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Meridian Mail

Hospitality Voice Services Implementation Guide

Product release 12

Standard 1.0

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NORTHERN TELECOM

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Hospitality Voice Services Implementation Guide

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Chapter 1

Overview

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General introduction

Introduction

The hospitality industry and hospitals have a unique business application that requires a specialized voice messaging system. The constant turnover of guests and patients creates special needs for the voice mail system.

Hospitality Voice Services (HVS), which is sometimes known as Meridian Hospitality Voice Services (MHVS), is a voice messaging system designed specifically for the hospitality industry. Typical customers would include hotels, inns, resorts and time share properties. HVS is also used in hospitals.

Audience

This chapter provides information which is useful to

- system administrators
- installation technicians
- maintenance technicians
- telecommunications management team

Definition

The Hospitality Voice Service (HVS) is an optional feature which provides specialized functions for the hospitality industry. The HVS system consists of the Meridian 1 and Meridian Mail components, which are connected to a Property Management System (PMS) to provide voice messaging services to hotel staff and guests, and to automate the management of mailboxes for guest rooms.

When a guest checks in to the hotel, a mailbox is created for the room the guest will be occupying. Upon checkout, the mailbox is removed, and any read or unread messages that arrived for that guest prior to checkout are moved to a post-checkout mailbox for later retrieval. It is up to you to decide how long after checkout a previous guest can access their messages in their mailbox.

The Property Management System (PMS) typically handles all routine functions, such as check-in and checkout, for providing voice messaging services to guests. If problems arise with the PMS, the Guest Administration Console (GAC) provides several functions for manual control of guest mailboxes.

The Meridian Mail administration terminal should only be used in cases where the GAC is not functioning. Changes should be made through the Hospitality Administration option from the Meridian Mail Main Menu.

How this book is organized

Introduction

This book is designed to familiarize you with the Hospitality Voice Services system and features. It will also provide you with instructions for the installation and maintenance of the system.

Chapter contents

Chapter 2, “Introduction,” provides you with an introduction to the Hospitality Voice Services system. The features and services, including guest messaging services, are discussed briefly here. This chapter also provides a general introduction into the hardware and software configuration requirements.

Chapter 3, “Property management system,” outlines the purpose of a property management system within a hospitality environment, and explains how the property management system (PMS) interfaces with the Meridian 1 and Meridian Mail to form a complete hospitality system.

Chapter 4, “Installing HVS,” provides the details for the installation of the hardware and software for each of the Meridian Mail platforms which can support a Hospitality Voice Services system.

In Chapter 5, “Meridian 1 configuration,” the manual explains the three methods available to implement the HVS system in your environment. Configuration instructions for the Meridian 1 and telephone sets are also provided.

Chapter 6, “Planning the Hospitality Install Parameters,” helps you plan the Hospitality Install Parameters for systems both with and without a PMS. These parameters include Language Services and the mapping of International Characters onto your system.

Chapter 7, “Planning and configuring the Hospitality Profile,” allows you to customize the messaging services available for your guest users.

Chapter 8, “HVS general administration,” provides an overview of the general administrative tasks required to administer the system, once it is in full operation. Although many of the tasks are the same as those required on a regular Meridian Mail system, this chapter highlights the unique aspects of administration required for HVS.

Chapter 9, “Hospitality System Status,” explains the Hospitality System Status, which provides the details on monitoring the PMS interface (PMSI) while the HVS is running. The section highlights the various methods available to monitor the system links, and to restore and recover the system in the event of downtime.

Appendix A, “Forms and worksheets,” provides a variety of forms masters which you can use to plan the various configurations and features as you design the system.

Appendix B, “End-user training,” is designed to provide the end-user trainer with a plan and suggestions for delivering HVS training to a group of students.

Appendix C, “Self-study guide,” is intended as a self-study guide (in conjunction with this manual) for an individual student.

A glossary of terms has also been included near the back of the manual.

Chapter 2

Introduction

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Overview

Introduction

This chapter provides a general overview of the features and services of the Meridian Mail HVS system. The basic hardware and software configurations are also presented.

Who should read this chapter

This chapter provides information for

- system administrators
- customer telecommunications management team
- end user

Hospitality voice services

The Meridian Hospitality Voice Service (MHVS) provides specialized functions for the hotel industry. The MHVS system consists of the Meridian 1 and Meridian Mail components, which are connected to a Property Management System (PMS) to provide voice messaging services to hotel staff and guests, and to automate the management of mailboxes for guest rooms.

When a guest checks in to the hotel a mailbox is opened for the room the guest will be occupying. Upon checkout, the mailbox is removed and any read or unread messages that arrived for that guest prior to checkout are moved to a post-checkout mailbox for later retrieval. It is up to you to decide how long after checkout a previous guest can access this mailbox.

Guest mailboxes are usually administered through the Property Management System. If PMS is not available, HVS can be monitored through the GAC. The Meridian Mail administration terminal should only be used in cases where the GAC is not functioning. Changes should be made through the Hospitality Administration option from the Meridian Mail Main Menu.

The PMS typically handles all routine functions, such as check-in and checkout, for providing voice messaging services to guests. If problems arise with the PMS, the GAC provides several functions for manual control of guest mailboxes.

Smaller hotels that do not have a PMS can still use Meridian Hospitality Voice Services. Meridian Mail functions in the same manner whether or not it is connected to a PMS, with the exception that the Message Waiting Indicator light cannot be used to inform guests of new text messages when not connected to a PMS. (In this case, express messaging can be used as an alternative.) Systems that are not connected to a PMS require the use of the Guest Administration Console to manually activate voice messaging services for guests.

If your Meridian Mail system is not connected to a PMS, set the PMSI Link to PMS Exists field in the View/Modify Hospitality Install Parameters screen to No. This will prevent Meridian Mail from trying to send messages to the PMS.

***Section A:* Features and services**

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Overview

Introduction

HVS provides the same services as Meridian Mail, with the addition of guest messaging. The hotel staff use the regular Meridian Mail services and features, while guests use a more simplified messaging service which requires fewer commands.

The prompts issued by the system are tailored to the hospitality environment, and certain greetings and prompts can be customized by the hotel.

The Meridian Mail equipment is almost identical to that of a regular Meridian Mail system, with just a few cabling changes to support an additional terminal called the Guest Administration Console (GAC) and a Property Management System Interface (PMSI).

For HVS, the Meridian Mail software incorporates the standard services (Voice Messaging, Voice Menus, and so on) with the Hospitality features, and additional optional features selected by the hotel (such as Fax on Demand, Voice Forms, and so on).

Property Management System Interface (PMSI)

Many hotels now use computerized property management systems (PMS) to manage room inventory, billing, control telephone restriction, and guest room status. These systems can be interfaced with Meridian 1 and Meridian Mail through the Property Management System Interface (PMSI) to enhance and automate messaging services.

Guest Administration Console

The Guest Administration Console (GAC) is a separate terminal which is used to manage HVS, in addition to the Meridian Mail administration terminal. It is used to monitor the PMS/PBX interface, and is the main guest mailbox administration device in hotels without a property management system.

It is normally situated near the hotel operators to allow for hands-on management of guest mailboxes and messaging services.

Supported platforms HVS is an optional Meridian Mail feature that is available on the following platforms:

- Card Option (Option 11)
- EC-11
- Modular Option
- Modular Option EC
- Meridian 1 upgrades

HVS is not available on any other platforms.

Features and services

Introduction

The following features and services are available to all HVS customers using Release 12:

- multiple administration terminals
- single Terminal access
- 9600 bps MMI
- multiple languages (up to four per system)
- dual language prompting
- increased capacity to support properties with up to 8000 rooms
- disk shadowing
- disk to disk backup
- multi-customer services (Only one of the customers can have the HVS feature.)
- outcalling services for staff
- Audio Messaging Interchange Specification (AMIS) Networking
- Meridian ACCESS
- Admin Plus
- Integrated Mailbox Administration
- Meridian Voice forms
- Voice Menus/Announcements
- Voice Messaging (MMUI)
- Fax on Demand

Restrictions

Specific applications or features consume various types and amounts of system resources (for example, disk space, ports, and terminals); therefore, certain configurations may not be supported.

Note: These limitations and restrictions apply to HVS systems operating on the Card Option or Modular Option platforms. Unless noted, HVS systems operating on the Modular Option EC platform are not affected by these limitations or restrictions.

Guest mailboxes

Simplified guest mailboxes with basic mailbox and messaging options are available.

Mailbox options	<ul style="list-style-type: none"> • Change a single greeting • Name identification (personal verification) - optional • Change password
Messaging options	<ul style="list-style-type: none"> • Mailbox cleanup (delete messages selectively or all at once) • Restore messages (during the same session) • Call Sender

Guests navigate through the mailbox using standard Meridian Mail commands. For example

- 1 – Skip back
- 3 – Skip forward
- # – Stop
- * – Help

Customizing system greetings

HVS provides a number of different greetings for guest mailboxes. The customer can choose to use the default greetings or customize them to be hotel specific.

The following types of greetings are available.

Type of greeting	Purpose
Introductory message	When guests access their mailbox for the first time, they can hear a custom message welcoming them to Meridian Mail and introducing them to the basic functions.
Guest System Greeting	This greeting plays to external callers when they are connected to a guest's mailbox. It may welcome the caller to the hotel.

Type of greeting	Purpose
Guest Logon Greeting	Guests can be given their own voice messaging DN with a customized greeting and instructions on how to access their mailbox.
Unanswered Greeting	This customized greeting plays if the guest room telephone is unanswered.
Busy Greeting	This greeting plays if the guest is on the telephone.
Vacant Room Greeting	This greeting plays if someone calls a vacant room. The caller is always transferred to the revert DN, which is usually defined by the system administrator as zero (0).
Disabled VM Greeting	This greeting plays if a guest chooses not to use voice messaging services.

Mailbox check-in and checkout capabilities

When a guest checks in or out of a room, Meridian Mail opens a mailbox upon check-in, then closes it upon checkout. This frees the mailbox for the next guest.

Mailbox relocation capability

If a guest wishes to move to a new room, the clerk at the Front Desk reassigns the guest to a new room in the Property Management System (PMS). A message is automatically sent to Meridian Mail to move the existing mailbox to the new room. This eliminates the need to delete a mailbox and any messages it may contain, and adds continuity to the messaging services.

In hotels without a PMS system, the mailbox can be relocated to the new room using the Guest Administration Console.

Voice count

This feature allows a current count of voice messages in a guest's mailbox to be obtained through the Property Management System or Guest Administration Console.

The PMS can only obtain the count if it has enhanced PMSI capabilities. Refer to Chapter 3, "Property Management System" and Chapter 4, "Installing HVS" for more information.

A voice count can be obtained while viewing a guest mailbox, through either the PMS or GAC when the guest room is checked in. The GAC can continue to obtain voice counts after check out using View Post Checkout Mailboxes.

Post checkout mailbox services When a guest checks out, the mailbox becomes “closed.” All messages are moved to a different file within the system.

If there are any unread messages in the mailbox, the guest is still able to retrieve them, even though he or she is no longer a registered guest. Hotels can also choose to retain read messages up to a maximum of 23 hours.

The Property Management System cannot query a mailbox that has been checked out. If required, this must be performed through the Guest Administration Console (GAC).

Language services The HVS system can be configured to offer multi-language or dual-language prompts, as outlined below.

Multi-language systems

HVS systems can be equipped with up to four languages. When the guest checks in, the Front Desk assigns a “preferred” language from one of the four available. All system prompts for that mailbox will play in the guest’s preferred language.

If no language is chosen, the system’s default language will be used, which is normally the native language.

The System Administrator can configure Meridian Mail to override the user’s preferred language for outside callers.

Note: Language services require substantial system storage. An increase to the system’s size may be required to incorporate languages on an existing system.

Dual Language Prompting

Multi-language systems can also offer an additional service called Dual Language Prompting. When the guest checks in, the Front Desk assigns a “preferred” language from one of the

languages available on the system. Whenever the *guest* uses the mailbox, all system prompts will be in the preferred language. Depending on which language is chosen by the guest, the *caller* may hear system prompts in a different language. There are four possible options, as explained in the following chart.

Guest	Caller
Preferred language is the same as the system default language	The caller will hear the system default language first, followed by the system's secondary language (if the prompt is repeated).
Preferred language is the system's secondary language	The caller will hear the system's secondary language first, followed by the system's default language (if the prompt is repeated).
Preferred language is neither the system's default or secondary language	The caller will hear the system's default language, followed by the guest's preferred language (if the prompt is repeated).
Preferred language has been overridden by the System Administrator for outside callers	The caller will always hear the system's default language (for both prompts)

Hospitality Screen Enhancement

Hospitality Screen Enhancement is a feature that allows for a special applications display to be attached to certain Meridian Modular sets, offering a manager the ability to activate the following features:

- Maid ID
- Room Status
- Automatic Wake-up Calls
- Message Registration

Detailed information can be found in *X-11 Software Features Guide* (NTP 553-301-305). The Meridian 1 must be equipped with software package 208-HSE, and the telephone set must be equipped with the Special Applications Display (model NT2K25YLxx, where xx represents the code for the color of the unit).

***Section B:* Guest messaging services**

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Overview

Introduction

Guest voice messaging services are more simple in design than those used by regular mailbox users. It is this simplicity in design that allows guests to check in to a hotel and, with little or no orientation to the services, readily access and use them.

Guest voice messaging feature

Introduction

Guest voice messaging features include Call Answering, Mailbox Setup, and Message Retrieval. Call Answering for guests functions similarly to Call Answering for staff; however, guests have limited mailbox setup and message retrieval features in order to make the service as simple and user friendly as possible while still meeting their voice messaging needs.

Mailbox setup

Guests have limited mailbox setup features, such as

- Recording a single greeting
- Recording a personal verification
- Changing a password

Message commands

Guests can choose to delete all of their messages at once, or to delete messages selectively. Guest mailboxes do not offer the reply, forwarding, compose, or tagging features. The message commands available are

- Delete all messages at once
- Confirming the deletion
- Selectively delete a message
- Restoring deleted messages
- Skip forward: 3
- Skip backward: 1
- Previous message: 4
- Next message: 6
- Pause: #
- Play: 2
- Call sender: 9

The introductory message

One additional feature available is the introductory message. This is an optional service that can be configured by the system administrator. It allows guests to hear a prerecorded message the first time they log on to their mailbox. The system administrator can configure the MWI for the introductory greeting to be available immediately upon check-in, or to be activated when the guest receives the first message.

A typical visit to a hotel using Meridian HVS**Check-in**

Guest voice messaging services begin upon check-in at the front desk.

The front desk personnel pulls up the guest's reservation from the file holding today's expected arrivals. After confirming the guest's name, address, and billing information, the clerk assigns the guest a room and changes the status of the room to occupied. The Meridian Mail HVS software intercepts the PMS information being sent to the Meridian 1 and automatically enables a mailbox for the assigned room number. If the guest's name is to be used for the password and Call Party Name Display is being used, Meridian Mail also incorporates the first four characters of the guest's last name as the default password. If the check-in date was being used as the password, Meridian Mail would enter the current date as the password.

The front desk person briefly explains the hotel's use of the voice messaging service and, if available, offers the guest a customized wallet reference card that instructs the guest on how to access and use the mailbox from both inside and outside the room.

If enabled, a customized introductory message may be waiting for the guest upon entering the room. The message can be provided to instruct the guest on how to use the voice messaging services, or to direct the guest to other voice messaging collateral available in the room.

During the stay**Leaving messages**

Two types of messages can be left for a guest in a hotel equipped with HVS:

- text messages
- voice messages

Text messages can be either handwritten or, if a PMS system is being used, typed into the message file of the PMS. When the PMS receives a text message, it sends a message to the Meridian 1 to turn the light on. Meridian HVS intercepts the message, activates MWI, and sends a message to the guest informing him or her of a text message.

In most cases, when a hotel uses HVS, voice messages are left, but some guests may choose not to use voice messaging services. The guest may be hearing impaired and cannot use the service, or just prefers to receive text (written) messages.

When the guest does not use voice messaging at all, the guest has still been assigned a mailbox during the check-in process, but the attendant now uses the Guest Administration Console to access the guest's mailbox and disable it.

When a call goes to a room where the mailbox has been disabled, Meridian Mail presents a "disabled" greeting and routes the caller to the attendant where a text (written) message can be taken.

Example of a guest room multi-button telephone

The following diagram illustrates a standard guest room multi-button telephone.



G100557

Types of greetings

When someone calls a guest room, depending on the status of the room, one of a number of greetings can play. Also, when a guest logs on to his or her mailbox, one of a number of greetings and messages can play.

These greetings are available for each of the one to four languages that may be installed. The following greetings and messages can be customized by the system administrator. (See Chapter 7, “Planning and configuring the Hospitality Profile” for information on how to customize greetings).

Type of greeting	Description
Guest System Greeting	This is the greeting that is played to external callers upon reaching a guest’s mailbox. It is heard before they hear the Call Answer greeting, or the guest’s personal greeting. This greeting is either On (if recorded), or Off (if not recorded).
Guest Logon Greeting	This is the greeting that is played to the guest the first time the guest logs on to Meridian Mail. It is in the same form as the logon greeting for a regular mailbox user, but offers “room number?” prompts instead of “mailbox?” prompts.
Introductory Message	This message is played to the guest during the first logon session after they have checked in. It is heard after the guest logon greeting and is used to provide instructions on how to use the service.
Unanswered Greeting	This is the greeting that is played to callers when they call a guest room that does not answer the phone, after which they can leave a message.
Busy Greeting	This is the greeting that is played to callers when they call a guest room and the guest’s phone is busy, after which they can leave a message.

Type of greeting	Description
Vacant Room Greeting	This is the greeting that is played to callers when they call a room that is currently vacant. In most cases, the caller will then be forwarded automatically to the operator for further assistance.
Disabled VM Greeting	This is the greeting that is played to callers when they call a guest room that has had VM disabled. The mailbox may be disabled intentionally (for example, if a guest does not want to use Meridian Mail).
<i>Note:</i> The above greetings are not heard if the mailbox is accessed through express messaging.	

Retrieving messages

The MWI activates when either a text or voice message is received. Depending on the type of telephone set being used in the room, the guest can either press a message key (multi-button set), or dial a specific message center number (single line set) which then automatically logs him or her on to the mailbox. The messages are then played back automatically to the guest.

If the guest has any text messages waiting, the guest will be told to contact the attendant to retrieve the message, or to access the video messaging service from their guest room television, depending on how Meridian Mail has been configured.

If a guest receives a message from one of the hotel staff, the envelope will tell the caller that the message was “received from (staff member’s name).” If no personal verification has been recorded by the staff member, Meridian Mail does not announce the staff member’s extension, but instead says “received from a staff member.”

If a guest receives a message from someone in another guest room, the envelope will tell the guest that the message was “received from another guest room.” Meridian Mail does not announce the guest room number for security reasons.

If the guests are outside their room, they can retrieve messages in much the same way that any Meridian Mail user does. The only difference is that guests may dial a Hospitality Voice Messaging DN instead of a regular voice messaging DN. This DN is exactly the same as a regular voice messaging DN except that it can be set up to have a customized greeting.

Rooms with multiple occupancy

Only one mailbox is assigned to a guest room; therefore, guests sharing rooms will all access and use the same mailbox. When more than one guest is checked in to a room, Meridian Mail only stores the name of the *last* person checked in. Any preceding name gets “bumped” out. This is important to remember when it comes to mailbox passwords, because if the guest’s last name is used for the password, the password for a guest room may change a number of times when a group of people sharing a room all check in at different times.

If the password has not been customized, the easiest way to identify what name is being used for the password is to call the room from any display set, and the name showing on the display is the one being used for the password.

When referencing a room in a Property Management System, some will display the name of the last guest checked in first. If so, this is another quick way to identify what name is being used for the password. Check with the hotel’s MIS representative to determine if the PMS being used at the hotel references in this way.

Check-out

When the guest is ready to checkout, the front desk personnel retrieves the guest’s file (folio) from the PMS system. If the PMS has enhanced interface capabilities, the clerk can use the PMS to query Meridian Mail and find out if there are any unread messages in the guest’s mailbox. If so, the clerk can remind the guest to retrieve the messages before leaving the hotel. The clerk then completes the checkout process and presents the guest with his or her bill. Immediately upon checkout, Meridian Mail HVS software acts on the PMS information being sent over the PMSI link, and automatically disables the guest’s mailbox.

If the mailbox contains any unread messages at checkout, Meridian Mail will store the messages in a Post checkout Mailbox file and hold them there for a predefined amount of time. (Some hotels configure the system to also hold read messages for an extended period after checkout.) Guests can log in to their room mailbox until a new guest is checked in to the room they were staying in, or they can use the Post checkout Mailbox service at any time. If the guest has not called back to the hotel to retrieve them within the time allowed, Meridian Mail will automatically delete the unread messages from the system.

The hotel operators

Because guest voice messaging is so simple to use, most guests will not require the assistance of an attendant; in fact, many hotels see a significant reduction in attendant console traffic as a result of the automated messaging services created by HVS.

The following are Meridian Mail functions that hotel operators perform most:

- Assist callers wishing to leave a text (written) message.
- Help guests needing assistance logging on to their mailboxes from outside their room.
- Route callers to express messaging.
- Assist checked-out guests with post-checkout mailbox services.
- Reenable mailboxes.
- Disable mailboxes for guests who do not wish to use voice messaging services.
- Monitor hospitality system status.

When HVS is installed, the console must not be used to activate or deactivate MWI. MWI can only be initiated by using voice messaging or the PMS terminal.

The X11, Release 16 feature, Digit Key Signaling (Option 180) allows the attendant to enter DTMF commands from the attendant console.

Attendants can use the Guest Administration Console to

- check the status of a guest's mailbox to find out when the guest last logged on to the mailbox
- disable a mailbox for a hearing-impaired guest
- re-enable a mailbox for a guest who violated his or her password disable autologon for added security
- change a guest's default password
- verify how many unread messages, text messages, or messages are waiting

Operators will also use the Guest Administration Console to monitor the PMSI link.

Customizing Meridian Mail collateral for guests

The hotel staff who have mailboxes are normally supplied with a standard Voice Messaging User Guide, Voice Messaging wallet card, and a keypad template.

Guests, on the other hand, often receive customized collateral. Some examples of customized collateral are

- detailed user guides
- quick reference card in a Plexiglass stand next to the telephone
- wallet cards for use when outside the room
- modified telephone face plates that include Meridian Mail instructions
- any of the above written in different languages for international travelers

Because of the wide range of telephone sets available for use in a hotel guest room, there is no standard guest keypad template available, although the more adventurous hotelier may decide to create his or her own.

Nortel has developed a guide titled *Customizing Your Collateral* (PO711684). This guide can assist hotels in developing this customized material. It contains examples of wallet cards and in-room user guides, along with ideas and instructions for customizing the information, and will soon be available in a number of languages. Hotels can purchase the book in their primary language, which will include a diskette that contains a soft copy of all the examples shown (using Aldus Pagemaker). If the hotel wishes to receive examples in other languages, additional diskettes can be purchased. For more information, contact your Nortel representative.

It is very important that this guide be given to the hotel representative as soon as possible, to give them time to learn about the Meridian Mail features and then put together their own collateral.

It is also recommended that mailbox logon instructions be posted at all housephones throughout the hotel, to assist those who wish to retrieve their messages from outside their room. The instructions can be as simple as the following:

To retrieve your messages, dial XXXX and

- enter your room number and # sign
- enter your password and # sign

Remote notification for guests

The remote notification feature allows users (either staff or guests) to be notified of new voice messages (not text messages) at a remote device such as a cellular phone or pager. This service is typically enabled for those guests who have been provided with a pager or cellular phone by the hotel. (Remote notification is described in the *Outcalling Application Guide*. Remote notification can only be administered from the Meridian Mail administration console.)

Note: This feature cannot be controlled by PMSI messages and will not exist on your PMS Front Desk Interface.

After checking in a guest, go to the Meridian Mail console User Administration screen and modify the outcalling fields for the guest's mailbox. Remote notification is initially disabled for all users. Therefore, you must enable the feature for each user.

Staff mailboxes have full outcalling capabilities. However, the following limitations apply to guest mailboxes:

- Delivery to nonusers is not available.
- Guests cannot create or modify their own remote notification schedules from their telephones.

You, therefore, cannot enable the Keypad Interface field for guest mailboxes.

Because of this second limitation, you will have to create at least one remote notification schedule. To create a schedule, you will need to provide the following information:

- When does the guest (or staff member) want to be notified?
 - Up to three different types of schedules can be created for each user (one for business days, one for nonbusiness days, and a temporary schedule).
 - Within each schedule, up to three time periods can be defined.
 - If a guest does not want to be notified past a certain hour, such as 10:00 p.m., ensure that the last active time period ends before 10:00 p.m.
- What is the number of the phone or pager at which the guest (or staff) wants to be notified?
 - Up to three different target DNs can be entered for each time period.

Note: If you provide guests with pagers or cellular phones, it is recommended that you always keep the same device with the same room. When you check in a new guest, Meridian Mail disables the time periods for the associated RN schedule; however, the target DN information is kept. When a new guest checks in, all you have to do is reenables the time periods. The actual start and end times, and target DN(s), will already be there.

***Section C:* Configuration overview**

In this section

Hardware overview	2-28
Software requirements	2-30

Hardware overview

Introduction

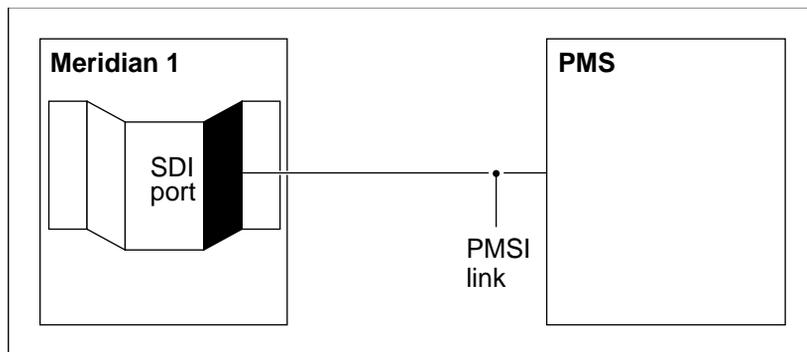
HVS is available through PMS either with or without Meridian Mail.

Hospitality configuration without Meridian Mail

When a hotel uses a Property Management System with no Meridian Mail, the PMS is connected to the Meridian 1 through an SDI port on the network shelf. The Meridian 1 PMSI software communicates with the PMS software to provide various services, such as Maid Status, Telephone Restriction, Call Party Name Display, and Message Waiting Indicator.

Diagram: Hospitality configuration without Meridian Mail

The following diagram illustrates the general hardware setup for the Hospitality configuration without Meridian Mail.



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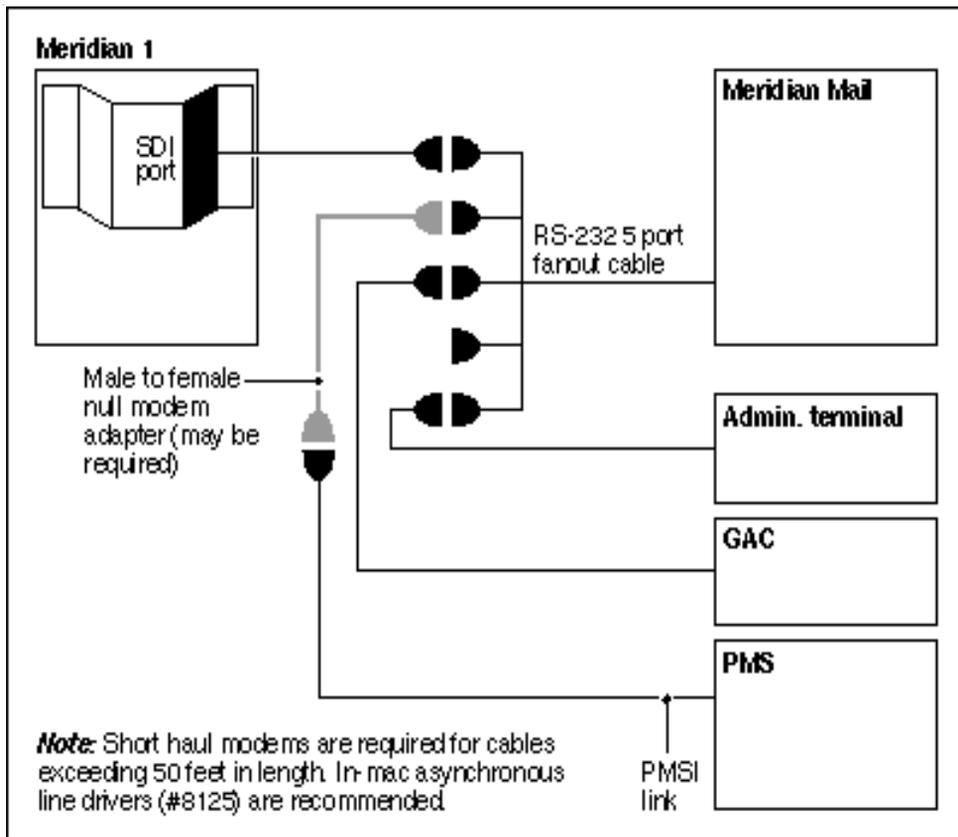
Hospitality configuration with Meridian Mail

When a hotel uses the Property Management System with Meridian Mail, the PMS is not directly connected to the SDI port in the Meridian 1 anymore. Instead, a fanout cable is connected to the RSM or Utility Card (on an EC system) in Meridian Mail. One plug is then connected to the PMS, and another is connected to the SDI port on the network shelf.

The Meridian 1 PMSI software communicates with the PMS software to provide services such as Maid Status, Telephone Restriction, Call Party Name Display, and Meridian Voice Messaging.

**Diagram:
Hospitality
configuration with
Meridian Mail**

The following diagram illustrates the general hardware setup for the Hospitality configuration with Meridian Mail.



Software requirements

Introduction

PMS systems offer many different features. The PMS system chosen and the features selected will determine if additional software packages are required.

PMS - required software packages on Meridian 1

The following table indicates the basic software packages required on the Meridian 1 to support a Property Management System (PMS).

Purpose	Software package number	Feature name
Basic	81	CCOS - Controlled Class of Service
	99	BGD - Background Terminal Facility
	100	RMS - Room Status
	103	PMSI - Property Management System Interface
Lamp status	46	MWI - Message Waiting Indicator
Optional packages for PMSI	101	MR - Message Registration
	102	AWU - Automatic Wake Up

Purpose	Software package number	Feature name
HVS packages	<i>Note:</i> When Meridian Mail HVS is included, the Meridian 1 requires Release 16 software, or higher, along with the following additional packages.	
	7	RAN - Recorded Announcement
	9	DNDI - Do Not Disturb, Individual
	10	EES - End to End Signaling
	11	INTR - Intercept Treatment
	17	MSB - Make Set Busy
	19	DDSP - Digit Display
	35	IMS - Integrated Message System
	40	BBACD - IMS - Integrated Message System
	45	ACDA - ACD Package A
	77	CSL - Command Status Link
	83	ACD CDR Queue Record
	85	CSLA - CSL with Alpha Signaling
	109	APL - Auxiliary Processor Link
179	HVS - Hospitality Voice Services	
180	DKS - Digit Key Signaling (This feature may also be referred to as “Attendant End to End Signaling.”)	

Note: PMSI is incompatible with the following packages:

- DSN - AUTOVON
- CAS - Centralized Attendant Services
- CDP - Coordinated Dialing Plans

PMS - optional software packages on Meridian 1

PMS systems offer many different features. The type of PMS system chosen and the features which are selected will determine if additional software packages are required.

The following table indicates all available PMS features, and lists any additional packages which are necessary (other than the required software listed in the chart on page “Software requirements” on page 2-30).

Note: Meridian 1 must have Release 16 or higher. For package dependencies, refer to the *X11 Features and Services NTP 553-3001-305*.

PMS Feature	Additional
Maid status update	None
Check-in/Check-out	None
Control of Restriction (basic)	None
Control of Restriction (extended)	173: ECCS - Enhanced Controlled Class of Service
Message Waiting	None
Do-Not-Disturb	None
CPND	95: CPND - Call Party Name Display
Multi-Language Wake-up Service	206 MLWU - Multi-Language Wake-Up
Mailbox restore	None
Copy mailbox	None
Query Voice	None
Voice Count	None
Polling Message	None
VIP Wake-up	212: VAWU - VIP Auto Wake-up
Hospitality Screen Enhancement	208: HSE - Hospitality Screen Enhancement
Multi-Language Mailbox Services	206: MLWU - Multi-Language Wake-up

Chapter 3

Property Management System

In this chapter

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Section B:: Property Management Interface Specification	3-9

Overview

Introduction

This chapter describes the Property Management System and how it interfaces with the Meridian Mail System and the Meridian 1.

Who should read this chapter

This chapter provides information for

- system administrators
- installation technicians
- maintenance technicians

***Section A:* Property Management System**

In this section

Overview	3-4
PMS basic functions	3-5

Overview

Definition

A Property Management System (PMS) is a specialized computer system whose principle functions are to automate the check-in/checkout process, manage room inventory, and perform billing and accounting functions.

In addition to these basic functions, additional features and services may be included such as

- sales/marketing statistics and reports
- guest history/preference files
- revenue statistics and reports
- cost analysis
- financial reports
- forecasting tools
- text messaging
- video messaging, checkout and account review (with established interface to hotel television system)

A PMS can consist of a central processor with a number of dumb terminals attached to it, or it can be a LAN-based application. The terminals are most often located at the Meridian 1, Front Desk, Reservations and Systems departments, although they can also be found in Accounting Concierge, Bellstand, and Executive Offices.

PMS systems can be configured to manage both small operations with less than 100 rooms, and huge 4000-plus room hotels.

PMS basic functions

Introduction

A PMS is a multi-processing system which handles many activities at the same time during the day, as in the following example:

- A guest can be calling to place a reservation or checking in at the Front Desk.
- An operator can be typing a message into a guest's file.
- An accountant can be verifying a guest's bill (folio).
- A waiter in a restaurant can be posting charges from a recent meal in one of the hotel's restaurants.
- A cashier can be posting charges from a recent purchase in one of the hotel's stores.

PMS is also a real-time system. A guest can look at his or her account at any time and see the current balance.

During the night, PMS suspends all input activity, both manual and through the interface, to perform special accounting, auditing and system maintenance functions.

While these routines are running, the staff cannot check guests in, post charges, write messages, and so on. Many peripheral devices just do not work, but others buffer data until the link is reestablished.

When the operations are complete, PMS will insert forecasted arrival/departure/occupancy information for the next day, and bring itself back on line, including reestablishing the appropriate interfaces.

Interface features

A PMS can be interfaced with other technologies to provide enhanced features and services, such as point-of-sale terminals, call accounting systems, video systems, and so on. The primary interface, however, is between the PMS and the hotel's Meridian 1.

The following special services and features are available through the PMS/Meridian 1 interface.

Telephone Restrict/Unrestrict

When a guest checks in, the PMS connects with the Meridian 1 to open up the class of service for the guest-room telephone, (using the Controlled Class of Service package [CCOS]) to allow outside calls. When the guest checks out, the restriction is put back on. This helps to control unauthorized use of the telephone when the room is not occupied.

Call Party Name Display

When a guest checks in, the name of the guest is automatically passed to Meridian 1 by the PMS. For Meridian 1 systems with Call Party Name Display (CPND), the CPND is automatically updated, and the name is displayed whenever the DN for that telephone is activated.

Message Waiting Indicator

A clerk can create a message, called a "text message," for a guest in a specific room. The message is stored on the PMS, and the message waiting indicator is activated. Once the message has been retrieved and read by the guest, the message file is "closed," and the message waiting indicator is canceled.

Maid Status

To speed up room inventory control, the housekeeping staff can dial a special code from the guest telephone to amend the status of a room from dirty/vacant to clean/vacant. Other codes can be used to indicate rooms that are out of order, and the types of problems. Reports can then be generated from the PMS by the hotel maintenance staff to coordinate repair services.

Posting of telephone charges

When a call is made from a guest room, Meridian 1 generates a call record, called the Station Message Detail Record (SMDR), which is sent to a separate call accounting system. Applicable taxes and surcharges are added, and the final charge is then passed on to the PMS for posting to the guest's account. This interface allows for real-time posting.

When a Meridian Mail system is incorporated into this interface, additional features are activated:

- **Mailbox Assignment**

Upon check-in, the PMS tells Meridian Mail to “open” a mailbox for the newly occupied room. The mailbox is “closed” upon checkout.

- **Mailbox Relocation**

If a guest changes rooms, the PMS makes the new room assignment (if configured to do so), and tells Meridian Mail to relocate the old mailbox to the new room.

- **Mailbox Restore**

Guests normally checkout at the Front Desk; however, some hotels offer video checkout services, where guests can use the televisions in their rooms to check themselves out. If a guest inadvertently checks out early, or if there is a clerical error at the Front Desk, the guest's mailbox is essentially closed, and callers dialing the room will hear the “vacant room” recording. In these cases, the mailbox restore command allows these mailboxes to be restored.

- **Message Waiting Indicator**

The Message Waiting Indicator (MWI) functions differently with Meridian Mail in place. When a voice message is received, Meridian Mail tells the Meridian 1 to activate MWI. Once the message has been retrieved and heard, Meridian Mail then tells Meridian 1 to cancel MWI.

Some PMS systems have enhanced PMS interface capabilities which give them the capability of tracking both the voice messages in Meridian Mail and text messages stored in the PMS system. When the front office brings up the room account on the PMS terminal, an indicator (which is either a number, letter, or symbol) indicates that the guest has a message waiting. This allows a front office clerk to view message status from the terminal at the front desk. For this to occur, Meridian Mail sends a signal to the PMS, and a “peg count” takes place.

***Section B:* Property Management Interface Specification**

In this section

Overview	3-10
HVS to PMS Interface	3-17
Testing the PMSI link features	3-24

Overview

Introduction

When a Meridian Mail HVS system is installed and operated in a hotel using a PMS, certain standards and protocols are required to ensure the PMS can communicate with Meridian Mail and the Meridian 1. These communications standards are called the Property Management Interface Specifications (PMIS).

Definition

The Property Management System Interface (PMSI) is an optional software package that allows the Meridian 1 to interface directly to a customer-provided PMS through a standard SDI port. It provides an automatic, simultaneous means of updating information in both the PMS system and the Meridian 1/Meridian Mail systems.

Features

There are a number of features supported by the interface, which can be divided into two major categories.

Interface	Features/commands
From the PMS to the Meridian 1 (room status and message waiting features)	Check-in/Check Out
	Telephone Restrictions
	Message Waiting Lamp
	Call Party Name Display
	Multi-Language or VIP Wake-up
	Do-Not-Disturb

Interface	Features/commands
From the Meridian 1 to the PMS (house cleaning and information features)	Ready for Sale (cleaning status changes, as dialed by housekeepers from guest rooms)
	Maid Inspector Update (cleaning status changes as entered on background terminals or special telephone sets)
	Cleaning status changes which are caused by automatic update commands that could be programmed on the Meridian 1
	Call number information messages
	Error messages that are caused by invalid PMS commands

PMSI protocols

Protocols are sets of rules and regulations that allow different pieces of equipment (such as the PMS system, Meridian 1, and Meridian Mail systems) to communicate with one another.

There are three types of PMSI protocol variations:

- PMS1, formerly known as the HIS protocol
- PMS2, formerly known as the NCR protocol
- PMS3, formerly known as the ECI protocol

Note: PMS2, the NCR protocol, is not currently supported by Meridian Mail Hospitality Voice Services.

The differences between these protocol variations consist of minor adaptations that were implemented to accommodate different PMS vendors. For each protocol there are specific transmitting and receiving requirements for both the PMS and the Meridian 1. The PMS vendor is responsible for selecting the protocol that best supports the interface requirements for a particular PMS system, and for verifying that both the transmitting and receiving requirements are met. Once the protocol has been identified, both Meridian Mail and the Meridian 1 can be configured to support the protocol chosen.

HVS Considerations With the protocol identified and the features selected, the PMS vendor and hotel management team must take time to review the message protocol differences associated with HVS. These are explained in detail in the PMS Specifications book described below, and should be reviewed thoroughly prior to configuring the PMS.

The points to review are

- HVS acknowledgment and retransmission protocols
- HVS directory numbers
- HVS multiple directory numbers
- invalid CPND name characters for HVS
- obtaining voice count information
- Check-in feature for HVS
- Checkout feature for HVS
- name change for HVS
- Message waiting feature for HVS
- Do-Not-Disturb feature for HVS
- Mailbox restore message
- Copy mailbox message
- Query Voice message
- Voice Count message
- Polling message
- Pre-arrival guest messaging

The PMS Interface Specifications Book

To assist the PMS vendor in making the appropriate selection and verifying the protocols, Nortel has developed a reference guide called the *Property Management System Interface Specification*, Issue 4.0.

All PMS vendors must have access to a copy when any interfaces are to be established. The PMS vendor should read this specification book carefully before making any decisions about which protocol to select. It is recommended that all personnel who regularly support HVS sites, and the hotel's MIS staff obtain a personal copy of this document.

The PMSI Specification book can be obtained from the following source:

Order number: NIS-Q203-2
Title of document: *Property Management System Interface Specification*
Issue 4.0
Contact: Manager, Technology Acquisition and Learning
Telephone number: (408) 565-2105
Fax contact: (408) 565-3325

There are addenda to this document for the Meridian 1, Release 19. Please refer to the appropriate marketing bulletins for this information.

Technical aspects of the PMSI

The following topics describe the technical aspects of the PMSI, including

- characteristics of the SDI port
- RS-232 lead designation

Characteristics of the SDI port

The Meridian 1's SDI port is an asynchronous RS-232 link that enables the CPU on the switch to interchange data with the PMS. This port conforms to EIA standard RS-232-C, and can be configured to operate in DCE or DTE modes.

In most cases, the SDI ports are configured to operate in the DCE mode since most PMS links are DTE. However, when the distance between the Meridian 1 and the PMS exceeds the maximum range, and a repeater is installed, it may be more convenient to configure the SDI port as a DTE to interface directly to the repeater. (Repeaters are normally DCE.)

The electrical characteristics of the link are

Data (Baud) Rate	150, 300, 600, 1200, and 2400 bps. The lower data rates will run into timing problems if very long messages are being used (that is, CPND with large names). Too high a rate will result in messages being lost. It is recommended that 1200 or 2400 bps be used, for optimal performance.
Operating mode	Full duplex
Interface distance	Maximum 16.5 meters (50 feet) (The operating range can be extended by using shielded cables or repeaters.)
Word framing option	1 start bit, 8 data bits (including parity), and 1 stop bit. Total, 10 bits per character.
Parity options	The parity of the data bytes sent by the PMS can be any of the following: <ul style="list-style-type: none">-7 bits + odd parity-7 bits + even parity-7 bits + space parity-7 bits + mark parity-8 bits + one-party

The Meridian Mail/Meridian 1 always use mark parity (7 bit + mark parity). The parity bit is always set on. It is best to configure the PMS to the same, or ignore parity altogether.

Monitoring the links

PMSI links can be monitored through the Universal Link Monitor (ULMA).

This utility can be accessed through the TOOLS level menu and allows the system administrator to monitor and capture link information.

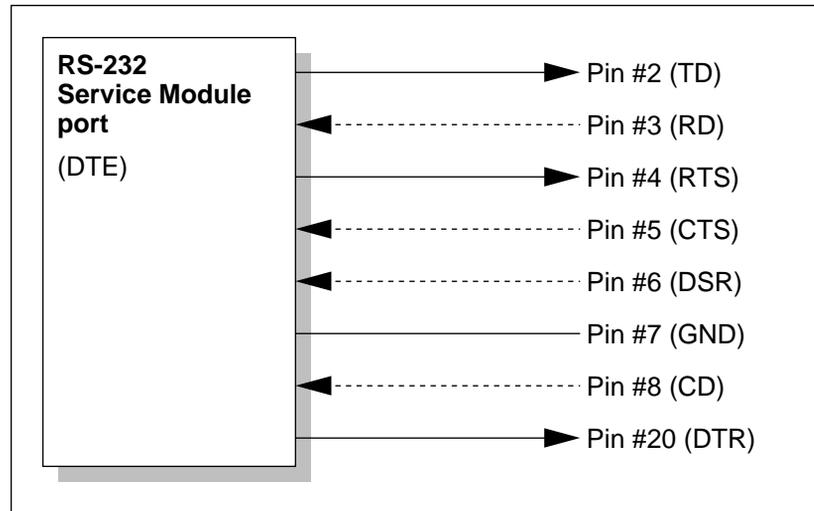
For additional information about the Universal Link Monitor utility, refer to the *System Administration Tools* (NTP 555-7001-305).

RS-232 lead designation

The RSM port is always wired as DTE, and a null modem adapter may be required if a DCE connection is desired.

The following diagram shows the RS-232 lead designations for a DTE connection.

HVS RS-232 pin connection



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Note 1: RS-232 pins #4 and #20 are always turned on by the RSM port. Pins #5, #6, and #8 should always be turned on by the PMS.

Note 2: If a DCE connection is desired, then a null modem adapter may be connected to the RSM port. If this is the case, then pins #8 (CD) and #6 (DSR) will be turned On at the connection from the null modem to the PMS port, and pin #5 (CTS) will be turned On at the connection from the null modem to the RSM port. The PMS should always turn on pins #4 and #20.

HVS to PMS Interface

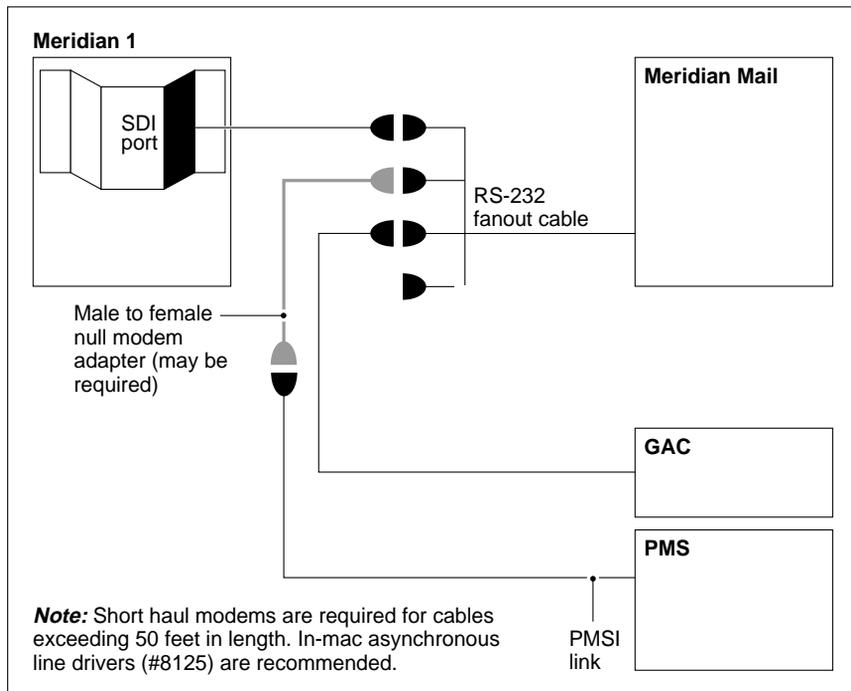
Introduction

The PMS is normally connected to the Meridian 1 by the PMSI link. When HVS is installed, Meridian Mail is inserted on the PMSI link between the PMS and the Meridian 1, as illustrated in the following diagram, “HVS connection - General Concept.”

Meridian Mail then acts as a server, intercepting PMS messages and acting upon them to automate the process of setting up mailboxes for guests, to integrate text and voice message notification in order to control the Message Waiting Lamp on the guest’s telephone. In this situation, the PMSI link does not terminate on the SDI port (as in the non-HVS environment), but now terminates on a Utility card for an EC system, or an RSM card for all other systems.

HVS connection - general concept

The following diagram illustrates the general concept of the connections of the PMSI link.



G100559

Selecting the features The PMS vendor and the hotel staff must identify which features and services are required on their particular PMS, and which ones they choose to use. Each feature has a particular protocol requirement. Information about available features are provided in the following sections:

- Room status and message waiting features
- House cleaning information

The Meridian Mail installation technician and system administrator need to be aware of which features have been chosen in order to ensure that both the Meridian 1 and Meridian Mail are properly configured to support them.

Room numbering plan Before beginning the installation, the PMS vendor must make sure the room numbers listed in the PMS system match both the room numbers configured in the Meridian 1 database and the guest mailbox numbers configured in the Meridian Mail database. If there are any discrepancies, the features and services will not operate properly.

For more information on configuring guest mailboxes, refer to Chapter 8, “HVS General Administration” in this manual.

Room status and message waiting features

There are a variety of room status and message waiting features available.

Message Waiting

When HVS is installed, Meridian Mail will control MWI. Once the Meridian Mail system is installed, only the PMSI message should control MWI. The attendant console, background terminal or special set must not be used, except when the Meridian Mail system is in bypass mode.

Note: The PMS turns the message waiting lamp on a guest room telephone on or off by informing the Meridian 1 of the desired state. The Meridian 1 can also be programmed to automatically turn off the message waiting lamp upon receipt of a checkout command from the PMS.

Do-Not-Disturb

The PMS activates the Do-Not-Disturb feature for a room's telephone by informing the Meridian 1 of the desired state. This can also be activated by way of the attendant console or a background terminal.

The Meridian 1 can also be programmed to automatically turn off the Do-Not-Disturb feature upon receipt of a checkout command from the PMS.

Call Party Name Display (CPND)

This feature allows the guest name to be set up in a mailbox when the guest is checked-in. The PMS sends the guest's name to the Meridian 1 where it is stored and displayed to any display telephone set when the DN associated with the name is activated.

This feature may be combined with the check-in/checkout feature or the multi-language wake-up feature. CPND is optional on the Meridian 1, and must be included if this feature is required.

Multi-Language Wake-Up

The PMS sends the guest's language preferences to the Meridian 1 where the information is stored and used to provide automatic wake-up announcements in the guest's preferred language. Up to six Meridian 1 customer-definable languages (RANs) can be chosen. MLWU is optional on the Meridian 1, and must be included if this feature is required. The language flag from the PMS system also identifies the language capability for the mailbox itself.

VIP Automatic Wake-Up

A guest room is given VIP status through the PMS or a background terminal. When a wake-up call is requested, the AWU feature in the Meridian 1 notifies the attendant of the wake-up request, rather than having the guest woken up by a RAN wake-up service.

House cleaning information

The following status updates are available.

Maid status update

This provides a convenient method of updating the PMS with the latest cleaning status of all hotel rooms.

Cleaning/room status messages

Seven different cleaning states can be sent by the Meridian 1 to the PMS, indicating the status of any specific room, as follows:

- cleaning requested
- cleaning in progress
- room cleaned
- passed inspection
- failed inspection
- cleaning skipped
- not for sale

Dial access from room telephones

The cleaning status of any room can be updated directly from the telephone set in that room.

Dial access from special telephone sets

The cleaning status of any room can be set to any one of the seven possible states by the housekeeping staff, using a special Meridian 1 set with an RMK key.

Cleaning changes by off-hook detection

Between two programmable times, the housekeeping staff can use the room telephone to signal that the room is being cleaned without dialing any code.

Cleaning changes from Meridian 1 background terminal

The cleaning status of any room is modified using a Meridian 1 background terminal.

ATTENTION

A single command can cause hundreds of messages to be sent to the PMS; therefore, only trained and authorized personnel should have access to such terminals.

Scheduled change to cleaning requested state

The status of all rooms is automatically changed to RE (cleaning requested) at a programmable time.

Automatic change on checkout

The Meridian 1 is programmed to automatically set the cleaning status of the room to “Cleaning Requested” for each checkout received.

Change at PMS request

The PMS requests that the cleaning status of a room be set to a particular state.

Check-in/checkout feature

The PMS controls the occupancy status of any room in the Meridian 1 database.

Control of restriction feature

The PMS controls the level of restriction of any guest telephone by informing the Meridian 1 of the desired state. The Meridian 1 can be programmed to automatically control the level of restriction of the room’s telephone, or the PMS can be set to override this automatic restriction by issuing additional commands.

Maid ID feature

Each housekeeping staff member may be given a four-digit ID number, which is stored in the Meridian 1. The Meridian 1 sends this ID across the link to the PMS and uses it to generate the proper maid status or performance reports, or both.

What to do after the PMSI link has been installed

Once the physical link has been established, the Meridian 1 and Meridian Mail systems need to be configured (including building all the mailboxes), after which a PMS database swap is performed, and then the PMS interface is tested. Details on how to install the PMSI link are covered in Chapter 4, “Installing HVS” in this manual. Details on how to configure the Meridian 1 are covered in Chapter 5. Details on how to configure the Meridian Mail system are covered in a number of chapters.

PMS database swap

When the link has been installed, all three systems (the PMS, Meridian 1, and Meridian Mail) need to be resynchronized. This synchronization is called a database swap. This is a required procedure on all system start-ups.

A database swap is initiated by the PMS to send the current check-in/checkout PMSI messages (and test message indications) for all rooms, from the PMS to the Meridian 1. It can be performed with all of the protocol variations (PMS1, PMS2, PMS3). The swap will result in heavy PMSI traffic and corresponding Meridian 1 and Meridian Mail load. For each checked-in room a check-in message and a message waiting message are sent to the Meridian 1. For checked-out rooms, a checkout message is sent. If asynchronous voice counts are allowed, a query voice count message will also be sent.

A typical database swap can reconcile about 40 – 45 rooms per minute, and starts with the lowest room number and works through to the highest. It is a good idea to have the Meridian Mail technician/administrator remain on site until the entire database swap has been completed in case the link fails.

Some PMS systems perform this operation on

- nightly maintenance routines
- system restart

Testing the PMSI link features

Introduction

When the database swap has been completed, testing can begin. During the initial testing, it is recommended that the PMS vendor, the hotel's MIS representative and the Meridian 1/ Meridian Mail technician all be present in order to quickly identify and resolve any potential problems.

Equipment needed

It is recommended that a datascopes/protocol analyzer and a break-out box be available when testing is performed. Both items are very useful for isolating persistent problems.

If the test equipment is unavailable, use the Universal Link Message Analyzer (ULMA) utility to view information about the links. The ULMA utility is accessible through the TOOLS level, and allows data transferred on any of the supported links to be captured, and stored on disk, or displayed on the terminal. Refer to Chapter 9, "Hospitality System Status" for detailed information on using the ULMA utility.

Procedure

Testing needs to be performed in two phases to help isolate potential problems:

1. Test the Meridian 1-PMS link (Meridian Mail in bypass mode).
2. Test the full PMSI link (Meridian Mail not in bypass mode).

By putting Meridian Mail into bypass mode for the first test, testing is specific to the Meridian 1 and PMS messaging. Once these are working properly, Meridian Mail can then be incorporated back into the link and tests specific to HVS can be conducted. Any problems that surface then are more likely to be associated with Meridian Mail.

Each and every feature that was selected during the PMS configuration process must be thoroughly tested.

These tables identify all possible tests that could be performed, and assume full PMSI integration. Conduct only those tests that apply.

PMS - Meridian 1 tests The following chart provides tests to be performed on the Meridian 1/PMS link, with Meridian Mail in bypass mode.

Test to be performed	Expected results	Suggested solutions
Check in a room through the PMS terminal	<ul style="list-style-type: none"> • Telephone restriction is deactivated. • CPND is activated when the room is called. 	<ul style="list-style-type: none"> • Make sure Meridian 1 background terminal command has been set to deactivate room restriction upon check-in. • Make sure all three systems have CPND name length set to the same number. • Make sure the guest room telephone set, and the telephone set making the test call have CNDA and CCSA in class of service.
Leave a text message for an occupied room. (Make sure it does not have any other messages in the mailbox.)	MWI is activated.	<ul style="list-style-type: none"> • Make sure the guest room telephone set has been configured with CLS of MWA. • Make sure there is no problem with the telephone set/light. • Verify that the PMS is sending a message across the link to activate MWI.
Leave a text message for a guest who has not checked in yet, then check the guest in. (This is a Due to Arrive situation.)	<p>The MWI is activated as soon as the room is assigned.</p> <p><i>Note:</i> This is not the same MWI that is used with the Introductory Message. It is suggested that the MWI for the Introductory Message be turned off.</p>	<ul style="list-style-type: none"> • Verify that the PMS is sending a message across the link to activate MWI. • Make sure the guest room telephone set has been configured with CLS of MWA. • Make sure there are no problems with the telephone set/light.
Deliver (retrieve) a text message for a checked in room	MWI deactivated when the message has been “delivered.”	Verify the PMS is sending a message across the link to deactivate MWI.

Test to be performed	Expected results	Suggested solutions
Check out a room through the PMS terminal.	<ul style="list-style-type: none"> • The telephone restriction reactivated. • MWI is deactivated upon checkout. 	<ul style="list-style-type: none"> • Make sure the Meridian 1 background terminal command has been set to reactivate room restriction upon checkout. • Make sure the Meridian 1 background terminal command has been set to deactivate MWI upon checkout.
Check in a room through the PMS terminal and select the preferred language. Have the operator initiate an automated wake-up request. Repeat the test for each language available for automatic wake-up calls. (2 RANs).	<ul style="list-style-type: none"> • The wake-up should play with each of the languages specified on the RANs. 	<ul style="list-style-type: none"> • Double check the RANs to ensure the language selected actually exists. • Make sure the MLWU package is installed on the Meridian 1. • Make sure the guest telephone sets are configured with CLS = CCSA in class of service.
<p>Have housekeeping use a guest room phone to enter the following cleaning status messages:</p> <p>a) Enter Maid ID b) Cleaning requested c) Cleaning in progress d) Room cleaned e) Passed inspection f) Failed inspection g) Cleaning skipped h) Not for sale</p>	<p>a) PMS receives Maid ID. b) “Cleaning requested” status shows up on PMS. c) “Cleaning in progress” status is activated on PMS. d) “Room cleaned” status appears on PMS. e) “Passes inspection” status activated on PMS. f) “Failed inspection” status activated on PMS. g) “Cleaning in skipped” status activated on PMS h) “Not for sale” status is activated on PMS.</p>	<ul style="list-style-type: none"> • For each message being sent, verify that Meridian 1 is sending appropriate messages across the link. • For each message being sent, verify that PMS is accepting (ACK) messages it receives from Meridian 1.
Check in a room via the PMS terminal and select a preferred language. Then check the room out.	Automatic clearing of the language for the room occurred at checkout.	Make sure the Meridian 1 background terminal command has been set to clear the language upon checkout.

Test to be performed	Expected results	Suggested solutions
Check in a room through the PMS terminal and give it VIP status. Have the operator initiate an automatic wake-up request.	Automatic wake-up request notified the attendant to place the wake-up call.	Verify that the VIP message is being sent from the PMS to the Meridian 1.
Activate DND in an occupied room and then check the room out via the PMS terminal	DND feature is deactivated	<ul style="list-style-type: none"> • Make sure the Meridian 1 background terminal has been set to deactivate the DND upon checkout. • Verify the PMS is sending the check -out message
Checkout a room	Cleaning status of the room changes to “Cleaning requested?”	<ul style="list-style-type: none"> • Verify that the PMS is sending the checkout message to the Meridian 1. • Verify the checkout message on the background terminal is being sent.
Use PMS to request a specific cleaning status for a view.	Cleaning status is changed to what has been required.	Verify the PMS is sending the appropriate message to the Meridian 1, and the Meridian 1 is returning with the appropriate response.

**PMS - Meridian 1 -
HVS (Meridian Mail)
tests**

The following chart provides tests to be performed on the Meridian 1/PMS link, and Meridian Mail.

Test to be performed	Expected results	Suggested solutions
Check in a room in through PMS terminal	<ul style="list-style-type: none"> • Did the room get a mailbox? • Did the MWI for the introductory message activate? (optional) • Was the name spelled correctly? (No information stripped?) 	<p>Make sure the guest room mailbox has been defined in Meridian Mail.</p> <p>Check the “Turn MWI On” prompt in the Hospitality Profile.</p>
Leave a voice message for a checked in room.	<ul style="list-style-type: none"> • Did MWI activate? • Did the custom introductory message play? 	<p>Check bulb on phone isn’t broken.</p> <p>Check telephone set has MWA in class of service.</p> <p>Check the “Introductory Message” prompt in the Hospitality Profile.</p>
Access guest room mailbox from guest room telephone.	<ul style="list-style-type: none"> • Autologon worked. • Mailbox was set for autoplay. 	<p>Check guest class of service and make sure autologon and autoplay were not modified.</p> <p>Check mailbox configuration to ensure autologon and autoplay were modified for this mailbox.</p>
Access a guest room mailbox from any phone outside the room.	<ul style="list-style-type: none"> • The password worked using letters of the last name or the check-in date. • Guest logon greeting provided custom prompts. 	<p>Check guest password configuration in Hospitality Profile.</p> <p>Check the Guest Logon Greeting in the Hospitality Profile.</p>
Call an occupied room from outside the hotel	Guest System Greeting played first, followed by the guest room greeting.	Check the “Guest System Greeting” in the Hospitality Profile.
Call an occupied room from inside the hotel	Custom greeting for an unanswered call is played.	Check the “Greeting When Guest’s Phone is Unanswered” in the Hospitality Profile.

Test to be performed	Expected results	Suggested solutions
Have someone use the phone in a guest room while you try to call the room.	Custom greeting for a busy guest room is played.	Check the “Greeting when Guest’s Phone is Busy” in the Hospitality Profile.
Call a vacant room.	<ul style="list-style-type: none"> • Custom greeting for a vacant room played. • Reverted to the correct extension after the greeting was played. 	<ul style="list-style-type: none"> • Check the “Greeting for Vacant Rooms” in the Hospitality Profile. • Check the “Revert DN for Vacant Rooms” in the Hospitality Profile.
Check a room in via the PMS terminal. Disable the mailbox through the GAC and then call the room.	<ul style="list-style-type: none"> • Custom greeting for a room with no voice messaging is played. • Reverted to the correct extension after the greeting was played. 	<ul style="list-style-type: none"> • Check the “Greeting for Rooms with no VM” in the Hospitality Profile. • Check the “Revert DN for Rooms with no VM” in the Hospitality Profile.
Leave a text message for a checked-in room.	<p>Log into the mailbox and listen:</p> <ul style="list-style-type: none"> • Correct instructions are heard on how to retrieve the text message. • Reverted to the correct extension when “0” is pressed. 	<ul style="list-style-type: none"> • Check the “Instructions if there are Text Messages” in the Hospitality Profile. • Check the “Revert DN for the Text Message Centre ” in the Hospitality Profile.
Leave a voice message for a checked-in room, and conduct a voice query from the PMS terminal.	<ul style="list-style-type: none"> • MWI was activated. • Voice count information displayed on the PMS terminal. 	<ul style="list-style-type: none"> • Check Meridian 1 background configuration for deactivating MWI upon checkout. • Check with PMS vendor to see if PMS has enhanced PMSI capabilities.

Test to be performed	Expected results	Suggested solutions
Leave a voice message for a checked-in room, then check the room out and access post checkout service using the GAC.	<ul style="list-style-type: none"> • Post checkout service indicated one unread message and one read message. • Message can be retrieved through PCO. • Message deleted after read message retention parameter for PCO expires. 	<ul style="list-style-type: none"> • Access Hospitality Profile and check post checkout service parameters. • Access Hospitality Install parameters and check voice count options.
Check room in, and select a preferred language. Log on to mailbox from guest room. Call guest room and let call no answer pick up. Repeat test for each language on the system.	Dual language prompting feature played the appropriate initial and repeat prompts for the mailbox user (when logging on), and the caller during call answer.	<ul style="list-style-type: none"> • Make sure the Language Identifier Table in the Hospitality Install Parameters is configured properly. • Make sure the language “flag” is being sent by the PMS upon check-in.
Check-in room in through PMS terminal and activate DND from the attendant console.	Call is forwarded to the guest room mailbox.	Make sure LD 15 in the Meridian 1 has been configured for DNDH to Yes.
Leave a voice message for an occupied room and then perform a room change using the PMS terminal.	The Mailbox and message are forwarded to the new room.	<ul style="list-style-type: none"> • Verify that the Meridian 1 background terminal commands are correct. • Verify the PMS messages for checkout and check-in are correct.

Chapter 4

Installing HVS

In this chapter

Overview	4-2
Dialing plans	4-3
Hospitality setup checklist	4-5
Hardware	4-9
Installation process overview	4-13
Section A:: Installation of Modular Option EC	4-17
Section B:: Installation of Modular Option	4-27
Section C:: Installation of Card Option	4-37

Overview

Introduction

This chapter explains the process for installing Meridian Mail Hospitality Voice Services (HVS) on each of the following platforms:

- Modular Option EC
- Modular Option
- Card Option

Who should read this chapter

This chapter provides information for

- installation technicians
- maintenance technicians

Dialing plans

Introduction

It is necessary to understand the room number to room DN correlation and dialing plan. This will be used to determine the “pad characters” for the room DNs when setting up the hospitality profile.

Note: In HVS, mailbox numbers are the same as room numbers, which may differ from the room DN as it is configured on the Meridian 1. This is because the PMS passes the room DN to Meridian Mail for mailbox check-in/checkout. This DN is then forwarded to the Meridian 1 to enable the phone features.

Common dialing plans

On the Meridian 1, DNs will be based on room numbers. However, there will likely be room numbers of varying lengths (for example, Room 101 to Room 1999). If the longest possible room number (and, therefore, DN) is four digits in length, three-digit room numbers will be preceded with a common number (quite frequently 7 in the hotel industry).

Example

The hotel may have both three-digit and four-digit room numbers (for example, Room 216 on the second floor and Room 2160 on the 21st floor). To call room 216, a guest dials 7216. The Left Pad field contains the character that is used to prefix the room number, thus generating the DN that is configured on the switch. For example, if 7 is defined as the left pad character, the DN 7216 is generated when you create a user for room 216.

Another common dialing scheme is to precede the three-digit room number DNs with 0 in the Meridian 1 database (room 216, therefore, would have the DN 0216).

Some hotel rooms will have more than one DN (for example, there are two telephone sets or two lines for the room). Up to three DNs can be assigned to a room mailbox, but only the primary DN (the first one configured) is significant for PMSI messages. All other DNs will be ignored.

If DNs are prefixed with a digit other than 0 or 7, you must rebalance the directory after adding users to the system and before you put the system into operation. Use the DR rebalance utility which is available at the tools level. This utility is documented in the *System Administration Tools Guide* (NTP 555-7001-305) in the chapter called “Rebalance directory.” You do not have to rebalance the directory for standard HVS dialing plans (in which DNs are prefixed with 0 or 7).

Hospitality setup checklist

Introduction

You should read all of this chapter to determine the options you have for configuring your hospitality system. In many instances, you may find that the default values are sufficient. The following parameters must be configured before you begin creating mailboxes (or “users” as described in the “User administration” chapter) for the rooms in your hotel.

On the Meridian 1

Make sure you have done the following before beginning your configuration of the Hospitality feature in Meridian Mail:

- Set the date. See the *X11 Input/Output Guide* (NTP 553-3001-400).
- Defined your PMS port (for integrated systems with PMS). See the *X11 Input/Output Guide* (NTP 553-3001-400).
- Installed all required packages. (HVS, PMS, and BGD are the minimum software requirements for hospitality systems).

To find out the equipped X11 software packages, use LD20-22. See the *X11 Input/Output Guide* (NTP 553-3001-400).

- If yours is a multilingual system, ensure that the Multilingual Wakeup feature has been configured on the Meridian 1.
- Defined ACD queues for all voice messaging services required. See “Configuring hospitality voice services” on page 4-7 for details.

Note: For PMSI link requirements and PMS hardware requirements, see *PMSI Description* (NTP 553-2801-101).

In the Hospitality Profile screen

In the View/Modify Hospitality Profile screen

- Record customized greetings (such as the guest lagon greeting, greetings for unanswered and busy guest phones, and a greeting for vacant rooms) in all required languages.
- If your hotel has room numbers of varying lengths, fill in the Left Pad field if you want the DNs to be of a fixed length. This must be done before you begin adding mailboxes as the left pad character is used to generate corresponding DNs.
- Set up the post checkout audit times to ensure that unread messages and old read messages do not remain on the system taking up needed storage space.
- Specify how guest passwords are generated upon check-in (using the guest's last name or date of check-in).
- Define the revert DNs for vacant rooms and rooms for which voice messaging is disabled so that callers have a chance to speak to an operator or leave a message at the message center.

In the Install Parameters screen

From the View/Modify Install Parameters screen, do the following:

- If the PMSI link character set is mapped to anything other than American ASCII, define the character mapping table so that unrecognized international characters can be mapped to their nearest ASCII equivalent.
- If you are using the CPND feature on the Meridian 1, set the default name length to the maximum that will ever be required (27 is the absolute maximum, 23 is recommended).
- If your system is integrated with a PMS, ensure that this value is the same as the setting on the PMS.
- If your system is multilingual, define the language mnemonic table so that Meridian Mail can recognize the language identification code that is sent in PMS messages. This code is also required by the GAC. This table should, therefore, be filled in even if Meridian Mail is not connected to a PMS. (The information will be used to generate PMSI link messages to the Meridian 1.)

- If Meridian Mail is connected to a PMS, set the voice count option to indicate when Meridian Mail should issue voice counts to the PMS.

General items

- Define the password for your GACs and the administration terminal.
- Make sure that resync mode is “Off” in the Hospitality System Status screen.
- Set up a service DN for hospitality messaging in the VSDN table.
- Check that the link between Meridian Mail and the Meridian 1, and the link between Meridian Mail and the PMS (if applicable) are up.
- Check the Hospitality System Status screen, select [Test Links], and update the screen.

Note: When programming the guest sets, you will need to assign the sets XFA CLS if they are 2500 sets or AO6 if they are multiline sets; otherwise, the call sender feature will not work. Refer to the “Meridian 1 Configuration” chapter in the *Installation and Maintenance Guide* (NTP 555-70xx-250) for more information.

Configuring hospitality voice services

Before configuring any voice services, read the section titled “Configuring Meridian Mail services” in the “Voice administration” chapter in the *System Administration Guide*. This section discusses strategies for configuring voice services and includes detailed procedures for configuring ACD queues on the Meridian 1 and ACD DNs in Meridian Mail. Then return to this section for additional details about configuring hospitality services in particular.

Voice service configuration is a complex process that involves several steps.

Configure the Meridian 1

This involves creating ACD queues for the voice services that you want to make available to guests and staff. You use *overlays* to define ACD queues. For each queue that you create, you will assign a unique ACD DN. This DN will be the access number for the associated service.

Note: Make sure these queues are serviced by ports with the appropriate capabilities. Hospitality voice messaging requires full service voice ports. Port capabilities are described in detail in the “Voice administration” chapter in the *System Administration Guide*.

If you are dedicating agents to a particular service and you have moved agents from one queue to another, modify the Channel Allocation Table in Meridian Mail to reflect the new Primary DN of the agent.

Note: These first two steps are typically carried out by experienced technicians.

Configure the VSDN Table in Meridian Mail

This is where you define the ACD DN for each voice service for which you have created a queue on the Meridian 1. This is the DN that guests and staff dial to access a particular service.

At the very least, you will have to configure one ACD queue on the Meridian 1 for Hospitality Voice Messaging. This queue contains the agents that answer calls coming in to the Meridian 1. Apart from this primary voice messaging queue, you will have to configure a queue for each service that is to be directly dialable by guests or staff. This may include a DN for Express Messaging, the Post Checkout Mailbox, and any voice menus or voice forms that you create.

Hardware

Introduction

Before beginning the installation of the HVS system, ensure that you have all the necessary hardware for

- HVS system
- Property Management System Interface

HVS Hardware Kit

In addition to the standard equipment necessary on any Meridian Mail system, Nortel provides a package called the HVS Hardware Kit. This package contains all of the additional hardware necessary to support Meridian Mail with HVS. The kit will vary according to the platform being used. The following chart identifies the hardware platform, the name of the HVS hardware kit, and the contents of the kit.

Platform	Hardware kit	Contains
Card Option	HVS Hardware Package AS7101	1 - RSM Breakout Assembly (NTAK18AA) 1 - 25 pair MDF Voice Cable, 10 ft., male to male (NE-B25C-FS) 1 - 25 pair MDF Voice Cable, 3.05 m (10 ft.), male to bare wire (NE-A25C-FS) 1 - DB25 peripheral cable, 3.05 m (10 ft.), male to bare wire (NTAK37AA) 3 - DB25 peripheral cable, 3.05 m (10 ft.) female to bare wire (NTAK36AA) 1 - DB25 Gender changer, female to female (A0351509) The following items are optional: VT420 Video display terminal (A0376839) HP700/32 Video display terminal - amber (A0376518) HP700/32 Video display terminal - green (A0376519) HP700/32 Video display terminal - white (A0376520)

Platform	Hardware kit	Contains
Modular Option EC	Modular HVS Hardware Package AS7010	1 - Cable, Connector (16 ft.) (M-M) (A0237451) 1 - Gender Changer (F-F) (A0351509) 1 - Powell DEC Cable (A0376171) 1 - DEC 420 Terminal (A0376839) 1 - Gender Changer (F-F) (A0351509) 1 - Null Modem Cable (25 ft.) (NTND82AB) 1 - HVS Implementation Workbook (PO710706) 5 - Guest Voice Messaging Reference Guide (PO711682)
Modular Option	Modular HVS Hardware Package	1 - Straight RS-232 cable (25 ft.) (NTND91AB) 1 - Null Modem Adapter (A0376505) 1 - Powell DEC Cable (A0376171) 1 - DEC 420 Terminal (A0376839) 1 - Gender Changer (F-F) (A0351509) 1 - Null Modem Cable (25 ft.) (NTND82AB) 1 - HVS Implementation Workbook (PO710706) 5 - Guest Voice Messaging Reference Guide (PO711682)
	Modular RSM Package AS7015	1 - 50 Pos. EMI Filter and Mounting (A0361136) 1 - RS-232C Service Module (RSM Card) (NT4R03AB) 1 - RSM Fanout Cable (25 ft.) (NT4R20AA) 1 - RSM Cable (NT6D4406) 1 - RSM Installation Kit Modular (Screws, bolts, and so on) (NT9D99AA)
<p>Note: For both the EC and Modular Option systems, up to four Guest Administration Consoles can be installed on any one HVS system, with a maximum of two on node 1.</p>		

PMS Hardware

The PMS vendor is responsible for providing the cable that physically connects the PMS to the fanout cable that attaches to Meridian Mail. This cable will vary depending on whether the ports on the PMS system are configured as DTE or as DCE.

There is no set rule saying the ports must be configured a certain way; the important thing to remember is to connect a DTE-DCE (unlike) with a straight-through (normal) cable, and connect a DTE-DTE or DCE-DCE using a null modem cable. Nortel offers a straight RS-232 cable (NTND91AB) for DCE connections, and a null modem RS-232 cable (NTND82AB) for DTE connections.

Note: These cables are not part of the HVS Hardware Kits noted above.

Here are some hints on how to determine what kind of configuration is being used:

- If the PMS system is located more than 50 ft. from the Meridian 1, short haul modems will be in use. This means the PMS will *probably* have been configured as a DCE. (There is no guarantee that it is in fact DCE, so check with the PMS vendor/hotel's systems staff to be sure).
- If the PMS system is located less than 50 ft. from the Meridian 1, this means the PMS is *probably* configured as a DTE. (Again, there is no guarantee that it is DTE, so check with the PMS vendor/hotel's systems staff to be sure).
- Look at the pins on both the PMS cable and fanout cable, and make sure the connectors match. It may also be necessary to obtain straight gender benders (M-M, F-F) to complete the connection.
- For hotels that are installing HVS on an existing Meridian 1-PMS setup, if the existing PMS cable going into the Meridian 1's SDI paddleboard (NT8D41) uses a DB9 pin, the cable will either have to be changed, or a DB9 to DB25 adapter will be required to make the connection to the RS-232 fanout cable.

**System
comprehensive
upgrade**

In changing your Meridian Mail System software you will need to perform a comprehensive upgrade.

See the *System Installation and Modification Guide* (NTP 555-7001-215), for detailed information on performing a comprehensive upgrade.

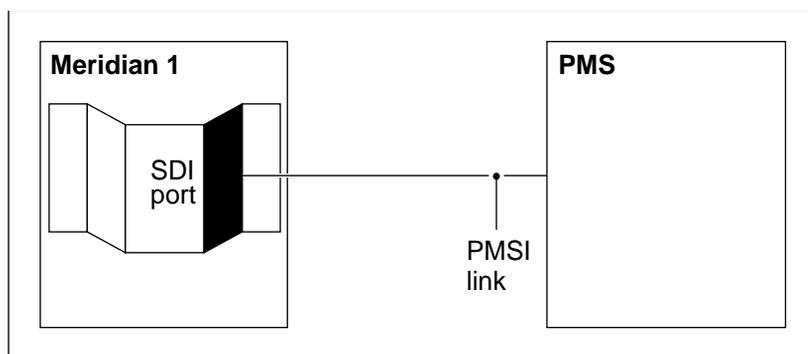
Installation process overview

Introduction

When a hotel installs a Property Management System (PMS) but is not using Meridian Mail, it is connected by the PMSI link, which is attached to the SDI port of the Meridian 1, as illustrated in the following diagram.

Diagram: PMS Connection (No Meridian Mail)

The following diagram illustrates the direct connection between the Meridian 1 and PMS.



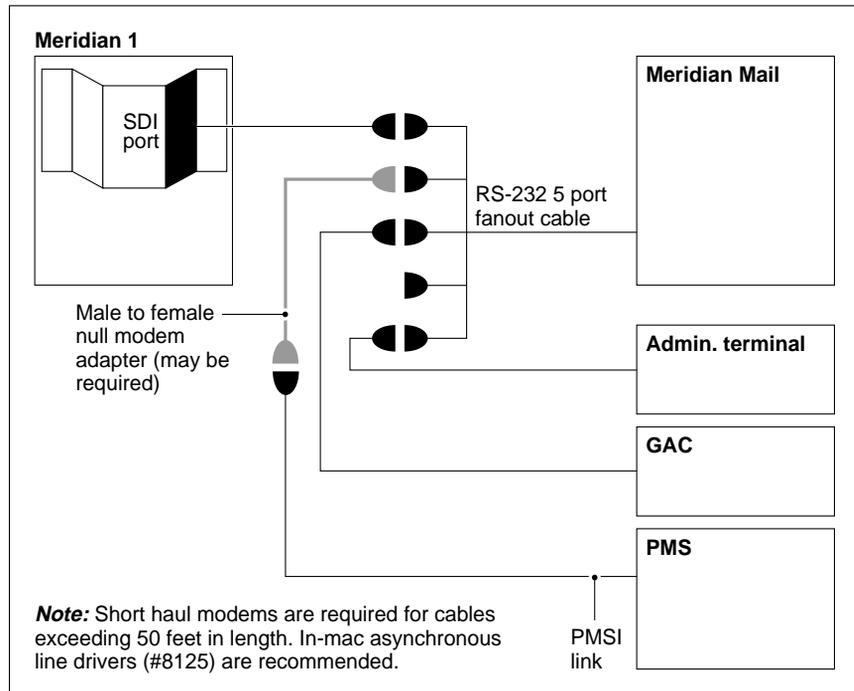
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When HVS is added to this PMS/Meridian 1 configuration, Meridian Mail becomes a server and is inserted on the PMSI link between the PMS system and the Meridian 1. The PMSI link from the PMS connects via a four- or five-port fanout cable, and terminates on an RS-232 Service Module (RSM) port, or Utility Card (for Modular Option EC) instead of the Meridian 1's SDI port, as illustrated in the following diagram.

Note: The type of platform will determine what fanout cable is used and whether an RSM or Utility card is used.

HVS Connection - General Concept

The following diagram illustration the general connections for a Hospitality Voice Service.



PMSI messages passing on this link are acted upon by Meridian Mail to automate the process of setting up mailboxes for guests, and to integrate text and voice message notification in order to control the Message Waiting Lamp on the guest's telephone.

Specific installation instructions will be affected by a number of factors including

- the type of platform being used (Card Option, Modular Option EC, or Modular Option)
- whether a PMS system is being used
- whether the hotel is currently operating, or is under construction

Installation procedures are provided for each of the three platforms.

Platform	For installation instructions, see:
Modular Option EC	page 4-17
Modular Option	page 4-27
Card Option	page 4-37

The instructions identify the procedures to follow in a PMS environment. If you are installing HVS in a hotel that does not use a PMS system, just omit the procedure for installing the PMSI link.

The installation procedures do not take into account whether the hotel you are working in is in operation or under construction. If you are installing HVS in a hotel that is currently operational, you will have to coordinate with the hotel staff regarding the best times to take the Meridian 1 and PMS system out of service while the installation takes place.

***Section A:* Installation of Modular Option EC**

In this section

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Installing the PMSI link	4-22
Installing the Guest Administration Console (GAC)	4-26

Overview

Introduction

This section provides instructions for the installation of a Hospitality Voice Services (HVS) system for a Meridian Mail Modular Option EC system.

The complete installation includes both the installation of the hardware and the software.

Before you begin

Before beginning this installation, it is assumed that Meridian Mail has been successfully installed, and that both the Meridian 1 and Meridian Mail have been configured. For additional information, see the following chapters:

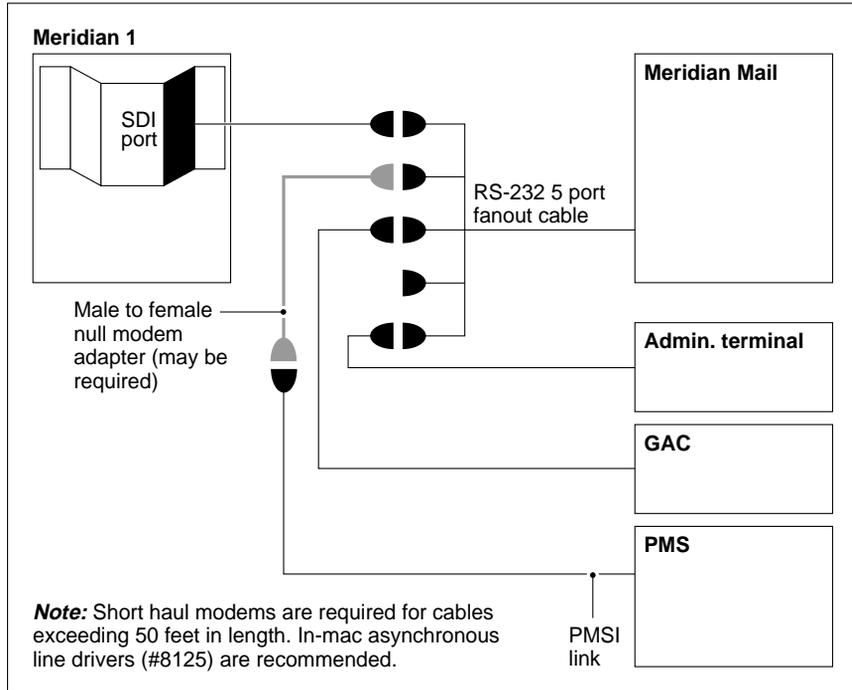
- Chapter 5, “Meridian 1 Configuration”
- Chapter 8, “Meridian Mail Configuration”

In addition, you must do the following:

- Assemble the correct hardware for the installation, as outlined in the following sections:
 - For HVS hardware, see page 4-9.
 - For PMS hardware, see page 4-11.
- Schedule a time to disable the PMS system. If Meridian Mail is being added to an existing Meridian 1/PMS setup, and both the Meridian 1 and Meridian Mail have been preconfigured, the system will be down for approximately 15 minutes. New installations will probably require the PMS to be down for a longer period.
- Determine whether the system has been configured as DCE or DTE.

Diagram:
HVS connection

The following diagram illustrates the connections required for an HVS system connected to a Modular Option EC system.



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Installing HVS on Modular Option EC

Introduction

The following procedure provides an overview of the steps required to install an HVS system on a Modular Option EC system.

Procedure

To install an HVS system on a Modular Option EC system, use the following steps.

Step Action

- 1 Power down the Meridian Mail system.
- 2 Connect the longest cable of the RS-232 5-port fanout cable, shown in the diagram "Diagram: HVS connection" on page 4-19, to the administration terminal.
- 3 Install the PMSI link, if required, as described in "Installing the PMSI link" on page 4-22.
- 4 Install the Guest Administration Console (GAC) as described in "Installing the Guest Administration Console (GAC)" on page 4-26.
- 5 Dress and secure any extra cable length. The physical installation is now complete.
- 6 Reset the bypass switch on the front of the Utility card to the up position to disable the bypass. (The LED lights up.) Meridian Mail is now incorporated into the link between the PMS and the Meridian 1.
- 7 Power up Meridian Mail.
- 8 Install the software using the detailed procedures in the *System Installation and Modification Guide* (NTP 555-7001-215). Remember, you will need a keycode to perform this installation.
Note: Hospitality Voice Services cannot be installed as part of a feature expansion.
- 9 Verify that the Channel Allocation table and customer number in Meridian Mail match the configuration for the Meridian 1.
- 10 Check the node and dataport configuration to ensure that the GAC has been configured properly.
- 11 Configure the Hospitality Install Parameters. See Chapter 6, "Planning the Hospitality Install Parameters" for further information.

Step Action

- 12 Configure the Hospitality Profile. See Chapter 7, “Planning and configuring the Hospitality Profile” for further information.
 - 13 Configure the Meridian Mail database with staff and guest mailboxes.
 - 14 Test PMSI and all services. Modify configurations if required.
 - 15 Complete a database swap to resynchronize the PMS and Meridian 1 databases. See “The PMS database swap” on page 9-35.
-

Note: Steps 8 to 13 can be done prior to the HVS hardware installation.

Installing the PMSI link

Introduction

The following procedure provides instructions for installing the PMSI link on a Modular Option EC system.

Procedure

To install the PMSI link, use the following steps.

Step Action

- | | | |
|----|--|----------------|
| 1 | Assemble the appropriate PMS cabling. See "PMS Hardware" on page 4-11 for a complete list. | |
| 2 | Set the bypass switch on the Utility card to the down position, which enables the bypass. (The LED turns off.) | |
| 3 | Remove the PMS cable currently installed in the SDI card in the Meridian 1 to disconnect the link between PMS and the Meridian 1. | |
| 4 | Disable the SDI card and ensure the PMS port on the card is set to 1200 bps. Do not reenale the SDI card yet. | |
| 5 | Determine how the PMS has been configured. | |
| | IF | THEN |
| | the PMS has been configured as DTE | go to Step 7. |
| | the PMS has been configured as DCE | go to Step 11. |
| 6 | Have the PMS vendor connect one end of the PMS' null modem cable to the PMS, and connect the other end to port S5P2 of the 5-port fanout cable (NT4R20AA). | |
| 7 | Connect one end of the null modem RS-232 cable (NTND82AB) to the SDI port on the Meridian 1 and the other end to port S5P3 of the 5-port RS-232 cable. | |
| 8 | Verify that the SDI card being used has the jumpers for the PMS port set for DTE (or RS-232C data terminal). Refer to <i>Circuit Card Installation and Testing</i> (NTP 553-3001-211). | |
| 9 | Go to Step 13. | |
| 10 | Have the PMS vendor connect one end of the PMS' straight null modem cable to the PMS, and connect the other end to port S5P2 of the 5-port fanout cable. | |
| 11 | Connect one end of the straight RS-232 cable (NTND91AB) to the SDI port on the Meridian 1, and the other to port S5P3 of the 5-port RS-232 cable. | |

Step Action

- 12 Verify that the SDI card being used has the jumpers for the PMS port set for DCE (or "Modem"). See the chart, "SDI DTE/DCE mode selection" on page 4-24.
 - 13 Dress and secure any extra cable length.
 - 14 Reenable the SDI card.
-

SDI DTE/DCE mode selection

The following table provides the valid jumper and switch settings.

QPC139 SDI Card													
PMS port		Jumper location		Settings									
Port 1 (J3)		A16		DTE									
		A13		DCE									
Port 2 (J4)		A22		DTE									
		A25		DCE									
NT8D41 SDI Paddleboard													
		SW5						SW6					
PMS port	Mode	1	2	3	4	5	6	1	2	3	4	5	6
Port 1	DTE	1	1	1	1	1	1	0	0	0	0	0	
	DCE	0	0	0	0	0	0	1	1	1	1	1	1
		SW7						SW8					
Port 2	DTE	1	1	1	1	1	1	0	0	0	0	0	0
	DCE	0	0	0	0	0	0	1	1	1	1	1	1
QPC841 SDI Card													
		SW8						SW9					
PMS port	Mode	1	2	3	4	5	6	1	2	3	4	5	6
Port 1	DTE	1	1	1	1	1	1		0	0	0	0	0
	DCE	0	0	0	0	0	0	1	1	1	1	1	1
		SW6						SW7					
Port 2	DTE	1	1	1	1	1	1	0	0	0	0	0	0
	DCE	0	0	0	0	0	0	1	1	1	1	1	1
		SW4						SW5					
Port 3	DTE	1	1	1	1	1	1	0	0	0	0	0	0
	DCE	0	0	0	0	0	0	1	1	1	1	1	1
		SW2						SW3					
Port 4	DTE	1	1	1	1	1	1	0	0	0	0	0	0
	DCE	0	0	0	0	0	0	1	1	1	1	1	1

SDI speed switch locations and settings for 1200 baud

The following table provides the SDI speed switch locations and settings.

QPC139 SDI Card					
PMS Port	Switch location	Position			
		1	2	3	4
Port 1 (J3)	C34	0	1	1	0
Port 2 (J4)	C22	0	1	1	0
NT8D41 SDI Paddleboard					
PMS Port	Switch location	Position			
		1	2	3	4
Port 1 (J1)	SW2	0	1	1	0
Port 2 (J2)	SW3	0	1	1	0
QPC841 SDI Card					
PMS Port	Switch location	Position			
		1	2	3	4
Port 1	SW10	0	1	1	0
Port 2	SW11	0	1	1	0
Port 3	SW12	0	1	1	0
Port 4	SW13	0	1	1	0
(Where 1=ON, and 0=OFF)					

Installing the Guest Administration Console (GAC)

Introduction

The following procedure describes the installation of the GAC on a Modular Option EC system.

Procedure

To install the Guest Administration Console (GAC), use the following steps.

Step	Action
------	--------

- 1 Run the Null Modem Cable for the GAC from the switch room to GAC.
- 2 Connect one end of the Null Modem Cable for the GAC to either of the first two cables on the RS-232 fanout cable, labeled S5P0 or S5P1.
- 3 Connect the other end of the Null Modem Cable to the Comm connection on the back of the GAC console.
- 4 Enter setup mode (F3) from the GAC's keyboard and configure the terminal as identified in Appendix A of NTP 555-7061-250.

Note: The ports on the Utility cards are preconfigured at the factory according to the original order, so no additional configuration is required.

If you plan to install additional GACs, contact your Nortel support facility to have the Utility Card reconfigured.

***Section B:* Installation of Modular Option**

In this section

Overview	4-28
Installing HVS on Modular Option	4-30
Installing the RSM card	4-32
Installing the PMSI link	4-34
Installing the Guest Administration Console (GAC)	4-36

Overview

Introduction

This section provides instructions for the installation of a Hospitality Voice Services (HVS) system for a Meridian Mail Modular Option system.

The complete installation includes both the installation of the hardware and the software.

Before you begin

Before beginning this installation, it is assumed that Meridian Mail has been successfully installed, and that both the Meridian 1 and Meridian Mail have been configured. For additional information, see the following chapters:

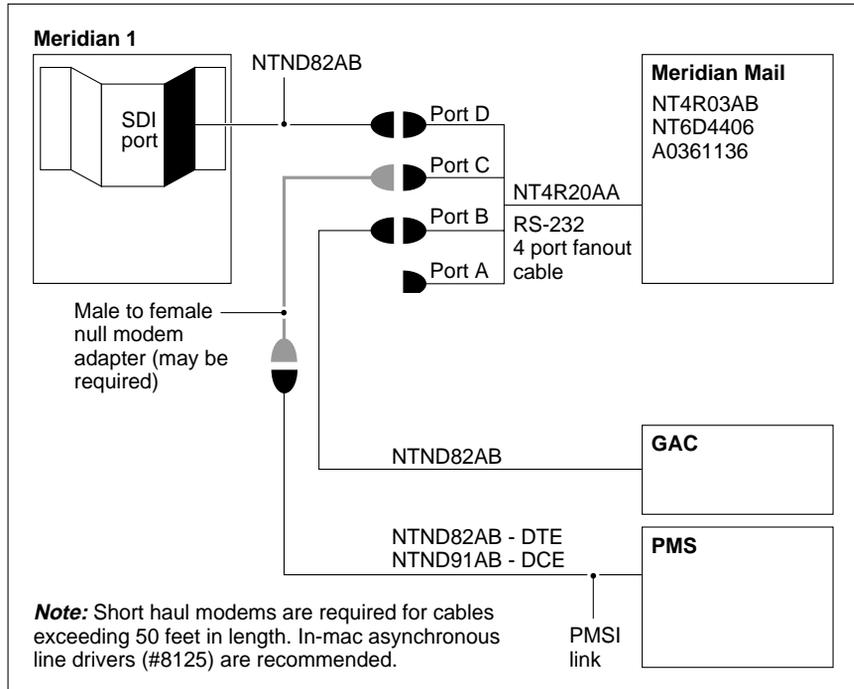
- Chapter 5, “Meridian 1 Configuration”
- Chapter 8, “Meridian Mail Configuration”

In addition, you must do the following:

- Assemble the correct hardware for the installation as outlined in the following sections:
 - For HVS hardware, see page 4-9.
 - For PMS hardware, see page 4-11.
- Schedule a time to disable the PMS system. If Meridian Mail is being added to an existing Meridian 1/PMS setup, and both the Meridian 1 and Meridian Mail have been pre-configured, the system will be down for approximately 15 minutes. New installations will probably require the PMS to be down for a longer period.
- Determine whether the system has been configured as DCE or DTE.

Diagram:
HVS connection

The following diagram illustrates the connections required for an HVS system connected to a Modular Option system



G100561

Installing HVS on Modular Option

Introduction

The following procedure describes the installation of HVS on a Modular Option system.

Procedure

To install an HVS system on a Modular Option system, use the following steps.

Step Action

- 1 Power down the Meridian Mail system.
- 2 Install the RSM card as outlined in “Installing the RSM card” on page 4-32.
- 3 Perform a hardware modification to add the RSM card to the hardware database. Refer to the *System Installation and Modification Guide* (NTP 555-7001-215) for detailed instructions.
- 4 Install the PMSI link, if required, as described in “Installing the PMSI link” on page 4-34.
- 5 Install the Guest Administration Console (GAC) as described in “Installing the Guest Administration Console (GAC)” on page 4-26.
- 6 Dress and secure any extra cable length. The physical installation is now complete.
- 7 Reset the bypass switch on the front of the RSM card to the up position to disable the bypass. (The LED lights up.) Meridian Mail is now incorporated into the link between the PMS and the Meridian 1.
- 8 Power up Meridian Mail.
- 9 Install the software using the detailed procedures in the *System Installation and Modification Guide* (NTP 555-7001-215). You will need to refer to the Overview chapter, and the Software Installation chapter. Remember, you need a keycode to perform this procedure.
Note: Hospitality Voice Services cannot be installed as part of a feature expansion.
- 10 Verify the Channel Allocation table and customer number in Meridian Mail that match the configuration for the Meridian 1.

Step Action

- 11 Check the node and dataport configuration to ensure that the GAC has been properly configured.
 - 12 Configure the Hospitality Install Parameters. See Chapter 6, “Planning the Hospitality Install Parameters” for further information.
 - 13 Configure the Hospitality Profile. See Chapter 7, “Planning and configuring the Hospitality Profile” for further information.
 - 14 Configure Meridian Mail database.
 - 15 Test PMSI and all services. Modify configurations if required.
-

Note: Steps 9 to 14 may be done prior to the HVS hardware installation.

Installing the RSM card

Introduction

The following procedure describes the installation of the RSM card on a Modular Option system.

Procedure

To install the RSM card, use the following procedure.

Step Action

- 1 Remove the front and rear covers from the module in which the RSM is to be installed.
- 2 Disconnect cabling at the front of the MMP40 card.
- 3 Remove the MMP40 card and set the jumpers to indicate that an RSM card is present. (Refer to Chapter 7 in the *Modular Option Installation and Maintenance Guide* [NTP 555-7041-250] for switch and jumper settings.)
- 4 Reinsert the MMP40 card.
- 5 Disconnect cabling at the front of the NVP cards.
- 6 Remove the NVP cards and set them aside.
- 7 Route the RSM cable (NT6D4406) along the inner panel (just to the right of the RSM card slot) to the rear of the shelf. (Clamps are provided to secure the cable along the panel.)
- 8 Go to the rear of the module and inspect the connector panel. Locate the ports marked RSM.
- 9 Insert the 50 Pos. EMI Filter and Mounting (A0361136) into the port labeled RSM on the connector panel. One side of the filter will be facing outwards and the other side will be facing the inside of the connector panel towards the back of the module.
- 10 Mount the J1 connector of the RSM cable (NT6D4406) onto the side of the EMI filter that is facing the back of the module. Secure the bail locks onto the connector.
- 11 Connect the RSM fanout cable (NT4R20AA) to the other side of the EMI filter that faces outwards, away from the back of the module.
- 12 Make sure the switch settings on the RSM card have been set according to the table in Chapter 7, "Planning and configuring the Hospitality Profile". Install the RSM card in slot 8 of the appropriate node.

Step Action

- 13 Connect the other end of the RSM cable (not the RSM fanout cable) to the front of the RSM card.
 - 14 Reinstall the NVP cards and reconnect the cabling at the front of the cards.
 - 15 Inspect all cables and cards to ensure that they are seated properly.
 - 16 Reinstall front and rear covers.
-

Installing the PMSI link

Introduction

The following procedure describes the installation of the PMSI link on a Modular Option system.

Procedure

To install the PMSI link, use the following steps.

Step Action

- | Step | Action | | | | | | |
|------------------------------------|--|----|------|------------------------------------|---------------|------------------------------------|----------------|
| 1 | Assemble the appropriate PMS cabling. See "PMS Hardware" on page 4-11 for a complete list. | | | | | | |
| 2 | Set the bypass switch on the Utility card to the down position, which enables the bypass. (The LED turns off.) | | | | | | |
| 3 | Remove the PMS cable currently installed in the SDI card in the Meridian 1 to disconnect the link between PMS and the Meridian 1. | | | | | | |
| 4 | Disable the SDI card and ensure that the PMS port on the card is set to 1200 bps. Do not reenab the SDI card yet. | | | | | | |
| 5 | Determine how the PMS has been configured. | | | | | | |
| | <table border="1"> <thead> <tr> <th>IF</th> <th>THEN</th> </tr> </thead> <tbody> <tr> <td>the PMS has been configured as DTE</td> <td>go to Step 6.</td> </tr> <tr> <td>the PMS has been configured as DCE</td> <td>go to Step 10.</td> </tr> </tbody> </table> | IF | THEN | the PMS has been configured as DTE | go to Step 6. | the PMS has been configured as DCE | go to Step 10. |
| IF | THEN | | | | | | |
| the PMS has been configured as DTE | go to Step 6. | | | | | | |
| the PMS has been configured as DCE | go to Step 10. | | | | | | |
| 6 | Have the PMS vendor connect one end of the PMS's null modem cable to the PMS, and connect the other end to port C of the 4-port fanout cable (NT4R20AA). | | | | | | |
| 7 | Connect one end of the null modem RS-232 cable (NTND82AB) to the SDI port on the Meridian 1 and the other end to port D of the 4-port cable.

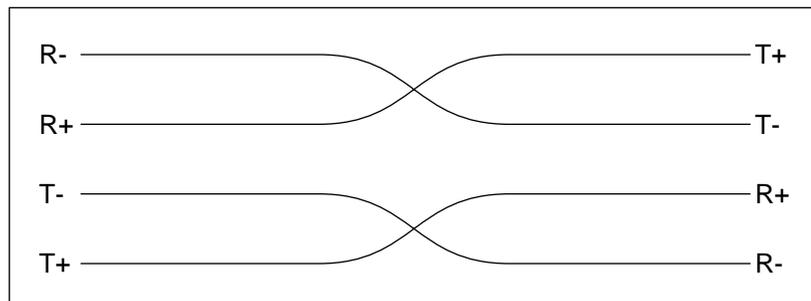
Note: If the distance between Meridian Mail and either the Meridian 1 or PMS is greater than 15.24 m (50 ft), line drivers (short haul modems) are required. Ensure that the signaling between line drivers is set up correctly. See the diagram "Line driver signaling example (INMAC 8125)" on page 4-35, for an example using INMAC units. | | | | | | |
| 8 | Verify that the SDI card being used has the jumpers for the PMS port set for DTE (or RS-232C data terminal). Refer to <i>Circuit Card Installation and Testing</i> (NTP 553-3001-211). | | | | | | |
| 9 | Go to Step 13. | | | | | | |

Step Action

- 10 Have the PMS vendor connect one end of the PMS's straight null modem cable to the PMS, and connect the other end to port C of the 4-port fanout cable.
- 11 Connect one end of the straight RS-232 cable (NTND91AB) to the SDI port on the Meridian 1, and the other to port D of the 4-port RS-232 cable.
Note: If the distance between Meridian Mail and either the Meridian 1 or PMS is greater than 15.24 m (50 ft), line drivers (short haul modems) are required. Ensure that the signaling between line drivers is set up correctly. See "Line driver signaling example (INMAC 8125)" on page 4-35 for an example using INMAC 8125 units.
- 12 Verify that the SDI card being used has the jumpers for the PMS port set for DCE (or "Modem"). See the chart, "SDI DTE/DCE mode selection" on page 4-24.
- 13 Dress and secure any extra cable length.
- 14 Reenable the SDI card.
- 15 Verify that the SDI card being used has the jumpers for the PMS port set for DCE (or Modem). Refer to the chart, "SDI speed switch locations and settings for 1200 baud" on page 4-25.
- 16 Reenable the SDI card.

Line driver signaling example (INMAC 8125)

The following diagram illustrates the signaling for a line driver, or short haul modem.



G100564

Installing the Guest Administration Console (GAC)

Introduction

The following procedure describes the installation of a GAC on a Modular Option system.

Procedure

To install the Guest Administration Console (GAC), use the following steps.

Step	Action
------	--------

- 1 Run the Null Modem Cable (NTND82AB) for the GAC from the switch room to where the GAC will be located.
- 2 Connect one end of the Null Modem Cable for the GAC to either of the first two cables on the RS-232 fanout cable, labeled A or B.
- 3 Connect the other end of the Null Modem Cable to the Comm connection on the back of the GAC console.
- 4 Enter setup mode (F3) from the GAC's keyboard and configure the terminal as identified in Appendix A of NTP 555-7041-250.

Note: The ports on the Utility cards are preconfigured at the factory according to the original order, so no additional configuration is required.

If you plan to install additional GACs, contact your Nortel support facility to have the Utility Card reconfigured.

***Section C:* Installation of Card Option**

In this section

Overview	4-38
Installing HVS on Card Option	4-39
Installing the RSM Breakout Assembly	4-42
Installing the Guest Administration Console	4-46
Installing the PMSI link	4-47

Overview

Introduction

This section provides instructions for the installation of a Hospitality Voice Services (HVS) system for a Meridian Mail Card Option system.

The complete installation includes both the installation of the hardware and the software.

Before you begin

Before beginning this installation, it is assumed that Meridian Mail has been successfully installed, and that both the Meridian 1 and Meridian Mail have been configured. For additional information, see the following chapters:

- Chapter 5, “Meridian 1 Configuration”
- Chapter 8, “Meridian Mail Configuration”

In addition, you must do the following:

- Assemble the correct hardware for the installation as outlined in the following sections:
 - For HVS hardware, see page 4-9.
 - For PMS hardware, see page 4-11.
- Schedule a time to disable the PMS system. If Meridian Mail is being added to an existing Meridian 1/PMS setup, and both the Meridian 1 and Meridian Mail have been preconfigured, the system will be down for approximately 15 minutes. New installations will probably require the PMS to be down for a longer period.
- Determine whether the system has been configured as DCE or DTE.

Refer to the *Meridian Mail Card Option Installation and Maintenance Guide* (NTP 555-7071-210). For additional information you might wish to also refer to the *Option 11 Installation Guide* (NTP 553-3011-210).

Installing HVS on Card Option

Introduction

The following procedure describes the installation of HVS on a Card Option system.

Procedure

To install an HVS system on a Card Option system, use the following steps.

Step Action

- 1 Courtesy down the Meridian Mail system.
- 2 Log on to the Meridian 1 PBX, and disable ESDI ports 8 and 9 as follows:
 - Type LD 48 <Return>.
 - Type DIS ESDI 8 <return>. (Stays disabled unless Meridian Mail is in use.)
 - Type DIS ESDI 9 <Return>, or DIS AML 9 <Return> (for Rills. 18.30 H 1 or later).
 - At the prompt, enter Y to confirm the ports have been disabled.
 - Type **** <Return>.
- 3 Turn off the power to Meridian Mail by flipping the power switch located on the 68K card. The switch should be in the DOWN position.
- 4 Unplug the 68K card from the Meridian 1 cabinet as follows:
 - Grasp the top three lock latches with one hand and the bottom three latches with the other, and unlock all three cards simultaneously.
 - Pull the assembly out slowly until the 68K card comes unplugged from the back of the cabinet. There is no need to remove it completely.



DANGER

Risk of electrical shock

Ensure that the 68K card has been unplugged before installing the RSM Breakout Assembly.

Step Action

- 5 Install the RSM Breakout Assembly as described in “Installing the RSM Breakout Assembly” on page 4-42.
- 6 Reinstall the 68K card, as follows:
 - Grasp the top three lock latches with one hand and the bottom three latches with the other, and slowly push the entire assembly back in, until the 68K card plugs firmly into the connector on the back of the cabinet.
 - Holding all three top lock latches with one hand, and all three bottom latches with the other, lock all cards simultaneously into the cabinet.
- 7 Turn the switch on the 68K card into the UP position to turn the power on.
- 8 Install the Guest Administration Console (GAC) as described in “Installing the Guest Administration Console” on page 4-46.
- 9 Install the PMSI link, if required, as described in “Installing the PMSI link” on page 4-47.
- 10 Dress and secure any extra cable length. The physical installation is now complete.
- 11 Log on to the Meridian 1 and re enable the ESDI ports 8 and 9, as follows:

Type **LD 48** <Return>.

Type **ENL ESDI 8** <Return>. (This is automatic when Meridian Mail is accessed via “AX.”)

Type **ENL AML 9 ACMS** <Return>.

At the prompt, enter Y to confirm the ports have been enabled.

Type ****.
- 12 Install the software using the detailed procedures in the *System Installation and Modification Guide* (NTP 555-7001-215). You will need to refer to the Overview chapter, and the Software Installation chapter. Remember, you need a keycode to perform this procedure.

Note 1: Hospitality Voice Services cannot be installed as part of a feature expansion.

Note 2: Meridian Mail must be loaded from tape when the Card Option is started for the first time. Meridian Mail will start automatically when the Card option is turned on (for example, in the event of a power failure.)

Step Action

- 13 Verify that the Channel Allocation table and customer number in Meridian Mail matches the configuration for the Meridian 1.
 - 14 Check the node and dataport configuration to ensure that the GAC has been configured properly.
 - 15 Configure the Hospitality Install Parameters. See Chapter 6, "Planning the Hospitality Install Parameters" for further information.
 - 16 Configure the Hospitality Profile. See Chapter 6, "Planning the Hospitality Install Parameters" for further information.
 - 17 Configure Meridian Mail database.
 - 18 Test PMSI and all services. Modify configurations if required.
-

Note: Steps 12 to 17 can be done prior to the HVS hardware installation.

Installing the RSM Breakout Assembly

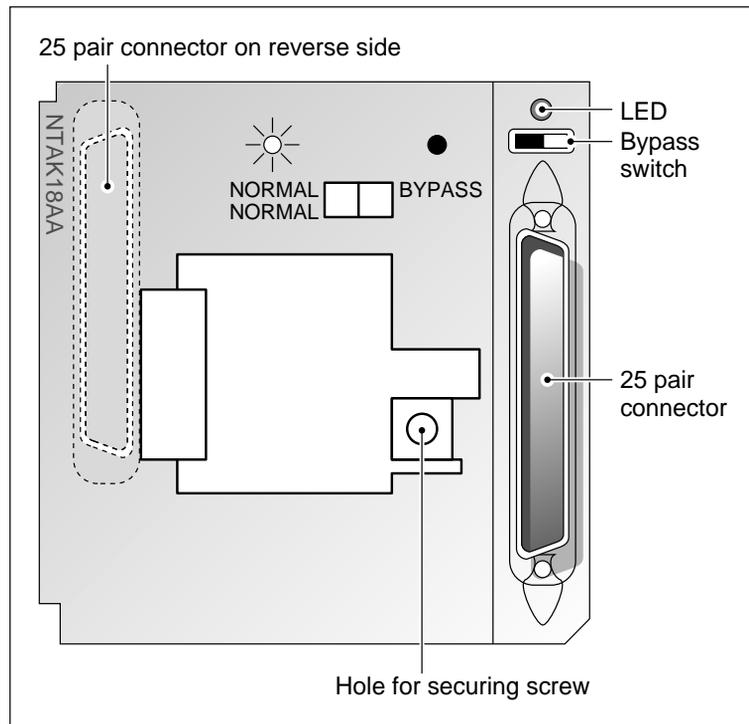
Introduction

The following procedure describes the installation of the RSM Breakout Assembly on a Card Option system.

RSM Breakout

Assembly - Front View

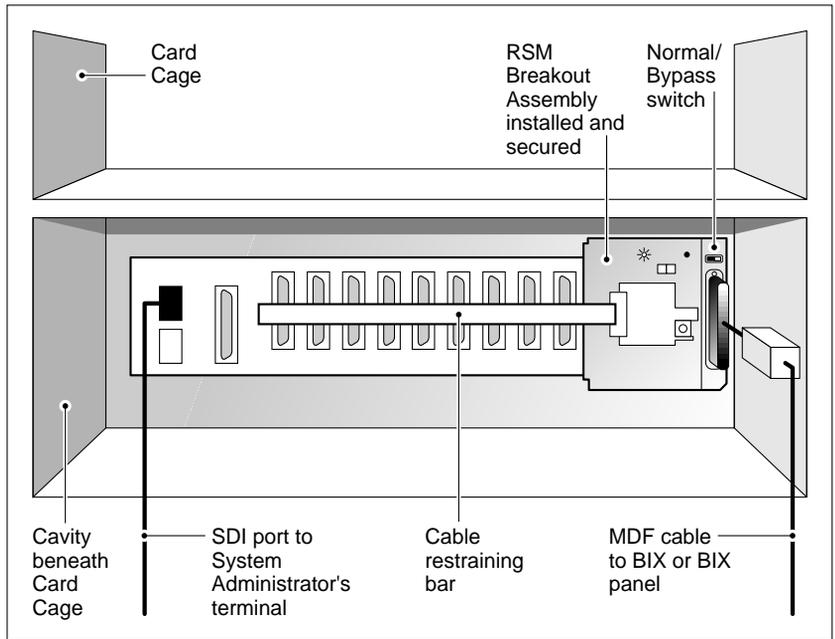
The following diagram illustrates the front of the RSM Breakout Assembly.



G100565

RSM Breakout Assembly - Installed

The following diagram illustrates the RSM Breakout Assembly installed.



G100566

Procedure

To install the RSM Breakout Assembly, use the following steps.

Step Action

-
- 1 Locate the RSM Breakout Assembly.
The RSM Breakout Assembly is a small circuit board beneath the three Meridian Mail cards which is connected to connector J10 (the right-most of the 25-pair connectors that run the length of the Meridian 1 cabinet). An MDF cable is attached to this assembly and allows the customer to connect other RS-232 devices to Meridian Mail, namely the Guest Administration Console. (See "RSM Breakout Assembly - Front View" on page 4-42.)
 - 2 Remove the cable restraining bar holding the cables in the cavity beneath the card cage.
Note: This bar also holds the Option 11 cabling in place. Be careful not to disrupt the cable connected to J1-J9.
 - 3 Move the small switch located in the top right corner of the Assembly into the Normal position (left) as indicated on the Assembly.
 - 4 With the metal plate of the assembly facing you, fit the hole in the middle of the Assembly over the plastic extrusion that holds the right end of the cable restraining bar in place. Using the 25-pair connector located on the back of the Assembly, plug the Assembly into the right-most 25-pair connector on the Meridian 1 (J10). Secure the Assembly into place with the screw provided.
 - 5 Select the type of voice cable required.
There are two types of voice cable available depending on how you wish to terminate on the BIX block:

NE-B25C-FS	25-pair MDF Voice Cable 3.05 m (10-ft), male to male
NE-A25C-FS	25-pair MDF Voice Cable 3.05 m (10-ft), mate to bare wire

Terminations can be done by plugging a modular plug into the BIX pack, or you can punch down onto the block itself.

Step Action

- 6 Plug the end of the MDF cable equipped with a cubic ferrite ring into the 25-pin connector located on the front of the Assembly. Depending on which cable you have chosen, either plug the male connector into the BIX pack (NE-B25C-FS cable), or punch down onto the block itself (NE-A25C-FS cable). Refer to Chapter 6, "Planning the Hospitality Install Parameters" for the wiring table.
 - 7 Run the MDF cable down the cable slot, and replace the cable restraining bar, as shown in the diagram, "RSM Breakout Assembly - Installed" on page 4-43.
-

Installing the Guest Administration Console

Introduction

The following procedure describes the installation of a GAC on a Card Option system.

Procedure

To install the Guest Administration Console, use the following steps.

Step	Action
1	Connect the female end of the DB25 peripheral cable, 3.05 m (10 ft), female to bare wire (NTAK36AA) to the Comm connection on the back of the GAC console.
2	Terminate the bare wires on the BIX block according to the wiring table found in Chapter 6, "Planning the Hospitality Install Parameters".

-
- 1 Connect the female end of the DB25 peripheral cable, 3.05 m (10 ft), female to bare wire (NTAK36AA) to the Comm connection on the back of the GAC console.
 - 2 Terminate the bare wires on the BIX block according to the wiring table found in Chapter 6, "Planning the Hospitality Install Parameters".
-

Installing the PMSI link

Introduction

The following procedure describes the installation of the PMSI link on a Card Option system.

Procedure

To install the PMSI link, use the following steps.

Step Action

- 1 Connect the male end of the DB25 peripheral cable, 3.05 m (10 ft), male to bare wire (NTAK37AA) to the DB25 pin coming off the PMS system. If necessary, also use the DB25 gender changer (A0351509).
 - 2 Terminate the bare wires on the BIX block according to the wiring table found in Chapter 7, "Planning and configuring the Hospitality Profile".
-

Chapter 5

Meridian 1 configuration

In this chapter

Overview	5-2
System verification	5-4
Section A: Configuring the hospitality voice messaging queue	5-7
Section B: Configuring the telephone sets	5-37

Overview

Introduction

This chapter explains how to configure the Meridian 1 to support a Meridian Mail system equipped with HVS.

Before you begin

In order to successfully complete this chapter you must be familiar with how to install “regular” Meridian Mail on each of the following platforms:

- Card Option
- Modular Option Enhanced Capacity
- Modular Option Classic

All information in this chapter is specific to Meridian 1 Release 18.

Who should read this chapter

The content in this chapter is intended for

- system administrators
- installation technicians
- maintenance technicians

Process of configuring the Meridian 1

Configuring the Meridian 1 to support a Meridian Mail system equipped with HVS involves completing a number of steps:

- system verification
- Hospitality Voice Messaging Queue
- configuring Meridian 1 to support PMSI
- configuring Meridian 1 to support hospitality features
- configuring the guest room telephone sets
- configuring the staff telephone sets

The Meridian 1 configuration requires input in the Overlays as well as the Background Terminal. If you are not familiar with how to use the background terminal, obtain the *Meridian 1 Background Terminal User Guide* (PO735211), and read the Introduction before continuing with this chapter.

**Process of
configuring Card
Option**

When the Meridian Card Option starts up, it automatically loads software consisting of a preprogrammed database. This database includes predefined ACD queues for Meridian Mail, but does not include any of the background terminal configurations or other items specific to HVS.

The Card Option technician can either review the entire Card Option database and modify those areas necessary to support HVS, or remove the preprogrammed database entirely and configure the system “from scratch.”

The configuration procedures for the Card Option are the same as those used to configure a Meridian 1.

System verification

Introduction

Before you start configuring the Meridian 1, you need to verify that the switch is capable of supporting HVS and the PMSI by:

- checking the system time and date
- confirming that the system has the correct issue and release
- confirming that the system has the correct software packages

Any reference to an Overlay in this topic assumes that you are logged on to the Meridian 1 and familiar with the process for programming the switch. For detailed instructions on programming the Meridian 1 and accessing Overlays, refer to the *System Installation and Maintenance Guide (555-70xx-250)* for your platform.

Check system date and time

It is important to check the system date and time to make sure that the background tasks are accurately completed. It is also important for any services that are time dependent, (that is, wake-up calls, automatic checkout, and so on). If necessary, reset the date and time.

Use Overlay 2 (LD 2) to verify the system date and time as follows:

- Check system date and time by entering the command TTAD.
- Reset system date and time by entering the command STAD.

Confirm the issue and release

The Meridian 1 must be equipped with Release 16 or higher to support HVS. If the system has a patch, a “+”, will be printed next to the issue number. It is a good idea to find out what the patch is for, because it might affect HVS.

Use Overlay 22 (LD 22) to print the correct issue

Prompt	Response	Description
REQ	ISS	Print the issue

Confirm the system software packages

The Meridian 1 must have the appropriate software packages loaded to support HVS. For information on what software packages are required, review “Software requirements” on page 2-30.

Use Overlay 22 (LD 22) to print out a list of the software packages currently on the system, and compare these to the software requirements listed in Chapter 2.

Prompt	Response	Description
REQ	PRT	Print
TYPE	PKG	Software packages

Identify the type of SDI card being used

Visually inspect the SDI card and determine which type of card is being used:

- QPC139
- QPC841
- NT8D41 SDI paddleboard

You will need to know this when configuring the Meridian 1 to support PMSI.

If card is QPC139 - CTYP, prompt in LD 17 will be SDI2.

If card is QPC841 - CTYP, prompt in LD 17 will be SDI4.

If card is NT8D41 - CTYP, prompt in LD 17 will be XSDI.

Note: The QPC513 (ESDI card) and NT6D80 (MSDL card) are used for the AML links, not the PMSI link.

Confirm the background option settings

This is an extremely important procedure. Refer to the *Meridian 1 Background Terminal User Guide*, in the section titled “System Administration and Configuration,” under the subsection titled “Print Option Settings” for detailed instructions.

From the background terminal, print out the options by typing in the following:

PR OP <CR>

Sit down with the PMS vendor and verify that each of the option settings for the background terminal are compatible with the PMS settings. These commands will vary from hotel to hotel, so it is important to check them line by line with the PMS vendor.

***Section A:* Configuring the hospitality voice messaging queue**

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Overview

Introduction

The following methods present three different ways of configuring the Voice Messaging service.

Method 1 is recommended if you will be phasing in voice messaging (to staff first, followed by guests).

Method 2 is recommended if you require absolute system integrity in the case of a PMSI link failure.

Method 3 is the least flexible and least recommended method, and only requires the primary voice messaging queue.

Method 1

Introduction

It is strongly recommended that a phased cutover be proposed to the hotel. In a phased approach, the staff would be cut over to Voice Messaging before the guest rooms. During this first stage, guests continue to use the message center (or whatever system you currently have in place) to retrieve messages.

The following are the advantages to phasing the cutover:

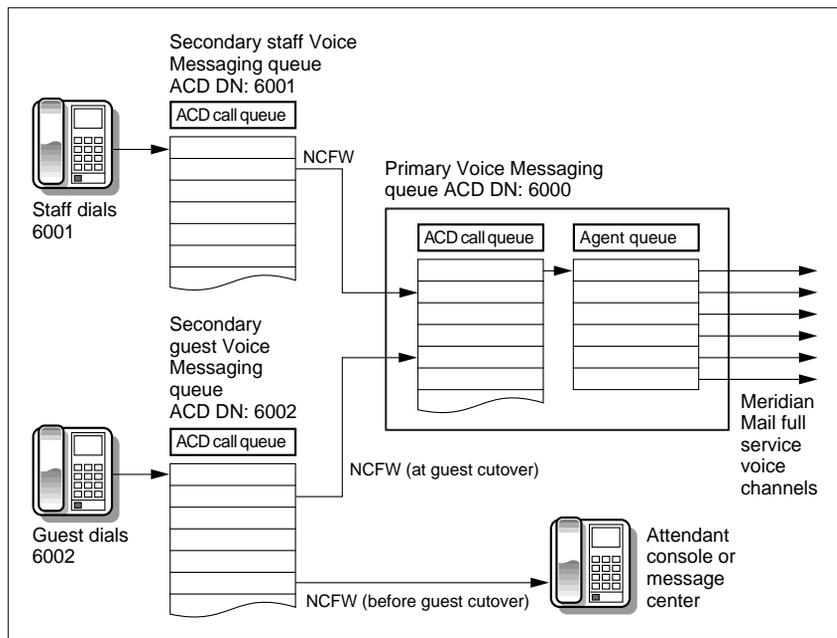
- Programming on the Meridian 1 side can be done far in advance of the guest cutover, ideally, at the same time the staff sets are reprogrammed.
- Staff are given time to become familiar with the service.

When the guest rooms are cut over, the staff are in a better position to assist, answering any questions the guests may have.

This method requires two secondary voice messaging queues (one for staff and one for guests) in addition to the primary voice messaging queue. The primary voice messaging queue contains the agents. The secondary voice messaging queues are “dummy” queues, meaning that they have no agents. During the initial stage of cutover, the staff dummy queue is night call forwarded (NCFW) to the primary voice messaging queue. The guest dummy queue is night call forwarded to the existing message center. When you are ready to cut over your guests, you simply night call forward the guest queue to the primary voice messaging queue. You, therefore, will publish one number to staff and a different number to guests. See the diagram, “Phased cutover (Method 1),” below.

Phased cutover (Method 1)

The following diagram illustrates the phased cutover method.



g100127

The following steps are carried out at the system administration level and are documented in the *System Administration Guide*. Follow these procedures supplied on the following chart to complete ACD-DN configuration.

Procedure	refer to
To configure the ACD queue (and ACD-DN) for the primary voice messaging queue	page 5-15
To configure the ACD queues for the staff and Guest Voice Messaging Services, including any additional Hospitality Voice Services	page 5-17
To configure ACD-DNs in Meridian Mail	page 5-22

During the first phase, program staff phone sets to forward to the Voice Messaging DN for No Answer and Busy conditions. When you are ready to cut over guests to Meridian Mail, night call forward the guest queue to the primary ACD-DN.

Method 2

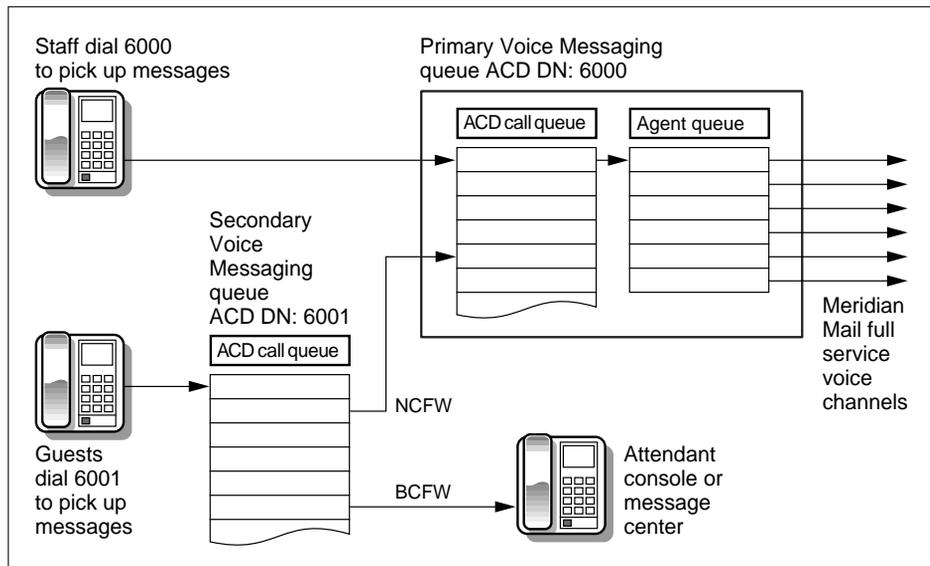
Introduction

This method is the most complex of the three. It should be used if absolute system integrity is required.

This method requires a secondary (agentless) ACD queue in addition to the primary voice messaging queue. The secondary ACD queue night call forwards (NCFW) to the primary Meridian Mail voice messaging queue and busy call forwards (BCFW) to a live attendant at a display phone. Publish the number associated with the secondary queue as the guest access number for Meridian Mail. Staff can either use the primary voice messaging DN, or you can create a dummy queue for staff that forwards to the primary voice messaging queue if you are phasing in voice messaging. See the diagram below.

Secondary voice messaging queue with NCFW and BCFW (Method 2)

The following diagram illustrates Method 2 for the cutover.



g100114

During normal operation, the guest DN call forwards to the primary Meridian Mail ACD queue so that calls are routed directly to Meridian Mail.

If the PMSI link goes down, set the agent phone set (in essence a “dummy console”) to “Make Busy”. When a caller dials a room where there is no answer, the call is forwarded to the guest DN which is set to “Make Busy” and is then forwarded to an attendant. The attendant can do one of the following:

- Take a text message and then inform the guest that there is a message waiting. This is the simplest method.
- Get the guest’s name and room number, and then verify on the PMS that the guest is indeed checked in to the room. If the guest is checked in to the room, the attendant can either
 - call the room to see if the guest is there
If the guest is there, the attendant can transfer the caller to the room. If the guest is not there, the attendant can use express messaging to connect the caller to the guest’s mailbox so that the caller can leave a voice message.
 - transfer the caller to the room
If the call comes back (because there was no answer), use express messaging to connect the caller to the guest’s mailbox.

If a guest calls to find out if there are any messages while the PMSI is down, the attendant can log the guest into his or her mailbox by dialing the primary Meridian Mail access DN, and entering the room number and guest’s password.

When the PMS is back up and corrective action has been taken, the “Make Busy” can be deactivated for the set. The following steps are carried out at the system administration level and are documented in the *System Administration Guide*. Follow the procedures on the following chart to complete ACD-DN configuration.

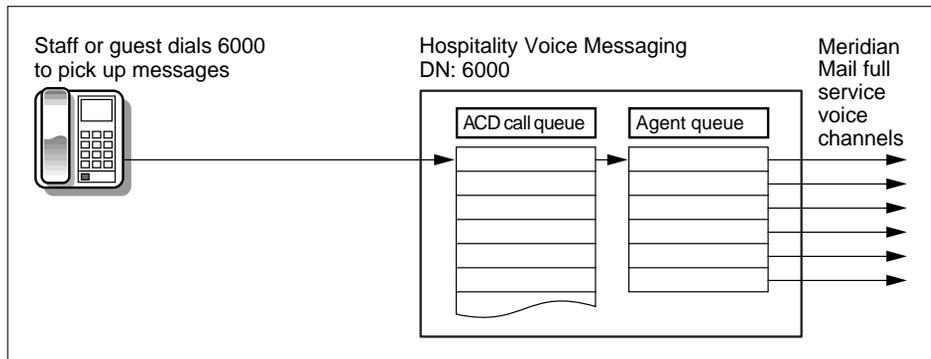
Procedure	refer to
To configure the ACD queue (and ACD-DN) for the primary voice messaging queue	page 5-15
To configure the ACD queues for the staff and Guest Voice Messaging Services, including any additional Hospitality Voice Services.	page 5-17
To configure ACD-DNs in Meridian Mail	page 5-22

Method 3

Introduction

This method only requires one ACD queue: an agent queue for hospitality voice messaging. The associated ACD-DN is published as the access number for voice messaging. Although this is the simplest method, it does not provide you with any flexibility. See the diagram below.

No secondary queues (Method 3) The following diagram illustrates Method 3 for the cutover.



g100126

The following steps are carried out at the system administration level and are documented in the *System Administration Guide*. Configure the ACD queue (and ACD-DN) for the primary voice messaging queue as well as any additional Hospitality Voice services.

Note: This is the simplest configuration and, as a result, it does not provide much flexibility. It is not typically recommended; however, some hotels do use it.

Configuring the primary hospitality voice messaging DN

Introduction

Regardless of which method you use, you will have to configure the primary voice messaging queue. This is the queue that contains agents.

Procedure

To configure the primary hospitality voice messaging DN, use the following steps.

Starting Point: Logged on to the Meridian 1 switch

Step Action

- 1 Load overlay 23 (LD 23) on the Meridian 1 to define the voice messaging ACD queue.
Result: A series of prompts is displayed in turn.
 - 2 Respond to the prompts in the table, "Overlay 23 - Parameters for the primary voice messaging ACD queue," on page 5-16.
Result: The ACD-DN becomes the direct number of the Voice Messaging Service.
 - 3 Decide whether you need to define another ACD queue.
If you are using Method 1 or Method 2, go to step 4.
If you are using Method 3, go to step 5.
 - 4 Enter NEW to define another ACD queue and continue as outlined in the following procedures:
For Method 1, go to "Meridian 1 configuration for Method 1" on page 5-17.
For Method 2, go to "Meridian 1 configuration for Method 2" on page 5-20.
 - 5 Define an ACD queue according to the responses shown on the table, "Overlay 23 - Parameters for the primary voice messaging ACD queue," for each additional voice service that you require (such as express messaging or the post-checkout mailbox). All additional services will NCFW to the primary voice messaging DN.
 - 6 If you do not need to configure more ACD queues at this time, enter END in response to the REQ prompt to exit Overlay 23.
 - 7 Go to "Configuring DNs in Meridian Mail" on page 5-22 to begin Meridian Mail configuration.
-

**Overlay 23 —
parameters for the
primary voice
messaging ACD queue**

Use the following prompts and responses to define the parameters for the primary voice messaging ACD queue.

Prompts	Responses	Description
REQ	NEW	
TYPE	ACD	ACD data block
CUST	<u>xx</u>	Meridian 1 customer number
ACDN	xxxxxxx	Enter the voice messaging DN.
MWC	YES	This is a Message Center DN. YES indicates that the queue has agents.
IMS	YES	This is an Integrated Messaging Service.
CMS	YES	Use the Command and Status Link Applications Protocol.
IMA	YES	Enable IMS attendant.
IVMS	YES	Integrated Voice Messaging This creates a message center from which messages can be retrieved.
VSID	xx	Enter the VAS ID (0-5) from LD 17.
MAXP	xx	Maximum number of ACD agents (This should be equal to the number of DSP ports in the installed voice processor cards.)
ALOG	YES	ACD agents associated with this queue are automatically logged on (made available) when Meridian Mail is powered up.
NCFW	0	The DN to which callers are forwarded if the Meridian Mail system fails (If NCFW = 0, callers are forwarded to the attendant. This number is also the DN to which callers are reverted when they press 0, unless otherwise specified in a mailbox user's profile.)

The ACD-DN becomes the directory number of the Voice Messaging service.

Meridian 1 configuration for Method 1

Introduction

Follow this procedure once you have created the primary voice messaging queue. This procedure describes how to create the staff voice messaging queue, the guest voice messaging queue, and any additional voice service queues.

Note: These procedures describe how to create a voice service that shares the agents in the primary voice messaging queue. If you need to dedicate agents to a particular service, see “Configuring Meridian Mail services” in the “Voice administration” chapter in the *System Administration Guide* (NTP 555-7001-301).

General process

A “dummy” queue is created that forwards calls to the primary voice messaging queue that has the agents. You then program your guest and staff telephone sets to FDN to the DN of the appropriate dummy queue; however, Meridian 1 software does not allow you to program a telephone set to FDN to an ACD queue that does not have agents.

To manage this, you must FDN a phone set to a message center ACD queue. When you are initially set up, these dummy queues respond to the MWC prompt with Yes. Program your telephone sets to FDN to the dummy ACD queue, then go back and change the MWC prompt to No for proper operation. Any time you program additional sets, you will have to temporarily change the MWC back to Yes before programming the FDN for the set.

Procedure

To configure the staff and guest voice messaging queues (Method 1), use the following steps.

Step Action

-
- 1 Respond to the prompts as shown in the table, "Overlay 23 - ACD parameters for voice service queues," in order to define the staff ACD queue.
 - 2 Enter NEW in response to the REQ prompt.
 - 3 To configure the guest voice messaging queue, respond to the prompts as shown in "Overlay 23 - ACD parameters for voice service queues" on page 5-19. The only difference is that you will enter the message center DN in response to the NCFW prompt (or whichever DN they currently call to pick up messages). When you are ready to cut guests over to voice messaging, you simply need to modify the NCFW field (so that the queue is forwarded to the primary voice messaging DN).
 - 4 For each additional voice service that you require (such as express messaging or the post-checkout mailbox), define an ACD queue according to the responses shown on the table. All additional services will NCFW to the primary voice messaging DN.
 - 5 If you do not need to configure more ACD queues at this time, enter END in response to the REQ prompt to exit overlay 23.
 - 6 Program telephone sets to FDN to this ACD-DN.
 - 7 Return to Overlay 23 and set MWC to No.
Result: The ACD-DN becomes the directory number of the new service.
 - 8 Go to "Configuring DNs in Meridian Mail" on page 5-22 to begin Meridian Mail configuration.
-

Overlay 23 - ACD parameters for voice service queues

Use the following parameters and responses to define the parameters for the voice services queues:

Prompts	Responses	Description
REQ	NEW	
TYPE	ACD	ACD data block
CUST	xx	Meridian 1/SL-1 customer number
ACDN	xxxxxxx	Enter the DN of the voice service.
MWC	YES	This field should be set to NO for voice service queues that forward to the primary queue. However, you must temporarily set MWC to YES so that you can FDN telephone sets to this queue.
MAXP	1	Maximum number of positions. Note: Even though no agents are assigned to this queue, this parameter must be set to 1.
NCFW	xxxxxxx	Enter the DN of the primary voice messaging queue that has the agents. (If this is an NMS satellite site, use the network format.)

Meridian 1 configuration for Method 2

Introduction

Follow this procedure once you have created the primary voice messaging queue. This procedure describes how to create the secondary voice messaging queue (which might call forwards to the primary voice messaging queue and busy call forwards to the message center) and any additional voice service queues.

Procedure

To configure the secondary voice messaging queues (Method 2), use the following steps.

Step Action

- 1 To define the secondary voice messaging queue, respond to the prompts in overlay 23 as shown in the table, "Overlay 23 - ACD parameters for secondary voice messaging queues."
 - 2 For each additional voice service that you require (such as express messaging or the post checkout mailbox), define an ACD queue according to the responses shown in the following table. All additional services will NCFW to the primary voice messaging DN. You will not need to respond to the BCFW prompt.
 - 3 If you do not need to configure more ACD queues at this time, enter END in response to the REQ prompt to exit overlay 23.
 - 4 Program telephone sets to FDN to this ACD-DN.
 - 5 Return to Overlay 23 and set MWC to No.
Result: The ACD-DN becomes the directory number of the new service.
 - 6 Go to "Configuring DNs in Meridian Mail" on page 5-22 to begin Meridian Mail configuration.
-

Overlay 23 - ACD parameters for secondary voice messaging queues

Use the following prompts and responses to define the parameters for the secondary voice messaging queues.

Prompts	Responses	Description
REQ	NEW	
TYPE	ACD	ACD data block
CUST	xx	Meridian 1/SL-1 customer number
ACDN	xxxxxxx	Enter the DN of the voice service.
MWC	YES	This field should be set to NO for voice service queues that forward to the primary queue. However, you must temporarily set MWC to YES so that you can FDN telephone sets to this queue.
MAXP	1	Maximum number of positions Note: Even though no agents are assigned to this queue, this parameter must be set to 1.
NCFW	xxxxxxx	Enter the DN of the primary voice messaging queue that has the agents. (If this is an NMS satellite site, use the network format.)
BCFW	xxxxxxx	Enter the DN of the agent set to which calls to Meridian Mail will be forwarded in the case of a PMSI link failure (usually the attendant console or message center).

Configuring DNs in Meridian Mail

Introduction

Follow this procedure once you have created all of the necessary voice service queues on the Meridian 1. This procedure describes how to define the ACD-DNs in Meridian Mail.

Procedure

To configure the Directory Numbers (DNs) in Meridian Mail, use the following steps.

Step	Action
1	Are you configuring DNs for a multi-customer system? If yes, go to step 2. If no, go to step 6.
2	Log on as customer administrator at the Meridian Mail administration terminal.
3	Select a customer from the Administration Selection screen.
4	Select Voice Administration from the Customer Administration Menu.
5	Continue with step 7.
6	Log on at the Meridian Mail administration terminal.
7	Select Voice Administration from the Main Menu.
8	Select Voice Services-DN Table.

Step Action

- 9 Press the [Add] softkey to add an ACD-DN to the VSDN table. See the *System Administration Guide* (NTP 555-7001-301) for details regarding adding DN information.
 - a. In the Access DN field enter the ACD-DN of the service.
 - b. In the Service field, enter the service with which the DN is associated. Enter one of the following acronyms, depending on the DN you are defining.

DN	Acronym
Primary voice messaging queue	HM
Guest and staff voice messaging queues	HM
Secondary voice messaging queue (Method 2)	HM
Note: When you specify HM as a service, the Autologon field is displayed. If you enable Autologon, guests do not have to enter their mailbox number or password when they log on from their room phone. If Autologon is disabled for the HM DN, guests are required to enter a mailbox number and password when they log on to listen for messages.	
For the primary voice messaging queue, disable Autologon. Secondary voice messaging queues typically have Autologon enabled. (If Autologon is disabled for the VSDN, guests will be prompted to enter their mailbox and password even if autologon is enabled in the Add a Local Voice User screens).	
Express messaging queue	EM
Post-checkout mailbox	CO

- 10 Press [Save] to save the ACD-DN definition.
- 11 Return to step 10 to add another ACD-DN.

Note: You might want to check the Channel Allocation Table (CAT) to ensure that all of the agents have been associated with Meridian Mail channels properly. Once the CAT has been configured after Meridian Mail installation, it is generally unnecessary to modify it unless you have added agents to the system or have decided to dedicate channels to particular services. The Channel Allocation Table is described in the “Voice administration” chapter in the *System Administration Guide*.

Configuring additional voice service DNs

Introduction

You must configure ACD-DNs for each additional service that is to be directly dialable by staff or guests. In a hospitality environment, you will probably want at least express messaging (EM) for your staff and the post checkout mailbox service (CO) for guests. Other voice services are discussed in the “Voice administration” section of Chapter 8, “HVS General Administration”.

Express messaging

This service allows staff to directly connect with a guest’s or another staff member’s mailbox to leave voice messages. For example, staff may want to leave a message for a guest who has a parcel waiting at the front desk. Normally, guests would not be aware of the Express Messaging DN.

Post-checkout mailbox

This service allows an attendant to connect guests to their post-checkout mailbox to hear any unread messages that may have arrived prior to their checkout.

Procedure

To configure an express messaging DN or a post-checkout mailbox DN, use the following steps.

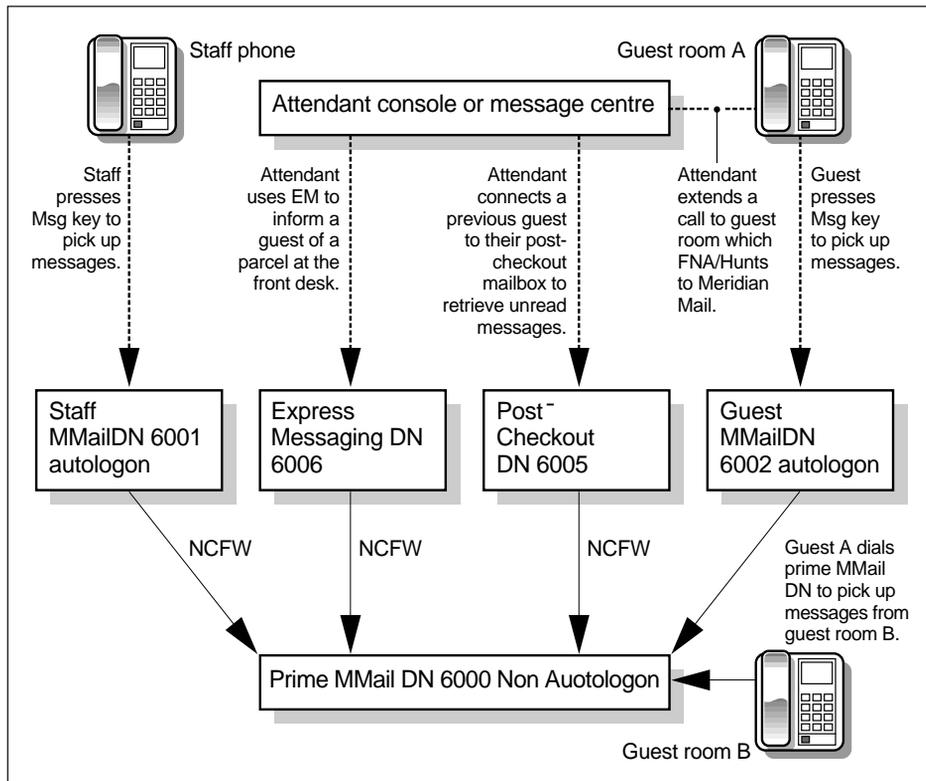
Step Action

- 1 Create a dummy ACD queue on the Meridian 1/SL-1.
- 1 Forward (NCFW) the ACD queue to the primary voice messaging DN.
- 2 Define the ACD queue according to the responses shown on the table, “Overlay 23 - Parameters for the primary voice messaging ACD queue” for each additional voice service that you require (such as express messaging or the post-checkout mailbox). All additional services will NCFW to the primary voice messaging DN.

Note: This number should not be made available to guests.

A sample DN configuration

The following illustration shows some of the ACD-DNs that can be configured to deal with typical call-handling scenarios in a hospitality environment. This example shows a configuration using Method 1 in which there is a staff DN and guest DN as well as DNs for express messaging and the post-checkout mailbox. Both the guest and staff voice messaging DNs indicate that Autologon is enabled for staff and guest mailboxes.



g100099

Configuring the Meridian 1 to support PMSI

Introduction

Certain parameters on the Meridian 1 must be set to support PMSI.

Procedure

To configure the Meridian 1 to support PMSI, use the following steps.

Step	Action
1	Using the background terminal, check the confirmation option to ensure it has been deactivated. Any time you enter a command, the system provides both the old status and the new status. If this option is turned on, it might affect the full control of the PMSI link. Make sure it is always off whenever a PMSI is configured.
2	Deactivate the confirmation option, if required, by entering the following command on the Meridian 1 background terminal: SE OP CO OF <CR>
3	Make sure the SDI card switch settings are set to support baud rate of 1200 bps. See "SDI speed switch locations and settings for 1200 baud" on page 4-25.

Step Action

- 4 Define the PMS port on the SDI card on Overlay 17 (LD 17) as shown on the configuration record below:

Prompt	Response	Description
REQ	CHG	Change data
TYPE	CFN	Configuration data block
ADAN	NEW TTY XX	Add I/O device. Type of device is a TTY (for PMS link). Enter the port number chosen at xx (0–15).
CTYP	SD12	If using a QPC139 card
	SD14	If using a QPC841 card
	XSDI	If using an NT8D41 card
USER	PMS	A PMS system is being used.
CUST	XX	Enter customer number (0–99).
PMSI	YES	Gate opens
MANU	PMSx	Enter the PMS protocol to be used: PMS1 standard (default) PMS2 does not support HMVS PMS3 updated RMS message sent is followed by the old room status when a room DN checks in or out.

- 5 Configure the minor alarm feature (optional) on Overlay 17 (LD 17) as shown on the configuration record below:

Prompt	Response	Description
REQ	CHG	Change data
TYPE	CFN	Configuration data block
ALRM	YES	Minor alarm displayed on attendant console

Step Action

- 6 Test the PMSI port using Overlay 37 (LD 37) - Input/Output diagnostic:

Command	Purpose
STAT TTY nn	Provides the status of TTY port nn
ENL TTY nn	Enables TTY port nn
DIS TTY nn	Disables TTY port nn

Configuring the Meridian 1 to support hospitality features

Introduction

The following hospitality features may require some configuration to be done in an overlay, or some to be done through the background terminal, or both.

Before you begin

Prior to configuring any of these features on the Meridian 1, make sure that both the PMS vendor and hotel representative are in agreement as to which features are to be used and, if there are variations on the way the feature is implemented, which variation has been chosen. The features are listed in alphabetical order for quick reference.

Call Party Name Display (CPND)

Call Party Name Display (CPND) allows names to be sent across the PMSI link and stored in the Meridian 1. When the guest room phone is connected to an extension with a display set, the name is displayed.

Activating CPND

To activate Call Party Name Display, the CPND data block must be defined as follows in Overlay 95 (LD 95):

Prompt	Response	Description
REQ	NEW	Define CPND for customer.
TYPE	CPND	Call Party Name Display data block.
CUST	XX	Enter the SL-1 customer number.
MXLN	23	Maximum allowed CPND character string. This will stay within the available display window if set at 23. Maximum is 27.
DFLN	23	Default character string length. Set to the same length as MXLN.

It is very important that the MXLN and DFLN be set to 23, and that the Meridian Mail and the PMS be configured to support the same name length. If there is any disparity between the three systems, the smallest name length will be the one used on all systems.

Note: If the PMS was already being used, in the Meridian 1 the expected length may already be set to a lower number than the MXLN. Take a moment to make sure they are modified to match on all three systems.

CPND also needs to be configured on telephone sets as outlined in Section B: Configuring the telephone sets.

Setting up controlled class of service

When a guest is checked in or out of a room using the PMS, the Controlled Class of Service (CCSA) is automatically changed. The CCSA determines the types of calls that are permitted or restricted (such as local or long distance calls).

When a guest is checked out of a room using the PMS, the telephone set becomes fully restricted so that no long distance calls can be placed from that phone. When a guest is checked back in to the room (using the PMS), the CCSA changes so that the guest can place long distance calls. However, if the PMSI is down, and guests are being checked in or out using the GAC, the CCSA will not change unless the Call Party Name Display (CPND) has been programmed in LD 10, LD 11 and LD 95 on the Meridian 1.

Check-in /Checkout and the Control of Restriction feature

This feature allows the PMS to control the occupancy status of any room in the Meridian 1 database. When a guest is checked in to/out of a room, the PMS informs the Meridian 1 of this change so that appropriate status changes will be performed. The Control of Restriction Feature can provide a single level of restriction (that is, the CCOS [customer-defined] normally fully restricted level) or, with the optional Enhanced Control Class of Service (ECCS) package, two additional customer-defined levels of restriction may be set (that is, the ECC1, ECC2 levels of restriction).

An example of an ECC1 level of restriction is that the guest is restricted to making only local calls. If the ECCS package is used, then the CCOS level of restriction will be used for all checked-out rooms.

It is recommended that the automatic change of the Control of Restriction feature be activated, to reduce the number of commands that the PMS has to send to the Meridian 1.

Activating the restriction feature

To activate the automatic change to the level of restriction on check-in/checkout, one of the following commands must be entered at the Meridian 1 background terminal.

Background entry	Room checked in	Room checked out
SE OP CH CO ON <CR>	Unrestricted	CCOS active
SE OP CH E1 ON <CR>	ECC1 active	CCOS active
SE OP CH E2 ON <CR>	ECC2 active	CCOS active

Deactivating the restrictions

To deactivate the automatic change to the level of restriction on check-in/check out, one of the following commands must be entered at the Meridian 1 background terminal.

Background entry
SE OP CH CO OF <CR>
SE OP CH E1 OF <CR>
SE OP CH E2 OF <CR>

Do-Not-Disturb - Hunt to Meridian Mail

This feature is only available if Meridian Hospitality Voice Services package 179 is installed. When this feature is enabled, calls to rooms that are set up for Do Not Disturb are forwarded to Meridian Mail instead of ringing the telephone set.

If the Do-Not-Disturb feature is activated for a guest room, you can choose to have subsequent calls automatically forward to the guest's mailbox, or just let the caller hear a busy signal when the room is called.

Activating Do-Not-Disturb Hunt

To allow calls to forward to the guest's mailbox, configure Overlay 15 (LD 15) as shown below.

Prompt	Response	Description
REQ	CHG	Change
TYPE	CDB	Customer data block
CUST	XX	Enter the Meridian 1 customer number
DNDH	YES	Allow do not disturb hunt

If DNDH is not allowed, when someone calls the guest room, the caller will hear the busy signal.

Do-Not-Disturb - turn off upon check- out

The Meridian 1 can be programmed to turn off the Do-Not-Disturb feature upon receipt of a check-out command from the PMS.

Activate DND - Turn off upon check out

To activate the automatic turn off of Do-Not-Disturb upon check out, the following command must be entered at the Meridian 1 background terminal:

SE OP CH DN ON <CR>

To De-activate DND - Turn off upon check out

To deactivate the automatic turn off of Do-Not-Disturb upon check-out, the following command must be entered at the Meridian 1 background terminal:

SE OP CH DN OF <CR>

**Do-Not-Disturb -
activated by PMS
terminal**

This feature allows the PMS to turn the Do-Not-Disturb feature on or off for any room's telephone by informing the Meridian 1 of the desired state.

It is recommended that the Do-Not-Disturb feature be controlled by the attendants only. This ensures proper tracking of DND services, as not all DNDs are activated because guests wish not to be disturbed. Some are activated to flag the attendants that the guest wishes to have his or her calls routed somewhere else.

By directing all DND requests through the attendant, such special services can readily be provided, and easily tracked and controlled.

**Programming one-
touch access**

Room phones can be programmed so that the one-touch access key automatically dials the primary voice messaging DN. This allows guests to access Meridian Mail from their own room phones without having to dial the Meridian Mail access number. If guests want to pick up messages from other guests' rooms, they will need to know the secondary or dummy DN and dial it directly. The property may choose to have this as one of their DID (Direct Inward Dial) numbers to allow guests to pick up messages without going to the system operator.

When programming the one-touch access number into a telephone, any of the following buttons may be used:

- Message Waiting button on a Meridian 1 set
- Messages button on a Rapport Plus set
- one of the keys from 1 to 9 on a generic 2500 set. Meridian 1 pretranslation will generate the number. See *XII Features and Services* (NTP 553-3001-305) for more information about pretranslation.

**Hospitality Screen
Enhancement**

This feature allows a hotel manager to activate four guest features (Maid ID, Room Status, Automatic Wake-Up Calls, and Message Registration), by using a Meridian Modular telephone set equipped with a Special Applications Display. With the appropriate software package loaded (package 208 - HSE) on the Meridian 1, no further programming is required.

The Special Applications Display (model NT2K25YLxx) needs to be installed on the telephone set before this feature will work. For information on how each of the features work, refer to *X-11 Features* (NTP 553-3001-305).

Maid ID, for use with the cleaning status

This feature allows cleaning status information being sent to the PMS from the guest room telephone to be associated with a particular maid (housekeeper). This information can then be used for performance reports.

With the appropriate software packages loaded (package 210 - MAID, 99 - BGD, 100 - RMS, 81 - CCOS and 103 - PMS) on the Meridian 1 and the Room Status service configured, no further programming is required.

Message Waiting indicator for HVS

The Message Waiting message in an HVS environment is different from that used on a “regular” Meridian Mail system. On a non-HVS system, the Message Waiting message simply indicates that the MWI is to be turned on or off. With HVS, this message indicates a change in either the Meridian Mail voice message or the PMS-based text message, or both. The lamp will only go off when all such messages (both voice and text) have been read/retrieved by the user.

Note: When HVS is incorporated into the PMSI, it is extremely important that MWI is not activated by any other means (such as a background terminal, attendant console, or special set) except when the Meridian Mail system is down or in bypass mode.

The Meridian 1 also has a feature to automatically turn off the message waiting lamp upon receipt of a check-in or check-out message from the PMS. This feature should be disabled when HVS is in use because it creates a conflict between this feature and the HVS control of the lamp.

To deactivate the automatic turn off of MWI upon checkout, the following command must be entered at the Meridian 1 background terminal:

SE OP CH MW OF <CR>

**Multi-Language
Wake-Up**

The Multi-Language Wake-Up (MLWU) feature allows guests' language preferences to be sent across the PMSI link to the Meridian 1. The language is stored by the Meridian 1 and used to provide automatic wake-up announcements in the guest's preferred language. If no language is identified at check-in, the default language (RAN 0) will be offered. Before you begin, ensure that the following conditions have been met.

1. Make sure the language identifier table is configured in the Hospitality Install Parameters (see Chapter 6, "Planning the Hospitality Install Parameters" of this guide).
2. Make sure the MLWU package and its associated software packages have been installed on the Meridian 1.
3. Make sure guest telephone sets are configured with CCSA class of service.
4. Make sure each RAN has the wake-up greeting recorded in the appropriate language, with RAN 0 being your default language.
5. Activate the automatic clearing of the language for the room at check-out by entering the following command at the Meridian 1 background terminal:

SE OP CH LA ON <CR>

**PMS-based Text
Messaging Feature**

When PMS-based Text Messaging or HVS Voice Messaging are used, MWI must be controlled by the PMSI link to allow HVS to detect an MWI from PMS for text-based messages. With all of the required software packages loaded, no further configuration of the Meridian 1 is required.

Room Status

With the appropriate software packages loaded (package 100 - RMS, 81 - CCOS, and 99 - BGD) on the Meridian 1, configure the Special Function Prefix (SPRE) Code. Refer to the *X11 Features Guide* (NTP 553-3001-305), to the section titled “Telephones,” and review the section covering feature codes used with SPRE.

To use the feature, the housekeeping representative just lifts the guest room telephone handset, dials the SPRE code and the appropriate feature code (86 + x), dials * and the Maid ID followed by #, if required, and then hangs up. Refer to the *X11 Features Guide* (NTP 553-3001-305) to the section titled “Room Status.”

VIP Automatic Wake-up

This feature allows specified rooms to be “woken up” personally by the attendant instead of by a RAN wake-up message. When the Front Desk clerk identifies the guest as a VIP during the check-in process, the PMS sends the VIP “flag” information to the Meridian 1. With the appropriate software package loaded (package 212 - VAWU), no further configuration of the Meridian 1 is required.

Voice Count Notification

No Meridian 1 configuration is required for this service to work. All necessary configuring is performed on Meridian Mail (refer to Chapter 6, “Hospitality Install Parameters”) and on the PMS.

***Section B:* Configuring the telephone sets**

In this section

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Overview

Introduction

The configuration of the actual telephone set is determined by the type of telephone, and by the user, as follows:

- Guest room analog sets
- Guest room digital sets
- Staff sets

All types of telephones must be configured on the Meridian 1 switch. Only the Guest room analog sets require additional physical programming.

Programming for analog sets (guests)

Introduction

The objective here is to make accessing and using the Meridian Mail system as easy as possible. The guest room analog sets require both configuration on the Meridian 1 switch and physical programming on the actual telephone. After completing the configuration procedures that are common to all guest room telephone sets, based on which set type the guest rooms are using, follow the appropriate procedures on the following page.

Types of analog sets

The following two choices are available and are based on what type of telephone set is available in the guest rooms.

- a. If the guest room telephones have multiple programmable keys, configure one-touch access with auto logon, using a programmable key predefined as the message key.
- b. If the guest room telephones are single line 500/2500 sets, configure Pre-translation (X-list) to Meridian Mail with auto logon predefined. If the dialing plan being used by the hotel will not allow this service to be defined, the guests will need to dial the four-digit Hospitality Voice Messaging DN.

Configuring 500/2500 sets

For 500/2500 sets, configure the guest room telephone sets in Overlay 10 (LD 10) as follows.

Prompt	Response	Description
REQ	NEW	Add a new set
	CHG	Change (modify) an existing set
TYPE	500	Type of telephone set
TN	xxx-x-xx-xx	
HUNT	xxxx	Hunt to Voice Messaging DN
CLS	CCSA	Controlled Class of Service Allowed
	MWA	Message Waiting Allowed
	FNA	Forward No Answer
	HTA	Hunting Allowed
	LPA	Message Waiting Lamp Allowed

Prompt	Response	Description
CLS cont'd	CFTA (CFTD)	Call Forward by Call Type Allowed
	DTN	Digitone
	XFA	Call transfer allowed. This will allow the Call Sender feature in Meridian Mail to work.
FTR	EFD xxxx	External Flexible call forward to voice messaging DN (only when CLS=CFTA)
	EHT xxxx	External Hunt to voice messaging DN (only when CLS=CFTA)
	FDN xxxx	Flexible Call Forward No Answer to voice messaging DN
	CPND	Call Party Name Display

Analog sets with multiple keys

The multiple keys on an analog guest room telephone set require physical programming on the telephone set itself. Most sets have some sort of “programming on/off switch” located underneath the face plate. When this switch is turned “on” the appropriate programming command can be entered into the set itself, after which the programming switch is turned “off” to prevent the user from inadvertently changing the command when misdialing a telephone number. For specific information, refer to the telephone set user guide. In Meridian Mail, make sure the actual mailbox is configured with auto logon, and the Hospitality Voice Messaging Queue you configure in the VSDN table has auto logon enabled.

Single-line telephone sets - pre translation (x-list) to Meridian Mail with auto logon

Refer to *X-11 Software Features Guide* (NTP 553-3001-305) to the section titled “Pretranslation.” Pretranslation provides a method of matching the numbering plan provided by the Meridian 1 to the room numbers of the hotel. This is done by translating the first digit dialed from the set to a string of digits defined in a pretranslation table. The DNs passed over the AML link are not pretranslated when HVS is installed. Pretranslation only works for calls dialed directly at a set with the feature enabled.

Before configuring the telephone, do the following.

1. Review the existing numbering plan to identify the number that will be assigned to Hospitality Voice Messaging DN.
2. Determine the access restrictions for this service.
3. Determine the dialing requirements and create a Pretranslation table, making sure that sets are not assigned group 0 or 1.
4. In Meridian Mail, make sure that the actual mailbox is configured with auto logon, and that the Hospitality Voice Messaging Queue you configure in the VSDN table has auto logon enabled.

Programming for digital sets (guests)

Introduction

Guest room digital sets must be configured on the Meridian 1 switch.

Before you begin

Make sure the mailbox has the appropriate Class of Service for auto logon in Meridian Mail.

Configuring digital sets

Digital sets with multiple keys must be configured through Overlay 11 (LD 11) as follows.

Prompt	Response	Description
REQ	NEW	Add a new set
	CHG	Change (modify) an existing set
TYPE	xxxx	Type of telephone set
TN	xxx-x-xx-xx	
FDN	xxxx	Internal flexible CFNA to voice messaging DN
CLS	CCSA	Controlled Class of Service Allowed
	MWA	Message Waiting Allowed
	FNA	Forward No Answer
	HTA	Hunting Allowed
	CFTD	Call Forward by Call Type Allowed
	CNDA	CPND name assignment allowed (if CPND is going to be used)
	DNDA	Dialed name display (only if CLS=CNDA)
HUNT	xxxx	Hunt to Voice Messaging DN
LHK	xx	Last Hunt Key
KEY	x MWK yyyy	Message Waiting Key (Enter voice messaging DN) <i>Note:</i> Designate a key as the message key and remember that X is the key number, and yyyy is the voice messaging DN.
	x A03 or A06	3 of 6 party conference key (This will allow the call sender feature in Meridian Mail to work.)

Configuring the staff telephone sets

Introduction

The staff telephone sets are configured as they would be on a system equipped with “regular” Meridian Mail.

Configuring multiline telephone sets

Multiline telephone sets must be configured through Overlay 11 (LD 11) as follows.

Prompt	Response	Description
REQ	NEW	Add a new set
	CHG	Change (modify) an existing set
TYPE	xxxx	Type of telephone set
TN	xxx-x-xx-xx	
FDN	xxxx	Internal flexible CFNA to voice messaging DN
CLS	CCSA	Controlled Class of Service Allowed
	MWA	Message Waiting Allowed
	FNA	Forward No Answer
	HTA	Hunting Allowed
	CFTD	Call Forward by Call Type Allowed
	CNDA	CPND name assignment allowed (if CPND is going to be used)
DNDA	Dialed name display (only if CLS=CNDA)	
HUNT	xxxx	Hunt to Voice Messaging DN
LHK	xx	Last Hunt Key
KEY	xMWK yyyy	Message Waiting Key (Enter voice messaging DN.) Note: Designate a key as the message key and remember X is the key number, and yyyy is the voice messaging DN.
	x A03 or A06	3 of 6 party conference key (This will allow the call sender feature in Meridian Mail to work.)

Chapter 6

Planning the Hospitality Install Parameters

In this chapter

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Overview

Introduction

The Hospitality Install Parameters are used to define the Meridian Mail portion of the Property Management System Interface (PMSI). These parameters are configured after the physical links between Meridian Mail, the PMS, and the Meridian 1 have been established.

This chapter explains how to configure the Hospitality Install Parameters in both a PMS and non-PMS environment.

If no Property Management System is to be used, see “Hospitality Install Parameters with no PMS” on page 6-39.

To configure the Hospitality Install Parameters for a system which will use PMS, see “Hospitality Install Parameters with a PMS” on page 6-7.

Who should read this chapter

This chapter provides information for

- system administrator
- installation technician
- maintenance technician
- customer’s MIS staff
- customer’s Meridian 1 manager

Planning the Hospitality Install Parameters

The Hospitality Install Parameters allow you to configure the Meridian Mail portion of the PMSI link. The features to be configured include

- PMS parameters, such as protocol chosen, ACK/NAK, and so on
- other parameters, such as CPND allowed, voice counts, and language services

Planning the Hospitality Install Parameters is a team effort involving the Meridian Mail/Meridian 1 installation technician and administrator, the PMS vendor and the hotel’s MIS staff.

The Hospitality Install Parameters will differ depending on whether there is a Property Management System. To assist you in planning the install parameters required for your system, a blank worksheet for the Hospitality Install Parameters has been provided which mirrors the main parameters specified on the View/Modify Hospitality Install Parameters screen.

**Hospitality Install
Parameters worksheet**

The following diagrams illustrate the worksheet. If you need additional sheets, feel free to make copies.

Hospitality Administration

View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links

PMS Protocol:	PMS1	PMS2	PMS3
Maximum Length of PMS Name	_____		
Is Calling Party Name Display Supported?	No	Yes	
Activate SL-1 Alarm on PMSI Link Errors?	No	Yes	

PMS Link Parameters

PMSI Link to PMS Exists?	No	Yes
Expect ACK/NAK from PMS?	No	Yes
PMS supports "IS TEST" polling message?	No	Yes
Maximum Number of NAKs permitted:	_____	
PMS Link InActivity TimeOut in Minutes:	_____	
PMS Link Timeout in 100ths of a second:	_____	

SL-1 Link Parameters

PMSI Link to SL-1 exists?	No	Yes
---------------------------	----	-----

Voice Count Parameters

Asynchronous Voice Count Option:	None	AnyChange	ToFromZero
Instances when a Voice Count message is sent to PMS:			
None:	Only in response to "IS QV" message from PMS		
AnyChange:	Any change in a guest's unread messages occurs.		
ToFromZero:	When guest unread voice message counts change zero to non-zero or vice-versa		

Note: If the "Route Voice Counts to" field (below) is set to GAC, then the Asynchronous Voice Count Option must be set to NONE.

At Check Out, Issue Voice Counts:	No	Yes
Route Voice Counts to:	GAC	PM S

Hospitality Administration More Above

View/Modify Hospitality Install Parameters

Language Identifier Table

	Language ID Provided in PMSI messages	No	Yes
ID:	Language:		
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

International Character Mapping on PMSI Link

Hexidecimal	Character Description	Character Equivalent	Mapping
40	Commercial AT	@	_____
5B	Left Square Bracket	[_____
5C	Reverse Solidus (Backlash)	\	_____
5D	Right Square Bracket]	_____
5E	Circumflex Accent	^	_____
60	Grave Accent	`	_____
7B	Left Curly Bracket	{	_____
7C	Vertical Line		_____
7D	Right Curly Bracket	}	_____
7E	Tilde	~	_____
5F	Underscore	_	_____
23	Octothorpe	#	_____

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***Section A:* Hospitality Install Parameters with a PMS**

In this section

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International Character Mapping on PMSI Link	6-23
Configuring the Hospitality Install Parameters	6-30

Overview

Introduction

Each portion of the system requires its own set of parameters, but in order to function smoothly as a system, most of these parameters must be common to, or recognized by, other links within the entire system.

These common parameters are specified on the View/Modify Hospitality Install Parameters screen.

View/Modify Hospitality Install Parameters screen

This screen is accessed from the Hospitality Administration screen and must be completed as part of the installation of the HVS system.

Screen 1

```

mmtsplab15.1
Hospitality Administration
View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links
PMS Protocol                PMS1 PMS2 PMS3
Maximum length of PMS Name: 23
Is Calling Party Name Display Supported? No Yes
Activate SL-1 Alarm on PMSI Link Errors? No Yes

PMS Link Parameters
PMSI Link to PMS exists?    No Yes
Expect ACK/NAK from the PMS? No Yes
PMS supports "IS TEST" polling message? No Yes
Maximum number of NAKs permitted: 4
PMS Link Inactivity Time-out in Minutes: 5
PMS Link Time-out in 100ths of a second: 400
MORE BELOW

Save      Cancel

```

Screen 2

```

Hospitality Administration MORE ABOVE
View/Modify Hospitality Install Parameters

SL-1 Link Parameters
PMSI Link to SL-1 exists?          No Yes

Voice Count Parameters
Asynchronous Voice Count Option:   None AnyChange ToFromZero
Instances when Voice Count message is sent to PMS:
None      : Only in response to "IS QV" message from PMS.
AnyChange : When any change in a guest's unread messages occurs.
ToFromZero: When guest unread voice message counts change
            from zero to non-zero or vice versa

At Check Out, Issue Voice Counts:   No Yes
Route Voice Counts to:              GAC PMS

Language Identifier Table MORE BELOW
    
```

Save Cancel

Screen 3

```

Hospitality Administration MORE ABOVE
View/Modify Hospitality Install Parameters

Language ID provided in PMSI messages? No Yes

ID:      Language
--      American_English Canadian_French

International Character Mapping on PMSI Link

Hexadecimal  Character Description  Character  Equivalent Mapping
40           Commercial AT          @           --
5B           Left Square Bracket     [           --
5C           Reverse Solidus (Backslash) \           --
    
```

Save Cancel

Parameters common to PMS and Meridian 1 links

The following parameters are common to the PMS and Meridian 1 links.

PMS protocol: PMS1, PMS2, or PMS3

This is the PMS protocol which is currently selected. PMS1 is the most common protocol chosen. PMS2 cannot be selected because it does not support HVS. PMS3 is basically the same as PMS1, with the addition of Room Cleaning status. The default is PMS1.

Note: See the PMSI specification (NIS-Q203-2) for further details.

Maximum length of PMS name

The maximum name length is 27 characters. Make sure all three systems (PMS, PBX, and Meridian Mail) have the same length defined. Nortel recommends setting the length to 23 characters so that it fits the LCD display window on digital telephone sets. The default is 23.

Is Calling Party Name Display supported

This field should be set to Yes if Call Party Name Display, (CPND) is enabled on the Meridian 1, or if the guest's last name is going to be used for the password. (The type of password to be used is defined in the Hospitality Profile. See Chapter 7 for details). The default is Yes.

Activate Meridian 1 alarm on PMSI link errors

When this field is set to YES, Meridian Mail activates minor alarms in the Meridian 1 when the PMSI link to the PMS is down. An alarm is also raised by Meridian Mail if no ACKs are received from the PMS in response to messages sent by Meridian Mail.

The alarm status is considered minor and illuminates the minor alarm indicator on the attendant console. This alarm can only be turned off manually through an overlay. The recommended default is No. The recommendation that the alarm *not* be activated is suggested because some PMS systems disable the

link during nightly maintenance. If the Meridian 1 alarm is activated, it can only be cancelled through an Overlay. In most cases, this means there will be no response to the alarm as it is assumed that the cause of the PMS link going down is the nightly routines, when in fact there may be other legitimate causes for the minor alarm which go unnoticed.

Note: This alarm is related across the AML link.

PMS Link Parameters The following parameters apply to the PMS link.

PMSI link to PMS exists

Set this field to YES if Meridian Mail is linked to the PMS. If you are using MHVS without a PMS, be certain to set this field to No to prevent Meridian Mail from sending messages to a nonexistent PMS. The default is Yes.

Expect ACK/NAK from PMS

This field determines if the PMS will respond to messages from Meridian Mail with ACK (acknowledgment) or NAK message (negative acknowledgment). If set to No, Meridian Mail will not wait for a response from the PMS. The default is Yes.

PMS supports “IS TEST” polling message

Meridian Mail sends the IS TEST message to both the Meridian 1 and PMS to test the ability of the links to transfer messages. This message is sent out *n* minutes after the last PMSI message has been received from the PMS, where *n* is the value configured in the PMS Link InActivity Timeout in Minutes field.

The PMS should respond to this message with an ACK. If there is no response from the PMS, an alarm is raised to allow personnel to take action. The default is Yes.

Note: If PMS does not support or recognize the IS TEST message, set this field to No.

Maximum number of NAKS permitted

This field is displayed only if the Expect ACK/NAKS field is set to Yes. The value entered determines the maximum number of consecutive NAKs (negative acknowledgments) that Meridian Mail will issue. When this limit is reached, the system will begin to send ACKs in order to avoid continuous retransmission of bad messages by the PMS. The default is 3. The maximum value is 99.

PMS link inactivity timeout in minutes

The value entered in this field determines how long the link to the PMS can remain inactive before Meridian Mail will send a polling message, if supported by the PMS. The default is five minutes. If no response is received from the PMS, a link failure is declared.

PMS link timeout in 100ths of a second

This is the amount of time that Meridian Mail will wait for a response from the PMS (ACK or NAK) before retransmitting a message. The default is 400 (4 seconds). If the field Expect ACK/NAK from PMS is set to No, this field is not applicable.

Meridian 1 link parameters

The following parameter applies to the Meridian 1 link.

PMSI link to Meridian 1 exists

This field indicates if the link between Meridian Mail and the Meridian 1 exists. The default is Yes.

Voice Count Parameters

Meridian Mail sends voice count messages to the PMS in order to indicate the number of read and unread voice messages present in a guest's mailbox.

Depending on the level of integration between the PMS and Meridian Mail, this information may be displayed on a PMS terminal to hotel staff. The form of the display depends on the PMS; however, as a minimum, the presence of unread messages will be indicated.

The following fields specify when Meridian Mail will issue voice count messages to the PMS.

Asynchronous Voice Count Option

This field must be configured as one of the following.

None

Voice count messages are sent only when the PMS queries the voice count with an IS QV message. This is the preferred method since voice counts will always be up-to-date and there is no detrimental effect on link traffic. When this option is selected, you can also have voice counts issued at checkout.

When using this method, it is recommended that the PMS send the QV message only when hotel staff explicitly request voice count information to prevent large amounts of link traffic (not every time the guest's folio is accessed).

AnyChange

A voice count message is sent to the PMS for each change in the status of unread and read messages for a guest mailbox. For example, a message will be sent when a guest receives a new voice message, reads a new voice message, or deletes a voice message.

This option, as well as the following option, can be used if the PMS has to constantly keep track of the voice count information (for instance, to light an external message lamp, or to control a television interface). Both options can generate substantial traffic on the PMSI link during heavy voice messaging activity. This option generates more link traffic than the “ToFromZero” option.

ToFromZero

Voice count messages are sent to the PMS when a guest’s unread message count changes from zero to a value other than zero or vice-versa. If this information is displayed on a PMS terminal, only the presence of unread voice messages will be indicated. Voice count messages will only be sent for checked-in rooms.

At CheckOut, Issue Voice Counts

This field determines whether a voice count is issued at checkout time to warn the clerk that the guest has unread voice messages.

Route Voice Counts to

Voice counts can be routed to the PMS console or the Guest Administration Console (GAC).

Monitoring the links PMSI links can be monitored through the Universal Link Monitor (ULMA).

This utility can be accessed through the TOOLS level menu and allows the system administrator to monitor and capture link information.

For additional information about the Universal Link Monitor utility, refer to the *System Administration Tools* (NTP 555-7001-305).

Language services

Introduction

When a guest checks into the hotel, the PMS has to tell the Meridian 1 what language to play during automatic wake-up calls, and it must also tell Meridian Mail what language to assign for the guest's mailbox prompts or for dual language prompting. One set of mnemonics (codes) is used by the PMS to identify the preferred language selected by a guest at check-in. To make sure that both the Meridian 1 and Meridian Mail are reading, and, therefore, using the same language, the Language Identifier Table must be configured.

Maximum number of languages

A Meridian 1 can support up to six different languages on the RANs (recorded announcements) for use during the automatic wake-up service.

Meridian Mail can support up to four different languages to provide system prompts in a specific language on guest mailboxes (and other system services).

These language services must be defined on the Language Identifier Table in order for the appropriate systems to recognize the language identification codes that are sent in PMS messages.

Language Identifier Table

The Language Identifier Table is only for multilingual systems. If no language services are going to be provided, you can set the following parameter to No and disregard the remainder of this chapter:

Language ID provided in PMSI Messages: Yes No

If language services are to be provided, the Language Identifier Table must be defined.

This table provides up to six user-definable mnemonic codes for the languages installed on your system, and is used to recognize the language identification code that is sent in PMS messages. The codes may be either alpha or numeric, according to what has been defined in the Meridian 1 MLWU feature.

Disparity between languages available on Meridian 1 and Meridian Mail

The same language code can be mapped onto different languages. This accommodates the case in which the Meridian 1 has fewer languages than Meridian Mail. If you check in a guest or change their preferred language on the GAC to a language that does not exist on the Meridian 1, the Meridian 1 will not understand the language code that is sent if it is not mapped to a language that is installed on the Meridian 1.

For example, both English and Swedish are installed on Meridian Mail but only English is installed on the Meridian 1. In this case, you can use EN for both English and Swedish in the table. When you check a guest in, or change the language for the guest to Swedish on the GAC (which does not exist on the Meridian 1), then EN will be sent to the Meridian 1, and the guest and callers to the guest's mailbox will hear prompts in Swedish, and the wake-up RAN will be in English.

Different language codes can also be mapped onto the same language. This is necessary when the Meridian 1 has a language that is not installed on Meridian Mail. For example, both German and Swedish are installed on the Meridian 1 (for multilingual wake-up calls), but only German is installed on Meridian Mail. Swedish can be mapped onto German by defining EN and GR as German. All possible language codes that may be sent in PMS messages should be defined in this table. (Make sure the Meridian 1 is configured properly before defining this table.)

The Language Identifier Table is also used to generate language identification codes used in check-in messages to the Meridian 1 when rooms are checked in by the GAC. This is done by scanning the table from the top and using the first match on the language specified. This should be kept in mind when assigning mappings to languages. For example, the Meridian 1 supports Swedish (ID=SW) and English (ID=EN) which are both mapped to English on MHVS. The EN to English mapping should appear ahead of the SW to English mapping, so that a check-in on the GAC of a guest assigned English on MHVS will result in a check-in message with language ID = EN being sent to the Meridian 1. If SW appears first, then SW is used.

Configuring the Language Identifier Table

The following procedure assumes the RANs (recorded announcements) have been configured and the wake-up greetings recorded on each one. To configure the Language Identifier Table, use the following steps.

Step Action

- 1 Identify the language for each RAN on the Meridian 1. For example
 - RAN 0: French
 - RAN 1: Portuguese
 - RAN 2: English
 - RAN 3: Russian
 - RAN 4: German
 - RAN 5: Spanish

Note: It is recommended that the languages that have been installed on your Meridian Mail system also be included on the RANs.

- 2 Identify the language identifier that comes across the PMSI. These identifiers are created by the individual vendors. The vendor can use one of two different types of identifier:
 - RAN number (The range is 0-5.)
 - Alphanumeric mnemonic (Any two-character ID can be created, but the first character must be a letter.)

RAN numbers are the ones most commonly used, and are preferred because they correspond to the actual RAN numbers 0-5. Alpha numeric mnemonics normally use abbreviated descriptions of the language being used (for example, French has a mnemonic of FR, German - GE, Spanish - SP).

The alphanumeric mnemonics can be identified by using the background terminal on the Meridian 1 and typing in the command:

```
PR (space) OP
```

This will print all options. The line that says LANG will list the RANs and the languages that are assigned. For example, using the languages shown in step 1, the table would look like this:

```
LANG 0:FR 1:PO 2:EN 3:RU 4:GE 5:SP
```

Step Action

- 3 Identify each of the languages being used on Meridian Mail.
For example
 - LANG 1: French
 - LANG 2: German
 - LANG 3: English
 - LANG 4: Spanish

- 4 Determine whether languages on Meridian Mail are identified by RAN numbers.
If YES, go to Step 5.
If NO, go to Step 10.

- 5 Determine whether there are matching languages between Meridian Mail and the RANs on Meridian 1.

- 6 Enter the numeric ID (RAN number) on the Language Identifier table.
The following table illustrates RANs with matching languages configured using alphanumeric mnemonics.

ID	Language			
	0	French	German	English
4	French	German	English	Spanish
2	French	German	English	Spanish
5	French	German	English	Spanish
___	French	German	English	Spanish
___	French	German	English	Spanish

Note: It is important that if the first four languages are also used on the RANs, they also be the first four identified on the language identifier table. If the PMSI is down and guests are checked in using the GAC, when one of the four languages is selected on the GAC, the Language Identifier Table is read top to bottom. Meridian Mail looks for the first listing of the language and then the assigned RAN. This ID then becomes the ID for any automatic wake-up calls. If you do steps 7 and 8 first, Meridian Mail would select comparable languages for the wake-up, instead of the real language.

Step Action

- 7 For the two remaining languages on the RANs, see if any of the languages in Meridian Mail are comparable in dialect, or likely to be understood by that culture. For example, many Portuguese people can understand Spanish.
- 8 When a comparable language is found, enter the RAN ID and select the language. For example, RAN 1 is assigned to Portuguese and can be compared with Spanish on the Meridian Mail system.

The following table illustrates RANs with matching languages and a comparable language configured using alphanumeric mnemonics.

ID	Language			
	0	French	German	English
4	French	German	English	Spanish
2	French	German	English	Spanish
5	French	German	English	Spanish
1	French	German	English	Spanish
—	French	German	English	Spanish

- 9 Go to Step 14.
- 10 Identify the alphanumeric mnemonics being used on the RANs by using the background terminal on the Meridian 1, and typing in the following command:

PR (space) OP

This will print all options. The line that says LANG will list the RANs and the languages that are assigned. For example, using the languages shown in step 1, the table would look like this:

LANG 0:FR 1:PO 2:EN 3:RU 4:GE 5:SP

Step Action

- 11 Enter the alphanumeric mnemonic for each matching language on the Language Identifier Table.

The following table illustrates RANs with matching languages configured using alpha-numeric mnemonics.

ID	Language			
FR	French	German	English	Spanish
GE	French	German	English	Spanish
EN	French	German	English	Spanish
SP	French	German	English	Spanish
___	French	German	English	Spanish
___	French	German	English	Spanish

Step Action

- 12 For the two remaining languages on the RANs, see if any of the languages in Meridian Mail are comparable in dialect, or likely to be understood by that culture. For example, many Portuguese people can understand Spanish.
- 13 When a comparable language is found, enter the RAN ID and select the language. For example, RAN 1 is assigned to Portuguese and can be compared with Spanish on the Meridian Mail system.

The following table illustrates RANs with matching languages and comparable language configured using alphanumeric mnemonics.

ID	Language			
	FR	French	German	English
GE	French	German	English	Spanish
EN	French	German	English	Spanish
SP	French	German	English	Spanish
—	French	German	English	Spanish
—	French	German	English	Spanish

- 14 If possible, match all RANs with a comparable language on the Language Identifier Table.

If any remaining languages on the RANs are so different from those on the Meridian Mail system that trying to “match” them would be confusing to the guest (in this example, Russian is not comparable to any of the languages in Meridian Mail), you can leave the language identifier table blank if you wish, but an error message and a NAK will be generated every time a PMSI message is sent indicating the room occupant is to use Russian. This is because the PMSI message sent to activate the Russian feature is looking at the language identifier table for a corresponding ID. Since it cannot find one, a SEER is generated. The wake-up service (in Russian) works.

International Character Mapping on PMSI Link

Introduction

PMS systems used in non-English-speaking countries may very well be operated using a foreign language, and the prompts on the screen are in Spanish or German, and so on. As a result, foreign characters may be used (examples of such characters are á, ü, ô, æ, and so on). The PMSI message that is sent across the link contains information that does not match the U.S. ASCII format being used in Meridian Mail and the Meridian 1. Consequently, the Meridian 1 and Meridian Mail will not understand the messages being sent across the PMSI. The characters must be “mapped” or defined in a table to translate the messages being sent across the PMSI.

Before you begin

If the PMS generates messages in U.S. ASCII format, International Character Mapping is not required. You have now finished configuring the Hospitality Install Parameters.

Character mapping

Character mapping involves configuring a “translation” table, so that the format being used by the PMS can be understood by the Meridian 1 and Meridian Mail.

Character mapping is required for all PMSI messages that incorporate the guest’s name, namely CPND. The password for a guest’s mailbox can be generated using the guest’s last name. If the international characters used to spell the guest’s name in the PMS do not match what Meridian Mail reads as the guest types into the keypad when logging on to his or her mailbox, in essence the guest will have entered an incorrect password and will not be able to log on. It is for this reason that the international characters must, therefore, be “mapped” to U.S. ASCII equivalents in order for the service to work. The International Character Mapping table then acts as an interpreter, and Meridian Mail “reads” the table to find the U.S. ASCII equivalent for the national character and allows the logon to take place.

International Character Mapping table

Each language has its own set of national characters. We are only concerned about those alpha characters which are likely to appear in names and, therefore, have to be interpreted correctly. Up to a maximum of 12 characters can be different from those provided in U.S. ASCII. All other characters must match.

The following table shows each of the national character sets and the characters that have been identified as important for interpretation purposes (some have less than 12 national characters).

The U.S. ASCII hex value is noted in the first row at the top of the table.

Hex	23	40	5B	5C	5D	5E	5F	60	7B	7C	7D	7E
North America (U.S. ASCII)												
Char	#	@	[\]	^	_		{		}	~
Map to	#	@	[\]	^	_	'	{		}	~
Danish/Norwegian												
Char		Ä	Æ	Ø	Å	Ü		ä	æ	ø	å	ü
Map to		A	AE	O	A	U		a	ae	o	a	u
Dutch												
Char			ÿ									
Map to			y									
Finnish												
Char			Ä	Ö	Å	Ü		é	ä	ö	å	ü
Map to			A	O	A	U		e	a	o	a	u
French/Belgian												
Char		à		ç					é	ù	è	
Map to		a		c					e	u	e	
												continued:

G100552

Hex	23	40	5B	5C	5D	5E	5F	60	7B	7C	7D	7E	
French Canadian													
Char		à	â	ç	ê	î		ô	é	ù	è	û	
Map to		a	a	c	e	i		o	e	u	e	u	
German													
Char			Ä	Ö	Ü				ä	ö	ü	ß	
Map to			A	O	U				a	o	u	ss	
Italian													
Char				ç	é			ù	à	ò	è	ì	
Map to				c	e			u	a	o	e	i	
Spanish													
Char				Ñ						ñ	ç		
Map to				N						n	c		
Swedish													
Char		É	Ä	Ö	Å	Ü		é	ä	ö	å	ü	
Map to		E	A	O	A	U		e	a	o	a	u	
Swiss													
Char		ù	à	é	ç	ê	î	è	ô	ä	ö	ü	û
Map to		u	a	e	c	e	i	e	o	a	o	u	u

G100553

How to read the International Character Mapping table

To read the International Character Mapping table, use the following steps.

Step Action

- 1 Identify the national character set you wish to use (choose a language).
- 2 Move along the set and select a national character (top row of the set).
- 3 Look up the column to the top of the page to identify the hex value for that character. This is the information that is sent across the PMSI link.

When Meridian Mail and the Meridian 1 read this hex character, they map it to a U.S. ASCII equivalent character. The equivalent character is shown below the national character.

Example

Choose the German character set, and select the national character Ü. Run your finger up the column until it reaches the hex table. Notice it is showing the hex value 5D. It is this 5D hex value that is sent by the PMS across the link. The Meridian 1 and Meridian Mail will read that hex value of 5D and map it to a U.S. ASCII equivalent character - in this case, the letter U.

Note: Make sure the appropriate case is used (upper case or lower case).

Invalid ASCII characters

A subset of the hex values displayed in the table are invalid and will be stripped if passed along the PMSI link. These hex values and their corresponding ASCII characters are displayed below.

Hex	22	2A	2B	3A	3F	40	5B	5C	5D	5E	5F	60
U.S. ASCII	"	*	+	:	?	@	[\]	^	_	`

G100551

It is especially important to map these characters, or make sure that they are not used at all. If Meridian Mail encounters one of these invalid hex values from the PMS, it is removed.

Note: The characters with hex values 22, 2A, 2B, and 3A cannot be mapped in Meridian Mail and should be avoided altogether.

International Character Mapping screen

The International Character Mapping screen is illustrated in the following diagram.

Hospitality Administration				MORE ABOVE
View/Modify Hospitality Install Parameters				
International Character Mapping on PMSI Link				
Hexadecimal	Character Description	Character	Equivalent Mapping	
40	Commercial AT	@	---	
5B	Left Square Bracket	[---	
5C	Reverse Solidus (Backslash)	\	---	
5D	Right Square Bracket]	---	
5E	Circumflex Accent	^	---	
60	Grave Accent	`	---	
7B	Left Curly Bracket	{	---	
7C	Vertical Line		---	
7D	Right Curly Bracket	}	---	
7E	Tilde	~	---	
5F	Underscore	_	---	
23	Octothorpe	#	---	█

Save Cancel [] [] []

The first three columns identify 12 U.S. ASCII characters and their hexadecimal equivalents. Notice how these correspond to the hex characters found at the top of the International Character Mapping table.

The far right column is where you will be entering your mapping equivalent.

Mapping International Characters

To map international characters, use the following steps.

Starting Point: Main Menu

Step Action

-
- 1 Select Hospitality Administration from the Main Menu.
Result: The Hospitality Administration menu is displayed.
 - 2 Select View/Modify Hospitality Install Parameters.
Result: The View/Modify Hospitality Install Parameters screen is displayed.
 - 3 Scroll down until the International Character Mapping screen appears.
 - 4 Identify the character set being used by the PMS. Be warned, the PMS vendor may have created his own set of characters, other than those shown on the character mapping table noted on the previous page.
 - 5 For each character, read the table, identify the hexadecimal equivalent and then identify to which U.S. ASCII character ("map to") it will be mapped.
 - 6 Locate the hexadecimal equivalent on the International Character Mapping screen and enter the "map to" character in the column titled "Equivalent Mapping."
 - 7 Repeat steps 5 and 6 for all remaining characters in the character set. Disregard any lines that remain blank.
 - 8 Select Save to save any changes you have made.
Result: A message is displayed to advise you that you must reboot the system for the changes to take effect. The Hospitality Administration menu is displayed.
Note: You may select Cancel to discard any changes and return to the Hospitality Administration screen.
-

Note: If the MMI keyboard and terminal are configured to use a national character set, the character column (not the character description column) will display the character set of the language selected. All other notations on this screen remain in English.

For example, if German was selected, the characters in the "character" column would include ü, Û, ß, and so on.

Troubleshooting the International Character Mapping configuration

Symptoms that indicate a possible problem with the configuration of the International Character Mapping screen include the following:

- Meridian 1 rejects all messages and sends back a NAK.
- Guest passwords are not accepted when logon is attempted.
- SEER 7134 will print when the Meridian 1 repeatedly discards PMSI messages that contain the invalid characters.

To help you in your troubleshooting efforts, ask the front desk personnel if they typed in anything that included any of the invalid characters. This is a good starting point, although be warned, the PMS can insert invalid characters in its protocol format, without the user even knowing. As a result, the ULMA utility, or a protocol analyzer/datascope might be necessary to catch the offending messages being sent by the PMS.

Also, keep in mind that when the PMS vendor installs new software on the PMS that has any effect on the PMSI, there is a strong probability that interface problems will surface again. This is because the PMSI message format may have changed and now the Meridian 1 and Meridian Mail are unable to recognize the changes in the message format. When any new software is installed on the PMS, all language configurations (and all others, for that matter) should be thoroughly reviewed and modified if necessary.

Configuring the Hospitality Install Parameters

Introduction

Hospitality Install Parameters can be changed through the View/Modify Hospitality Install Parameters screen at any time to configure the Hospitality Voice Services system.

View/Modify Hospitality Install Parameters

The View/Modify Hospitality Install Parameters screen is primarily used at installation time to set certain hospitality install parameters, such as PMS link activities, and issuing and routing voice counts. The parameters in this screen, however, can be changed at any time.

The system may need to be rebooted if some of the parameters are changed. When you press the [Save] softkey, a message will appear if a reboot is required.

View/Modify Hospitality Install Parameters screen

The View/Modify Hospitality Install Parameters screen is shown in the following diagrams

```

mmtsplab13.1
Hospitality Administration
View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links
PMS Protocol                PMS1 PMS2 PMS3
Maximum length of PMS Name: 23
Is Calling Party Name Display Supported? No Yes
Activate SL-1 Alarm on PMSI Link Errors? No Yes

PMS Link Parameters
PMSI Link to PMS exists?    No Yes
Expect ACK/NAK from the PMS? No Yes
PMS supports "IS TEST" polling message? No Yes
Maximum number of NAKs permitted: 4
PMS Link Inactivity Time-out in Minutes: 5
PMS Link Time-out in 100ths of a second: 400

MORE BELOW

Save      Cancel

```

```

Hospitality Administration MORE ABOVE
View/Modify Hospitality Install Parameters

SL-1 Link Parameters
PMSI Link to SL-1 exists?           No Yes

Voice Count Parameters
Asynchronous Voice Count Option:    None AnyChange ToFromZero
Instances when Voice Count message is sent to PMS:
None      : Only in response to "IS QV" message from PMS.
AnyChange : When any change in a guest's unread messages occurs.
ToFromZero: When guest unread voice message counts change
           from zero to non-zero or vice versa

At Check Out, Issue Voice Counts:    No Yes
Route Voice Counts to:              GAC PMS

Language Identifier Table
MORE BELOW

Save  Cancel
    
```

```

Hospitality Administration MORE ABOVE
View/Modify Hospitality Install Parameters

Language ID provided in PMSI messages?  No Yes

ID:   Language
--   American_English Canadian_French

International Character Mapping on PMSI Link

Hexadecimal  Character Description  Character  Equivalent Mapping
40           Commercial AT           @           -
5B           Left Square Bracket      [           -
5C           Reverse Solidus (Backslash) \           -

MORE BELOW

Save  Cancel
    
```

Field descriptions The following fields are displayed.

Parameters Common to PMS and Meridian 1 Links

PMS Protocol

Description This field defines the PMS protocol that is currently in use. You may select one of the following.

Valid entries PMS1 (HIS, CLS) This is the default.
 PMS2 (NCR) This entry cannot be selected.
 PMS3 (ECI) This is basically the same as PMS1, with the addition of a room cleaning status.

Note: See the PMSI specification (NIS-Q203-2) for further details.

Maximum Length of PMS Name

Description The value entered here determines the maximum name length. Ensure that all three systems (PMS, PBX, and Meridian Mail) have the same length. The default is 23 characters which fits the LCD display window on digital telephone sets.

Valid range 0-27

Default 23

Is calling party name display supported?

Description	This field identifies whether the Meridian 1 supports Call Party Name Display (CPND).
Valid entries	Set to Yes if the guest's last name is going to be used for the password. (The type of password to be used is defined in the Hospitality Profile. See Chapter 7 for details.) Set to No if CPND is not supported.
Default	YES

Activate Meridian 1 alarm on PMSI link errors

Description	When this field is set to Yes, Meridian Mail activates minor alarms in the Meridian 1 when the PMSI link to the PMS is down. An alarm is also raised by Meridian Mail if no ACKs are received from the PMS in response to messages sent by Meridian Mail. The alarm can only be turned off manually. <i>Note:</i> This alarm is relayed across the AML link.
Valid entries	Set to Yes to activate the alarm. Set to No to de-activate the alarm.
Default	No

Parameters Common to PMS and Meridian 1 Links

PMSI Link to PMS Exists?

Description	This field identifies whether Meridian Mail is linked to the PMS.
Valid entries	Set to Yes if Meridian Mail is linked to the PMS. Set to No to prevent Meridian Mail from sending messages to a nonexistent PMS.
Default	Yes

Expect ACK/NAK from PMS

Description	This field determines whether you wish Meridian Mail to wait for an ACK (acknowledgment) or NAK (negative acknowledgment) message from the PMS when a command is sent.
Valid entries	Set to Yes so the PMS will respond to PMSI messages containing the ACK/NAK. Set to No so the PMS will not respond to PMSI messages containing the ACK/NAK.
Default	Yes

PMS supports “IS Test” polling message

Description	Meridian Mail sends the IS TEST message to both the Meridian 1 and PMS to test the ability of the links to transfer messages. This message is sent out <i>n</i> minutes after the last PMSI message has been received from the PMS, where <i>n</i> is the value configured in the PMS Link InActivity TimeOut in Minutes field. The PMS should respond to this message with an ACK. If there is no response from the PMS, an alarm is raised to allow personnel to take action.
Valid entries	Set to Yes if you want Meridian Mail to wait for an ACK or NAK message when a command is sent. Set to No if the PMS cannot respond to polling messages, or if Meridian Mail is not linked to a PMS.
Default	Yes

Maximum Number of NAKs permitted

Description	This field is displayed only if the Expect ACK/NAKS field is set to Yes. The value entered determines the maximum number of consecutive NAKs (negative acknowledgments) Meridian Mail will issue. When this limit is reached, the system will begin to send ACKs in order to avoid continuous retransmission of bad messages by the PMS.
Valid entries	3-99
Default	3

PMS Link InActivity TimeOut in Minutes

Description	The value entered in this field determines how long the link to the PMS can remain inactive before Meridian Mail sends a polling message (if supported by PMS.) If no response is received from the PMS, a link failure is declared.
Default	5 minutes

PMS Link TimeOut in 100ths of a second

Description	This is the amount of time that Meridian Mail will wait for a response from the PMS (ACK or NAK) before retransmitting a message. If the field Expect ACK/NAK from PMS field is set to No, this field is not applicable.
Default	400 (4 seconds)

Parameters Common to PMS and Meridian 1 Links

PMS Link to Meridian 1 Exists

Description	This field indicates if the link between Meridian Mail and the Meridian 1 exists.
Default	Yes

Voice Count Parameters

Description	<p>Meridian Mail sends voice count messages to the PMS in order to indicate the number of read and unread voice messages present in a guest's mailbox.</p> <p>Depending on the level of integration between the PMS and Meridian Mail, this information may be displayed on a PMS terminal to hotel staff. The form of the display depends on the PMS; however, as a minimum, the presence of unread messages will be indicated.</p>
Valid entries	<p><i>Asynchronous Voice Count Option:</i></p> <p><i>None</i> Voice count messages are sent only when the PMS queries the voice count with an IS QV message. This is the preferred method since voice counts will always be up-to-date, and there is no detrimental effect on link traffic. When this option is selected, you can also have voice counts issued at checkout.</p> <p>When using this method, it is recommended that the PMS send the QV message only when hotel staff explicitly request voice count information to prevent large amounts of link traffic (not every time the guest's folio is accessed).</p> <p><i>AnyChange</i> A voice count message is sent to the PMS for each change in the status of unread and read messages for a guest mailbox. For example, a message will be sent when a guest receives a new voice message, reads a new voice message, or deletes a voice message.</p> <p>This option, as well as the following option, can be used if the PMS has to constantly keep track of the voice count information (for instance, to light an external message lamp, or to control a television interface). Both options can generate substantial traffic on the PMSI link during heavy voice messaging activity. This option generates more link traffic than the "ToFromZero" option.</p>

Valid entries - continued	ToFromZero Voice count messages are sent to the PMS when a guest's unread message count changes from zero to a value other than zero or vice-versa. If this information is displayed on a PMS terminal, only the presence of unread voice messages will be indicated. Voice count messages will only be sent for checked-in rooms.
Description	At CheckOut, Issue Voice Counts This field determines whether a voice count is issued at checkout time to warn the clerk that the guest has unread voice messages.
Default	Yes
Description	Route Voice Counts to They can be routed to the PMS console or the Guest Administration Console (GAC).
Default	GAC

Language Identifier Table

For information about the Language Identifier Table, see “Language Identifier Table” on page 6-16.

Language ID Provided in PMSI messages

Description	This field is for multilingual systems only.
Valid entries	Set to Yes to indicate that the guest’s preferred language can be sent across the PMSI link to the Meridian 1. <i>Note:</i> The Meridian 1 must also have the Multi-Language Wake Up (MLWU) package installed. Set to No to indicate that the guest’s preferred language cannot be sent across the PMSI link to the Meridian 1.

International Character Mapping on PMSI link

For information about the International Character Mapping on PMSI link, see “International Character Mapping on PMSI Link” on page 6-23.

***Section B:* Hospitality Install Parameters with no PMS**

In this section

Overview

6-40

Overview

Introduction

If no Property Management System is going to be used, the Hospitality Install Parameters are very simple to configure. Only a few fields require a response. All the remaining fields can be ignored.

Required fields

Only the following fields are to be completed on the View/Modify Hospitality Install Parameters screen for an HVS system with no PMS:

- Is Call Party Name Display Supported? (Yes or No)
- PMSI link to PMS Exists (Set to No)
- Voice Count (Set to =GAC)

Configuring the Hospitality Install Parameters with no PMS

For complete instructions on configuring these fields, see “Configuring the Hospitality Install Parameters” on page 6-30. Configure only those fields listed in “Required fields” above.

Chapter 7

Planning and configuring the Hospitality Profile

In this chapter

Overview	7-2
Planning the Hospitality Profile	7-3
Configuring the Hospitality Profile	7-19

Overview

Introduction

Hotels want to customize the messaging services that can be offered to their guests. This chapter provides details on how to plan and configure the Hospitality Profile.

Who should read this chapter

The content in this chapter is intended for

- system administrators
- end user trainers
- installation technicians
- maintenance technicians
- the customer's telecommunications management team

Planning the Hospitality Profile

Introduction

The Hospitality Profile is one of the Hospitality Administration menu items that allows you to customize guest voice messaging services. The features which can be customized are

- Type of password a guest mailbox can use
- Post check out mailbox parameters
- Special mailboxes and DNs
- Left pad characters for guest room DNs
- Text messaging instructions
- System and mailbox greetings

These parameters are normally configured once during the initial installation, and rarely modified.

Process

Planning the Hospitality Profile will require both the system administrator and the hotelier to make some decisions.

Generally, the system administrator should determine the configurations of those parameters which relate to system size and requirements including

- initial guest password length
- post check out mailboxes
- pad characters for room DNs

Other fields which affect hotel operating procedures will require input from the hotelier, such as

- password generated using last name or check-in date
- special mailboxes and DNs
- instructions for text messages
- system greetings

The system administrator will need to meet with one of the hotel managers and an MIS representative. Try to talk to whoever is in charge of the rooms division (the operational part of the hotel that does not involve food and beverage). They may have the title of Rooms Manager or Executive Assistant Manager.

This manager is normally responsible for the PBX department and guest messaging and so on, so it makes sense to have their input. The manager might also want to consult other key managers.

**View/Modify
Hospitality Profile
worksheet**

Complete the View/Modify Hospitality Profile worksheet to define the parameters for all Guest Messaging Services. An explanation of each of the fields is provided in the following topics.

Once completed, use the worksheet to enter the parameters on the View/Modify Hospitality Profile screen, as outlined in “Configuring the Hospitality Profile” on page 7-19. File the worksheet as a permanent record of the configuration.

Hospitality Administration

View/Modify Hospitality Profile

Initial Guest Password

Length: _____ Generated Using: [Last_Name] Check_In_Date

Post Check Out Mailboxes

Unread Message Audit (Time): _____

Read Message Audit (Hours): _____

Unread Message Retention (Days): _____

Read Message Retention (Hours): _____

Class Of Service For Guests: _____

Special Mailboxes and DN's

DN for Text Message Center: _____

Revert DN for Vacant Rooms: _____

Revert DN for Rooms with no VM: _____

Pad Characters for Room DN's

DN Length: Variable [Fixed] Digits: _____ Left Pad: _____

Instructions if there are Text Messages: None [Press_Zero] GoTo_TV

Customized Greetings Turn MWI On: No [Yes]

Introductory Message: None [Default] Custom Recorded [Voice]:

Guest System Greeting: None [Custom] Recorded [Voice]:

Guest Logon Greeting: None [Default] Custom Recorded [Voice]:

Greeting When Guest's Phone Unanswered: None [Default] Custom Recorded [Voice]:

Greeting When Guest's Phone Busy: None [Default] Custom Recorded [Voice]:

Greeting For Vacant Rooms: None [Default] Custom Recorded [Voice]:

Greeting For Rooms with No VM: None [Default] Custom Recorded [Voice]:

MORE BELOW

Select a softkey >

Save	Cancel		Voice	
------	--------	--	-------	--

**Initial Guest
Password Length**

This field specifies the length of the initial guest password. The default is 4 characters and the maximum is 16. It is recommended that you use the default. Longer passwords are more difficult to remember and increase the probability of errors during logon. This, in turn, can cause an increase in the number of complaints made by guests to your staff.

**Generated Using:
Last Name or Check-In
Date**

A default password is automatically generated when a guest checks in. This password can later be changed from the View/Modify a Mailbox screen or from the GAC. The password may be based on one of the following

Last Name

The password consists of the first n characters of the guest's last name, where n is the allowable password length (configured in the Initial Guest Password Length). This is the recommended method because it provides better security against unauthorized attempts to access the system.

CheckinDate

The password is the date of the guest's check-in. The default format is *mmdd* where *mm* is the month and *dd* is the day of the month. This format can be set to *ddmm* through the General Options screen.

In order to set the generation of the initial guest password to the *ddmm* format, the administrator must select the initial password to be generated by CheckinDate. The required date format must be selected from the Date Format for Administration and Maintenance Reports field on the General Options screen. Any other selection of the date format (*mm/dd/yy* or *yy/mm/dd*) will automatically use the default *mmdd* format to create the password.

Note: If the date format is changed, only the passwords of guests who check in after the change will be generated in the new format.

Post Check out Mailboxes

Unlike “regular” Meridian Mail, where mailboxes remain in the system unless they are deleted, HVS allows the guest mailboxes to be handled like a hotel: “checking in” a mailbox and “checking out” a mailbox when the guest leaves. The mailbox is not deleted from the system during checkout, but reflagged and archived according to the parameters you define below. Decide on the following four parameters.

Unread Message Audit (Time)

This field allows you to specify the time the system will audit unread messages and delete them from the system. The recommendation is 04:00 hrs because this process can consume a lot of system resources and take some time. Check to ensure that there will be no conflict with PMS or Meridian 1 routines that may occur during the same time period. Conflicts may prevent the audits from running properly. The default is 04:00.

Read Message Audit (Hours)

This field allows you to specify how frequently the system is to delete read messages that have exceeded the read message retention parameters. The recommendation is 04:00 hrs (which is the system default) because this will accommodate room changes and accidental checkouts. (The front office will have four hours to recheck in a mailbox as a result of a room change or clerical error, without deleting the read messages). The range is 1-23 and the default is 4.

Unread Message Retention (Days)

Use this field to set the number of days an unread message will stay in the system after the guest has checked out. The recommendation is one or two days. This gives guests time to travel to their next destination and call in for any new messages. If your system is sized generously, this can be increased. The range is 1-99 and the default is 7.

Read Message Retention (Hours)

Use this field to specify how long a read message will stay in the system after the guest has checked out. To save disk space some hotels set retention time to zero (or a very low number), which will remove messages during the next audit. The range is 0-23 and the default is 3. Nortel recommends between 4-8 hours.

Guest Class of Service This is the class of service (COS) to which guest rooms are assigned; however, this class of service can be customized for any new guest without affecting any other system classes of service. The personal class of service that is created defaults to the settings specified in the class of service chosen in this field. When the current guest is checked out, the class of service assigned to the room reverts back to the class of service specified in this field.

For example, if, in your standard guest configuration, remote notification (RN) is not enabled, yet a guest requests that he be notified of new messages at a pager, you can enable RN for this guest. Then, when this room is checked out, the class of service reverts to the standard configuration in which RN is disabled.

Special mailboxes and DNs

The following special mailboxes and Directory Numbers (DNs) must be set up for the system.

DN for Text Message Center

The Directory Number of the hotel message center. This is the number that guests call to see if there are any text messages waiting for them. The default is 0. Ensure that this is a staff number and not a guest room number.

Revert DN for Vacant Rooms

If a guest is not checked in to a room, the room is considered vacant and no mailbox is checked in. Telephone sets programmed for Meridian Mail must have a mailbox activated in order for them to work properly. In an MHVS environment, Meridian Mail recognizes vacant rooms and plays a greeting to inform callers that the room is vacant. The caller is automatically forwarded to a specified Directory Number for assistance. The default is 0 for the hotel operator. Ensure that this is a staff number and not a guest room number.

Revert DN for Rooms with no VM

Some guests may choose not to use voice messaging services (perhaps they are hearing impaired or do not like the technology, and so on). A mailbox is still assigned to the room (to eliminate the “vacant” prompts), but it is then disabled through the GAC. When this mailbox is disabled, a greeting is played informing callers of the status of the room, and automatically forwards them for assistance. This number should be for whoever handles messaging services - preferably the hotel operator.

You must specify the Directory Number to which calls to rooms for which Voice Messaging is disabled are redirected. The default is 0. Ensure that this is a staff number and not a guest room number.

Pad characters for room DNs

The following fields allow you to specify whether DNs are of variable or fixed length. If you select “Fixed” in the DN Length field, you must also specify the number of digits in the DNs and whether or not any pad characters are required.

When DNs are configured on the Meridian 1, they generally follow the hotel’s room numbering. However, it is often the case that hotel room numbers are of varying lengths. For example, you may have two-digit room numbers (Room 23), three-digit room numbers (Room 123) and four-digit room numbers (Room 2123). When these DNs are configured on the Meridian 1, they are padded so that all DNs are of the same length. A commonly used pad character is 7. Therefore, in this example, the DN that corresponds to Room 23 is 7723, the DN that corresponds to Room 123 is 7123, and the DN that corresponds to Room 2123 is 2123.

In this example, you would enter 7777 as the pad characters. The number of pad characters you enter should equal the longest possible room number to accommodate all possible room numbers.

When you add a user (or mailbox) in User Administration, the system checks this field when you enter the extension. If the extension you enter has fewer digits than specified in the Digits field (four in this example), the system will automatically pad it.

For example, you are about to add the mailbox for Room 23. When prompted for an extension, you enter 23 (instead of 7723 which is the real DN as configured on the Meridian 1). The system automatically pads the extension and generates the DN 7723. This DN is automatically entered as the Primary Extension DN in the Add a Local Voice User screen. This simplifies the process of adding mailboxes since you only need to specify the room number.

Note: If a staff member or a guest wants to call another guest in the hotel, they must include any necessary pad characters. For example, to call the guest in Room 23, the dialable DN is 7723, not 23. If 23 is dialed, it will not automatically be padded with 77. Therefore, it is important that guests be aware of the rules for dialing other rooms in the hotel.

DN Length

DNs can be of a variable length or a fixed length. When this field is set to Fixed, the following fields are also displayed:

- **Digits** The length of the DN. This field is not displayed if DN Length is set to Variable.
- **Left Pad** When the room number is shorter than the fixed DN length, the digit(s) entered in this field are used as a prefix to generate the required DN when new mailboxes are being generated. The pad character(s) must match the DN configuration on the switch. If a pad character is not required, leave this field blank. This field is not displayed if DN Length is variable.

Before making a decision about these parameters, read the section titled “Dialing Plans” in Chapter 1, “Introduction.”

Instructions if there are text messages

The selection made here determines the instructions that are provided to a guest who has text messages waiting. These instructions are appended to the logon greeting:

- **None** The guest will not receive any instructions. However, the guest will still be informed that other mail is available. For example, *“There is other mail for you.”*
- **Press Zero** The guest will be instructed to press 0. The following prompt is played: *“To retrieve other mail, please press 0 at any time.”* This action forwards the caller to the text message center.
- **GotoTV** The guest will be instructed to use the television message system. The following prompt is played: *“Please retrieve your other mail from your television messaging system.”*

Customizable greetings

There are a number of customizable greetings, each of which can be recorded in every language installed for the customer group that is on the system. The first line indicates the language for which you are recording greetings. These greetings are played under specific circumstances such as guest logon, or if a caller reaches a guest phone that is busy or unanswered.

If you have not recorded a custom greeting, you can choose to play the default greeting or no greeting at all. If you have recorded a custom greeting, the Recorded (Voice) field is set to Yes and you can choose to play the custom greeting, the default greeting, or no greeting. A custom greeting is recorded by pressing the [Voice] softkey while the cursor is positioned in one of the greeting fields, as outlined in “Recording, playing, and deleting custom greetings” on page 7-17.

Note: If you have not recorded a custom greeting, the Custom option will still be displayed. You will also be allowed to move your cursor into that field. However, if you try to save the hospitality profile with Custom selected when no custom greeting is recorded, an error message will be displayed and you will have to select a valid option before saving the profile.

The following greetings can be customized.

Introductory Message

This greeting introduces new guests to the voice messaging system. It introduces them to basic functions and informs guests how to get help while using Meridian Mail. This message is played once when the guest first logs into their mailbox.

- **Turn MWI On**

When this field is set to Yes, the system will turn the Message Waiting Indicator light on for all newly checked-in guests. When the new guest enters his or her room, the MWI light will be on. When the guest logs on, he or she will hear the introductory message. If this field is set to Yes, ensure that the Introductory Message field is set to either Default or Custom. If this field is set to No, the system will not turn the Message Waiting Indicator light on for a newly checked-in guest unless there is a message in the mailbox. The guest will hear the introductory message at the start of his or her first voice messaging session. The default is Yes.

On multilingual systems, this field has to be set to Yes for each language in which guests may be checked in. For example, your system has four languages: AmericanEnglish, French, Spanish, and Japanese. Turn MWI On is set to Yes for all languages except Japanese. If a guest is checked-in with Japanese as the selected language, he or she will not get the message waiting indication even though it has been turned on for three of the four languages.

You may want to turn this feature off for the following reason. When a guest sees the MWI light on, he or she expects there to be a voice message. When the guest logs on and hears the introductory message and no voice message, he or she will often call down to the desk to check for messages when there are not any. This can cause confusion for the guest who expects a message and extra work for your staff.

- **Guest System Greeting**

This greeting is played to external callers when they are connected to a guest's mailbox. This greeting is used to identify the hotel and, typically, contains the spoken name of the hotel. This feature is optional if your hotel is identified by a live attendant taking calls at a console or through a voice menu greeting.

If a custom greeting is recorded, you can select None so that no greeting is played, or Custom to play the greeting you have recorded.

Note: There is no default system greeting since this greeting will be unique to every customer organization.

If a custom greeting is recorded and you choose to play it, it will also be played before all of the following greetings.

- **Guest Logon Greeting**

This greeting is played when guests log on to Meridian Mail. The default greeting asks the user to enter his or her room number followed by his or her password.

- **Greeting When Guest's Phone Unanswered**

This greeting is played when a guest phone is not answered. However, if the guest has recorded his or her own personal greeting, the personal greeting will be played instead. When a guest phone is unanswered, the following greetings are played in the order in which they are listed:

- the guest system greeting (if recorded) for external callers
- the guest's personal greeting (if recorded)
- if the guest has not recorded a personal greeting, the default or custom unanswered greeting (if you have selected Custom or Default for the unanswered greeting)

- **Greeting When Guest’s Phone Busy**

This greeting is played when a guest phone is busy. When a caller reaches a busy guest phone, the following greetings are played in the order in which they are listed:

- the guest system greeting (if recorded) for external callers
- the default or custom busy greeting (If None is selected, no busy greeting is played.)
- the guest’s personal greeting (if recorded) or
- if the guest has not recorded a personal greeting, the custom unanswered greeting (if Custom is selected for this greeting)

If the guest phone is busy, the following combinations of greetings are possible.

Unanswered greeting	Busy greeting	Greeting played when phone is busy
Default	Default	Busy greeting
Default	Customized	Customized busy, Default unanswered
Customized	Default	Default busy, Customized unanswered
Customized	Customized	Customized busy, Customized unanswered

The recommendation is to use the default unanswered and busy greetings, or to customize both greetings.

- **Greeting for Vacant Rooms**

This is played to callers who have reached a vacant room. This greeting is preceded by the guest system greeting (if recorded). Once the message has been played, the caller is transferred to the DN specified in the Revert DN for Vacant Rooms field.

- **Greeting for Rooms with No VM**

This greeting is played to callers who have reached a mailbox for which voice messaging has been disabled. This greeting is preceded by the guest system greeting (if recorded). Once the message has been played, the caller is transferred to the DN specified in the Revert DN for Rooms with No VM field.

Recording, playing, and deleting custom greetings

To record, play, or record a custom greeting, use the following steps.

Starting Point: The Main Menu

Step Action

- 1 Select Hospitality Administration.
Result: The Hospitality Administration menu is displayed.
- 2 Select View/Modify Hospitality Profile.
Result: The View/Modify Hospitality Profile screen is displayed. See “Configuring the Hospitality Profile” on page 7-19.
- 3 Determine which action is required.

IF YOU WANT TO	THEN
record a new custom greeting	go to Step 4.
play an existing custom greeting	go to Step 12.
delete a custom greeting	go to Step 13.
disconnect	go to Step 14.

- 4 Move the cursor to the Customized Greetings section of the screen, to the Recorded (Voice) field associated with the greeting you want to record

```

Hospitality Administration MORE ABOVE
View/Modify Hospitality Profile

Pad Characters for Room DNs
DN Length: Variable Fixed Digits: 4 Left Pad: 000000

Instructions if There are Text Messages: None Press_Zero Goto_TV

Customized Greetings for American English

Introductory Message: None Default Custom Turn MWI On: No Yes
Guest System Greeting: Recorded (Voice): No
Guest Logon Greeting: None Custom Recorded (Voice): No
Greeting When Guest's Phone Unanswered: None Default Custom Recorded (Voice): No
MORE BELOW

Save Cancel Voice
    
```

Step Action

- 5 Press the [Voice] softkey.
Result: You are prompted for an extension DN.
 - 6 Enter the extension number of the phone that you will be using to record the greeting and press <Return>.
Result: The phone at that extension rings.
 - 7 Pick up the handset of the phone.
Result: A new set of softkeys is displayed: [Return], [Play], [Record], [Delete], and [Disconnect].
 - 8 Press [Record] and speak into the handset to record the greeting.
 - 9 Press [Stop] when you have finished recording the greeting.
 - 10 Select "Custom" to enable the newly recorded greeting.
 - 11 Press the [Play] softkey.
Result: If a custom greeting is recorded, it will be played over the phone.
 - 12 Press the [Delete] softkey.
Result: If a custom greeting was recorded, it will be deleted.
 - 13 Press [Disconnect] or [Return].
Both [Disconnect] and [Return] cause the original softkeys to return. [Return] does not disconnect the extension (as long as you do not hang up the receiver). If you press [Voice] again to make another recording, you will not have to re enter the telephone extension. However, if you use [Disconnect], you will have to enter the extension if you press [Voice] again.
 - 14 Do you want to save the greeting?
If yes, go to step 10.
If no, go to step 11.
 - 15 Press the [Save] softkey.
Result: The recordings and any other changes are saved and you are returned to the Hospitality Administration menu.
 - 16 Press [Cancel].
Result: Any recordings and changes are discarded, and you are returned to the Hospitality Administration menu.
-

Configuring the Hospitality Profile

Introduction

The View/Modify Hospitality Profile screen allows you to define parameters for all Guest Messaging Services.

Before you begin

Review the completed View/Modify Hospitality Profile worksheet with the hotelier and any involved managers to ensure that all the details are correct and reasonable.

View/Modify Hospitality Profile screen

The View/Modify Hospitality Profile screen is illustrated in the following diagram.

Hospitality Administration

View/Modify Hospitality Profile

Initial Guest Password

Length: _____

Generated Using: [Last_Name] Check_In_Date

Post Check Out Mailboxes

Unread Message Audit (Time): _____

Read Message Audit (Hours): _____

Unread Message Retention (Days): _____

Read Message Retention (Hours): _____

Class Of Service For Guests: _____

Special Mailboxes and DNs

DN for Text Message Center: _____

Revert DN for Vacant Rooms: _____

Revert DN for Rooms with no VM: _____

Pad Characters for Room DNs

DN Length: Variable [Fixed] Digits: _____ Left Pad: _____

Instructions if there are Text Messages: None [Press_Zero] GoTo_TV

Customized Greetings

Turn MWI On: No [Yes]

Introductory Message: None [Default] Custom Recorded [Voice]:

Guest System Greeting: None [Custom] Recorded [Voice]:

Guest Logon Greeting: None [Default] Custom Recorded [Voice]:

Greeting When Guest's Phone Unanswered: None [Default] Custom Recorded [Voice]:

Greeting When Guest's Phone Busy: None [Default] Custom Recorded [Voice]:

Greeting For Vacant Rooms: None [Default] Custom Recorded [Voice]:

Greeting For Rooms with No VM: None [Default] Custom Recorded [Voice]:

MORE BELOW

Select a softkey >

Save

Cancel

Voice

Field descriptions

The information for these fields should have already been completed on the View/Modify Hospitality Profile worksheet. Use the completed worksheet to enter the required information on the View/Modify Hospitality Profile screen.

For details regarding the field descriptions, see the individual explanations provided in “Planning the Hospitality Profile” on page 7-3.

Configuring the Hospitality Profile

To configure the Hospitality Profile, use the following steps.

Starting Point: The Main Menu

Step Action

-
- 1 Select Hospitality Administration on the Main Menu.
Result: The Hospitality Administration menu is displayed.
 - 2 Select View/Modify Hospitality Profile.
Result: The View/Modify Hospitality Profile screen is displayed.
 - 3 Obtain the View/Modify Hospitality Profile worksheet, which was completed as outlined in “Planning the Hospitality Profile” on page 7-3.
 - 4 Use the completed worksheet to enter the appropriate parameters on the View/Modify Hospitality Profile screen.
-

Chapter 8

HVS General Administration

In this chapter

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Section B:: User administration	8-11
Section C:: Operational measurements	8-33
Section D:: Guest Administration Console	8-53

***Section A:* HVS system overview**

In this section

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Meridian Mail Hospitality Voice Services screen map	8-5
The Main Menu	8-6
Hospitality Administration menu	8-7

Overview

Introduction

This chapter provides information which is specific to the administration of an HVS system.

Many of the administration tasks for an HVS system are the same as for a regular Meridian Mail system; however, these tasks are not documented in the *HVS Implementation Guide*. Reference will be made to the appropriate location in the *System Administration Guide* (NTP 55-7001-301) to document these common tasks.

This chapter will review the database and show you where the differences are, give you points to consider when planning the database from a hotelier's perspective, and show you how to configure those areas that are different.

Who should read this

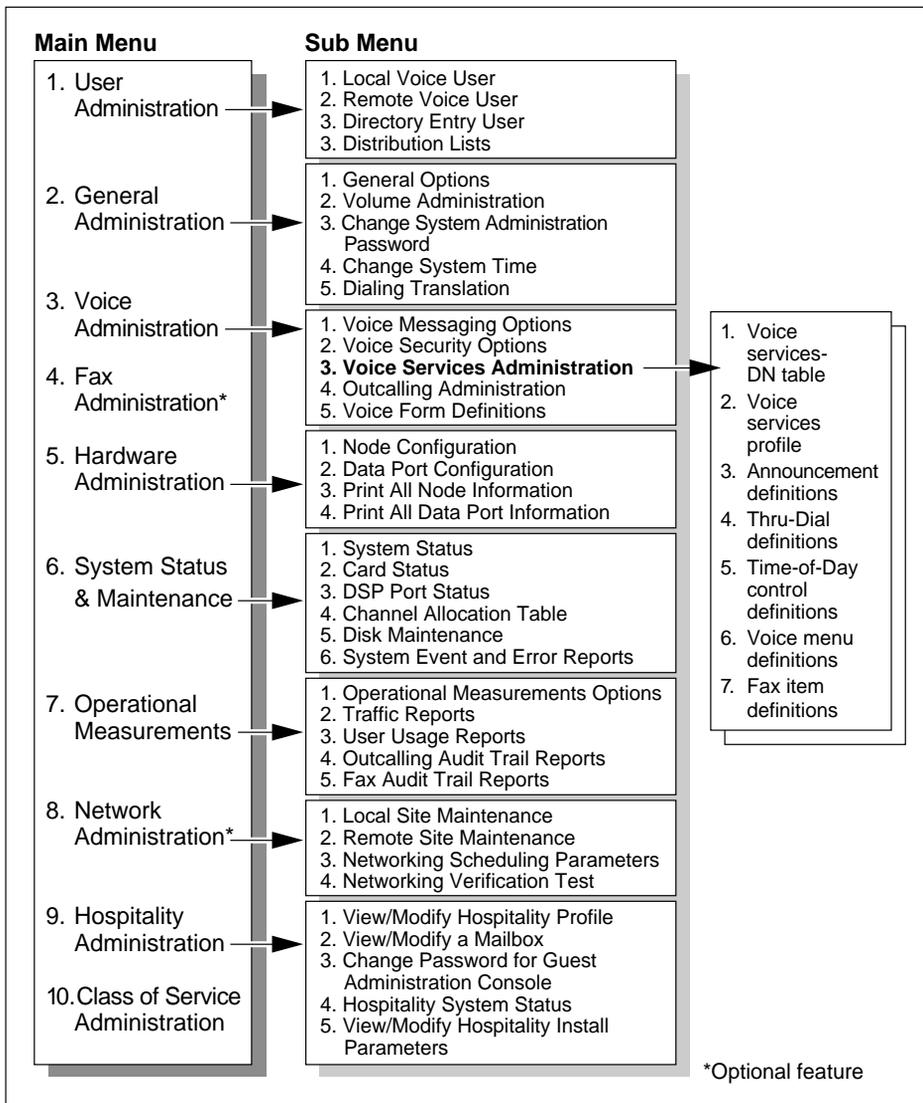
The following people should review this chapter:

- system administrators
- installation technicians
- maintenance technicians
- the customer's telecommunications management team

Meridian Mail Hospitality Voice Services screen map

Introduction

The following screen map provides an entire list of available menus and options for a Meridian Mail system with HVS.



G100573

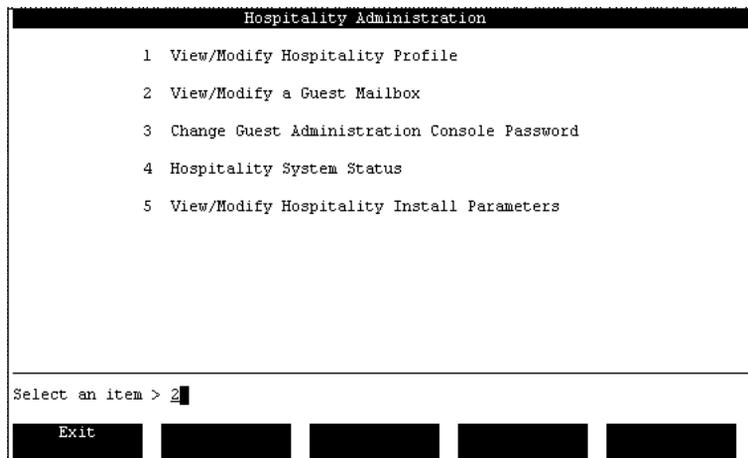
Hospitality Administration menu

Introduction

Hospitality Administration involves configuring the hospitality profile and guest mailboxes, changing the password for the guest administration console, checking the system status, and modifying install parameters.

Hospitality Administration menu

The Hospitality Administration menu allows you to perform administration and maintenance tasks for the Hospitality service. This menu is displayed when you select Hospitality Administration from the Meridian Mail Main Menu.





CAUTION

Risk of equipment damage

After performing hospitality administration on any of the Hospitality Administration screens, be sure to return to this screen (or log out if you will be leaving the terminal unattended for extended periods of time). Leaving the system in a Hospitality Administration screen for extended periods can lead to problems.

Available options

The following options are available from the Hospitality Administration menu.

Select	Refer to
View/Modify Hospitality Profile	Chapter 7, “Planning and configuring the Hospitality Profile”
View/Modify a Guest Mailbox	See “View/modify a guest mailbox” on page 8-17.
Change Guest Administration Console Password	See “Changing the Guest Administration Console Password” on page 8-59.
Hospitality System Status	Chapter 9, “Hospitality System Status”
View/Modify Hospitality Install Parameters	Chapter 6, “Planning the Hospitality Install Parameters”

Section B: User administration

In this section

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Voice Administration	8-23
Voice Services Administration	8-24
Hardware Administration	8-27
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Overview

Introduction

During system set up, the guest and staff mailboxes must initially be set up through the Add a Local User screen. Once the mailboxes have been established, they can be viewed or modified through the View/Modify a Mailbox screen.

After the mailboxes have been set up, user administration is very similar to Meridian Mail. The following options do not change in a system equipped with HVS:

- Delete User
- Find User
- Directory Entry Users
- Distribution Lists

For additional information, refer to “User Administration” in the *System Administration Guide* (NTP 555-7001-301).

Guest versus staff users

Both guest and staff are considered local voice users; what differentiates them is the class of service which is set when adding the local user to the system.

Guest room mailboxes are only added once because they are associated with guest rooms, not guests. Guest room mailboxes are enabled during the check-in procedure, and disabled at checkout.

Staff mailboxes are associated with people and can be added and deleted as the need arises.

Before you begin

Here is a checklist of points to remember when adding users to an HVS system.

1. Obtain the guest room numbering plan from the hotel.

Note: If you are installing HVS in a hotel that is under construction, make sure the numbering plan you obtain is POST C.O. (Certificate of Occupancy). If not, you may end up getting the construction numbering plan instead of the hotel numbering plan.

2. Obtain the list of all the staff members who will be assigned a mailbox.
3. Review the Class of Service and modify accordingly.
4. Add all guest room mailboxes to the system first, then add all the staff mailboxes.

It is important that you understand the room number to room DN correlation and dialing plan. See Chapter 7, “Planning and configuring the Hospitality Profile”. Read this section carefully and make sure you understand it fully before proceeding.

Note: Before you actually add the mailboxes to the system, refer to the *System Administration Guide* (NTP 555-7001-301) to the chapter titled “User Administration” and section titled “Adding Large Numbers of Users”. This is especially important when you are installing HVS in a large hotel (500+ rooms).

5. When you configure the guest mailboxes *do not* enter a name. This is because the name will change with each guest who occupies the room. Meridian Mail will recognize this room as a guest mailbox. When the PMSI sends a message checking someone into the room, the Call Party Name Display feature, if being used and configured, will download the guest's name to the user profile for that room.
6. The guest mailbox number *must match the room number*, not the room's DN. If the hotel is using a left pad character for some room numbers, (that is, 7 + room number for rooms on lower floors), it is important to remember *not* to enter the 7, just the room number. The prefix (7) will be accounted for when the left pad is configured in the Hospitality Profile. See Chapter 7, “Planning and configuring the Hospitality Profile”
7. Remember, the mailboxes will not work until you have completed the configuration of the telephone sets on the Meridian 1. (See Chapter 5, “Meridian 1 configuration”.)

Add Local Voice Users

Introduction

Two types of mailboxes must be added to the system: a guest mailbox for every room in the hotel and a staff mailbox for each staff member. Mailboxes are added to the system from the Add a Local Voice User screen, described below. The mailbox type is defined in the *Hospitality User Class* field. The class determines the features that are available to the user.

The difference between staff and guest mailboxes

Staff mailboxes have access to voice messaging capabilities. Guests, however, cannot compose and send messages. The guest interface is simplified, providing them with call answering capabilities only. Staff also have access to other features that are not available to guests.

If any of the following features are installed on your system, they are only available to staff:

- Delivery to Non-Users
- Remote notification
- User-customizable revert DN
- Meridian Networking
- AMIS networking
- ACCESS

Ensure that staff are aware that guests have limited capabilities and cannot compose and send messages.

Autologon

Autologon must be enabled in two places in Meridian Mail; in the VSDN table when you add the DN for Hospitality Voice Messaging (HM), and in the Add a Local Voice User screen when you define room mailboxes. Guest mailboxes are usually configured with autologon enabled.

Generally, the primary voice messaging DN is configured as non-autologon. Any secondary guest (or staff) DNs are configured as autologon. When autologon is enabled, the guest is not prompted to enter a mailbox number or password if he or

she calls from the room telephone. When autologon is disabled, the guest must enter the mailbox number and password.

Autologon is typically used in combination with one-touch access. In this manner, when the guest is in his or her own room and wants to retrieve messages, he or she presses the designated message key and is automatically logged on to the mailbox. However, when the guest wants to log on to his or her mailbox from a phone other than the guest's own room phone, the guest will not be able to press the message key since that will log the user onto the mailbox associated with the phone he or she is using. Instead, the guest will have to use a voice messaging DN that is configured as non-autologon (the primary voice messaging DN) to listen to messages.

Note: If autologon is disabled for a Hospitality Voice Messaging DN yet enabled for a particular mailbox (in the Add a Local Voice User screen), the setting for the DN overrides the setting for the mailbox and the guest will have to enter the mailbox number and password to log on to Meridian Mail.

Adding a Local Voice User

Adding a local voice user to an HVS system is the same as adding a user on Meridian Mail, with the following important exceptions:

- *Do not* enter a name when you configure a guest mailbox. This is because the name will change with each guest who occupies the room. Meridian Mail will recognize this room as a guest mailbox. When the PMSI sends a message checking someone into the room, the Call Party Name Display feature, if being used and configured, will download the guest's name to the user profile for that room.
- Ensure that you select "013 - Guest Class" for the Class of Service.

Refer to the *System Administration Guide* (NTP 555-7001-301) for complete information on adding Local Voice Users.

Add Local Voice User screen The following illustrations show the Add Local Voice User screens.

Screen 1

User Administration	
Add Local Voice User	
Mailbox Number:	7703
Volume ID:	2
Storage Used:	0
Last Name:	_____
First Name:	_____ Initials: ■
Department:	_____
Class of Service:	Personal 001_regular_lv 002_reg_&_dnu 003_manager (Use More Detail Key) 004_executive 005_foreign_sa 006_directory_ 019_Guest_Class
Extension DNs:	7703 _____ _____
MORE BELOW	
Save	Cancel
More Detail	Change Password
Voice	

Screen 2

User Administration	
Add Local Voice User	
Revert DN:	_____
Message Waiting Indication DN:	7703
Personal Verification Recorded (Voice):	No
Monitor Mailbox during Monitoring Period:	No Yes
Name Dialable by External Callers:	No Yes
Hospitality User Class:	Staff Guest
Logon Status:	Disabled Enabled
Preferred Language:	American_English Canadian_French
MORE ABOVE	
Save	Cancel
More Detail	Change Password
Voice	

View/modify a guest mailbox

Introduction

Attributes of guest mailboxes can be viewed or modified from the View/Modify a Mailbox screen.

Note 1: This screen is also accessible from the Guest Administration Console. When viewed on the GAC, this screen displays the softkey [Change Guest Password].

Note 2: Staff mailboxes are modified from the View/Modify a Local Voice User screen in User Administration.

View/Modify a Mailbox screen

The following illustration shows the View/Modify a Mailbox screen.

Hospitality Administration

View/Modify a Mailbox

Room: 1261 Room Status:Occupied

Last Name:Fink First Name:Barton

Logon Status: [Enabled]Disabled
AutoLogon: No [Yes]
Voice Messages Accepted:No[Yes]

* Language:Japanese [AmericanEnglish] German Swedish

Voice Messages:Unread:29Total:29Text Messages:No

Last Logon:1/25/91 09:39

SaveCancel

* Appears only on multilingual systems

Field descriptions

The following fields are available on this screen.

Room

Description This field indicates the room number. This is the same as the mailbox number.

Room Status

Description This field indicates the status of the room. This will always be “Occupied” because you can only view/modify occupied rooms.

Last Name

Description This field indicates the last name of the guest occupying the room.

Note 1: If the last name that is entered during check-in or during a name change contains leading digits (0-9), these digits will be transposed to the end of the name if

- the initial password is generated using the last name

and

- the leading digits are at least the initial guest password length

Up to the initial password length of digits are transposed to the end of the Last Name.

The password is still generated by the last name as entered.

Example

The Initial Guest Password Length = 4, Generated using Last Name

If the Last Name entered is: 1234LastName, the name viewed on the GAC is LastName1234.

Note 2: If the Calling Party Name Display (CPND) feature is installed, the name on the Meridian 1 and the name displayed on Meridian Mail may be different.

First Name

Description This field indicates the first name of the guest occupying the room.

Note: If there is heavy check-in/checkout activity, the first and last name fields may remain blank until the backlog is processed by HVS. The update delay will be approximately 5 minutes for every 100 guest rooms being processed. The following message will be displayed on the screen: "Name update may be pending."

Logon Status

Description When a guest's mailbox is disabled, he or she cannot log on to the system to hear messages. However, callers can still leave messages. A mailbox may become disabled if a guest makes too many logon attempts using the wrong password. When the mailbox status is Disabled, an explanation is displayed on the line below this field. When the status is Enabled, the guest has full access to the mailbox.

Default Enabled

AutoLogon

Description When this field is set to Yes, a guest has one-touch access to his or her mailboxes. In other words, a guest does not need to enter a mailbox number or password to gain access to Meridian Mail when dialing from their room. When this field is set to No the guest must enter a mailbox number and password. This provides greater security against unauthorized access. For further information, see “Autologon” on page 8-14.

Default Yes

Voice Messages Accepted

Description If someone calls this phone when this field is set to No, and the guest does not answer, the greeting for rooms with no voice messaging is played, and the revert DN for rooms with no voice messaging (as defined in the Hospitality profile) is called.

Default Yes

Language

Description This field is displayed on multilingual systems only. The selection made here determines the language in which the guest and callers to the mailbox will hear voice messaging prompts. When a guest checks in, his or her preferred language should be specified. If no language is specified, the default language that is defined in the Voice Messaging Options screen is assigned.

Default Language specified on Voice Messaging Options screen

Voice Messages

Description	<p>The following read-only fields display statistics for the number of messages in the guest mailbox.</p> <p><i>Unread</i> This field indicates the number of unread voice messages in the guest's mailbox.</p> <p><i>Total</i> This field indicates the total number of messages, read and unread, in the guest's mailbox.</p> <p><i>Text Messages</i> This field indicates whether the guest has any text messages waiting.</p>
-------------	--

Last Logon

Description	<p>This field displays the date and time at which the guest last logged on to his or her mailbox. If the mailbox has not yet been logged on to by the guest, this field displays "Guest has Not Logged On."</p>
-------------	---

Extension DN

Description	<p>This field indicates the Directory Number of the phone associated with this room's mailbox. This number may be different from the mailbox number. More than one DN may be associated with a room mailbox; however, only the primary DN is shown.</p>
-------------	---

Revert DN

Description	<p>This field indicates the Directory Number to which a caller who has reached Meridian Mail (through call answering or a voice menu application) is transferred on pressing 0. This is a read-only field. The value that is displayed is the revert DN which is defined in the user's profile.</p>
-------------	---

**Viewing or modifying
a Guest Mailbox**

To view or modify a Guest Mailbox, use the following steps.

Starting Point: The Main Menu

Step Action

- 1 Select Hospitality Administration on the Main Menu.
Result: The Hospitality Administration Menu appears.
 - 2 Select View/Modify a Guest Mailbox.
Result: The View/Modify a Mailbox screen appears.
 - 3 Enter the number of the mailbox you wish to view or modify and press <Return>.
Result: The information for the requested mailbox is displayed.
 - 4 Review the information, and change any parameters required.
 - 5 Select [Save] to save any changes you have made. Otherwise, select [Cancel] to exit without saving those changes.
Result: The Hospitality Administration menu appears.
-

Voice Administration

Introduction

The following options do not change in a system equipped with HVS:

- Voice Messaging Options
- Voice Security Options
- Configure Meridian Mail Services
- Finding a subset of VSDNs or Services

A note about broadcast messaging

When a broadcast message is sent, all mailboxes (both guest and staff) receive the message. In a hotel, it is recommended that broadcast messaging be kept to an absolute minimum. As you know, a broadcast message can quickly tie up all the Meridian Mail channels with everyone trying to retrieve the message simultaneously.

In a hotel, guests have little tolerance for not being able to access their mailbox when they want to. If a broadcast message is left that is not important (for example, just advertising a special activity in one of the restaurants) and guests cannot log on to their mailbox to retrieve their messages, they will swamp the hotel switchboard with inquiries as to what is going on. Some guests, who may want to retrieve real messages from their mailbox will then become frustrated and even angry at having to wait for the trivial message to be retrieved by everyone else before they can pick up their important messages. They will often ask if the operator has any way of bypassing everyone else and logging onto Meridian Mail quickly. Needless to say, it is not a pleasant situation for the guests or hotel staff.

Nortel recommends that you use broadcast messaging for emergency situations (for example, no water between 3 and 5am while boilers are being maintained, or fire safety system being tested between 2 and 3pm, so disregard alarms), or send broadcast messages late at night.

Voice Services Administration

Introduction

The following options do not change in a system equipped with HVS:

- Voice Services Profile
- Thru-dial definitions
- Time-of-Day Control definitions
- Fax Item definitions (optional feature)

Other options may provide alternative uses or features based on the hospitality requirements.

Voice Services - DN table

Two additional services specific to HVS can be assigned a VSDN. They are Hospitality Messaging (HM) and Post Check Out Mailbox (CO). Neither requires a session profile.

When Hospitality Messaging is defined, a pop-up window appears, asking whether or not to enable or disable auto logon. HVS can offer the guests two voice messaging DN's, one that includes autologon (to be used when logging on to the room mailbox from the guest room), the other to be defined without autologon (to be used when logging on to the mailbox from outside the guest room).

Before configuring either of these two hospitality-specific DN's, be sure to read Chapter 5, "Meridian 1 configuration" of this guide. This section covers the special considerations for building ACD agents and queues on a system equipped with HVS.

Announcement definitions

Announcement definitions do not change in a system equipped with HVS. The following list includes some common uses for announcement definitions on an HVS system:

- hotel's address and fax number
- daily weather forecast
- daily health club agenda
- dial-a-story for kids at bedtime
- employee cafeteria menu
- daily restaurant hours/specials/activities

Voice menu definitions

Two additional services specific to HVS can be assigned as a menu choice. They are Hospitality Messaging and Post Checkout Mailbox.

Here are some common uses for voice menu definitions:

- health Club activities (for the tennis club, touch 1; for the golf shop, touch 2; and so on)
- Human Resources services (for health benefits information, touch 1; to change your address, touch 2; and so on)
- Restaurants and bars (to be connected to the cafe, touch 1; for the Chinese restaurant, touch 2; for the soda fountain, touch 3; and so on)

Automated attendant services can be used for overflow purposes, or in smaller properties where the switchboard "closes down" during the graveyard shift.

Outcalling Administration (optional feature)

The way in which Outcalling is administered does not change in a system equipped with HVS. Staff mailboxes have the full Outcalling capabilities, but guest mailboxes have limited functionality:

- Delivery to nonuser is not available.
- Guests cannot create or modify their own remote notification schedules from their telephones; therefore, you cannot enable the Keypad Interface field for guest mailboxes.

Administering Outcalling for hotel guests is technically possible, but you will quickly find that it is logistically hard to provide. It is, therefore, recommended that you only offer this service in exceptional circumstances such as emergencies or super-VIP situations.

Note: If Outcalling is going to be used, make sure all security measures have been reviewed thoroughly before the service is implemented.

Voice Form definitions (optional feature)

Voice Form definitions do not change in a system equipped with HVS.

Here are some common uses for voice forms:

- audio comment cards
- group activity registration
- health club reservations (for tennis, a massage, fitness assessment, and so on)
- restaurant reservations
- internal maintenance requests for engineering

Hardware Administration

Introduction

The process of viewing the hardware configuration under Hardware Administration, and viewing/modifying through TOOLS is the same in an HVS system. What is different is the actual configuration: this is due to the interface with the PMS and the installation of the GAC. Let's look at each of the screens.

Node Configuration

Here are examples of node configuration screens for systems equipped with HVS. The first example is for a Modular Option platform, the second example is for the Modular Option GP, and the third example is for the EC platform.

Node Configuration screen - Modular Option

The following illustration shows the node configuration for an HVS system on a Modular Option platform.

Hardware Administration								
Node Configuration								
Node	Card_1	Card_2	Card_3	Card_4	Card_5	Card_6	Card_7	Card_8
1	Empty	HABC	MMP40	Empty	VP	VP	VP	RSM

Move the cursor to the node number and press the space bar to select.

Exit View

Note: The HABC in slot 2 is required in a multi-node system. The RSM card in slot 8 is required for HVS.

Node Configuration - Modular Option GP (Single Node)

The following illustration shows the node configuration for an HVS system on a Modular Option platform.

	1	2	3	4	5	6	7	8
Power Supply	R S M * *	H A B C *	M M P 4 0	E M P T Y	V P	V P	V P	E M P T Y

Node Configuration - Modular Option EC

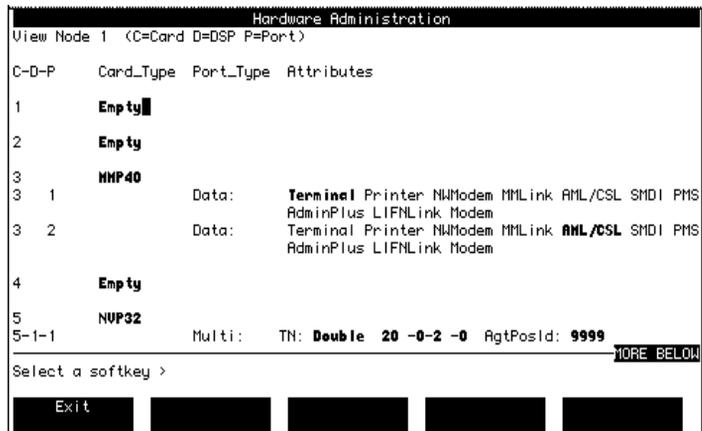
The following illustration shows the node configuration for an HVS system on a Modular Option EC platform.

Meridian Mail Module		Node X/Y			Node Y			Node X			MSU 3		MSU 5		Node Z				
CE Pwr Sup	CE Pwr Sup	0 VP	1	2	3	4 MMP40	5 Utility	6 MMP40	MSU 1	MSU 2	MSU 4	7 MMP40	8 VP	9	10	11			

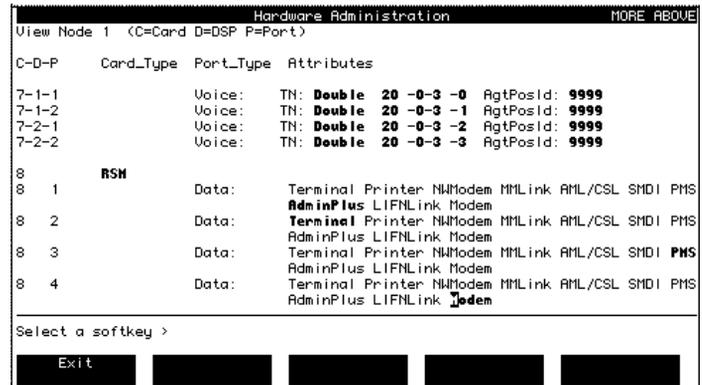
View Node

When the View softkey is selected, details of each node are provided. The information provided is standard except where the RSM or UTIL card is identified. Here you see the assignments for the terminals (Guest Administration Consoles) and the PMS ports.

View Node screen - first section



View Node screen - last section



At least one GAC terminal is assigned, and two ports will be set up as PMS. Although not shown on the illustrations above, one of the PMS ports is the connection from Meridian Mail to the PMS system, and one is the connection from Meridian Mail to the Meridian 1.

If port 2 on the RSM is defined as anything other than Terminal, have the system administrator modify the field if more than one Guest Administration Console is to be added.

Remember, modifying the node configuration must be done through the Tools level.

Dataport configuration The Data Port Configuration screen shows HVS-related items in the column titled Device Type. The “terminals” refer to the administration terminal on port 1 and the GAC on port 2, and the PMS on ports 3 and 4.

The following illustration shows an example of a Data Port Configuration screen.

Data Port Configuration screen

Hardware Administration			
Data Port Configuration			
Port Location	Description	Device Type	Status
1-3-1	Node 1 MMP40 Port 1	Terminal	InService
1-3-2	Node 1 MMP40 Port 2	AML/CSL	InService
1-8-1	Node 1 RSM Port 1	AdminPlus	InService
1-8-2	Node 1 RSM Port 2	Terminal	InService
1-8-3	Node 1 RSM Port 3	PMS	InService
1-8-4	Node 1 RSM Port 4	PMS	InService

Move the cursor to the data port location and press the space bar to select.

Exit View/Modify

View Data port

The following screen shows the data port information for one port.

```
Hardware Administration
View Data Port
Data Port Location: 1-8-3
Device Type: PMS
Device Name: PMS0 183
Baud Rate: [200 2400 4800 9600
Parity: Even Odd None

Select a softkey >
Exit [ ] [ ] [ ] [ ]
```

Print Node and Data Port information

The Print All Node and Print All Data Port options do not change in a system equipped with HVS.

System Status and Maintenance

Introduction

This screen should not be confused with Hospitality System Status (discussed in Chapter 9, “Hospitality System Status”). The System Status screens do not change in a system equipped with HVS. All system status and maintenance options and features remain the same; however, there are minor variations for the Channel Allocation Table and SEERs.

Channel Allocation Table

Two additional services specific to HVS can be assigned to channels. They are Hospitality Messaging and Post Check-Out Mailbox. It is recommended that all voice channels be made available to all services.

System Event and Error Reports

SEERs are reviewed in detail in Chapter 9, “Hospitality System Status”

***Section C:* Operational measurements**

In this section

Overview	8-34
The Hospitality Statistics report	8-38
Guest Console Statistics report	8-43
Interpreting other Meridian Mail reports	8-50

Overview

Introduction

Meridian Mail generates a number of operational measurements reports, two of which are specific to Hospitality Voice Services:

- Guest Console Statistics report
- Hospitality Statistics report

The User Usage Report and Operational Measurement Options remain unchanged in a system equipped with HVS.

In this chapter, you will learn how to read and interpret the data on the two hospitality reports, and also how to identify points to consider when reading other Meridian Mail reports from a hospitality perspective.

HVS Reports

The following are two additional traffic reports that are specific to HVS.

Guest Console Statistics Report

Both reports are traffic reports and are available through Operational Measurements. For additional information, refer to the *System Administration Guide* (NTP 555-7001-301), and read the following sections:

- “Operational Measurements Traffic Reports”
- “Operational Measurements User Usage Reports”
- “Using Operational Measurements to Detect or Investigate System Problems”

Meridian Mail reports There are two Meridian Mail reports specific to Hospitality Voice Services. They are

- **Guest Console Statistics Report**
The Guest Console Statistics report contains totals for activities that were performed using the Guest Administration Console menu options.
- **Hospitality Statistics Report**
The Hospitality Statistics report contains totals for guests checked in and out, as well as statistics on post-checkout mailboxes.

Both are traffic reports, available through Operational Measurements. Obtain the *System Administration Guide* (NTP 555-7001-301) and turn to Chapter 13, “Operational Measurements,” and read the introduction and sections titled “Operational Measurements Traffic Reports,” “Operational Measurements User Usage Reports,” and “Using Operational Measurements to Detect or Investigate System Problems.”

How to interpret reports

Interpreting a report is more than just knowing what the numbers mean. Interpreting a report requires taking many factors into consideration and being flexible in your analysis. When interpreting the Meridian Mail reports, keep the following points in mind:

- Do not look only at the counts for each service, but also at the relationship between the counts for different services. For example, both Express Messaging and call answering features allow messages to be left in the system. Therefore, both counts should be taken into consideration when looking at the total number of incoming messages during a particular time period.
- Know the size of the system; both channels and disk capacity. Obviously, hotels with smaller systems will be much more sensitive to high peg counts and durations than those with larger systems.

- Consider whether the hotel is using a Property Management System or not. For example, the numbers on the Guest Console statistics report will be very different if the hotel provides all of its guest messaging manually (no PMS interface).
- A report does not tell you everything. Talk to the hotel employees who use the system. Find out what has been going on. What do they think? Are they contributing to/creating the problem or trying to develop new operating procedures that compensate for the actual problem?
- Taking the previous point one step further: make sure you have taken any unusual operational activity into consideration. For example, was it a national holiday? Was it election day? Was there a major breaking news headline recently? Such off the wall activities will distort the figures.
- Know how the hotel using the system operates. Some hotels focus on convention business, while others rely on transient business. A destination resort hotel will be different from a downtown hotel in a resort town. Many of the counts and durations will have a direct relationship on how the hotel uses the system as part of its overall operation. If you do not know how the hotel functions, find someone within the hotel who does and interpret the information together. That person will provide the necessary knowledge about how the hotel works, and you can provide the information about the system. Together, your interpretations will have much more validity.
- Many reports relate to one another. For instance, the voice services summary report provides a summary of the voice menus and announcement traffic, but the voice menus and announcements detail report provides much more detailed information about this one particular service. Know what reports a system can produce, and know which ones relate to each other. Read through each report and move back and forth through the information making sure you have optimized the interpretation and analysis process.

- Consider how long a feature or service has been in operation. When something is new, it can generate more traffic than normal as a result of human curiosity, or little or no traffic at all because users do not know the service exists or do not feel comfortable using it. These factors can skew your counts.
- If you work on numerous systems with Hospitality Voice Services, remember, each Meridian Mail system is unique. You will have to evaluate each system within its own particular configuration.

The Hospitality Statistics report

Introduction

The Hospitality Statistics report contains totals for guests checked in and out, as well as statistics on post-checkout mailboxes.

Hospitality Statistics report

An example of the Hospitality Statistics report is shown below.

Operational Measurements								
Hospitality Statistics								
Interval Start	#Guests Checked In	#Guests Checked Out	#Exprd with Unread Messages	#New with Unread Messages	Total Unread Msg Length (in minutes)	#Messages Unread Read		
06/24 0:800	7	104	1	11	96	12	2	
06/24 09:00	6	97	0	5	81	10	2	
06/24 10:00	32	54	0	4	84	11	1	
06/24 11:00	47	61	1	5	74	10	3	
06/24 12:00	31	38	1	3	51	8	2	

Select a softkey>

EXIT Next Report Next Page

Field descriptions and interpretations

The following fields appear on the Hospitality Statistics Report. Suggestions for interpretations are also provided on the chart.

Interval/Start

Description This field represents the date and time that the data was compiled.

- Interpretation**
- Are the date and interval correct?
 - Are you looking at a relevant period on the report? For example, you would not want to look at information every three hours if activity fluctuates more often.

#Guests Checked-In

Description This figure represents the number of guests checked in during the interval.

- Interpretation**
- **PMS:** If the hotel's Property Management System keeps statistics on how many people were checked in during a particular interval, the two numbers should match. If they do not match, there must have been an interface problem. Ideally, the manual check-in process (using the GAC) should have been used to reconcile the differences.
 - **No PMS:** This number should match the number of guests checked in to the hotel during the same interval.

#Guests Checked-Out

Description	This is the number of guests that checked out during the interval.
Interpretation	<p>PMS: If the Property Management System keeps statistics on how many people were checked out during a particular interval, you can compare the two and see if all messages (check outs) sent across the link deleted a mailbox. Again, this number should match the PMS statistics. If the interface was down, manual check outs (through the GAC) should have reconciled the differences. Make sure there are good backup procedures in place for when the link is down.</p> <p>No PMS: This number should match the number of guests checked out during the same interval.</p>

#Expired with Unread Messages

Description	This field represents the total number of post-checkout mailboxes that expired and deleted while still holding unread messages.
Interpretation	<p>PMS/No PMS: If the number is greater than three, check with the front desk to confirm what the clerks are saying during the guest checkout process. If the PMS system offers some sort of message notification to the clerk, does the clerk notify guests that they still have unread messages and remind them to go to a phone and listen to their messages before leaving the hotel? Check to see if the bellmen are monitoring the guest room phone when assisting guests with bags at checkout. Are they notifying guests who have a message waiting light on? Work on methods that will help guests obtain messages prior to checking out.</p>

#New with Unread Messages

Description	This represents the total number of post-checkout mailboxes that were created during the interval. (A post-checkout mailbox is only created if there are unread messages in the mailbox when the guest checks out).
Interpretation	PMS/No PMS: If the number is greater than five, take a look at how guests are notified of voice messages, and improve pre-checkout message retrieval processes. Aim to keep this number at a minimum. Do you notice this number increases closer to the hotel's checkout time? If so, this may indicate that guests are rushing to checkout in time and are ignoring messages. Do you notice this number increases on days when there are a lot of checkouts? If so, this may indicate that the front desk is rushing through the checkout process and not informing guests of messages.

Total Unread Message Length

Description	The total length (in minutes) of unread messages in all post-checkout mailboxes.
Interpretation	PMS/No PMS: This needs to be kept as low as possible to maintain disk space. You have little control over message <i>length</i> , so manage the steps noted above and this will take care of itself.

#Messages: Unread

Description	Total number of unread messages in all post-checkout mailboxes.
Interpretation	PMS/No PMS: Aim to keep this as low as possible. Work on unread message procedures, noted above.

#Messages: Read

Description	Total number of read messages in all post-checkout mailboxes.
Interpretation	PMS/No PMS: Guests need to be able to retrieve their messages, even if it is after checkout. However, aim to get them to do it before checkout, rather than afterwards. Work on message notification procedures. You do not want to jeopardize system memory when new guests check in and there are too many old guest messages still in the system.

Other reports to consider:

- Guest Console Statistics Report
- User Usage Reports

Field descriptions and interpretations

The following fields appear on the Guest Console Statistics Report. Suggestions for interpretations are also provided on the chart.

Interval/Start

Description	This field represents the date and time that the data was compiled.
Interpretation	<ul style="list-style-type: none"> • Are the date and interval correct? • Are you looking at a relevant period on the report? For example, you would not want to look at information every three hours if activity fluctuates more often.

View Mailbox

Description	This represents the number of times the GAC was used to view a guest's mailbox.
Interpretation	<ul style="list-style-type: none"> • PMS: Ideally, this should be a minimal number - more an indication of an individual guest problem, rather than a system problem. If a lot of mailboxes are viewed, investigate why this is happening? If the Update Mailbox counts, noted in the next column, are comparable, there is your answer. If they are not, then you need to talk to the hotel's operators and others who use the GAC and find out what is going on. Resolve any technical problems or provide follow-up training, or both. • No PMS: The number is likely to be quite high, especially if part of the Front Office checkout procedure is to verify the guest's mailbox for unread messages.

Update Mailbox

Description	This is the number of times the GAC was used to update a guest's mailbox.
Interpretation	<p>PMS/No PMS: Find out what specifically was updated and why. If it was the spelling of guest names, verify Reservation and Front Office procedures to make sure the spelling of guest names are always confirmed during the reservation and check-in processes.</p> <p>If it was to reenable a guest mailbox, review guest collateral and other information processes to ensure guests can readily understand how to use their passwords and access their mailboxes.</p> <p>Guest mailboxes may be intentionally disabled because a guest cannot use the service (hearing impaired) or does not want voice messaging.</p> <p>If it was to update/change guest passwords, review which password process is being used (last names or check-in dates) and, if it is the check-in date, strongly consider changing the system to support last names. Make sure guest collateral provides easy instructions on how to change their password themselves.</p>

View Post Check-out Mailboxes

Description	The number of times the GAC was used to view the list of post-checkout mailboxes.
Interpretation	<ul style="list-style-type: none">• PMS: If the hotel's PMS system has a message notification process, this number should be at a minimum because, if the guest has any messages, the Front Desk should be notifying the guests upon checkout. If the hotel's PMS does not have a message notification process, this number should still be quite low: check that the collateral in the rooms is clear and concise about checking messages prior to checkout, and make sure the bellmen are including a quick message check as part of their checkout routine.• No PMS: If the numbers are significant, look for ways to make sure guests are notified of unread messages prior to checkout.

Copy Mailbox

Description	The number of times the GAC was used to copy (or move) a mailbox to another room.
Interpretation	<ul style="list-style-type: none">• PMS: Any number higher than zero indicates that the link was down and the PMS was unable to notify Meridian Mail of room changes, so a manual room change was performed using the GAC. This is a critical service issue when guests are already being inconvenienced by a room change. Establish tighter interface management controls.• No PMS: This number should match the Front Office room change records indicating that every guest who changed rooms had their mailbox moved to their new room.

Check-in

Description	The number of times the GAC was used to check a guest mailbox in.
Interpretation	<ul style="list-style-type: none">• PMS: This should be zero. Establish tighter interface management controls if the GAC is being used.• No PMS: This number should match the Front Office check-in records indicating that for every guest who was checked in, a mailbox was activated.

Check-Out

Description	The number of times the GAC was used to check out a guest mailbox.
Interpretation	<ul style="list-style-type: none"> • PMS: This should be zero. Establish tighter interface management controls if the GAC is being used. • No PMS: This number should match the Front Office checkout records indicating that for every guest who was checked out, the mailbox was deactivated.

Re-Check-In

Description	The number of times the GAC was used to re-check a guest mailbox in.
Interpretation	PMS/No PMS: This should be zero. If not, double check Front Office procedures and determine why the guests were checked out and rechecked in. Try to avoid clerical errors, and eliminate the need to use this service.

View Status

Description	The number of times the GAC was used to view the Hospitality System Status.
Interpretation	PMS/No PMS: The hotel staff should have procedures in place where this status is manually checked at least once an hour, preferably even more. If no system alarm has been installed, this status should be checked hourly, at a minimum, if not more.

Update Status

Description	The number of times the GAC was used to update the Hospitality System Status.
Interpretation	PMS/No PMS: Any time the system status is updated, a thorough investigation should be conducted. What link problems occurred and why? If it is human error, rewrite procedures, and retrain the staff. If it is technical error, fix the problem in such a way that it does not keep occurring. If this is higher than the view status column, this is telling you that the hotel staff are waiting for problems to occur and not performing preventive procedures.

Other reports to consider:

- Hospitality Statistics Report
- User Usage Reports

Interpreting other Meridian Mail reports

Introduction

Hotels put demands on an HVS system that are different from those on a regular Meridian Mail system. Consequently, reports will present statistics that are different. For each of the other Operational Measurements reports here are some points to consider from a hotelier's perspective.

Voice Services Summary Report

This report will include a service unique to HVS, the Post-Checkout service. Post-Checkout service is the service used to access any new messages from a guest room mailbox that has been checked out. If there are more than five accesses in any one-hour interval, notify the hotel management staff that guests are checking out without listening to all of their messages. The hotel staff can make sure that employees who come into contact with a guest as part of the checkout process (namely bellstaff and front desk clerks) are including a "have you checked your mailbox?" inquiry to the guest prior to checkout. The goal is to have as high a percentage of guests as possible empty their mailboxes prior to checkout. Any remaining messages could take up valuable storage space for future incoming guests.

Voice Messaging Detail Report

On a system equipped with HVS, this report will probably show significant swings in activity from hour to hour. This is especially evident in larger hotels (500+ rooms) that support a lot of convention business. As meetings break, guests tend to use the housephones to pick up messages, then traffic slows down as they return to the meetings. Early morning and early evening time periods also generate more traffic because guests are in their rooms getting ready for the day or evening activities.

Obviously, when a hotel is headquarters for a city-wide convention, or there is a national event taking place in town (for example, the Superbowl, or a political convention), traffic will be extremely high throughout the day.

Channel Usage Detail Report	If all channels are available for all services, the only thing that will be different is that the counts will probably show significant swings in activity from hour to hour. (See Voice Messaging Detail Report, noted above, for the reasons.)
Voice Menus Detail Report	The Voice Menus Detail report will not be much different from that found on a regular Meridian Mail system.
Networking Detail Report	The Networking Detail report will not be much different from that found on a regular Meridian Mail system.
AMIS Networking Detail Report	The AMIS Networking Detail report will not be much different from that found on a regular Meridian Mail system.
Outcalling Detail Report	The Outcalling Detail report will not be much different than those found on a regular Meridian Mail system.
Disk Usage Detail Report	The Voice Space Used column will probably show significant swings in activity from hour to hour. (See Voice Messaging Detail Report, noted above, for the reasons). This report should be watched closely when a hotel is headquarters for a city-wide convention, or there is a national event taking place in town (for example, the Superbowl, or a political convention). Traffic will be extremely high during these situations and care must be taken to avoid letting system memory fill up completely.
User Usage Reports	The User Usage reports will not be much different than those found on a regular Meridian Mail system.

***Section D:* Guest Administration Console**

In this section

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Using the Guest Administration Console	8-58

Overview

Introduction

Hotel staff use the Guest Administration Console to manage guest messaging. Whether or not it is installed in a hotel that has a Property Management System, the GAC is an important part of the Hospitality Voice Services system.

Who should read this chapter

The following should be reading this chapter:

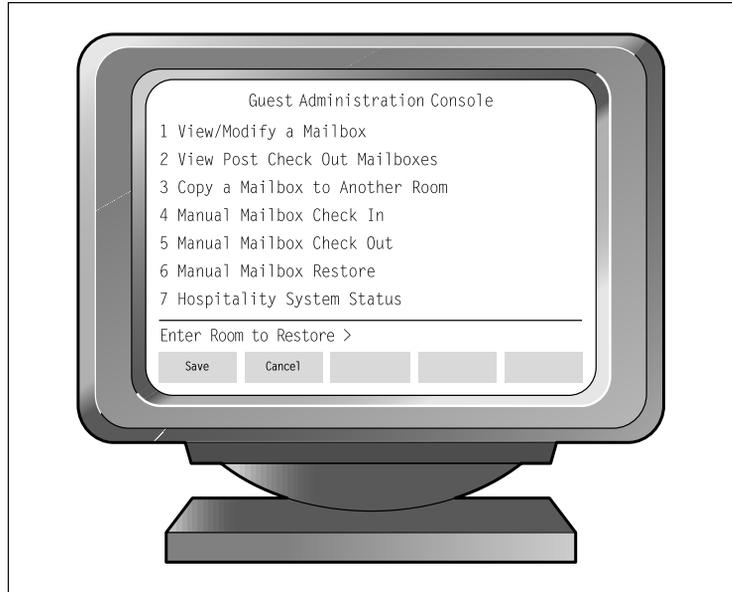
- system administrators
- installation technicians
- maintenance technicians
- end user trainers
- the customer's telecommunications management team

Definition

The Guest Administration Console is a peripheral terminal attached to the Meridian Mail system through the fanout cable. It is different from the administration terminal in that it is used by the hotel staff, and only allows them to administer guest mailbox services and manage the interface between Meridian Mail, the PMS, and the Meridian 1.

Diagram:
GAC

The following diagram illustrates a Guest Administration Console, or GAC.



G100347

The Guest Administration Console and the PMS interface

Introduction

The Guest Administration Console (GAC) is designed to be used in both a PMS environment and a non-PMS environment. In a hotel without a PMS, the GAC is the focal point for guest messaging services, but, in a hotel that has a PMS, it takes on a supporting role.

Services available through the GAC

In a hotel that does not have a Property Management System, all the GAC's services are used frequently. The following is a typical list of priorities:

- Manual Mailbox Check-in
- Manual Mailbox Checkout
- View/Modify a Mailbox
- Hospitality System Status
- Copy a Mailbox to Another Room
- View Post-Checkout Mailboxes
- Manual Mailbox Re-check in

In a hotel that uses the PMSI, three services are used regularly. The following is a typical list of priorities:

- Hospitality System Status
- View/Modify Mailboxes
- View Post-Checkout Mailboxes

The remaining four services are only used when there is a PMSI failure:

- Manual Mailbox Check-in
- Manual Mailbox Checkout
- Copy a Mailbox to Another Room
- Manual Mailbox Re-check in

Note: The “Copy a Mailbox to Another Room” and “Manual Mailbox Re-check-in” commands require enhanced PMSI capability.

Manual messaging procedures

It is important that the hotel develop manual messaging procedures to be implemented in the event that the link goes down or disk storage on the Meridian Mail system is full. Even though this is a rare occurrence, machines can and do fail and disks can reach capacity, so being prepared is the best plan.

Using the Guest Administration Console

Introduction

The Guest Administration Console is simple to use. All of the services are menu driven and are provided in simple, easy-to-understand terminology.

The best way to learn how to use the GAC is to obtain a copy of the *Guest Administration Console User Guide* (P0746530) and sit down at a terminal, and try each of the features, while following the information and instructions in the user guide. By following this procedure you can teach yourself how to use the GAC in approximately 45 minutes to 1 hour.

Be sure to recognize how a GAC is used in both a PMS and non-PMS environment. If you are learning how to use a GAC in an operating hotel, take a few minutes to ask the Front Office to give you two or three dummy guest rooms with which to practice.

Locating the GAC

Whether or not the hotel has a PMS, if only one GAC is to be used, it should be located as near to the switchboard as possible.

Chances are, the first person guests call when they are having trouble with their mailbox is the hotel operator. In both a PMS and non-PMS environment, the operator will be called upon to assist guests with mailbox services (changing passwords, reenabling mailboxes, viewing post-checkout mailboxes and so on).

Having the GAC readily available will make guest messaging services that much more efficient. Also, when the link goes down, the GAC sounds an audible alarm. This alarm can be more easily heard and responded to by the operators. Locating the GAC near the switchboard will also help when it comes to managing the interface. Again, operators are often the first to discover the problem: guests complaining, CPND not working, and so on. When aware of a technical problem, the first procedure the operator has to perform is to verify Hospitality System Status, which is done using the GAC.

If more than one GAC is to be installed, additional units can be located at or near the Front Desk.

Logon password

When Meridian Mail is first installed, the GAC has a default password of “fdc.” For security purposes, a new password must be defined immediately after installation, after which it should be changed on a regular basis, or whenever an employee leaves the PBX or MIS departments.

You may enter a password that is from 4 to 16 characters in length (both letters and numbers are acceptable). Passwords are not case sensitive.

Note: If you have multiple GACs, the same password applies to all of the consoles.

Changing the Guest Administration Console Password

To change the password through the MMI or Administration terminal, use the following steps.

Starting Point: The Main Menu

Step Action

- 1 Select Hospitality Administration.
Result: The Hospitality Administration menu appears.
 - 2 Select Change Password for Guest Administration Console.
Result: You are prompted to enter the new Guest Administration Console password.
 - 3 Enter the new password and press <Return>.
Result: Passwords are not displayed on the screen as you enter them. You are prompted to enter the new password again for verification purposes.
 - 4 Enter the new password again and press <Return>.
Result: The new password is saved, and you are returned to the Hospitality Administration menu.
-

Chapter 9

Hospitality System Status

In this chapter

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Overview

Introduction

This chapter explains how to monitor and troubleshoot the PMSI once the Meridian Mail system has been installed, and is up and running.

Who should read this chapter

The content in this chapter is of interest to

- system administrators
- installation technicians
- maintenance technicians
- end user trainers
- the customer's telecommunications and MIS management team

Interface problems

Interface problems may arise when any of the links between the Property Management System, Meridian 1, and Meridian Mail (PMSI link) are not working properly.

If all systems are configured correctly, and the equipment is managed and maintained properly, interface problems will be rare, but it is always important to be prepared. An interface problem can occur at any time, but there are certain activities that tend to be a precursor to a problem such as the following:

- The PMS vendor installs new software on the PMS system. The new software might change the format of the messages being sent across the PMSI. Consequently, the Meridian 1/ Meridian Mail does not recognize the new message format and the link goes down.
- The Hospitality Install Parameters in Meridian Mail are changed.
- There is a hardware change that affects the ESDI or Network cards on the Meridian 1.
- Any of the Meridian 1 configurations that support PMSI are changed.
- During electrical storms and power surges.
- There is physical movement or damage to any of the equipment.

- A PMS vendor takes the PMSI link down to perform backups on the PMS system.

The majority of PMSI link problems occur at installation. Many vendors do not adhere to, or are not aware of, the latest PMSI Specification 4.0. They are still referring to the previous issues, such as 2.0 and 3.1, which are significantly different.

Monitoring the PMS interface

Introduction

The PMSI is monitored for any problems with the various links in the HVS system. Monitoring can be done in a number of ways, as shown on the following table.

Monitoring Method	See page
Hospitality System Status	9-7
SEERs	9-15
Meridian 1 error codes	9-18
Universal Link Monitor (ULMA)	9-19

Who manages the PMS interface

It takes a team of people to manage the interface successfully, including the hotel's PBX staff (attendants), the hotel's MIS staff, and, the Meridian 1/Meridian Mail staff. By working together as a team, most interface problems can be resolved quickly and efficiently.

PBX staff (attendants)

The hotel's attendants are normally the first point of contact when an interface problem occurs. If they have not already discovered the problem themselves (guests checking in and no mailbox being assigned, CPND not working, and so on), the attendants will soon be receiving phone calls from guests and staff members pointing out the problem.

It is the attendant's responsibility to monitor the interface, verify that there is a problem and, if unable to fix it through the Guest Administration Console, notify the hotel's MIS/Systems staff.

The hotel's MIS/Systems staff

The hotel's MIS staff are responsible for maintaining the health of the PMS system. They are extremely knowledgeable in every aspect of how the system operates and provide internal support to the hotel staff when it comes to training, system operation, and technical troubleshooting. They are often trained on PMSI diagnostics and serve as the first point of contact.

When an interface problem does occur, the hotel employees should call the MIS staff first, to determine if there is a problem with the PMS. The MIS staff will normally run diagnostic tests on the PMS to check for system integrity. Many of the larger hotels have equipment that allows them to see real-time transmissions being sent across the link, normally through some sort of dial-up using a terminal in their office. If they are unable to fix the problem, or re establish the link themselves, or both, they will then contact the Meridian 1/Meridian Mail technician.

Meridian Mail/Meridian 1 technician

The Meridian Mail/Meridian 1 staff are responsible for making sure the hotel staff (both the attendants and MIS staff) are thoroughly trained in their respective roles. Many interface problems can be avoided through careful system management, and when a problem does occur, it can be managed quickly and efficiently, with minimal disruption to hotel guests and employees. If the hotel staff are unable to resolve the problem themselves, the Meridian Mail/Meridian 1 staff will be required to verify system integrity for both the Meridian Mail and Meridian 1 systems, and work with the hotel staff to correct the problem. More severe interface problems may require the PMS vendor to be called in. Whenever this occurs, in all likelihood, the Meridian Mail/Meridian 1 staff will be present.

Types of link failures The following chart shows some common symptoms which may provide clues to determine which type of link outage has occurred.

Type of link failure	Common symptoms
Meridian Mail to PMS	<ul style="list-style-type: none"> • Guests are checking in/out through the PMS but Meridian Mail is not assigning mailboxes to rooms. • Guests are changing rooms but mailboxes are not “following” guests to new rooms. • CPND is not working.
Meridian Mail to Meridian 1	<ul style="list-style-type: none"> • Meridian Mail cannot be accessed. • MWI is not working. • Housekeeping cannot update Room Status. • Guest room restrictions are not being enabled/disabled. • No VIP wake-up service is available. • There are transmit and receive errors on the PMSI, or the entire link is down.

Hospitality system status

Introduction

The Hospitality System Status screen displays the status of the data links to the Meridian 1 and the PMS systems, and the status of the bypass switch.

The Hospitality System Status can be checked from either the Guest Administration Console or the Meridian Mail administration terminal.

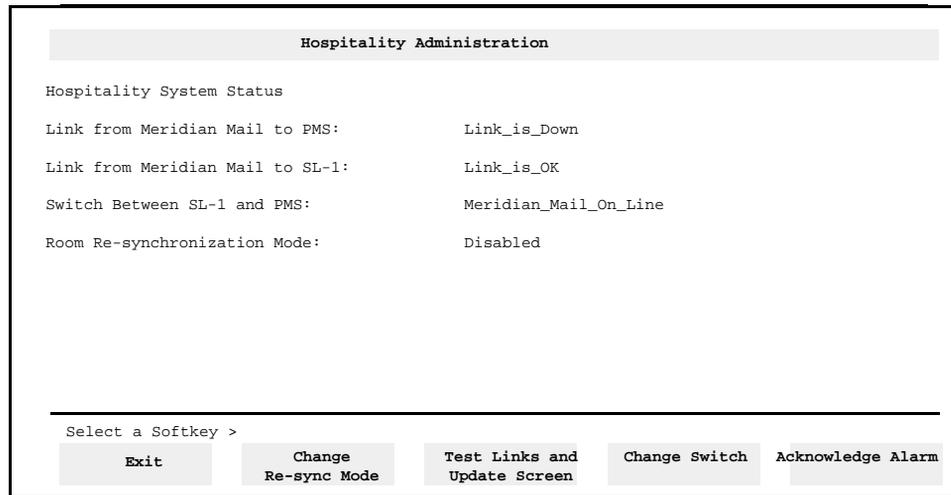
Restrictions

Hospitality System Status is not the same as System Status and Maintenance. Hospitality System Status only deals with the PMSI link. It does not provide any other information about the Meridian Mail system. In most cases, the two screens are used independently, but there may be times when reviewing both screens might help you isolate the problem more quickly (that is, channel problems).

This System Status screen does not refresh itself. The [Test Links and Update Screen] softkey does this (or you can exit and reenter the screen). A common problem to watch for is that the hotel staff will leave this screen displayed and think it is showing the current status.

**Hospitality System
Status screen**

The following illustration shows the Hospitality System Status screen.



Note: This screen is *not* automatically updated with the current link status. To refresh the screen, use the [Test Links and Update Screen] softkey.

Field descriptions

The following read-only fields are displayed.

Link from Meridian Mail to PMS

Description	This field displays the status of the link between Meridian Mail and the PMS. One of the following states is possible.
Valid states	<ul style="list-style-type: none">• Link is OK This field indicates that the link between Meridian Mail and the PMS system is operational.• Link is Down This field indicates that the link is not operational. When the PMS does not respond to a message sent by Meridian Mail, Meridian Mail retransmits the message three times and then tries polling the PMS. When there is no response from the PMS to any of these messages, Meridian Mail assumes that the link is down.• Link Tx is Down This field indicates that the link is receiving but not transmitting.• Link Rx is Down This field indicates that the link is transmitting but not receiving. Note: If the “IS_TEST PMSI message is not supported (see “Viewing and modifying hospitality install parameters” later in this chapter), then no polling will be done. The link status will be determined by messages being passed between Meridian Mail, the Meridian 1 and the PMS.

Link from Meridian Mail to Meridian 1

Description	This field displays the status of the link between Meridian Mail and the Meridian 1.
Valid States	<p>The link may be in one of the following conditions.</p> <ul style="list-style-type: none"> • Link is OK The link between Meridian Mail and the Meridian 1 is operational. • Link is Down The link is not operational. When the Meridian 1 does not respond to a message sent by Meridian Mail, Meridian Mail retransmits the message three times. When there is no response from the Meridian 1 to any of these messages, Meridian Mail assumes that the link is down. • Link Tx is Down The link is receiving but not transmitting. • Link Rx is Down The link is transmitting but not receiving.

Switch Between SL-1 and PMS

Description	<p>If the Meridian Mail system requires work that will affect users, you may bypass Meridian Mail instead of taking the system down. This field indicates whether Meridian Mail is connected to the PMS and the Meridian 1.</p> <p>In bypass mode, PMSI messages go directly from the PMS to the Meridian 1 and MHVS is not updated. After switching back to “On Line” mode, action must be taken to update MHVS. The [Change Switch] softkey is used to toggle between these two states.</p>
Valid states	<ul style="list-style-type: none"> • Meridian Mail On Line indicates that Meridian Mail is connected to the PMS and the Meridian 1. • Meridian Mail Bypassed indicates that Meridian Mail has been removed from the PMSI link.

Default Meridian Mail On Line

Note: There is also a hard bypass switch on the RSM or Utility card, which serves the same purpose.

Room Re-Synchronization Mode

Description Resynchronization should be enabled after an extended system outage to synchronize the PMS database with the Meridian 1.

The [Change Re-Sync Mode] softkey is used to toggle between enabled and disabled.

Valid states *Enabled* In the enabled state, the guest currently occupying a room is automatically checked out when a new guest is checked in (as long as the last names differ). While re-sync mode is enabled, check-ins that occurred while the system was down must be reentered to bring the Meridian Mail database in line with the PMS database. When re-sync mode is enabled, the Meridian Mail database is updated incrementally on a room-by-room basis. (This is different from a database swap initiated on the PMS which is performed for all rooms and may take up to several hours.) Alternatively, a database swap can be run if it is not practical to enter the individual check-ins and checkouts.

Disabled During normal operation, re-sync mode should be disabled. In this manner, the guest currently occupying a room is not automatically checked out when a check-in with a different name is done (see Note 2). Also, if a guest is accidentally checked in to the wrong room, the data associated with the guest currently checked in is not deleted (only a name change is done).

Valid states,
cont'd

Note 1: Re-sync works best when the dummy console (Method 2) is implemented. This prevents new guests that were checked in while the PMSI link was down from having access to the previous guest's messages. See "Method 2" on page 5-11.

Note 2: If the PMS is using the CH IN command to do name changes and not the name change command, then extra caution must be taken when using re-sync mode since this will cause a checkout/check-in to occur.

Note 3: While the system is in re-sync mode, periodic audible beeps will occur and warning messages will appear on the GAC as a reminder.

Default

Disabled

Acknowledge Alarm

Description

The terminal will beep every 60 seconds to let you know that a link is down. Select the softkey to acknowledge the alarm, and turn it off.

**Checking the
hospitality system
status**

To check the status of the hospitality system, use the following steps.

Starting Point: The Main Menu
The Customer Administration Menu

Step Action

-
- 1 Select Hospitality Administration.
Result: The Hospitality Administration menu appears.
 - 2 Select Hospitality System Status.
Result: The Hospitality System Status screen appears.
 - 3 Determine the action required.

Action	Go to
To change the resynchronization mode	step 4.
To test the links in the system and refresh the screen	step 7.
To change the setting of the PMS link	step 9.
To exit the Hospitality System Status screen	step 11.
 - 4 Select [Change Re-Sync Mode] to enable or disable resynchronization mode, depending on the current setting.
Result: A new set of softkeys are displayed.
 - 5 Use [OK to Change Re-Synch Mode] to continue, or [Cancel] if you do not want to proceed.
Result: If resynchronization mode is currently disabled, the system issues the following warning: "Warning: System will be switched into resynchronization mode."

If resynchronization mode is currently enabled, the system issues the following warning: "Warning: Resynchronization mode will be cancelled."
 - 6 Go to step 11 to exit the Hospitality System Status screen.
 - 7 Use [Test Links and Update Screen]. Links are tested for the ability to send and receive messages between Meridian Mail and the Meridian 1, and between Meridian Mail and the PMS.
Result: The system tests both links (this may take some time), updates the link status, and displays an informative message when it is done.
 - 8 Go to step 11 to exit the Hospitality System Status screen.

Step Action

- 9 Select [Change Switch].
Result: A new set of softkeys are displayed.
- 10 Use [OK to Change Switch] to continue, or [Cancel] if you do not want to proceed.
Result: If Meridian Mail is currently online, the setting is changed to "Meridian Mail Bypassed."
If the setting is currently "Meridian Mail Bypassed," Meridian Mail is activated and the setting is changed to "Meridian Mail On Line."
- 11 When you are done, press [Exit].
Result: The Hospitality Administration menu is displayed.
-

SEERs

Introduction

Meridian Mail generates three classes of SEERs that are HVS-specific:

- Class 70 - Hospitality Administration Server (HAS)
- Class 71 - PMS Link Handler (PLH)
- Class 72 - Guest Administration Consoles

Class 70 - Hospitality Administration Server

Class 70 SEERs will appear when there is a problem with the Hospitality Administration Server (HAS). HAS is software that provides for execution of the commands passed to it from the hotel's property management system and the Guest Administration Console. The commands include such things as check-in, checkout, copy mailbox, Recheck-in, setting guest MWI, querying guest mailboxes and post-checkout message retrieval facilities, and so on.

Class 71 - PMS Link Handler

Class 71 SEERs will appear when there is a problem with the PMS Link Handler (PLH), which handles the communication between the Meridian Mail and PMS, and between Meridian Mail and the Meridian 1.

Class 72 - Guest Administration Consoles

Class 72 SEERs will appear when there is a problem with the Guest Administration Console.

Common HVS-related SEERs

The Meridian Mail system can potentially generate numerous HVS-related SEERs. Here are some examples of the most common ones you will see.

As a result of normal daily activities

1. The following SEERs show the normal start and completion of the Post-Checkout Audit. They indicate the type of audit (read or unread messages) and the number of messages deleted.

```
SEER> 01/06/93 12:01:23 81113758 S:Adminf LOCN: 1/11/7E00 0000 1260 0713
7070 Starting PCO Audit, READ
```

```
SEER> 01/06/93 12:01:25 81113764 S:Adminf LOCN: 1/11/7E00 0000 1260 0713
7070 Total PCO msgs: vol: 202 read: 57 unread: 55;
```

```
SEER> 01/06/93 12:01:27 81113765 S:Adminf LOCN: 1/11/7E00 0000 1260 0713
7070 Total PCO msgs: vol: 203 read: 0 unread: 0:
```

2. The following SEER contains the text “rc = 16” which indicates that the room being checked in is a staff user and not a guest. Some hotels use this to indicate the beginning or end of a database swap, or both.

```
SEER> 70-30 7/17/ 09:15 AdmPro Failed to check in room 1095, rc= 16 rslt:
7099 L:12 T:7E00 0000 1087 391C C:1
```

As a result of common user or configuration problems

1. The following SEER indicates that a file has been left open for too long. This normally occurs when an administrator is viewing/modifying a user or parameters, using either the GAC or MMI. It is important that anyone using either terminal should log off when they are finished. It could become a major problem if not corrected.

```
SEER> 01/06/93 18:29:52 83444648 S:Debinf LOCN: 1/2/7/E00 0000 0460 5F05
```

```
1150 VS1: Stale File Version: root,tid= 7456 7E0000000F602B12
```

2. The following SEER indicates a problem with secondary DNs on telephone sets. When a caller dials a secondary DN that has not been configured as part of the mailbox, Meridian Mail thinks the DN is a non-user which is trying to forward its DN to a mailbox. All secondary DNs on sets should be configured as part of the mailbox.

```
SEER> 01/06/93 19:11;17 83672959 S: Adminf LOCN: 3/10/7A00 0000 0aBF 1Ef3
```

```
2232 VM:Non-User forwarded to VM, Mbox: 5282 rc: 2236
```

As a result of problems with the PMS

The following two SEERs are telling us that Meridian Mail expects a complete message from the PMS within a certain time period. The first SEER is the message in question. The second SEER indicates the actual time it took to receive the message. This is not a problem as the message is processed, but it can slow down the system.

```
SEER> 02/06/93 02:20:11 86266373 S:AdmMin LOCN: 1/0/7E00 0000 0760 3508  
7140 SE CP 71024 "SMITH, MR. JOHN SE CP 7505"
```

```
SEER> 02/06/93 02:20:13 86266378 S:AdmMin LOCN: 1/0/7E00 0000 0760 3508  
7140 Message from PMS exceeds maximum transmission time (1660 milli-sec)
```

Meridian 1 error codes

Introduction

The Meridian 1 can identify two problems associated with the PMSI and presents the problems in the form of a PMS61X error code.

Meridian 1 error codes The two codes are as follows.

Meridian 1 error code	Description
PMS610	Input/output block pointer does not exist.
PMS611	Link does not exist (that is, no unprotected data).

Both of these codes refer to problems with the configuration of the Meridian 1 database.

Procedure

If these messages are displayed, follow these steps to correct the situation.

Step Action

- 1 Turn to Chapter 5, "Meridian 1 configuration" and verify that all configuration processes have been performed correctly.
- 2 If the configuration is correct and the problem still exists, initialize the Meridian 1.
- 3 If initialization does not fix the problem, contact your Nortel support facility immediately.

Universal Link Monitor Utility

Introduction

The PMS interface can also be monitored using the Universal Link Monitor Utility (ULMA).

Universal Link Monitor Utility

The Universal Link Monitor (ULMA) is a utility which is accessed from the TOOLS level. The ULMA utility allows data transferred on the PMS links to be captured and stored on disk, or viewed and printed from the administration terminal.

This utility provides a tool for monitoring the PMS interface, and debugging any possible configuration problems. In some instances, the utility may eliminate the need to use a protocol analyzer, although it does not replace it.

This section only provides a brief introduction to the ULMA utility. For detailed instructions and illustrations, refer to the *System Administration Tools Guide* (NTP 555-7001-305).

Message formats

You can select the type of information you wish to display by selecting either brief or detailed output from the View/Capture Data Link screen.

Brief Message Format

When brief mode is selected, the display shows each link message on a one line per message basis. Timestamps are shown on the left side of the formatted output. The message type region is split into two columns: one for each direction of data flow. Any additional data pertaining to the message is displayed in the Data column on the right of the message type. The data information is specific to each message type. This form of output is useful when detailed information for each message is not necessary.

```

Universal Link Monitor - View/Capture Link Data
06/09/96   TDiff M1 MM PMS Err Data

14:50:14.72 -00.26 <==      (SE CP 7001 "SMITH,JOHN" CH IN)
14:50:14.99 -00.25 <--      (SE CP 7001 "SMITH,JOHN" CH IN)
14:50:15.04 -00.00 -->      (<<ACK>>)
14:50:15.22 -00.00 ==>      (<<ACK>>)
14:52:05.76 -00.30 <==      (SE CP 7002 "WILSON,JENNIFER" CH IN)
14:52:06.06 -00.30 <--      (SE CP 7002 "WILSON,JENNIFER" CH IN)
14:52:06.13 -00.00 -->      (<<ACK>>)
14:52:06.26 -00.00 ==>      (<<ACK>>)
14:52:12.23 -00.15 <==      (SE ST 7003 CH OU)
14:52:12.39 -00.14 <--      (SE ST 7003 CH OU)
14:52:12.43 -00.00 -->      (<<ACK>>)
14:52:12.73 -00.00 ==>      (<<ACK>>)
14:52:17.27 -00.15 <==      (SE ST 7004 CH OU)
14:52:17.42 -00.15 <--      (SE ST 7004 CH OU)
14:52:17.48 -00.00 -->      (<<ACK>>)
14:52:17.77 -00.00 ==>      (<<ACK>>█

Select a softkey >
PMS-1-6-3   <not logging>   <brief>   <viewing>
Exit         Start/Stop   Brief/    Freeze/
             Logging    Detailed  Unfreeze

```

Detailed Message Format

The detailed output format is used when all message information is necessary for debugging or other purposes.

Viewing and capturing link messages

This screen allows you to view link messages in real time, and capture them if necessary. The link messages can be displayed in brief or detailed formats.

To view and capture link messages, use the following steps.

Starting Point: The TOOLS level menu

Step Action

- 1 Select Universal Link Monitor from the TOOLS level menu.
Result: The Link Selection screen is displayed.
 - 2 Highlight the PMS link you wish to view and choose the [Select] softkey.
Result: The Universal Link Monitor menu is displayed. There are 2 PMS links: Meridian Mail to PMS, and Meridian Mail to Meridian 1. Selecting either will result in the same display, which includes the link information from Meridian Mail to both PMS and Meridian 1.
 - 3 Select [View/Capture Link Data].
Result: The View/Capture Link Data screen is displayed.
See the *System Administration Tools* (NTP 555-7001-305) for a complete description of options and features.
 - 4 Select Start/Stop Logging to toggle the log to disk process.
Result: When logging to disk is active, all received link messages are logged to disk. When the Start/Stop Logging softkey is pressed again, logging to disk stops.
This process can be repeated any number of times to capture only the desired link messages. Each log session is appended to the end of the log file.
 - 5 Select [Brief/Detailed] to toggle between the two output formats - Brief or Detailed. The brief format is the default, where messages are displayed in a one line per message format.
 - 6 Select [Freeze/Unfreeze] to toggle display of new link messages on the screen.
Result: When the display is frozen, no new link messages are displayed on the screen. When Freeze/Unfreeze is selected again, the display of messages is resumed. Any link messages received while the display was frozen are not displayed.
 - 7 Select [Exit] to return to the Universal Link Monitor. If link messages are being captured at the time, this process is stopped.
-

Viewing link message logs The Log View screen allows viewing and printing of previously logged link messages. To view message logs on the terminal, use the following steps.

Starting Point: The TOOLS level menu

Step Action

- | | |
|---|--|
| 1 | Select Universal Link Monitor from the TOOLS level menu.
Result: The Link Selection screen is displayed. |
| 2 | Highlight the PMS link you wish to view and choose the Select softkey.
Result: The Universal Link Monitor menu is displayed. |
| 3 | Select [Log View].
Result: The Log View screen is displayed.
See “ <i>System Administration Tools</i> ” (NTP 555-7001-305) for a complete description of options and features. |
| 4 | Select [Cancel Operation] to cancel the “Prev/Next Page” and “Find” log repositioning operations if they are in progress.
Result: A “Search Terminated” message appears on the next empty display line. Log viewing will resume as if the entire display region was filled with messages. The softkey will do nothing if a repositioning operation is not in progress. |
| 5 | Select [Brief/Detailed] to toggle between the two output formats - Brief or Detailed. The brief format is the default, where messages are displayed in a one line per message format. |
| 6 | Select [Print] to allow printing of a specified number of link messages to a printer or the terminal display.
Result: The Log View Screen - Print Option appears. See “Printing Log View screen” on page 9-23. |
| 7 | Select Exit to return to the Universal Link Monitor. |
-

Printing Log View screen

The Log View screen allows for the printing of previously logged link messages. To print message logs on the terminal, use the following steps.

Starting Point: The TOOLS level menu

Step Action

- 1 Select Universal Link Monitor from the TOOLS level menu.
Result: The Link Selection screen is displayed.
- 2 Highlight the PMS link you wish to print and choose the [Select] softkey.
Result: The Universal Link Monitor menu is displayed.
- 3 Select [Log View].
Result: The Log View screen is displayed.
See “*System Administration Tools*” (NTP 555-7001-305) for a complete description of options and features.
- 4 Select [Print] to allow printing of a specified number of link messages to a printer or the terminal display.
Result: The Log View Screen - Print Option appears.
- 5 Enter the “Number of Messages to Print” on the Log View Screen - Print Option. The valid range is 1 - 1000, but the default is 100.
See “*System Administration Tools*” (NTP 555-7001-305) for a complete description of options and features.

Step Action

- 6 Select [Continuous Display] to print the entered number of messages to the ULMA display in a continuous mode.
Result: The printed messages will be without any control characters, and can therefore be captured by other applications for further analysis.
 - 7 Select [Print to Printer] to print the entered number of messages to the SEER or reports printer. While printing to the printer is in progress, access to other link monitors or MMI is impossible. This is because the Cobra package will not show the window selection menu while data is being sent to the printer.
 - 8 Select [Cancel] to cancel the selected print operation, and return the user to the Log View screen.
Once printing begins, it can be stopped at any time by pressing the "Cancel Printing" softkey. When printing is completed or stopped by the user, log viewing is resumed. The printed messages are formatted as brief or detailed, depending on the previous selection.
-

Hardware and link failures

Introduction

A failure may occur in any one of the elements comprising the HVS system. A hardware or software failure may occur in the Meridian 1, Meridian Mail, or PMS component. Failures may also occur in the links that connect these elements. Hotel staff are notified of link failures by messages that are displayed on the Guest Administration Console (GAC) as well as an audible beep. As an option, the Meridian 1 minor alarm may also be activated for link failures.

Meridian Mail failure

Meridian Mail may become unavailable due to a hardware or software failure; however, the Meridian 1 may remain fully functional. In this situation, the system may automatically activate a bypass switch to remove Meridian Mail from the PMSI link under conditions of power loss or severe hardware failure. However, if this needs to be done manually, go to the Hospitality System Status screen. If the field Switch between SI-1 and PMS indicates that Meridian Mail is online, use the [Change Switch] softkey to bypass Meridian Mail. A hard bypass switch is also available on the RSM card.

Once Meridian Mail is functioning and online, enable re-sync mode and issue all of the check-in (CH IN) commands that occurred while the system was down. Disable the re-sync mode, and proceed as normal until a down period, and disable re-sync mode. At this point, you can issue a database swap from the PMS.

PMS to MHVS link failure or PMS outage

When the PMSI link from the PMS to MHVS is down or the PMS system itself is down, check-ins and other operations will not be performed. A checkout and check-in for the same room may be missed, and the new guest checking in will have access to the previous guest's voice messages. Hotel staff should, therefore, use the GAC to perform the check-ins and checkouts manually until the situation is rectified. If the PMSI link is down for any length of time and the GAC has not been used, or if the Meridian Mail bypass switch is activated, enable re-sync mode.

If it is not acceptable to use the GAC to perform check-ins and checkouts during a failure, then you may wish to consider implementing the dummy console configuration. This configuration requires an agent set that is night call forwarded to the primary Meridian Mail queue during normal operation, and busy call forwarded to a live attendant at a display phone when the set is in Make Busy mode. In the event of a link failure, the Make Busy key on the agent set is pressed, causing calls to overflow to an attendant at a display phone. When a call is received by the attendant, the display will show the room number, that the call was forwarded from the Meridian Mail access DN, and the name of the guest if Call Party Name Display is active. The attendant can verify this information and, then, either take a text message or transfer the call to Meridian Mail if the caller has a current mailbox. When the link is operational, the Make Busy key should be pressed again to deactivate it and to reroute calls directly to Meridian Mail.

After a link failure you may want to verify that the MHVS database is in sync with the PMS database. To do so, produce a printed report on checked in rooms, as outlined in the procedure, “Producing a printed report on checked-in rooms” on page 9-27.

PMS to Meridian 1 link failure or Meridian 1 outage

Due to hardware or software failure, the Meridian 1 (or the link from MHVS to the Meridian 1) is inoperational, but Meridian Mail is still available. Meridian 1 features such as CPND and telephone restrictions will not work. In this situation, the phone system (or individual sets) will have long distance calling disabled. PMSI messages can still be sent to Meridian Mail and will be used to set up mailboxes for guests. A database swap will have to be done once the Meridian 1 resumes operation to ensure that all phones are enabled/disabled. At the time of the database swap, the Meridian Mail database will be updated as well.

Producing a printed report on checked-in rooms

To produce a printed report on checked-in rooms, follow these steps.

Starting Point: The Main Menu
The Customer Administration Menu

Step Action

- 1 Select the User Administration menu.
Result: The User Administration screen is displayed.
 - 2 Select Local Voice User from the User Administration menu.
 - 3 Press the [Find] softkey.
Result: The Find Local Voice Users screen is displayed.
 - 4 Fill in the search criteria as necessary.
 - To list all checked in rooms, select “Any” in the Type field and enter “_+”, in the Last Name field (if you enter “_+”, the system will also find rooms for which the Last Name field is blank [that is, in a checked-out state] whereas the underscore ensures that at least one character occurs in that field).
 - To list all checked-in room numbers beginning with a certain number (such as 3), select Local Voice Use” in the Type field, enter “3+” in the Mailbox field, and “_+” in the Last Name field.

If you are going to use the department field to find users (for example, to find all guests if you have assigned these users to the “Guest” department), you can only enter two characters. Therefore, you would enter “g+” instead of “guest” to find all guest users, or “s+” instead of “staff” to find all staff users.
 - 5 Use [List] to display search results on the screen.
 - 6 Use [Print] to send search results to the printer.
 - 7 Use [Cancel] to cancel the search.
Result: The User Administration menu is redisplayed.
-

Some PMS systems automatically initiate a database swap on restart. A problem will arise if there has been an extended PMS system outage and HVS has been kept updated using the GAC. A database swap may cause out-of-date information to be sent to the HVS. To avoid a checked-in room from being checked out (because this was the PMS status at the time of shutdown),

only send information for checked-in rooms during the database swap.

**Procedure for the
Hotel Operator/PBX
staff**

Immediately upon the discovery of an interface problem, use the following steps to determine what action is required.

Step Action

- 1 Using the Guest Administration Console, access the Hospitality System Status screen and acknowledge the alarm by pressing the [Acknowledge Alarm] soft key.
 - 2 Test the links and update the screen (use the [Test Links and Update Screen] softkey).
 - 3 If the link is still down, notify the hotel's MIS staff.
 - 4 Immediately activate the manual messaging/room status procedures if it looks like the link is going to be down for more than a few minutes. The hotel staff will need to convert to manual operations in order to continue providing guest services.
-

Procedure for the MIS/ Systems staff Upon notice by the Hotel Operator/PBX staff that there is a problem with the PMSI links, follow these steps.

Step Action

- 1 Determine if the problem is caused by the PMS. This may involve monitoring the PMS to see if information is being sent across the link.
 - 2 Determine if information is being sent across the link.
If no, go to step 3.
If yes, go to step 4.
 - 3 If no information is being sent, rectify the situation or contact the PMS vendor for additional support. Once corrected, initiate a database swap to reconcile all the systems.
 - 4 If the PMS is sending messages across the link but there appears to be a protocol problem (for example, no ACK/NAK activity), contact the Meridian Mail/Meridian 1 staff for further assistance.
-

Procedure for the Meridian Mail/ Meridian 1 staff

Upon notice by the MIS/Systems staff that there is a problem with the PMSI link, follow these steps.

Step Action

- 1 Talk to the hotel's MIS and PBX staff and review what has currently been done to rectify the problem.
 - 2 Verify system integrity by checking Hospitality System Status.
 - 3 Access Hospitality System Status on the administration terminal or Guest Administration Console, and identify which part of the interface is down.
 - 4 Use the appropriate Troubleshooting Interface Problems procedure and follow the recommended solution(s).
If it is the PMS/Meridian Mail link, go to "Troubleshooting Interface Problems - PMS/Meridian Mail link" on page 9-30.
If it is the PBX/Meridian Mail link, go to "Troubleshooting Interface Problems - Meridian Mail to Meridian 1" on page 9-31.
 - 5 If all else fails, contact your local Nortel ETAS Representative.
-

Troubleshooting interface problems

Introduction

This section details the troubleshooting procedures for problems with the PMS/Meridian Mail link, and the Meridian Mail/Meridian 1 link.

Troubleshooting Interface Problems - PMS/Meridian Mail link

When troubleshooting a problem with the PMS/Meridian Mail interface, use the following steps.

Step Action

- 1 If there is a Meridian Mail problem and the Meridian 1 is still fully functional, activate the bypass switch to remove Meridian Mail from the PMSI link, and allow the PMS system to continue functioning with the Meridian 1.
- 2 Notify the front desk that every time they check someone in through the PMS, they must also check them in/out through the GAC (to enable/disable the mailbox).
Note: If there is only one GAC and it is near the operators, each time the front office checks someone in or out they must notify the operators to perform the check in/out on the GAC.
- 3 Access the Hospitality System Status screen to determine whether the “Switch between SL-1 and PMS” indicates Meridian Mail is online. Use the [Change Switch] softkey to bypass Meridian Mail. A hard bypass switch is also available on the RSM or Utility card.
- 4 Monitor the PMSI link using the Universal Link Monitor Utility, as outlined in “Universal Link Monitor Utility” on page 9-19.
- 5 Check all cabling to make sure that all physical connections are secure.
- 6 Check to find out whether the PMS vendor installed new software recently. Sometimes, this new software will change the format of the messages being sent across the link, and this will cause an interface problem. If new software has been added to the PMS, verify Hospitality Install Parameters and make sure they are configured to support the new PMS protocol.

Step Action

-
- 7 Identify the symptom (MWI does not activate, checkout command on PMS does not deactivate mailbox, and so on) to clarify which PMS feature is not working. When identified, review the Meridian Mail screen that supports that feature and make sure it is configured properly.
 - 8 Make sure all guest mailboxes have been configured. Print off a list of all users (guests), and make sure that it matches what is in the PMS system and in the Meridian 1 numbering plan.
 - 9 If any changes are made to the Meridian Mail database, be sure to perform a full backup, so that you have the most current copy of the new configuration.
 - 10 When Meridian Mail is functioning properly, go to "Troubleshooting Interface Problems - Meridian Mail to Meridian 1".
-

**Troubleshooting
Interface Problems -
Meridian Mail to
Meridian 1**

When troubleshooting the problem with Meridian Mail to Meridian 1 link, follow these steps.

Step Action

-
- 1 Check the cabling and make sure all physical connections are secure.
 - 2 Make sure the baud rate on the SDI card matches the PMS. Check both software (load 17) and hardware (switch settings on the card itself).
 - 3 Check the confirmation option on the background terminal. Any time you enter a command, it gives you the old status and the new status. If it is turned on, it might affect the full control of the PMSI link. Make sure it is always off whenever a PMSI is configured.

To turn it off, using the background terminal, type in the following:

SE OP CO OF <CR>
 - 4 Identify the symptom (MWI does not activate, checkout command on PMS does not deactivate mailbox, and so on) to determine which PMS feature is not working. When identified, review the Meridian 1 configuration in the background terminal and make sure it supports the feature.

Step Action

- 5 Using Overlay 37 (IOD), disable the SDI port and reenale it.
 - 6 Using Overlay 17 (Configuration Record), change or replace the SDI port.
 - 7 If the problem still persists, contact a Meridian 1 engineer to have an analysis done with a datascopel/protocol analyzer, because you need to see the specific message which is going across the PMSI.
 - 8 If the problem persists, contact your Nortel ETAS representative.
 - 9 When Meridian Mail is functioning properly, go to "When the link is functioning again" on page 9-33.
-

When the link is functioning again

When the PMSI link is functioning properly, use the following steps to restore the system.

Step Action

- 1 Access the Hospitality System Status screen to determine whether “Switch between SL-1 and PMS” will indicate that Meridian Mail is bypassed. Use the [Change Switch] softkey to put Meridian Mail back online. A hard bypass switch is also available on the RSM or Utility card.
 - 2 Use the [Test Links and Update Screen] softkey to confirm that the link is in fact back up.
 - 3 Use the [Change Re-sync Mode] softkey to enable room resynchronization. The staff will need to issue all of the check-in (CH IN) commands that occurred while the system was down.
 - 4 Leave this re-sync mode enabled until you can arrange to have a PMS database swap performed as outlined in “The PMS database swap” on page 9-35. Just prior to the database swap occurring, enable the re-sync mode. Disable and re-synch after the database swap.
-

Restore and recovery

Introduction

If the system has been down for a while and backup messaging procedures have been initiated, you will need to perform a restore and recovery.

The restore and recovery procedure on a system equipped with HVS takes into account the need to maintain as much of the PMSI link as possible, while quickly and efficiently bringing Meridian Mail back on line, incorporating it back into the link and re-synchronizing the data on all three systems.

Performing a restore and recovery on an HVS system

To perform a restore and recovery on an HVS system, use the following steps.

Step Action

-
- 1 Put Meridian Mail into bypass mode using the bypass switch on the RSM card, or the bypass softkey on either the administration terminal or GAC.
The Property Management System and Meridian 1 will continue to communicate with each other. Guests can check in/out, CPND continues to work and the hotel staff can initiate manual messaging or PMS-based messaging services.
 - 2 Perform the restore and recovery on Meridian Mail according to the instructions in the *System Installation and Modification Guide* (NTP 555-7001-215).
 - 3 Using the TOOLS utility, perform a global checkout to “clean out” the guest mailboxes.
 - 4 Disable the bypass switch and put Meridian Mail back into the PMSI link.
 - 5 Initiate a PMS database swap to reconcile all of the data between the three systems. See “The PMS database swap” on page 9-35 for information. Guest mailboxes will be verified and guests currently registered in the PMS will be assigned a mailbox.
-

The PMS database swap

Introduction

Even in the event that the system goes down, guests continue to check in and out, so the information stored in the three systems (PMS, Meridian 1 and Meridian Mail) is no longer synchronized.

Because the two systems (Meridian Mail and PMS) have been operating independently, the information in the PMS system will not match what is being stored in Meridian Mail. When the link has been restored, some kind of reconciliation needs to be performed. This reconciliation is called a database swap.

Definition

A database swap is a resynchronization operation initiated by the PMS to send the current check-in/checkout PMSI messages (and test message indications) for all rooms, from the PMS to the Meridian 1. It can be performed with all of the protocol variations (PMS1, PMS2, PMS3). Obviously, if the link has been down for an extended period of time, the database swap will result in heavy PMSI traffic and a corresponding Meridian 1 and Meridian Mail load.

Process

A check-in message and a message-waiting message for each checked-in room are sent to the Meridian 1. If a room has any special status, such as Do-Not-Disturb or telephone restrictions, then appropriate messages should be sent as well (if these are normally sent using the PMSI link). For checked-out rooms, a checkout message is sent.

Some PMS systems will also perform this operation on a nightly basis or on system restart. A database swap is required by the Meridian 1 and HVS after any extended system outage.

Once the link has been restored, the PMS vendor or hotel's MIS staff are responsible for initiating the database swap on the PMS. If the link has been down for an extended period of time, it is a good idea to have the Meridian Mail technician/administrator remain on site until the entire database swap has been completed, just in case the link fails again during the swap.

A typical database swap can reconcile about 40 to 45 rooms per minute, starting with the lowest room number and works through to the highest.

Appendix A

Forms and worksheets

In this appendix

Overview	A-2
HVS planning, installation, configuration, and cutover checklist	A-3
Hospitality voice services database worksheets	A-7

Overview

Introduction

This chapter provides blank worksheets and checklists which are used to plan a Meridian Hospitality Voice Services system.

If you need additional sheets, feel free to make copies.

HVS planning, installation, configuration, and cutover checklist

Introduction

The following checklists show the major steps required to plan your Hospitality Voices Services system. Use the checklist to ensure that you have completed all appropriate steps in the process.

Planning

This checklist details the steps required in planning the system.

	Give hotelier the Customizing your Collateral packet, so they can start to plan and design hotel-specific guest collateral.
	PMS vendor/hotel's MIS staff select PMS protocol and features to be used.
	Obtain the information from PMS vendor necessary to plan the Hospitality Install Parameters and configure the Meridian 1.
	Plan the Hospitality Install Parameters.
	Plan the Hospitality Profile and meet with customer to identify customer-specific parameters (greetings, and so on).
	Identify and plan the remainder of the Meridian Mail database with customer.
	Schedule a time to power down Meridian Mail to conduct HVS installation.
	Inventory HVS Hardware Kit to make sure you have everything, and identify and prepare the appropriate cabling for PMSI.
	Make sure PMS vendor has finished configuring PMS.

Installation

This checklist details the main steps required for the installation of the system.

	Power down Meridian Mail.
	Install Meridian Mail hardware (RSM card non-EC, RSM breakout Assembly Option 11, Cabling for EC Utility card).
	Using RSM or Utility card, put Meridian Mail into bypass mode.
	Meridian 1: Configure the SDI card.
	Install the PMSI link.
	Install the Guest Administration Console(s).
	Install Meridian Mail software.

Configuration

This checklist details the major steps required to configure the system.

	Meridian 1: Verify system date and time, issue and release, software packages, SDI card type, and background option settings.
	Meridian 1: Configure the various PMSI features that have been selected.
	MM: Configure the GAC(s).
	MM: Check hardware configuration.
	MM: Check node and data port configuration.
	MM: Configure general administration options.
	MM: Change guest administration console password.
	MM: Configure voice administration options.
	MM: Configure the hospitality install parameters.
	MM: Configure voice services (VSDNs).
	MM: Configure the hospitality profile and record customized greetings.
	MM: Configure user administration options (check user class of service before beginning and modify as necessary, then configure guest/staff mailboxes, distribution lists).
	Meridian 1: Configure the guest room telephone sets.
	Meridian 1: Configure the staff telephone sets.
	MM: Check hospitality system status.
	Test all services and PMSI features, and troubleshoot as necessary.
	Set up help line/help mailbox in preparation for cutover.
	MM: Configure announcement services.
	MM: Configure thru-dialer services.

	MM: Configure voice menu services.
	MM: Configure voice form services.
	MM: Configure time of day controllers.
	MM: Set up Operational Measurements to print all traffic reports regularly for the first month after cutover.
	PMS: Have PMS vendor perform a database swap to synchronize all systems.

End-user training and cutover

This checklist outlines the tasks required to train the endusers and the preparation for the cutover of the system.

	Train the hotel staff on features and services.
	Establish procedures for when interface problems occur. Make sure PBX staff, MIS staff, and Meridian 1/ Meridian Mail staff are all aware of responsibilities.
	Distribute guest collateral to guest rooms, front desk, bell staff, PBX.
	Cutover the system.

During first month after cutover

This checklist details follow-up steps to ensure that the Hospitality Voice Services have been well established and are running well.

	Respond to help line/help mailbox requests, and administer system as necessary.
	Provide ongoing follow-up training.
	Monitor Operational Measurements reports carefully and administer system as necessary.

Hospitality voice services database worksheets

Introduction

The following pages are blank copies of the worksheets needed to plan a Meridian Hospitality Voice Services system. If you need additional sheets, feel free to make copies.

List of forms and worksheets

The following worksheets are included in this section.

Form or worksheet	See page
HVS Planning, Installation, Configuration, and Cutover Checklist	A-3
General Administration - General Options	A-9
Class of Service Administration - Add Class of Service	A-10
Voice Services Administration - Add DN Information	A-11
Operational Measurements - Options	A-12
System Status and Maintenance - System Event and Error Reports	A-13
Hospitality Administration - View/Modify Hospitality Install Parameters (2 pages)	A-14
Hospitality Administration - View/Modify Hospitality Profile	A-16
VS Config/Menu Application Admin	A-17
Voice Menu Application Administration	A-18
Announcement ID - Add a Thru-Dial Definition	A-19
Announcement ID -Voice Services Profile	A-20
Meridian Mail: Mailbox User Entries	A-21
Hospitality Profile - Customized Greetings - 2 pages	A-22

Form or worksheet	See page
Distribution Lists	A-24
Menu Service	A-25
Voice Form Sequence	A-26
Voice Form Definition Worksheet (2 pages)	A-27
“No Answer” Field Worksheet	A-29
“Voice Answer” Field Worksheet	A-30

General Administration

General Options

System Name: _____

System Number: _____

System Addressing Length: _____

Available Features: _____

Class of Service Selection: _____

Attendant DN: _____

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 the
console port)

Reports Printer Port Name: _____ (blank implies the
console port)

Class of Service Administration

Add Class of Service

Class of Service Number:		_____
Class of Service Name:		_____
		<i>For each COS defined on the system</i>
Personal Verification Changeable by User:	No	Yes
Voice Storage Limit (minutes):		_____
Maximum Message Length (mm:ss):		_____
Delayed Prompts:	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)		_____
Receive Composed Messages:	No	Yes
Message Waiting Indicating Options:	None	Any Urgent
External Call-Sender Restriction Permission Codes:		Unrestricted On_Switch Local Long_Distance_1 Long_Distance_2
Read Message Retention (days):		_____
		("0" implies that read messages are retained until the user deletes them manually.)
Send Messages to External Users:	No	Yes
Retain Copy of Sent Messages:	No	Yes
Extension Dialing Restriction/Permission Codes:		Unrestricted On_Switch Local Long_Distance_1 Long_Distance_2
Custom Revert Restriction/Permission Codes:		Unrestricted On_Switch Local Long_Distance_1 Long_Distance_2

Multiple Entry Form

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	HM	Hospitality Messaging
ACC	Meridian Access	NW	Meridian Networking	CO	Post Checkout Mailbox
PM	Prompt Maintenance	RA	Remote Activation	TS	Thru-Dial Service
TD	Time-of-Day Controls	TR	Transcription Service	VF	Voice Forms Service
MS	Voice Menu Service	VM	Voice Messaging		

Access DN: _____

Service: _____

Comment: _____ ID: _____

Access DN: _____

Service: _____ ID: _____

Comment: _____ ID: _____

Access DN: _____

Service: _____

Comment: _____ ID: _____

Access DN: _____

Service: _____ ID: _____

Comment: _____ ID: _____

Operational Measurements

Operational Measurement Options

Collect Traffic Data: Disabled Enabled

Traffic Period Start (hh:mm): _____

Traffic Period End (hh:mm): _____

Traffic Commit Interval (hh:mm): _____

Number of days of Traffic Data
stored: _____

Collect User Usage/Session Trace
Data: Disabled Enabled

Number of days of User Usage Data
stored: _____

Collect Audit Trail Data: Disabled Enabled

Number of days of Audit Data
stored: _____

Shutdown Audit Trail at Volume
Full (%) _____

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): _____
(or blank for oldest)

Report End (mm/dd/yy hh:mm): _____
(or blank for newest)

Hospitality Administration

View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links

PMS Protocol:	PMS1	PMS2	PMS3
Maximum Length of PMS Name	_____		
Is Calling Party Name Display Supported?	No	Yes	
Activate SL-1 Alarm on PMSI Link Errors?	No	Yes	

PMS Link Parameters

PMSI Link to PMS Exists?	No	Yes
Expect ACK/NAK from PMS?	No	Yes
PMS supports "IS TEST" polling message?	No	Yes
Maximum Number of NAKs permitted:	_____	
PMS Link InActivity TimeOut in Minutes:	_____	
PMS Link Timeout in 100ths of a second:	_____	

SL-1 Link Parameters

PMSI Link to SL-1 exists?	No	Yes
---------------------------	----	-----

Voice Count Parameters

Asynchronous Voice Count Option:	None	AnyChange	ToFromZero
Instances when a Voice Count message is sent to PMS:			
None:	Only in response to "IS QV" message from PMS		
AnyChange:	Any change in a guest's unread messages occurs.		
ToFromZero:	When guest unread voice message counts change zero to non-zero or vice-versa		

Note: If the "Route Voice Counts to" field (below) is set to GAC, then the Asynchronous Voice Count Option must be set to NONE.

At Check Out, Issue Voice Counts:	No	Yes
Route Voice Counts to:	GAC	PM S

Hospitality Administration

More Above

View/Modify Hospitality Install Parameters

Language Identifier Table

Language ID Provided in PMSI messages No Yes

ID:	Language:		
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

International Character Mapping on PMSI Link

Hexidecimal	Character Description	Character Equivalent Mapping	
40	Commercial AT	@	_____
5B	Left Sqaure Bracket	[_____
5C	Reverse Solidus (Backlash)	\	_____
5D	Right Square Bracket]	_____
5E	Circumflex Accent	^	_____
60	Grave Accent	`	_____
7B	Left Curly Bracket	{	_____
7C	Vertical Line		_____
7D	Right Curly Bracket	}	_____
7E	Tilde	~	_____
5F	Underscore	_	_____
23	Octothorpe	#	_____

Hospitality Administration

View/Modify Hospitality Profile

Initial Guest Password

Length: _____

Generated Using: [Last_Name] Check_In_Date

Post Check Out Mailboxes

Unread Message Audit (Time): _____

Read Message Audit (Hours): _____

Unread Message Retention (Days): _____

Read Message Retention (Hours): _____

Class Of Service For Guests: _____

Special Mailboxes and DN's

DN for Text Message Center: _____

Revert DN for Vacant Rooms: _____

Revert DN for Rooms with no VM: _____

Pad Characters for Room DN's

DN Length: Variable [Fixed] Digits: _____ Left Pad: _____

Instructions if there are Text Messages: None [Press_Zero] GoTo_TV

Customized Greetings

Turn MWI On: No [Yes]

Introductory Message:

None [Default] Custom
Recorded [Voice]:

Guest System Greeting:

None [Custom]
Recorded [Voice]:

Guest Logon Greeting:

None [Default] Custom
Recorded [Voice]:

Greeting When Guest's Phone Unanswered:

None [Default] Custom
Recorded [Voice]:

Greeting When Guest's Phone Busy:

None [Default] Custom
Recorded [Voice]:

Greeting For Vacant Rooms:

None [Default] Custom
Recorded [Voice]:

Greeting For Rooms with No VM:

None [Default] Custom
Recorded [Voice]:

MORE BELOW

Select a softkey >

Save

Cancel

Voice

VS Config/Menu Application Admin

Add a Voice Menu Definition

Choice of Menu Actions:

AS	Announcement Service	CL	Call	RV	Call Revert DN
DS	Disconnect	EM	Express Messaging	HM	Hospit. Messaging
PP	Play Prompt	CO	Post Check-out Mailbox	RP	Repeat Menu Choices
MM	Return to Main Menu	TS	Thru-Dial Service	TD	Time of Day Control
TR	Transcription Service	VF	Voice Forms Service	MS	Voice Menu Service
VM	Voice Messaging				

Voice Menu I.D.#:

Title:

Revert DN:

Access Password:

Update Password:

Greeting Recorded (Voice):

Menu Choices Recorded (Voice):

Silent Disconnect:

Language for Prompts:

Key	Action	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		

Delayed Response

Initial No Response

Voice Menu Application Administration

Announcement ID: _____ Title: _____

Revert DN: _____ Update Password: _____

Access Password: _____

Announcement Recorded (Voice): YES NO

Language for prompts: _____

Announcement Script:

VS Configuration/Menu Application Administration

Add a Thru-Dial Definition

Thru-Dial ID: **Title:**

Revert DN:

Access Password: **Update Password:**

Greeting Recorded (Voice): No

Language for Prompts: (American English)

Dial by: **Number Name Both**

DN Length: **Variable Fixed Digits: Left Pad:**

Restriction/Permission Set **Custom OnSwitch Local LongDistance1**
LongDistance2

Restriction Codes:

Permission Codes:

GREETING SCRIPT: (For custom greeting)

VS Config/Menu Application Administration

Voice Services Profile

Voice Services Volume: 1

Time-outs

Command Entry: seconds Short Disconnect: seconds
Record (mm:ss)

Maximum Prompt Size (mm:ss) Business Hours Default: to

Holidays:

Start Date (mm/dd/yy)	End Date (mm/dd/yy)	Start Time (hh:mm)	Comments
1			
2			
3			
4			
5			
6			
7			

Meridian Mail: Mailbox User Entries				<i>Multiple Entry Form</i>
	Dir.Entry or Local User	Dir.Entry or Local User	Dir.Entry or Local User	Dir.Entry or Local User
Last Name				
First Name				
Initial				
Department				
Mailbox Number				
Class of Service				
Volume ID				
Storage Limit				
Extension DNs				
Revert DN				
Msg. Wtg. Ind. Opt.: None, Any, Urgent				
Msg. Wtg. Ind. DN				
Msg. Wtg. Link Name				
Personal Verification Recorded				
Name Dialing to External Callers				
Administrator Capability				
Logon Status/Billing Class				
Read Message Retention (days)				
Retain Copy of Sent Messages				
Auto Logon				
Delayed Prompts				
Auto Play				
Callers Notified of Busy Line				
Restriction/Permission Codes: None, On-Switch, Local, Long Distance-1, Long Distance-2				
- Custom Revert				
- Extension Dialing				
- Ext. Call-sender				
Change Password				
- Present				
- New				

Hospitality Profile
Customized Greetings

Page 1 of 2

INTRODUCTORY GREETING

GUEST SYSTEM GREETING

GUEST LOGON GREETING

GREETING WHEN GUEST'S PHONE IS UNANSWERED

Hospitality Profile
Customized Greetings
Page 2 of 2

GREETING WHEN GUEST'S PHONE IS BUSY

GREETING FOR VACANT ROOMS

GREETING FOR ROOMS WITH NO VM

Distribution Lists

Add Distribution List

List Number: _____

List Title: _____

List Title Recorded (Voice): No Yes

Mailbox Numbers:

_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

Voice Form Definition Worksheet**Page 1 of 2**

F: VOICE FORM ID#: _____

What ID# will this form have? It is not the VSDN. _____

F: TITLE: _____

T: TRANSACTION PASSWORD: _____

Do you want transcribers to have to use a password to access the voice form for transcription? If not, leave blank.

C: MAXIMUM UNTRANSCRIBED RESPONSES: _____

How many untranscribed responses will you allow to be stored on the system? If you have a lot of voice forms, or if the voice form is long, keep this number low. When the maximum is reached, callers are transferred to the DN specified below.

C: OVERFLOW HANDLING DN: _____

When the number of untranscribed responses exceeds the maximum limit, where should callers be transferred?

T: NEW RESPONSES NOTIFICATION DN: _____

When a new response is recorded, who should be notified? If you are not using the notification feature, leave this field blank.

T: NEW RESPONSES SMDI LINK NAME: Link 1 Link 2

If you have multi-SMDI links (only available on DMS-100, DMS-10, or SL-100) what is the name of the SMDI link (as defined in the hardware database) on which you want to send the new responses notification?

T: SPECIAL RESPONSES NOTIFICATION DN: _____

When a response is marked as special, who should be notified? If you are not using the notification feature, leave this field blank.

T: SPECIAL RESPONSES SMDI LINK NAME: Link 1 Link 2

If you have multi-SMDI links, (only available on DMS-100, DMS-10, or SL-100) what is the name of the SMDI link (as defined in the hardware database) on which you want to send the special responses notification?

T: TRANSACTION FIELD SEPARATOR: Field Name Tone Silence

What do you want the transcriber to hear before the answer to each field is played?

T: DEFAULT FIELD SEPARATOR DELAY: Stop Delay (deciseconds) During transcription, should playback stop after an answer is played or should it delay for a number of deciseconds between each response? This gives the transcriber time to process the answer.

Voice Form Definition Worksheet

Page 2 of 2

T: PLAY ENVELOPE FOR HEADER: No Yes

Do you want the transcriber to hear the header (response status and number) or the entire envelope (also includes the form name or ID and a date and time stamp)?

F: DELAY AFTER HEADER (deciseconds): _____

Do you want a delay to follow the header/envelope? (Only necessary if the header information needs to be transcribed).

C: CALLER CONFIRMATION MODE: None At Each Field Whole Form

When will confirmation occur, if at all?

C: DEFAULT REVERT DN:

If there is a problem using the form or the caller presses 0 (if allowed), where should he or she be transferred?

C: CALLER '0' ALLOWED: No Yes

Do you want callers to be able to press 0 for direct access to an operator?

C: SYSTEM MESSAGES FILE: _____

If you have multilingual system, in what language should the SYSTEM prompts be played?

How will callers access the service? Choose one:

1. Direct Access: VSDN: _____

2. Via Voice Menu Service: VSDN: _____ MENU I.D.# _____
TITLE OF MENU SERVICE: _____

3. Via Time of Day Controller: VSDN: _____
TIME OF DAY CONTROLLER I.D.# _____

Transcription Service VSDN: VSDN: _____

"No Answer" Field Worksheet

Field Name: _____

Field Prompt Recorded:

Action After Field (circle one): NextField Revert Disconnect

Choose the action that takes place after the field prompt is played to the caller.

Revert DN:

If Revert is selected for No Answer Handling, enter the DN to which the caller is transferred. _____

System Disconnect Message (circle one): No Yes

If Disconnect is selected, choose Yes if you want the system to play "Goodbye" upon disconnecting.

Save Response if Hangup (circle one): No Yes

Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (i.e., enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own).

"Voice Answer" Field Worksheet

Field Name: _____

Field Prompt Recorded:

Field Name Recorded: _____

State the field name or a descriptive of the field name. Callers and transcribers will hear this "label" before the response is played back to them.

Answer Length Limit: _____ seconds

This field determines the maximum length of the caller's answer to this prompt. The maximum value is 30 seconds.

No Answer Handling (circle one): NextField Revert Disconnect Repeat

Choose the action that should be taken if the caller does not record an answer.

Revert DN: _____

If Revert is selected for No Answer Handling, enter the DN to which the caller is transferred.

Repeats before Disconnect: _____

If Repeat is selected for No Answer Handling, enter the number of times the current prompt should be repeated before the caller is disconnected from the voice form. Note that the next field is not played when Repeat is selected.

Stop Recording on Silence (circle one): No Yes

This field determines what happens if the caller is silent for four seconds during recording. If Yes is selected, recording stops and the next action in the form is taken. If No is selected, the recording period continues for the amount of time specified in the Answer Length Limit field.

Field to be confirmed (circle one): No Yes

If Confirmation Mode is Whole Form or At Each field, select Yes if you want callers to confirm their answer to this question.

Save Response if Hangup (circle one): No Yes

Choose Yes if you want the voice form to be saved should the caller hang up at this prompt (i.e., enough valuable information has been saved at this point). Choose No if the information collected so far is not of use on its own).

Field Separator Delay (circle one): Stop Delay (deciseconds):

This field affects the transcription process. Choose Stop if you want playback to stop after the caller's answer has been played (the transcriber has to enter a specified command to resume playback). Choose Delay (and specify a value) if you want playback to pause for the specified amount of time after which playback will automatically resume).

Appendix B

End-user training

In this chapter

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Overview

Introduction

Every environment varies from hotel to hotel. Each hotel will have different training requirements, so it is very important to schedule a time with the customer to discuss your training ideas.

This chapter will provide you with an overview of training ideas and practice exercises which can be used in conjunction with this manual to train the appropriate users in the installation and maintenance of an HVS system.

This end user training package is intended to be used for delivery by a trainer to a small group of students.

If you require additional information about training or self-study guides, contact your Nortel support group for further information.

Who should complete this chapter

This chapter is of particular interest to

- system administrators
- end-user trainers
- the customer's telecommunications management team

Before you begin

Introduction

The most successful Meridian Mail installations and day-to-day operations occur when the end users are informed about what is going on, and are thoroughly trained.

With the installation of a voice mail system, your customers will face a dramatic change in the way they run their operation. This is especially true in hotels where the personalized service offered with manual messaging is being taken away. As with most people, change is somewhat difficult. The employees have been “doing it this way for years” and may resent the intrusion and mixing up of old routines.

Introducing a new product and showing the end users how to use it is a vitally important skill. If you include the hotel staff in every stage of the project, from start to finish, you will have a much easier cutover and a happier relationship afterwards when you manage and maintain the system.

You can install the most sophisticated, efficient piece of technology in the world, but it is useless if the people who use it do not feel comfortable with it, and do not know how to use it properly.

Training is more than just showing them how to use a mailbox. It is an education process, a sharing of information about the system, the installation process and how it will affect their organization and their daily routines.

Training begins with a signed contract from the customer and involves keeping hotel staff informed about the project and the system, as well as showing them how to use the system’s many features. Training does not stop once the system is installed; it is on going.

The following is the key to success:

Get the hotel staff involved, keep them informed, and train them thoroughly.

Who will need to be trained

When you provide Meridian Mail training to end users in hotels, you will be faced with training four different groups of people.

Mailbox users

Any employee who will have a telephone with a voice mailbox.

Example: sales managers, department heads, senior managers, general manager.

Other users

Anyone in the organization who does not have a telephone with a mailbox, but will use message services (that is, express messaging), or be in a customer contact area.

Example: front desk clerks, bellmen, concierge, restaurant maitre'd's, housekeeping teamleaders, office coordinators.

Attendant (Operators)

Anyone who operates an M1250 or M2250 attendant console, or acts as the attendant in the hotel.

Example: hotel operators, PBX managers/supervisor, front desk staff. In small hotels, the night auditors may take over the console during the graveyard shift.

Supervisors

Anyone who will have a telephone set with a mailbox defined with administrator capabilities, or anyone who will be the first point of contact in the hotel when a problem with Meridian Mail occurs.

Example: PBX manager/supervisor, MIS staff.

Selecting and preparing training resources

The training resources you use should enhance the student's learning and not serve as a hindrance to the learning process.

Example: A video tape describing the history of voice messaging systems is all well and good, but it does not help someone learn how to use Meridian Mail! All it does is use up valuable time.

Your training presentation can be an elaborate setup for a group of people involving a switch, all necessary equipment, booklets and handouts. However, it is just as effective one-on-one with a telephone set, a student and you. There is no standard way to conduct training each situation is unique. Classes should be designed to optimize the resources available while meeting the needs of the student. Your aim as a trainer is to find a match that is perfect for the situation you are encountering.

There are three questions you should consider asking before selecting training resources:

1. What does the student need to know?
2. Where will training be conducted?
3. How much time do I have to prepare the resources?

Some helpful hints to follow:

- Know what it is you will be teaching.
Example: If you are teaching an operator how to use the attendant console to access a mailbox, you will need access to the attendant console work area.
- Know where training will be conducted before deciding on what resources to use.

Example: It is no good planning to use overhead projectors or a TV/VCR if you will only have access to someone's small office without those items.

- Know how much time you will have in which to prepare your training resources. Ideally, by planning ahead you will have all the time that you need, but there is always a possibility that things will go wrong, or other priorities will come into the picture and you will be left with little time to prepare a training class. Just remember working telephones and user guides can work just as well as any fancy video or set of overheads.

What the student needs to know

You will be training four types of student: mailbox users, other users, hotel operators and supervisors. Each user has different information to learn and will use different equipment (telephone set types may differ, attendant console, and so on).

Where the training will be conducted

Now that you know what each of your student groups needs to know, identify the location that will best support their learning needs. Consider the following points:

- Mailbox users and other users only need access to a telephone, so you can conduct their training anywhere where a telephone is available.
- Hotel operators will be learning the mailbox user/other user features, and, in addition, how to use the attendant console. This will mean that you will need access to the room where the attendant consoles are located.
- Supervisors will want to know how the mailbox user/other user and attendant functions work, along with administrative functions, so access to the switchroom, where the main administration terminal is located, will be required.

The classroom

Providing an optimum environment in which to teach Meridian Mail is obviously ideal, but do not feel you have to have a large, fancy, well-equipped classroom to be a successful trainer. You can be equally successful teaching someone in an office with a phone. The key is to make the students feel as comfortable as possible and give them every opportunity to have hands-on access to the equipment needed.

Here are some points to consider.

Location

As long as the room is relatively near to the students and readily accessible, that is all that is required.

Capacity

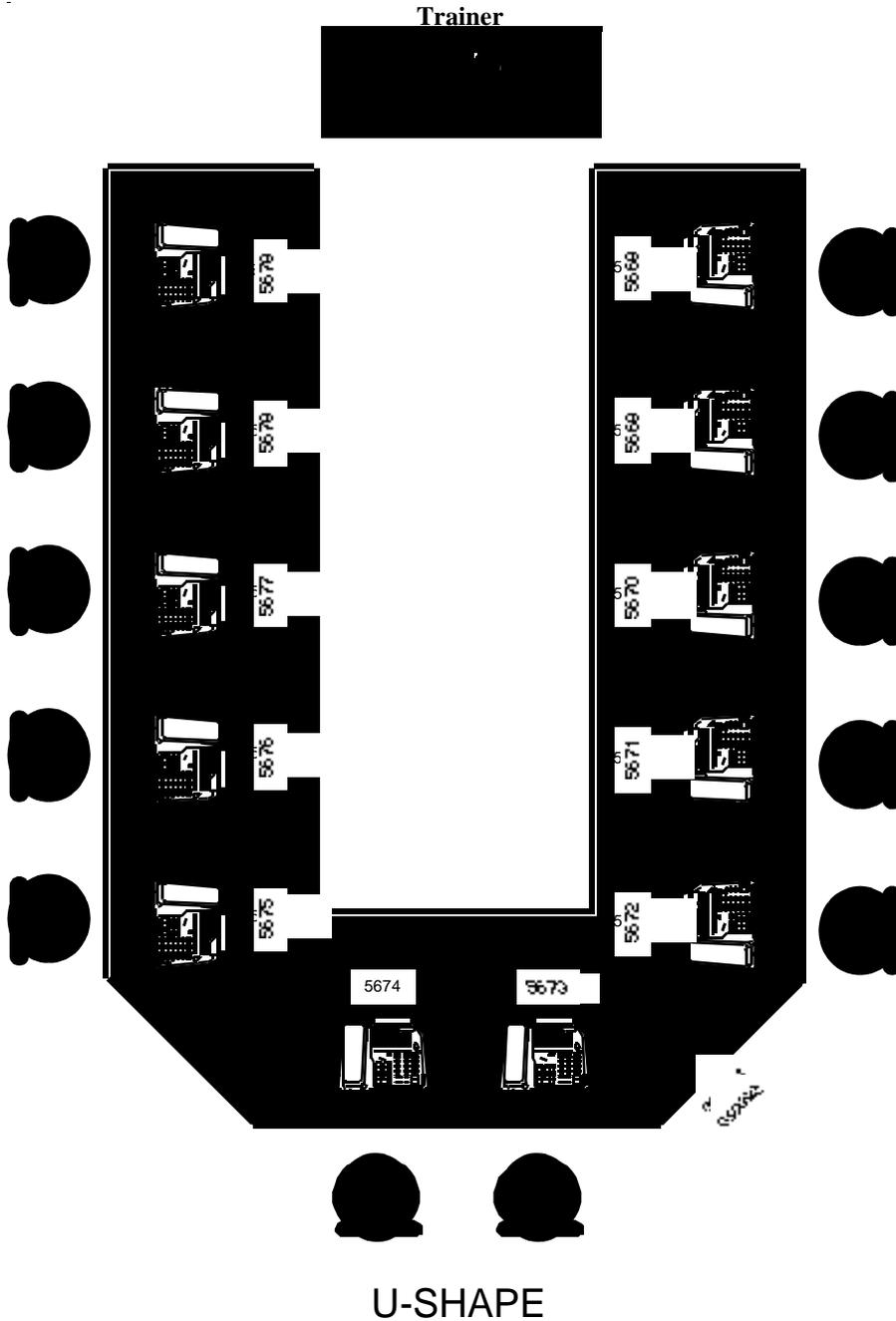
The number of people that can fit into a room does not imply that you should have that many students in one class (that is, capacity = 40). The maximum number of students you want in a given training class should not exceed 12, and the ideal is 10. Of course, this situation will be out of your control from time to time.

Layout

You may have access to a large room with four walls, or you may have to take over someone's office. Some rooms may be preset with furniture that you cannot move, such as a heavy boardroom table, and others may offer you total freedom in the way you organize the room.

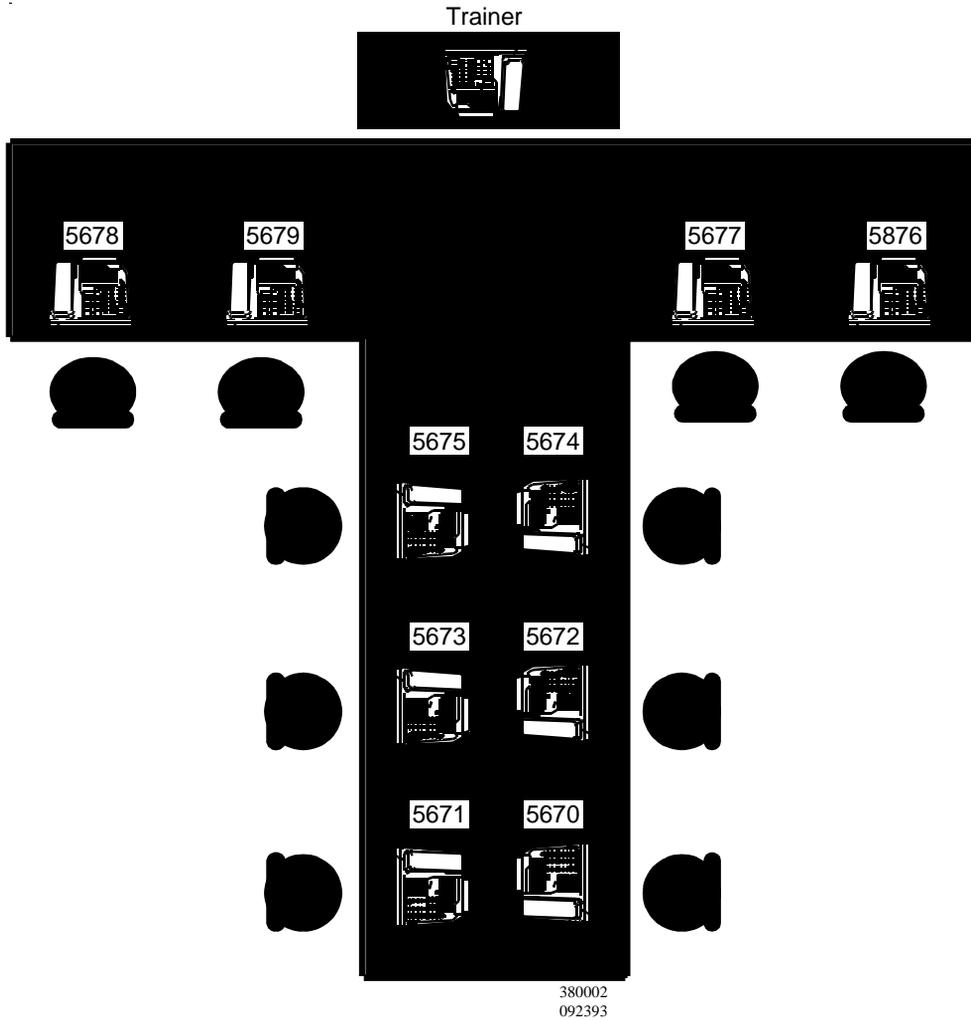
If you have a good-sized room and the freedom to lay out the furniture the way you want, there are several classroom layouts that you can use. The following pages identify the three most common classroom layouts. The most popular design is the U-shape layout. Others include the T-shape and schoolroom style (rows of desks).

U-Shaped Design



Before you begin

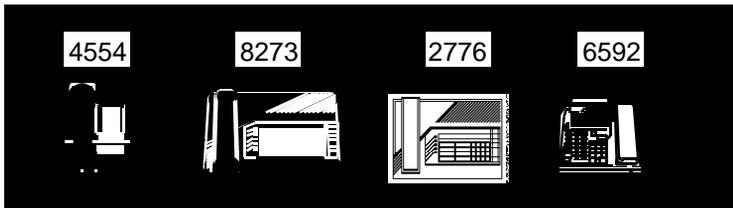
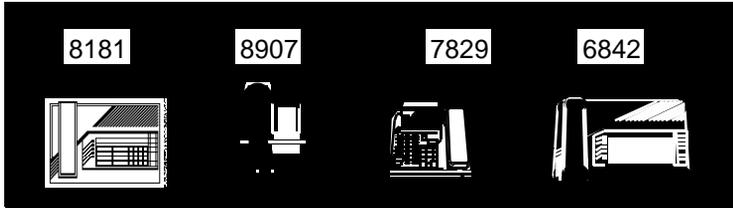
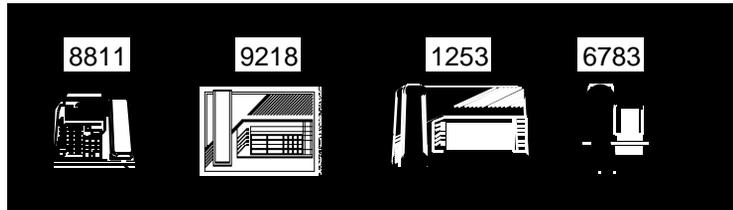
T-Shape Design



T-TYPE

Schoolroom Layout

Trainer



361713
022693



Take another look at the schoolroom layout. Notice that this classroom uses an assortment of telephones. This is another suggestion for how to set up a classroom. By having at least one example of each set type used by the end users, you give the students an opportunity to work with the set type they use back in their office. Obviously, not every student in every class will get to use their own set type, but at least they will get to see it in action.

Time available to prepare resources

Different resources require different amounts of time to prepare. First of all, let's look at the kinds of resources from which we have to choose.

In a nutshell, you are only limited by your imagination and availability. There are numerous resources you could use to train students on Meridian Mail, it is just a matter of how creative you want to be while maintaining a level of common sense.

At a minimum, you need a telephone set with a mailbox predefined. As a second resource, you should have plenty of user guides, keypad templates, and wallet cards.

The following are additional resources you could use:

- administration terminal
- flip charts
- marker boards
- overhead projector and overheads
- video tapes
- VCR and TV
- someone who already knows how to perform the skill (demonstrator/skits)
- video cameras
- flash cards
- cheat sheets with the highlights of each feature listed in one sentence
- quiz sheets

Preparation of resources

Let's look at the preparation of each of these resources in a little more detail. Information on how to use these resources will be covered later in this chapter.

Telephones with a mailbox predefined

At a minimum, you must have a working telephone so that you can demonstrate the features and allow the students hands-on practice.

When you know where you will be conducting your training and have identified how many people you can fit into the room at any one time (remembering that you should have no more than a maximum of 12 students per class), you can start thinking about how to get the telephones installed.

Meet with one of your installation technicians and walk through the training room together. Identify what cabling is available and where the nearest IDF closet is, just in case you need to run some temporary cable. Determine how long it will take to install the telephone sets, and plan this into your schedule.

Voice messaging user guides, wallet cards and templates

It is a good idea to teach the students while having the voice messaging user guide as a reference. If the students become familiar with the referencing materials during class, they are more likely to use them when back in their workplace. This frees you from follow-up phone calls with questions about how to do something. The wallet cards and templates enhance your referencing packet and help implement the learning process.

Administration terminal

If you will be training any administrators, you will need to have access to the Meridian Mail Administration Terminal. Obviously, use of this terminal needs to be coordinated with the installation project to ensure that it is not going to interrupt the technicians or disrupt the schedule.

Flip charts

Flip charts provide a great way to present information to a class without you having to rewrite all your visuals with each class. If you carefully plan out your course, you can just write everything onto the flip charts and use them as your guide when conducting the class. Flip charts allow students to see written information while listening to more details, which allows them to take notes on a timely basis. Flip charts also allow the students to use the chart as a reference when following a particular instruction.

The following are some points to consider when preparing a flip chart:

- Use lots of colored markers. Color attracts attention and is known to aid the learning process. Have a color scheme that is consistent (all page titles in one color, all text in a second color, all helpful tips in another color, and so on). This helps students see consistency in what they are reading and helps them retain the information.
- Identify in what order you wish to present the material, making sure it is in a logical and chronological order, before you prepare the flip chart. (We will be talking more about how to identify what to teach when in the next section.)
- Use bullet points, similar to what you see here on this page. Keep information on the flip chart short and elaborate verbally.
- Draw pictures, diagrams, charts, anything graphic, as much as possible. Students are more likely to remember a picture than they are a page of text.
- Some flip chart paper is not very thick and it is possible to see through from one page to the next. This is distracting for the students because they instinctively try to read what is coming on the next page, rather than focus on what you are currently teaching them. If the pages are quite thin, leave a page in between each set of notes, and staple the two pages together to help you turn the pages more efficiently.

Marker boards

Marker boards are especially useful for elaborating on temporary topics (specific/custom student questions). You can use the board to explain something and then erase it when you have finished, in preparation for the next question. The following are some points to consider when working with marker boards:

- Use lots of colored markers. Color attracts attention and is known to aid the learning process.
- If you find you have to use the board a lot to explain something, you may need to be more detailed in your flip chart or other permanent reference materials.

Remember, the students cannot take the board home with them and you will probably need to erase one piece of information in order to discuss something else, so it is not a permanent resource. Make notes on what it was you covered using the marker board and make a point to update your permanent resources.

Overhead projector and overheads

Overheads can be considered an upgraded version of what you would put on a flip chart. When you have a well-rehearsed course and know what you want to present and when, overheads provide a much more professional image.

Unlike the flip chart which has a fixed order, overheads give you the flexibility of creating additional slides at a later time and inserting them into your existing program. Overheads are good to use if you think students will have a hard time seeing a flip chart standing at the front of the room. Finally, if you know you will be a travelling trainer, overheads offer a convenient way of carting your whole presentation from one site to the next, without the concern of cumbersome resources. Many of the points discussed with flip charts also apply to overheads:

- Use lots of colored markers. Color attracts attention and is known to aid the learning process. Have a color scheme that is consistent (all page titles in one color, all text in a second color, all helpful tips in another color, and so on).

This helps students see consistency in what they are reading and helps them retain the information.

- Use bullet points, similar to what you see here on this page. Keep information short on the overhead and elaborate verbally.
- Draw pictures, diagrams, charts, anything graphic, as much as possible. Students are more likely to remember a picture than they are a page of text.
- Ideally, computerized text and graphics make your presentation that much more professional, but if a computer is not available, make sure that whoever prepares the slides has excellent handwriting and uses upper case letters for all text.
- When your overheads have been prepared, get an overhead projector and test them out ahead of time. Sometimes, you find that a particular color does not show up well on the screen, or some of your printing is too small, and so on. Now is the time to correct those mistakes.

Video tapes

Nortel is pleased to offer a video tape that shows how to use the mailbox features. It is called “Meridian Mail Feature Operations” (Tape #V006). One copy of this tape is shipped with each new system. If you wish to purchase additional copies, just call Meridian Information Products, located in Richardson, Texas, at 1-(800)-775-6835. This video tape provides a good overview of the basic mailbox features.

You may decide to have one of your training presentations taped, or tape yourself or a colleague using a particular feature. This may be good for situations where you have a large number of students to teach, and back-to-back classes start to wear you down. Video tapes provide an interesting distraction for the student while keeping the class on schedule, and giving you a chance to add some creativity to what, otherwise, could be a week to two weeks of monotonous instruction.

In both cases, in order to use a video tape you will need to make arrangements to have a VCR and television set available.

A Meridian Mail demonstrator

Here you can find someone who is currently knowledgeable in each of the features and have him or her demonstrate for you, or work with you to present real life situations (skits). It is easy enough for you to do it on your own, so do not feel you have to have someone there assisting you, though it does provide an interesting diversion for the students. If you decide to use a demonstrator, you will have to plan time to practice your training sessions together to make sure you each know what the other is expected to do. If you can find someone within the organization to be this demonstrator, so much the better. Students are much more attentive when one of their own is on show, and it also gives recognition to the more skilled employees within the organization.

Flash cards

As elementary as these sound, you would be surprised at what a valuable resource flash cards can be. The best way to prepare them is in the form of a question and an answer—one for each card. There are hundreds of questions you can ask a Meridian Mail user about the system and how it works.

Experience has shown these to be especially helpful as a follow-up training tool for the attendants. Obviously, they have to know a lot about the system and how it works so that they can support and service the employees and customers properly. Training attendants is often difficult due to the restrictions in scheduling because the switchboard needs to be continually operational. With flash cards as a follow-up learning tool, you can have the attendants come to your training class and not worry that they have not become totally proficient in the time allowed for the class. When they go back to their work area, they can use the flash cards to reinforce skills and knowledge among themselves.

If you decide to prepare flash cards, it is a good idea to have them laminated because they get a lot of use.

Information sheets

Simply put, these are 8 1/2" x 11" pieces of paper with a one-sentence instruction for each feature available in Meridian Mail.

For example

- COMPOSE:
 - Log on to mailbox
 - Touch 75
 - Enter mailbox number followed by # sign, and repeat for each mailbox. After the last mailbox has been entered, touch # sign twice.
 - Touch 5 to record and touch # to stop when recording is finished.
 - Touch 79 to send the message.

The key is to keep it simple and on as few pieces of paper as possible. You will find many employees do not like to use the user guides because it means flipping through pages to find the information.

Cheat sheets can be posted next to their telephones to help students memorize the key strokes. It makes for a good transitional learning resource and encourages employees to learn how to use the system.

Quizzes

Some companies like the idea of providing a quick quiz at the end of the training session. It helps to confirm if the employees have really learned the information. If you decide that you want to have written quizzes, create questions in the form of real-life situations that the student can relate to. For example, "You have just received a message from an irate customer and want your manager to hear what he or she said. What feature can you use to get the message to your manager and how do you use it?"

This kind of question requires the student to apply his or her knowledge, whereas a true or false or circle the right answer

approach does not really make the student think through the application.

However, you are limited to this list. If you have some innovative resources at your disposal, go ahead and use them. Just remember, you want it to be an effective learning tool, not a distraction from your objective, which is to get your students to master Meridian Mail.

Time available

Now that you are familiar with the resources and what it takes to prepare them, you can estimate how much time you are going to need to put something together. Remember, most resources can be used over and over again, so you will only need to prepare them once. It may, therefore, be well worth the effort to go ahead and prepare a quality resource when you know it will be put to good use. With this information in mind, select the resources you want to use.

Deciding what to teach and when to teach it

Before you can prepare your resources, you need to decide in what order you are going to present your material.

Potentially, you have a tremendous amount of information to share with the hotel staff. How do you know what to teach and when to teach it? After all, you do not want your students to become even more confused than they might have been before the training started.

A training program that has good chronology considers the following points:

- The program has a beginning, a middle, and an end.
- The program starts out with a primer (the basics) and elaborates on the more specialized features as the class progresses. Once a student has mastery over the simple things, the more complex features are not so intimidating.
- When a practical application is being taught, the students are introduced to the equipment as quickly as possible. This generates interest and makes the remainder of the training class lively and productive.

- The more advanced students (attendants and supervisors) master the skills and knowledge of the users under them, as well as information specific to their own responsibilities. For example, someone who will be assigned the responsibility of training new users will need to know all of the mailbox user information, have an explanation of how the other user functions are different and also know attendant functions, prior to learning anything specific to his or her own responsibilities.

The lists that follow are a suggested chronology for teaching Meridian Mail. There are four lists, one for each user group.

How to use the chronology lists

1. Read through the lists and check each item that is to be included in the training session.
2. Any item not checked is simply ignored, and all other information is listed in the order in which you need to present during the training session.
3. Using this information, prepare your resources/training program to cover the material in the order shown.

You are now ready to begin teaching!

Note: These lists only identify the Meridian Mail information. You may be required to combine Meridian Mail training with instruction on how to use the telephone sets.

Mailbox users**General information**

- ____: What is voice mail?
- ____: What is our voice mail system called and who made it?
- ____: Name of company that installed and will support the system
- ____: What can it do? (quick overview of features)
- ____: If I have a problem with Meridian Mail, to whom do I talk?
- ____: Collateral overview: User guide, template, wallet card

Messaging basics**Leaving a message**

- ____: Call answering: no answer/line busy
- ____: Express messaging DN
- ____: Express messaging procedures
- ____: Secretaries, forward callers to boss's mailbox using express messaging

How do I know I have a message waiting?

- ____: Message lights
- ____: Flashing LCD
- ____: Flashing envelope icon
- ____: Stutter tone

How do I retrieve and listen to a message?

- ____: Messages organized in mailbox: new messages first, old (listened to) last
- ____: 5 identification stamps
 - message number
 - type (old, new, urgent)
 - received from: (extension, name, externally)
 - day received
 - time received

At own phone:

- ____: Auto logon
- ____: 2 - Play (if not set on autoplay)

Passwords

___: What they are

___: Number of digits

Away from own phone but in hotel

___: Voice Messaging DN

___: Manual logon using password

___: 2 - Play (if not set on automatic)

Outside hotel

___: DID number or access through operator

___: Manual logon using password

___: 2 - Play (if not set on automatic)

How do I delete a message?

___: 76 command

___: 76 restore (in same session)

How to listen again?

___: Messages remain in mailbox until deleted or system deletes them, whichever comes first

___: New messages play first, followed by old messages. If no new messages, old messages play

___: Message numbering system and what happens to a message number when a message is deleted

Other information

___: Port size and what system sounds like when all channels are busy

___: Storage limit and what system does when all disk space is used up

___: Mailbox storage limit and what happens when you try to use mailbox features when mailbox is full

___: Distinguish between a mailbox set up option (8X) and a messaging command (7X)

Mailbox setup options

- ____: 81 - Logon
- ____: 82 - Greeting
- ____: 83 - Disconnect
- ____: 84 - Password (password length, automatic update reminder, password violation procedures)
- ____: 85 - Distribution List (difference between a personal and system distribution list)
- ____: 86 - Go To
- ____: 89 - Personal Verification
- ____: 801 - Change operator
- ____: 8* List of mailbox options
- ____: Bilingual prompting
- ____: Multi-language services
- ____: Keypad template: mailbox setup options

MESSAGING COMMANDS

- ____: 71 - Reply
 - ____: 72 - Play Envelope
 - ____: 73 - Forward
 - ____: 74 - Reply All
 - ____: 75 - Compose (custom set of mailboxes, using a personal distribution list, using a system distribution list)
 - ____: 76 - Delete/Restore (in same session) - importance of deleting unwanted messages
 - ____: 79 - Send
 - ____: 7* List of all messaging commands
 - ____: 70 Tagging commands
- 1 - Urgent
 - 2 - Standard Delivery
 - 3 - Economy Delivery

4 - Private Delivery

5 - Acknowledge

6 - Timed Delivery

____: Keypad template: messaging commands

____: Broadcast messaging: what it is and how it differs from a distribution list

____: special ID number to limit use

____: how to manage delivery to prevent all channels from being tied up

____: Sending a message to a network site

Keypad commands

____: * Help (or repeat a prompt in a menu/announcement)

____: # stop

____: 0 Attendant

____: 1 Skip backward (5-second intervals)

____: 3 Skip forward (5-second intervals)

____: 4 Skip backward (1 message at a time)

____: 6 Skip forward (1 message at a time)

____: 2 Play

____: 5 Record

____: 9 Call sender

____: 11 Name dialing and addressing (directory entry users)

____: Keypad template: other commands

Outcalling

____: What is it?

____: Know that some people may have the feature and can be contacted when away from their office

____: How do I get the feature on my phone? (mailbox must be defined)

____: How to set up a remote notification call

____: How to respond to a remote notification call - answer/cancel

____: How to set up a call for delivery to non-user

____: How a non-user responds to a call

Voice menus

____: What they are

____: Review/listen to the ones already defined

Announcements ____: What they are

____: Review/hasten to the ones already defined

____: How to use voice prompt maintenance to update them

Voice forms

____: What they are

____: Review/listen to the ones already defined

Fax on demand

____: What it is

____: Review/listen to the services already defined

____: How to update a fax item

Automated attendant

____: What it is

____: How it works when I call

____: What times of the day is it activated?

Language services

____: What is multi-language service?

____: How many languages CAN system have?

____: How many languages does our system have?

____: What languages does our system have?

____: What is dual language prompting

____: Prompts affected by dual language prompting
- mailbox logon, call answer for external callers, express messaging

____: How does a guest get assigned a language?

Security issues

- ____: Passwords - as long as possible, change regularly
- ____: If phone has autologon, make sure it is in a secure place.
- ____: Watch for shoulder surfers
- ____: Report any unusual activity, odd recordings, and so on, to the system administrator.
- ____: If you are required to sign off on your monthly phone bill and you see unusual activity, notify your system administrator immediately.
- ____: When employees change departments/transfer/leave, notify the PBX manager so that passwords, mailboxes, and so on, can be changed.

Guest Messaging services

- ____: Simplified messaging services for guests
- ____: Mailbox setup options
- 81 Record a single greeting
- 82 Record a personal verification
- 83 Change the password
- ____: Messaging Commands
 - 71 Delete all messages at once
 - 711 Confirm deletion of messages
 - 727 Selectively delete messages
 - 72 Restore messages
 - 1 Skip backward (5-second intervals)
 - 3 Skip forward (5-second intervals)
 - 4 Skip forward (1 message at a time)
 - 6 Skip backward (1 message at a time)
 - 2 Play
 - # Stop/pause
 - 9 Call sender
- ____: Introductory message

____: Customized mailbox greetings

Guest System Greeting

Guest Logon Greeting

Introductory Message

Unanswered Greeting

Busy Greeting

Vacant Room Greeting

Disabled Greeting

____: Customized in-room collateral for guests

ANY MORE QUESTIONS?

PRACTICE TIME.

Other Users (no mailbox, but will use system)

General information

- ____: What is voice mail?
- ____: What is the name of our system and who made it?
- ____: Name of company that installed the system
- ____: How much did it cost?
- ____: What can it do? (quick overview of features)
- ____: If I have a problem with Meridian Mail, who do I talk to?
- ____: Collateral overview (user guide, template, and wallet card)

Messaging basics

Leaving a message

- ____: Call answering: no answer/line busy
- ____: Express messaging DN
- ____: Express messaging procedures
- ____: 11 Name dialing and addressing (directory entry users)
- ____: 75 Compose. If you need to leave messages for more than one person, you need to use the compose feature. This requires you using someone's mailbox. Find someone who is willing to let you use their mailbox. (They can log you on, and you can complete the message.)
- ____: 76 Delete. If you do not like what you said in your message, try again.
- ____: Sending a message to a network site

What a phone looks like when it has a message waiting

- ____: Message lights
- ____: Flashing LCD
- ____: Flashing envelope icon
- ____: Stutter tone

Other information

____: Port size and what system sounds like when all channels are busy

____: Storage limit and what system does when all disk space is used up

____: Bilingual prompting

____: Multi-language services

KEYPAD COMMANDS

____: * Help (or repeat a prompt in a menu/announcement)

____: # stop

____: 0 Attendant

Outcalling

____: What it is

____: Know that some people may have the feature and can be contacted when away from their office

Voice menus

____: What they are

____: Listen to the ones already defined

Announcements

____: What they are

____: Listen to the ones already defined

____: How to use voice prompt maintenance to update them

Voice forms

____: What they are

____: Listen to the ones already defined

Fax on Demand

____: What it is

____: Listen to the services already defined and look at the faxes available from the services.

Security issued

____: Report any unusual activity, odd recordings, and so on, to the system administrator.

____: If you sign off on your monthly phone bill and you see unusual activity, notify your system administrator immediately.

Guest messaging services

____: Simplified messaging services for guests

____: Mailbox setup options

81 Record a single greeting

82 Record a personal verification

83 Change the password

____: Messaging Commands

71 Delete all messages at once

711 Confirm deletion of messages

727 Selectively delete messages

72 Restore messages

1 Skip backward (5-second intervals)

3 Skip forward (5-second intervals)

4 Skip forward (1 message at a time)

6 Skip backward (1 message at a time)

2 Play

Stop/pause

9 Call sender

____: Introductory message

____: Customized mailbox greetings

Guest System Greeting

Guest Logon Greeting

Introductory Message

Unanswered Greeting

Busy Greeting

Vacant Room Greeting

Disabled Greeting

____: Customized in-room collateral for guests

ANY MORE QUESTIONS?

PRACTICE TIME.

Attendants

General Information

- ____: Complete all mailbox user training
- ____: Difference between a mailbox user and other user (review other user training)
- ____: How to access Meridian Mail from the console using EES
- ____: PMSI must control MWI. Do not use the console or a special set to activate MWI.

GUEST ADMINISTRATION CONSOLE

- ____: What it is and why it is used
- ____: Logging on and off
- ____: Main Menu
- ____: View/Modify Mailbox
 - Information available
 - How to disable a guest mailbox
 - How to reenable a guest mailbox when password is violated
 - How to lock mailbox so none can log on at all
 - How to change guest password
- ____: View Post-Checkout Mailboxes
 - Information available
- ____: Copy a Mailbox to Another Room
 - How to do a room change on a guest mailbox
- ____: Manual Mailbox Check-in
 - How to check a mailbox in when interface is down
- ____: Manual Mailbox Checkout
 - How to check a mailbox out when interface is down
- ____: Manual Mailbox Re-Check in
 - How to restore a mailbox that is accidentally checked out

Managing the PMSI link

____: Hospitality System Status

How to read the screen

Contacts for help

What to do when a PMSI problem occurs

Manual messaging procedures

How to handle irate callers while system is down

____: Common symptoms indicating a PMSI link problem

No CPND appears when guest calls from room

Telephone restricted even though guest checked in

No one can access Meridian Mail at all

OUTCALLING (additional training)

____: How to set up delivery to non-user

____: How to set up remote notification

____: Know that some people may have the feature and can be contacted when away from their office.

SECURITY ISSUES (additional training)

____: Report any unusual activity, odd recordings, and so on, to the system administrator

____: Do not give outside access to anyone reverting from a mailbox. Call them back.

____: Always log off the GAC when not in use.

____: Never give a technician access to the switchers (refer them to a supervisor or manager).

____: Make sure the trouble-log is always filled out completely and all troubles are resolved promptly.

Fax on Demand (additional training)

____: How to upload a new fax

ANY MORE QUESTIONS?

PRACTICE TIME.

Supervisor

General information

____: Complete all mailbox user training.

____: Complete all other user training.

____: Complete all attendant training.

____: Overview of what a class of service is and how the administrator function is set up on the mailbox

____: 828 review and update system greetings

____: Modifying personal verification

- ANY MORE QUESTIONS?
- PRACTICE TIME.

Scheduling the training

Introduction

Scheduling the training sessions for a large number of people takes some planning and organization. Here is a suggested procedure to follow.

1. Find out how many students you will be training.
2. Find out how many different types of student you will be training. For example, if you need to train mailbox users and attendants, at a minimum you must now have two classes.
3. Find out how many students you can fit into each class. Remember, ideally, you do not want more than 12 students per class.
4. Find out how much information each student is expected to learn, to determine the duration of the class. This should include enough time for hands-on practice and a review. If you are also including telephone set training, take this into account. Enter this in the box below.
5. Calculate how many classes you will need to present. For each student type, divide the total number of students by the number of students you can fit into a classroom. The answer is the number of classes you will need to conduct for each student type.

Scheduling calculation table

Use the following table to determine the number of classes you need to conduct for each student type.

Student type	Total # of students	# of Students per class	Duration	# of classes required
Mailbox users				
Other users				
Attendants				
Administrators				

6. Identify the date when the system will be operational for you to conduct the training. This will be the earliest time when you can start the training.
7. Identify the dates/times when more specialized equipment (attendant consoles and administration terminal) will be accessible for you to use.
8. Identify the date when all training is expected to be completed (normally, the cutover date).
9. Identify the training interval, by subtracting the date in step 7 from the date in step 8. This will tell you how many days you have available for training.
10. Plot the training schedule by doing the following:
 - Using a calendar similar to the one below, indicate the entire training interval available.
 - Cross out any days you are not available to train, or any days the customer organization is not available to be trained (closed, and so on).
 - Mark in those days when you will have access to areas where more specialized equipment is required (for example, attendant consoles).
 - Mark in those days when you have other project priorities. Remember, you need to be as flexible as you can when trying to accommodate the customer's needs.
 - Mark in the training classes.

SUN	MON	TUE	WED	THU	FRI	SAT

11. Review the schedule and the calendar with the customer and modify as necessary.

Appendix C

Self-study guide

In this chapter

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Lesson 2: Guest Messaging Services	C-16
Lesson 3: Property Management Systems - An introduction	C-24
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Lesson 10: Guest administration console	C-101
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Overview

Introduction

This self-study guide is designed for anyone wishing to learn how to install, configure and manage a Meridian Hospitality Voice Services system.

It is to be used in conjunction with the *Meridian Mail Hospitality Voice Services Implementation Guide*. You will also need to have access to a fully operational Meridian Mail Hospitality Voice Services system, preferably one that is interfaced to a property management system (PMS).

Objective

This guide is designed to teach you how to install, administer, operate, and maintain the Meridian Mail Hospitality Voice (HVS) system, Nortel's voice messaging system for the hospitality industry.

How to use this guide

This study guide consists of twelve sections, each teaching you a new concept, skill or procedure. The entire course will take you approximately two days to complete. Approximate times needed to complete each lesson are noted at the beginning of each section. Complete the chapters in chronological order, starting from lesson 1 and finishing with Lesson 12.

How to work through a lesson

1. The beginning of each lesson provides you with information about the material to be covered, and what you need before you start. Review this information carefully before proceeding and follow the instructions given.
2. Read the "What to Do" section and work your way through the lesson. In most cases you will be directed to read various chapters within the *Hospitality Voice Services Implementation Guide*.
3. At the end of each chapter is a section titled "Practice." Complete the practice and review the answers that follow. The practices are simply to help you verify that you have read and understood the information presented in the chapter. Wherever possible, the practices will

involve hands-on experience with the equipment. Practice and review as much as you like, until you feel you have mastered the information presented in a lesson.

4. At times, you may wish to confer with someone who is knowledgeable about the information contained in a lesson you are studying. Because this is a self-study course that you complete in your own work environment, it is up to you to locate knowledgeable individuals. We recommend that you identify an experienced customer service representative and a field technician who have completed Hospitality Voice Service installations.

Prerequisites

You must be able to do the following:

- Communicate about basic telecommunications.
- Identify Meridian 1 software feature packages.
- Use Nortel documentation.
- Identify and use telephone features.
- Log in and out of the Meridian 1 system.
- Use print routines to interpret the Meridian 1 database.
- Identify and locate the major components of the Meridian 1 Option 11-81.
- Install the Network Equipment (NE) cards and cables.
- Install the system terminal and Universal Equipment Modules (UEMs).
- Test equipment and grounds.
- Troubleshoot a Meridian 1.
- Interview customers about how the database should be programmed to meet their needs.
- Describe and install Meridian Mail's hardware configurations, software requirements, and options.
- Use Meridian Mail voice messaging features and commands on telephone sets and attendant consoles.
- Provision the Meridian 1 database to support Meridian Mail systems.

- Maintain and troubleshoot the Meridian Mail system.
- Generate and interpret Meridian Mail statistics reports

These prerequisite skills may be obtained by attending the following Meridian Information Products courses:

- 362 - Meridian Mail Installation and Maintenance
- 263 - Meridian 1 Options 21-81 Installation and Maintenance

Required documents

Meridian Mail Hospitality Voice Services Implementation Guide (NTP 555-7001-221)

Lesson 1: Hospitality Voice Services - An introduction

About this chapter

Hotels have special needs when it comes to voice mail because they have a unique business application that requires a specialized voice messaging system.

If you check into a hotel that uses voice mail you may think it is just like the one you have back in your office, but that is not true. Although the voice mail system has many similarities, it also has some distinct, and necessary, differences. Understanding these differences is essential if you are going to be a successful part of a project team that installs, operates, or maintains a Meridian Mail system in a hotel.

This lesson will give you a brief overview of Hospitality Voice Services, the Meridian Mail application for the hospitality industry.

Who should complete this lesson

- systems administrators
- installation technicians
- maintenance technicians
- the customer's telecommunications management team

Where this lesson should be completed

Any quiet work area.

Estimated completion time

Approximately 30 to 45 minutes.

What you need before you start

- pencil
- *HVS Implementation Guide* (NTP 555-70901-221)
- *X-11 Features Guide* (NTP 553-3001-305)

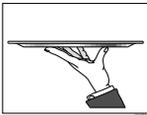
What you will learn

After completing this chapter, you will be able to do the following:

- Briefly describe what Hospitality Voice Services (HVS) are.
- Identify the Meridian Mail hardware platforms that support HVS.
- List the features and services available that are specific to an HVS system.
- Sketch two different hardware configurations:
 - a hospitality configuration without Meridian Mail
 - a hospitality configuration with Meridian Mail
- List the software required to support HVS.
- Explain what Hospitality Screen Enhancement is, and how it works.
- Describe how the multi-language/dual prompt feature works on an HVS system.

What to do

1. Read Chapter 2, “Hospitality Voice Services - An Introduction” in the *HVS Implementation Guide*.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 2 of the *HVS Implementation Guide* again, or talk to someone who has a good basic knowledge about Hospitality Voice Services.

Practice scenario**Situation**

The sales department has just signed a contract for a Meridian Mail system with Hospitality Voice Services (HVS) for the Grand Hotel. A couple of the people on the project team have never done an installation that includes HVS. You decide to provide them with a quick overview.

Instructions

Answer the questions below by recalling the information provided in Chapter 2 of the *HVS Implementation Guide*, and filling in the blanks. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate sections. If you wish, find a colleague who is knowledgeable in the information covered in this chapter and verbally provide the answers.

1. Define the term HVS.

2. What Meridian Mail hardware platforms support HVS?

3. List the features/services that make HVS different from basic Meridian Mail.

4. Draw a diagram of a hospitality hardware configuration with no Meridian Mail, and another diagram where Meridian Mail has now been included.

Hardware configuration with no Meridian Mail.

Hardware configuration with Meridian Mail.

5. List the Meridian 1 software requirements needed to support HVS.

6. What is Hospitality Screen Enhancement, and how does it work?

7. The Plaza Hotel in Frankfurt has an HVS system equipped with four languages: English, German, French, and Italian, and dual-language prompting. The system's primary language is German and the secondary language is English. The system administrator chooses not to have the system's primary language override the guest's preferred language. For each of the following guests, indicate in what language a caller will hear the initial and repeat system prompts.

a. John Smith checks in and chooses English as his preferred language.

Initial prompt:

Repeated prompt:

b. Simone Evans checks in and chooses French as her preferred language.

Initial prompt:

Repeated prompt:

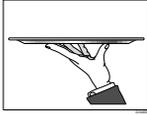
c. Boris Koffen checks in and chooses German as his preferred language.

Initial prompt:

Repeated prompt:

8. If the Plaza Hotel did not have dual language prompting on their system, how would the prompts differ?

Practice feedback



1. Define the term HVS.

HVS is Hospitality Voice Services, a voice messaging system designed specifically for the hospitality industry.

2. What Meridian Mail hardware platforms support HVS?

- *Meridian Mail Card Option*
- *Meridian Mail Modular Option, 21-81*
- *Meridian Mail Modular Option EC, 21-81*
- *Meridian 1 upgrades*

3. List the features/services that make HVS different from basic Meridian Mail.

The features and services that are unique to HVS are

- *simplified guest mailboxes*
- *customizable system greetings for mailboxes. These include*

Introductory message
Guest system greeting
Guest login greeting
Unanswered greeting
Busy greeting
Vacant room greeting
Disabled mailbox greeting

- *Mailbox check-in and check out capability*
- *Mailbox relocation capability*
- *Post-checkout mailbox services*
- *Property management system interface*
- *Guest administration console*

4. Draw a diagram of a hospitality hardware configuration with *no* Meridian Mail, and another diagram where Meridian Mail has now been included.

Refer to the diagrams in Chapter 2 of the HVS Implementation Guide, which identify the two hardware configurations.

5. List the Meridian 1 software requirements needed to support HVS.

The following basic software packages are required on the Meridian 1 to support a property management system:

- 81: CCOS - Controlled Class of Service
- 99: BGD - Background Terminal Facility
- 103: PMS - Property Management System Interface
- 100: RMS - Room Status

The following package is required for lamp status:

- 46: MWC - Message Center

Optional packages for PMSI include

- 101: MR - Message Registration
- 102: AWU - Automatic Wake Up

When Meridian Mail HVS is included, the Meridian 1 requires Release 16 software or higher, along with the following additional packages:

- 7: RAN - Recorded Announcement
- 9: DNDI - Do-Not-Disturb, Individual
- 10: EES - End-to-End Signaling
- 11: INTR - Intercept Treatment
- 17: MSB - Make Set Busy

- 19: DDS - Digit Display
 - 35: IMS - Integrated Message System
 - 40: BACD - Basic Automatic Call Distribution
 - 45: ACDA - ACD Package A
 - 77: CSL - Command Status Link
 - 83: ACD CDR - Queue Record
 - 85: CSLA - CSL with Alpha Signaling
 - 109: APL - Auxiliary Processor Link
 - 179: HVS - Hospitality Voice Services
 - 180: DKS - Digit Key Signaling. This feature may also be referenced as "Attendant End to End Signaling."
6. What is the Hospitality Screen Enhancement and how does it work?

Hospitality Screen Enhancement is a feature that allows for a special applications display to be attached to certain Meridian Modular sets, offering a manager the ability to activate the four following features:

- *Maid ID*
- *Room Status*
- *Automatic Wake Up Calls*
- *Message Registration*

7. The Plaza Hotel in Frankfurt has an HVS system equipped with four languages: English, German, French and Italian, and dual-language prompting. The system's primary language is German and the secondary language is English. The system administrator chooses not to have the system's primary language override the guest's preferred language. For each of the following guests, indicate in what language a caller will hear the the initial and repeat system prompts.

a. John Smith checks in and chooses English as his preferred language.

Initial prompt: *English*

Repeated prompt: *German*

b. Simone Evans checks in and chooses French as her preferred language.

Initial prompt: *German*

Repeated prompt: *French*

c. Boris Koffen checks in and chooses German as his preferred language.

Initial prompt: *German*

Repeated prompt: *English*

8. If the Plaza Hotel did not have dual-language prompting on their system, how would the prompts differ?

All system prompts would be in the guest's preferred language. For John Smith - English, Simone Evans - French, and Boris Koffen - German.

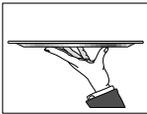
Lesson 2: Guest Messaging Services

About this chapter	Guest voice messaging is <i>not</i> the same as regular voice messaging. The mailboxes are intentionally more simple in design to help guests quickly adjust to the service with little or no training. In this lesson you will learn what the voice messaging features are and how to use them.
Who should complete this lesson	<ul style="list-style-type: none">• systems administrators• installation technicians• maintenance technicians• the customer's telecommunications management team
Where this lesson should be completed	Any quiet work area equipped with a telephone that is configured with a guest voice mailbox.
Estimated completion time	Approximately 45 minutes to 1 hour.
What you need before you start	<ul style="list-style-type: none">• pencil• <i>HVS Implementation Guide</i>• <i>Guest Voice Messaging User Guide</i>• <i>Hospitality Voice Services: Customizing your collateral</i> (P0711684)• a colleague knowledgeable about guest messaging services
What you will learn	<p>After completing this chapter, you will be able to do the following:</p> <ul style="list-style-type: none">• List the features and services guest voice messaging provides.• Describe the voice messaging experience a guest typically encounters during a stay at a hotel.• Using a telephone equipped with a guest voice mailbox, demonstrate use of each of the guest voice messaging features.

- Briefly discuss how hoteliers can customize their guest voice mail collateral.

What to do

1. Read “Guest Voice Messaging” in Chapter 2 of the *HVS Implementation Guide*. When instructed, refer to other documentation.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the feedback provided. If you still have questions, review Chapter 2 of the *HVS Implementation Guide* again, or talk to someone who is familiar with Guest Messaging Services, or both.

Practice scenario**Situation**

A new employee has joined your project team and is unfamiliar with the guest messaging services. He asks you to demonstrate them to him and explain what happens to a guest who stays in a hotel using Meridian HVS.

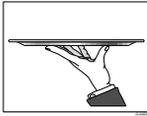
Instructions

1. Locate a telephone configured with a guest voice mailbox.
2. Read the *Guest Voice Messaging User Guide*. As you work through the guide, use the accompanying telephone to try each of the features without referencing the user guide.
3. Find a colleague who is familiar with the guest messaging features. Demonstrate your knowledge by accessing the mailbox and using each of the features without referencing the user guide.
4. When you have finished demonstrating the features, describe to your colleague how the messaging services work for a guest who stays in a hotel using Meridian HVS.

5. Answer the following question:

Miss Williams and Miss Smith are attending the ISLUA Convention, and have been assigned to share rooms. Miss Smith arrives and checks in at 1:30 p.m. Miss Williams is due to arrive on a flight at 4:35 p.m. What is the password for the early arrival, and why does it change when Miss Williams checks in?

6. Review the feedback that starts on the following page.

Practice feedback

1. *You should have been able to confidently use all of the guest mailbox features.*
2. *Your description of the messaging services for a guest staying in a hotel with HVS should have covered the following*

Check-in

The front desk clerk checks guests in, and, when status of room changes to occupied, the Meridian Mail HVS software intercepts the PMS information being sent to the Meridian 1 and automatically enables a mailbox for the assigned room number, incorporating the first four characters of the guest's last name as the default password if Call Party Name Display is being used.

The front desk clerk briefly explains the hotel's use of the voice messaging service and, if available, offers the guest a customized wallet card that instructs the guest on how to use the mailbox from both inside and outside the room.

The bellman, while assisting the guests with their bags, will provide further information about the voice messaging service during the room orientation.

If enabled, a customized introductory message may be waiting for the guest upon entering the room. The message can be provided to instruct the guest on how to use the voice messaging services, or to direct the guest to other voice messaging collateral available in the room.

During the stay***Leaving messages***

Two types of messages can be left for a guest in a hotel equipped with HVS: voice messages or text messages.

Text messages can be either handwritten or, if a PMS system is being used, typed into the message file of the PMS. When the PMS receives a text message, it sends

a message to the Meridian 1 to turn the light on. Meridian HVS intercepts the message and activates MWI. This sends a message to the guest informing them that they have a text message. In most cases, when a hotel uses HVS, voice messages are left, but some guests may choose not to use voice messaging services. This may be because the guest is hearing impaired and cannot use the service, or just prefers to receive written (text) messages. When the guest does not use voice messaging at all, the guest has still been assigned a mailbox during the check-in process, but the attendant now uses the Guest Administration Console to access the guest's mailbox and disable the Voice Messaging.

What callers hear

When someone calls a guest room, depending on the status of the room, one of a number of greetings can play. Also, when a guest logs on to his or her mailbox, one of a number of greetings and messages can play. Each of the following greetings and messages can be customized by the system administrator:

- ***Guest System Greeting:*** *This is the greeting that is played to external callers upon reaching a guest's mailbox. It is heard before they hear the Call Answer greeting, or the guest's personal greeting. This greeting is either on or off, even if it has been recorded.*

Guest Logon Greeting: *This is the greeting that is played to the guest when the guest logs on to Meridian Mail.*

Introductory Message: *This message is played to the guest during the first logon session after they have checked in. It is heard after the guest logon greeting and is used to provide instructions on how to use the service.*

Unanswered Greeting: *This is the greeting that is played to callers when they call a guest room that does not answer the phone, after which they can leave a message.*

Busy Greeting: This is the greeting that is played to callers when they call a guest room when the guest's phone is busy, after which they can leave a message.

Vacant Room Greeting: This is the greeting that is played to callers when they call a room that is currently vacant. In most cases, the caller will then be automatically forwarded to the operator for further assistance.

Disabled VM Greeting: This is the greeting that is played to callers when they call a guest room that has had the Voice Messaging for the mailbox disabled. The mailbox may have been disabled intentionally (because a guest does not want to use Meridian Mail).

Retrieving messages

The MWI activates when either a text or voice message is received. If the telephone is a single-line set, the guest dials the predefined Hospitality Voice Messaging DN and is then automatically logged on to the mailbox. If the telephone is a multi-button set, the guest dials the predefined Hospitality Voice Messaging DN and is then automatically logged on to the mailbox. If the telephone is a multi-button set, the guest presses the assigned Message Waiting key, and, again, is automatically logged on to the mailbox. The messages are then automatically played back to the guest.

If the guest has any text messages waiting, depending on how Meridian Mail has been configured, the guest will be told to contact the attendant to retrieve the message, or to access the video messaging service from his or her guest room television. If a guest receives a message from one of the hotel staff, the envelope will tell the call that the message was "received from (staff member's name)." If no personal verification has been recorded by the staff member, Meridian Mail does not announce the staff member's extension but, instead says "received from a staff member."

If a guest receives a message from someone in another guest room, the envelope will tell the guest that the message was

“received from a guest room.” Meridian Mail does not announce the guest room number for security reasons.

If the guests are outside their room, they can retrieve messages in much the same way that any other Meridian Mail user does. The only difference is that guests may dial a Hospitality Voice Messaging DN instead of a regular voice messaging DN, and they are required to enter their mailbox number and password.

Checkout

When the guest is ready to check out, the front desk clerk retrieves the guest’s file (folio) from the PMS system. If the PMS has enhanced interface capabilities, the clerk can use the PMS to query Meridian Mail and find out if there are any unread messages before the guest leaves the hotel. The clerk then completes the checkout process and presents the guest with his or her bill. Immediately upon checkout, Meridian Mail HVS software acts on the PMS information being sent on the PMSI link, and automatically disables the guest’s mailbox.

If the mailbox contains any unread messages at checkout, Meridian Mail will store the messages in a Post-Checkout Mailbox file and hold them for a predefined amount of time. (Some hotels configure the system to also hold read messages for an extended period after checkout.) Guests can log in to their room mailbox until a new guest is checked in to the room in which they were staying, or they can use the post Checkout Mailbox service any time. If the guest has not called back to the hotel to retrieve them within the time allowed, Meridian Mail will automatically delete the unread messages from the system.

- 3. Miss Williams and Miss Smith are attending the ISLUA Convention, and have been assigned to share rooms. Miss Smith arrives and checks in at 1:30 p.m. Miss Williams is due to arrive on a flight at 4:35 p.m. What is the password for the early arrival, and why does it change when Miss Williams checks in?*

SMIT will be the password for the early arrival, and it will change to WILL when Miss Williams arrives. This

is because only one mailbox is assigned to a guest room and Meridian Mail stores the name of the last person checked in to the room. It is this last name that is used for the password.

Note: *If Miss Smith has already changed the password, when Miss Williams checks in the changed password remains (that is, it will not be WILL).*

Lesson 3: Property Management Systems - An introduction

About this chapter

More and more, you will find that a hotel's primary computerized management tool is a Property Management System (PMS). Hotels that do not have a property management system are fast becoming the exception to the rule.

Hotels need this technology to remain competitive in the industry. In all likelihood, when a Meridian Mail system is installed, it will be interfaced to a property management system. This requires that you know a little bit about them. You are not required to know how to operate a hotel's property management system, but it is important that you have a basic knowledge of its function. We encourage you to take the time to learn all you can, especially if you will be supporting hospitality projects on a regular basis. This lesson is a good place to start and will give you a basic overview.

Who should complete this lesson

- systems administrators
- installation technicians
- maintenance technicians

Where this lesson should be completed

Any quiet work area.

Estimated completion time

Approximately 30 to 45 minutes

What you need before you start

- pencil
- paper

What you will learn

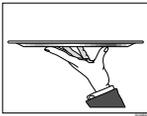
After completing this chapter, you will be able to do the following:

- Describe what a property management system is.
- Describe the basic functions of a property management system.
- List the available interface features.

- List property management systems with an established interface to Nortel's Meridian 1 switch.
- Identify hotel chains with standardized property management systems.

What to do

1. Read "Property Management Systems" in Chapter 3 of the *HVS Implementation Guide*. When instructed, refer to other documentation.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 3 of the *HVS Implementation Guide* again, or talk to someone who is familiar with hotel property management systems, or both.

Practice scenario**Situation**

The sales department has just signed a contract for a Meridian Voice Messaging system at the Main City Hotel and you have been assigned to the project team. One of the members of the project team, John Smith, is not familiar with what a property management system is. You decide to provide him with a quick overview.

Instructions

Answer the questions below by recalling the information provided in Chapter 3 of the *HVS Implementation Guide*. Check your answers against the recommended answer in Chapter 3 of the *HVS Implementation Guide*. If you wish, find a colleague who is knowledgeable about the information covered in this chapter, and verbally provide the answers.

1. What is a Property Management System?

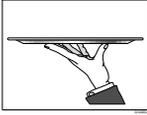
2. Describe the basic functions of a PMS.

3. List three general features available through a PMS/PBX interface.

4. List the additional features available when Meridian Mail is included in the interface.

5. List four PMS systems that have an established interface with Nortel's Meridian 1 PBX.

6. Name two hotel chains that have a standardized PMS system, and identify the PMS system they are using.

Practice feedback

1. What is a property management system?

A Property Management System (PMS) is a specialized computer system that primarily controls room inventory and billing in hotels and resorts. This system automates the check-in/checkout process, and manages room inventory, along with billing and accounting procedures.
2. Describe the basic functions of a PMS.
 - Guest room check-in/checkout
 - Guest room billing: room and tax, restaurants, hotel facilities
 - Guest text-based messaging
 - Account balancing
 - Financial reporting/statistics
 - Guest reservations
3. List three general features available through a PMS/PBX interface.
 - Guest room telephone restriction/unrestriction
 - Call Party Name Display
 - Maid status
 - MWI for text-based messaging
 - Posting of telephone charges
4. List the additional features available when Meridian Mail is included in the interface.
 - Guest room mailbox check-in/checkout
 - Post-Check Out Mailbox
 - Mailbox relocation

5. List four PMS systems that have an established interface with Nortel's Meridian 1 PBX. You should have chosen four of the following.

AMR (Compass)	CARA (Innsite)
CLS	ECI (EECO-ECI/UX)
ENCORE	Fidelio
FLAGLER	GEAC Computer Corp. (Jonas & Erickson)
HIS	Lodging Systems
LODGISTIX (Lanmark Series 1) (Requires an IPS protocol converter)	MARLBORO (PC Lodger)
Marriott Full Service	Marriott - MMS (MAGIC)
Marriott (Courtyard)	Quantel (HAL)
Resort Systems (Hotelsoft)	Scandasring
Westin (Welcom)	

6. Name two hotel chains that have a standardized PMS system, and identify the PMS system they are using. You should have selected two from the following list.

HOTEL	PMS
Embassy Suites/Hampton Inns/Homewood	Lodgistix/NCR
Four Seasons	ECI (EECO-ECI/UX)
Holiday Inn	Encore
Hyatt Hotels Corporation	Encore
Hilton Hotels Corporation	Compass
Intercontinental	HIS and Fidelio
Marriott Courtyard	Marriott Proprietary
Marriott Hotels	Marriott Proprietary
Ritz Carlton	Encore
Sheraton Hotels, Inns and Resorts	ECI (EECO-ECI/UX)
Westin Hotels	Welcom

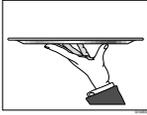
Lesson 4: Property Management Systems interface specifications

About this chapter	<p>When you install and operate a Meridian Mail HVS system in a hotel using a property management system, both systems are interfaced together. In order to make sure the property management systems can communicate with Meridian Mail and the Meridian 1, certain standards and protocols are required. These are identified as interface specifications. Since it takes both the Meridian 1/Meridian Mail team and the PMS vendor hotel's MIS staff (the PMS experts) working together to establish and maintain this interface, everyone needs to be familiar with basic information about the interface specifications.</p>
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• installation technicians• maintenance technicians• telecommunications managers
Where this lesson should be completed	<p>Any quiet work area.</p>
Estimated completion time	<p>Approximately 1 to 1 1/2 hours.</p>
What you need before you start	<ul style="list-style-type: none">• pencil• <i>HVS Implementation Guide</i>• OPTIONAL (not included with this study guide) <i>Property Management System Interface Specification, Issue 3.1</i>
What you will learn	<p>After completing this lesson, you will be able to do the following:</p> <ul style="list-style-type: none">• Describe what a property management system interface specification (PMSI) is, and why it is needed.

- Describe what a PMS protocol is, and explain why there are three to choose from.
- Describe the technical aspects of the PMSI link.
- Explain the difference between a DTE connection and a DCE connection.
- Explain what the PMS Interface Specification book is, and how to obtain one.
- Describe how the PMSI features are identified and selected.
- List the information that the PMS vendor/hotel's MIS staff must provide the Meridian 1/Meridian Mail technician/administrator in preparation for system configuration.
- Explain what happens once the PMSI has been configured, and identify the tests that need to be performed.
- Describe what a PMS database swap is, why it is performed, when it is done and who initiates it.

What to do

1. Read "Property Management Systems" in Chapter 3 of the *HVS Implementation Guide*. If you have a copy of the *Property Management System Interface Specification*, refer to it as you read this chapter.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 3 of the *HVS Implementation Guide* again, or talk to someone who is familiar with hotel property management systems, or both.

Practice scenario**Situation**

You are part of a team installing HVS at the Galaxy Hotel. John Mars has joined the team, to replace Sam Mercury, who is out with appendicitis. Unfortunately, John has never installed HVS in a hotel that uses a PMS system, so he has never had to worry about PMSI. He is familiar with what a PMS system is but wants to have a better understanding of the PMS interface, so he asks you to help explain it to him.

Instructions

Answer the questions below by recalling the information provided in Chapter 3 of the *HVS Implementation Guide*. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate section in the guide. If you wish, find a colleague who is knowledgeable about the information covered in this chapter, and verbally provide the answers.

1. What is a PMSI specification, and why is it needed?

2. Why is there more than one PMS protocol?

3. John wants a technical overview of the link. What are the characteristics of the SDI port?

4. The RS-232 lead designation is important with PMSI. Explain to John the differences between a DTE connection and a DCE connection.

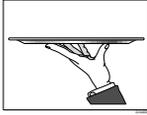
5. John will be the one collecting the PMSI information from the PMS vendor/hotel's MIS staff. What information are you going to ask him to obtain?

6. If John wants to read more about this PMS interface, what document provides this kind of information, and where can he obtain one?

Test to be performed	What to check for	Suggested solutions
Check in a room through the PMS terminal.		<p>Make sure Meridian 1 background terminal command has been set to deactivate room restriction upon check-in.</p> <p>Make sure all three systems have CPND name length set to the same number.</p> <p>Make sure the guest room telephone set, and the telephone set making the test call have CNDA and CCSA in class of service.</p>
Check in a room through the PMS terminal and select the preferred language. Have the operator initiate an automated wake-up request. Repeat test for each language available for automatic wake-up calls. (All RANs)	<p>For each language on RANs that has matching language on Meridian Mail, does the exact language play for the wake-up?</p> <p>For each language on RANs that does not have a matching language on Meridian Mail, does a comparable language play for the wake-up?</p> <p>For each language on RANs that does not have a matching or comparable language on Meridian Mail, does the default RAN language play for the wake-up?</p>	
Check in a room through the PMS terminal, and give it VIP status. Have the operator initiate an automated wake-up request.	Does automatic wake-up request notify the attendant to place the wake-up call?	
Call an occupied room from outside the hotel.		Check the “Guest System Greeting” in the Hospitality Profile.
Call an occupied room from inside the hotel.	Did the custom greeting for an unanswered call play?	

Test to be performed	What to check for	Suggested solutions
Leave a voice and text message for a checked-in room, then check the room out and access post-checkout service using the GAC.		Access Hospitality Profile and check post checkout service parameters. Access Hospitality Install Parameters and check voice count options.
Check in a room through PMS terminal, and activate DND from the attendant console. Call the room.	Does the call forward to the guest room mailbox?	

Practice feedback



1. What is a PMSI specification, and why is it needed?

A PMSI specification is an optional software package that allows the Meridian 1 to interface directly with a customer-provided PMS.

2. Why is there more than one PMS protocol?

There is more than one PMS protocol to enable a variety of different PMS systems to interface with the Meridian 1.

3. John wants a technical overview of the link. What are the characteristics of the SDI port?

Asynchronous RS-232 link.
Configured to operate in DCE or DTE modes.
Data rate: 150, 300, 600 and 1200 bps. 1200 bps is the recommended rate.
Operates in full duplex mode.
Interface distance is 50 ft., and can be extended with repeaters.
Word framing option is 1 start bit, 8 data bits, and 1 stop bit. Total 10 bits per character.
There are five different parity options. (Refer to the information in the <i>HVS Implementation Guide</i> for details.)

4. The RS-232 lead designation is important with PMSI. Explain to John the differences between a DTE connection and a DCE connection.

*Your explanation should include a sketch of the pin connection diagram found in the *HVS Implementation Guide*, along with a description of the two notations located under the diagram.*

5. John will be the one collecting the PMSI information from the PMS vendor/hotel's MIS staff. What information are you going to ask him to obtain?

- *Is the PMS configured as DTE or DCE?*

- *What is the gender and number of the pins of the connector at the PMS port?*
 - *What is the baud rate of the PMS port?*
 - *What PMS features are going to be used, and how are they going to be configured?*
 - *What room numbering plan is being used?*
 - *What voice messaging services are going to be used?*
 - *What PMSI protocol has been chosen?*
 - *What is the maximum length of the PMS name?*
 - *Will PMS support CPND?*
 - *Should the Meridian 1 alarm be activated if the PMS has errors?*
 - *Should Meridian Mail expect an ACK/NAK from PMS?*
 - *Does the PMS support an "IS TEST" polling message?*
 - *What is the maximum number of NAKS permitted?*
 - *What is the PMS link activity timeout (in minutes) going to be?*
 - *What is the PMS link timeout in hundredths of a second going to be?*
 - *What kind of asynchronous voice count option has been chosen?*
 - *Is language ID provided in PMSI messages?*
 - *Is the PMSI link character set to US ASCII?*
6. If John wants to read more about this PMS interface, what document provides this kind of information, and where can he obtain one?

PMS Interface Specification, Issue 4.0

Call (408) 764-2105.

7. a) What is a database swap?

A PMS database swap sends the current check-in/checkout PMSI messages (and test message indications) for all rooms, from the PMS to the Meridian 1. It can be performed with all of the

protocol variations (PMS1, PMS2, PMS3). The swap will result in heavy PMSI traffic and corresponding Meridian 1 and Meridian Mail load. For each checked-in room, a check-in message and a message waiting message are sent to the Meridian 1. For check-out rooms, a checkout message is sent. If asynchronous voice counts are allowed, a query voice count message will also be sent.

b) Why is it performed?

It is done to synchronize database information and system timing between the three pieces of equipment.

c) When is it done, and who initiates it?

It is initiated by the PMS, either automatically during nightly routines, or when initiated by the hotel's MIS staff, normally after a PMSI failure.

8. John should be familiar with the tests required to check the integrity of the PMSI link. Fill in the blank squares on the table on the following page.

Test to be performed	What to check for	Suggested solutions
Check in a room through the PMS terminal.	<p>Did the telephone restriction deactivate?</p> <p>Does CPND activate when the room is called?</p>	<p>Make sure Meridian 1 background terminal command has been set to deactivate room restriction upon check-in.</p> <p>Make sure all three systems have CPND name length set to the same number.</p> <p>Make sure the guest room telephone set, and the telephone set making the test call have CNDA and CCSA in class of service.</p>
Check in a room through the PMS terminal and select the preferred language. Have the operator initiate an automated wake up request. Repeat test for each language available for automatic wake up calls. (All RANs)	<p>For each language on RANs that has matching language on Meridian Mail, does the exact language play for the wake-up?</p> <p>For each language on RANs that does not have a matching language on Meridian Mail, does a comparable language play for the wake-up?</p> <p>For each language on RANs that does not have a matching or comparable language on Meridian Mail, does the default RAN language play for the wake-up?</p>	<p>Double-check the RANs to make sure the language selected actually exists.</p> <p>Make sure the language identifier table in the Hospitality Install Parameters on Meridian Mail has been configured properly.</p> <p>Make sure the MLWU package is installed on the Meridian 1.</p> <p>Make sure the guest telephone sets are configured with CCSA class of service.</p>
Check in a room through the PMS terminal and give it VIP status. Have the operator initiate an automated wake-up request.	Does automatic wake-up request notify the attendant to place the wake-up call?	Verify that the VIP message is sent from the PMS to the Meridian 1.
Call an occupied room from outside the hotel.	Did the Guest System Greeting play first, followed by the guest room greeting?	Check the "Guest System Greeting" in the Hospitality Profile.

Test to be performed	What to check for	Suggested solutions
Call an occupied room from inside the hotel.	Did the custom greeting for an unanswered call play?	Check the “Greeting when Guest’s Phone is Unanswered” in the Hospitality Profile.
Leave a voice and text message for a checked in room, then check the room out and access post checkout service using the GAC.	<p>Did the post checkout service indicate one unread message and one text message?</p> <p>Can the message be retrieved from PCO?</p> <p>Does the message delete after read message retention parameter for PCO expires?</p>	<p>Access Hospitality Profile and check post-checkout service parameters.</p> <p>Access Hospitality Install Parameters and check voice count options.</p>
Check in a room via PMS terminal and activate DND from the attendant console. Call the room.	Does the call forward to the guest room mailbox?	Make sure LD 15 in the Meridian 1 has been configured for DNDH to “yes.”

Lesson 5: HVS hardware installation

About this chapter	<p>In order to successfully complete this chapter, you must be familiar with how to install “regular” Meridian Mail on each of the following platforms:</p> <ul style="list-style-type: none">• Card Option (Option 11)• Modular Option EC (Enhanced Capacity)• Modular Option Classic
Who should complete this lesson	<ul style="list-style-type: none">• installation technician• maintenance technicians
Where this lesson should be completed	<p>In the switch room.</p>
Estimated completion time	<p>Approximately 2 to 4 hours</p>
What you need before you start	<ul style="list-style-type: none">• pencil• <i>Meridian Mail Modular Option EC Installation</i> procedures (NTP 555-7061-250)• <i>Meridian Mail Modular Option GP Installation</i> procedures (NTP 555-7001-250)• <i>Meridian Mail Card Option Installation</i> procedures (NTP 555-7071-210)• <i>Meridian Mail System Administration TOOLS</i> (NTP 555-7001-305)• <i>HVS Implementation Guide</i> (NTP 555-7001-221)• <i>Option 11 Installation Guide</i> (NTP 553-3011-210)

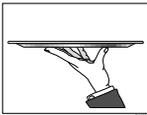
What you will learn

After completing this lesson, you will be able to do the following:

- List the platforms on which HVS is compatible.
- Describe what is contained in the HVS hardware kits.
- List the HVS installation procedures on a Meridian Mail Modular Option, Modular Option EC, or Card Option.
- Install HVS on any of the above platforms.

What to do

1. Read Chapter 4, “Hardware Installation” in the *HVS Implementation Guide*. You will be referred to a number of NTPs, so make sure you have them available before you start. (Refer to “What you need before you start.”)
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 4 of the *HVS Implementation Guide* again, or talk to someone who is familiar with hotel property management systems, or both.

Practice scenario**Situation**

You are a senior Meridian Mail installation technician at Technoid Inc., a local telecommunications company. Next month your company will be installing Hospitality Voice Services at three different sites, each using a different Meridian Mail platform. With more new accounts close to being signed, three new Meridian Mail installation technicians have just been hired to support this increase in hospitality business, and you have been assigned to train them on how to install HVS on each of these platforms.

Instructions

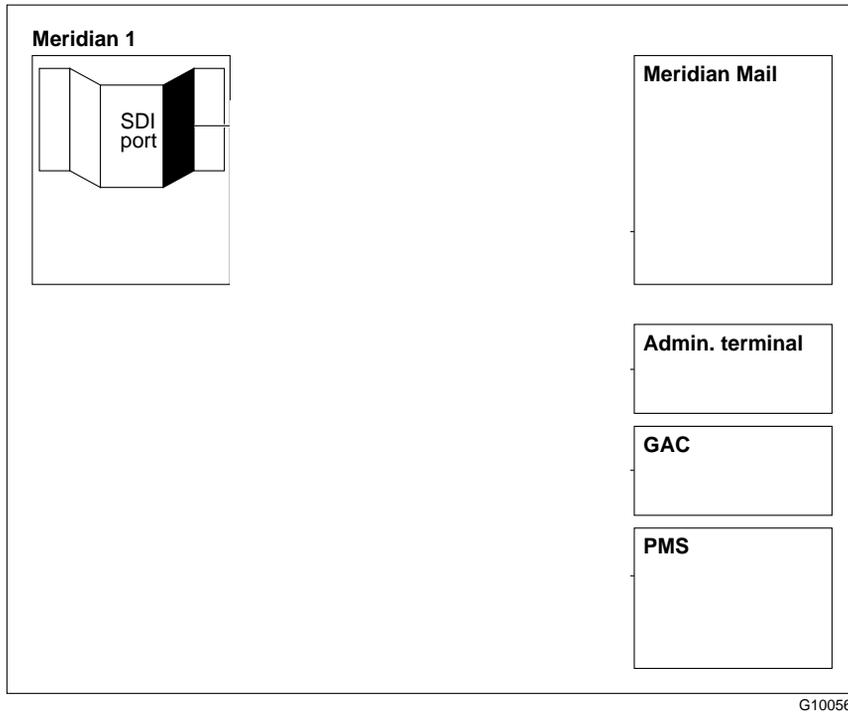
Answer the questions below by recalling the information provided in Chapter 4 of the *HVS Implementation Guide*. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate section in the guide. If you wish, find a colleague who is knowledgeable about the information covered in this chapter, and verbally provide the answers.

1. What is an HVS Hardware kit?

2. a) What is the difference between a DTE and a DCE device?

- b) Why is it important to understand this when installing the HVS hardware?

3. Using the following diagram, draw in the BASIC cabling requirements for HVS. This sketch does not have to be platform specific.



4. The PMS systems may be located more than 50 feet away from the Meridian 1. If this is the case, how will the cabling setup change to support this?

5. What is the difference between an RSM cable and an RSM fanout cable?

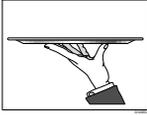
6. List the steps required to install an RSM card on a Modular Option.

- 7. a) What is the bypass switch on the RSM/Utility Card used for?
- b) Why must it be enabled during the installation process?
- c) What are the two ways you can enable/disable the bypass switch?

11. How does the cabling for the GAC differ on a Card Option?

12. Briefly describe how to install the HVS software on a Modular Option.

13. Once the physical installation is complete, what must be completed before initiating a database swap on the PMS?

Practice feedback

1. What is an HVS Hardware Kit?

An HVS Hardware Kit is an additional hardware package that contains all of the additional equipment necessary to support HVS. The contents of the HVS Hardware Kit will vary depending on which system HVS is to be installed.

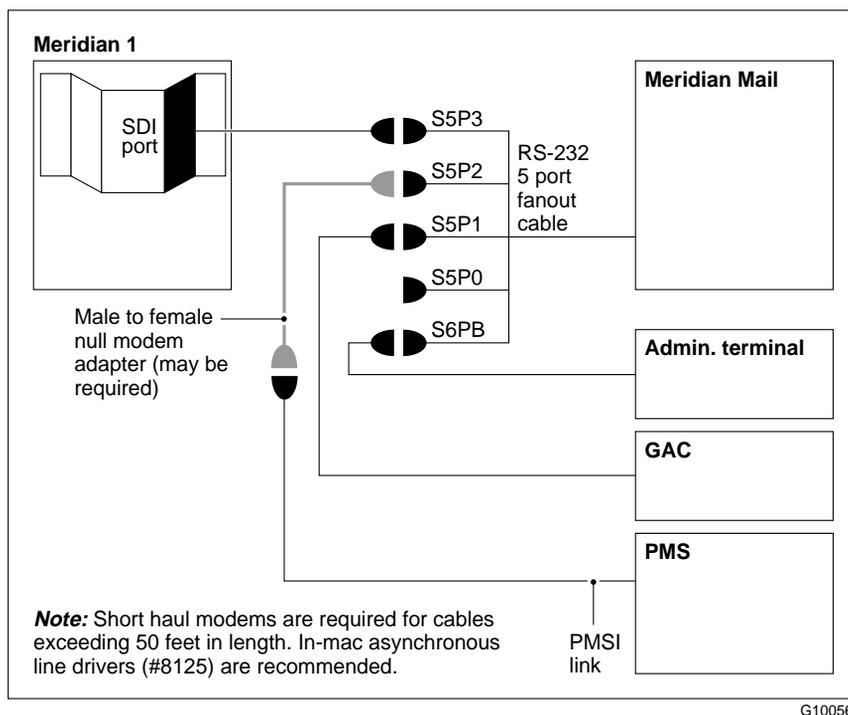
a) What is the difference between a DTE and a DCE device?

A DTE device is any piece of equipment at which a communication path begins or ends, such as a terminal. A DCE device is a unit that provides all the functions required to establish, maintain and terminate a connection, including signal conversion and coding.

b) Why is it important to understand this when installing the HVS hardware?

It is important to understand the difference between DTE and DCE because the PMSI cabling configuration will differ, depending on whether PMS has been configured as a DTE or DCE device.

- Using the following diagram, draw in the basic cabling requirements for HVS. This sketch does not have to be platform specific.



- The PMS systems may be located more than 50 feet away from the Meridian 1. If this is the case, how will the cabling setup change to support this?

A short-haul modem will be inserted between the PMS cable and the fanout cable connection.

- What is the difference between an RSM cable and an RSM fanout cable?

The RSM cable connects the RSM Card to the EMI filter, located on the connector panel on the back of the module. The RSM fanout cable connects to the other side of the EMI filter and is used to attach other peripheral devices (MMI, GAC, PMS) and to establish the PMSI link.

5. List the steps required to install an RSM on a Modular Option.

1	Remove the front and rear covers from the module in which the RSM is to be installed.
2	Disconnect cabling at the front of the ESBC card.
3	Remove the ESBC card and set the hampers to indicate that an RSM card is present. (See the appropriate NTP for switch and jumper settings.)
4	R-insert the ESBC card.
5	Disconnect cabling at the front of the NVP cards.
6	Remove the NVP cards and carefully put them aside.
7	Route the RSM cable (NT6D4406) along the inner panel (just to the right of the RSM card slot to the rear of the shelf). Clamps are provided to secure the cable along the panel.
8	Go to the rear of the module and inspect the connector panel. Locate the ports marked RSM.
9	Insert the 50 Pos. EMI Filter and Mounting (A0361136) into the port labeled RSM on the connector panel. One side of the filter will be facing outwards and the other side will be facing the "inside" of the connector panel towards the back of the module.
10	Mount the J1 connector of the RSM cable (NT6D4406) onto the side of the EMI filter that is facing the back of the module. Secure the bail lock onto the connector.
11	Connect the RSM fanout cable (NT4R20AA) to the other side of the EMI filter that faces outwards, away from the back of the module.
12	Re-install the NVP card and reconnect the cabling at the front of the cards.
13	Make sure the switch settings on the RSM card have been set according to the table in the NTP. Install the RSM card into slot 8 of the appropriate node.
14	Connect the other end of the RSM cable (not the RSM fanout cable) to the front of the RSM card.
15	Inspect all cables and cards to ensure that they are properly seated.
16	Reinstall front and rear covers.

7. a) What is the bypass switch on the RSM/Utility Card used for?

The bypass switch is used to “disconnect” Meridian Mail from the PMSI link. The PMS system remains “connected” to the Meridian 1, and remains functional.

- b) Why must it be enabled during the installation process?

The bypass is enabled during the installation process to prevent any inadvertent traffic being sent across the link, which might cause one of the systems to fail or operate improperly.

- c) What are the two ways you can enable/disable the bypass switch?

The bypass switch can be set manually by flipping the hard switch located on the card itself, or on an operating system, it can be set through system software using the Meridian Mail Administration terminal or GAC.

8. a) List the steps required to install the PMSI link on an EC option.

1	Make sure you have the appropriate PMS cabling ready. (Refer to the PMS hardware information noted above.)
2	Schedule a time to disable the PMS system. If this is an upgrade, and both the Meridian 1 and Meridian Mail have already been pre configured, the system will be down for approximately 15 minutes. New installations will probably require the PMS to be down for a longer period.
3	Set the bypass switch on the Utility card into the down position, which enables the bypass. The LED turns off.
4	If this is an upgrade, remove the PMS cable currently installed in the SDI card in the Meridian 1 to disconnect the link between PMS and the Meridian 1.

5	Disable the SDI card and ensure that the PMS port on the card is set to 1200 bps. Do not reenble the SDI card yet.
6	<p>If the PMS is configured as DTE</p> <ul style="list-style-type: none"> • To connect the PMS to the RS-232 fanout cable, have the PMS vendor connect one end of the PMS's null modem cable to the PMS, and connect the other end to port S5P2 of the 5-port fanout cable. • To connect the Meridian 1 to the RS-232 fanout cable, connect one end of the null modem RS-232 cable (NTND82AB) into the SDI port on the Meridian 1 and the other into SP5P3 of the 5-port RS-232 cable. • Refer to NTP 553-3001-211 and verify that the SDI card being used has the jumpers for the PMS port set for DCE (or "Modem").
7	<p>If the PMS is configured as DCE</p> <ul style="list-style-type: none"> • To connect the PMS to the RS-232 fanout cable, have the PMS vendor connect one end of the PMS' null modem cable to the PMS, and connect the other end to port S5P2 of the 5-port fanout cable. • To connect the Meridian 1 to the RS-232 fanout cable, connect one end of the null modem RS-232 cable (NTND91AB) into the SDI port on the Meridian 1 and the other into SP5P3 of the 5-port RS-232 cable. • Refer to NTP 553-3001-211 and verify that the SDI card being used has the jumpers for the PMS port set for DCE (or "Modem").
8	Reenable the SDI card.

b) What steps would be different if you were installing it on a Modular Option?

*On a Modular EC, the fanout cable is already in place.
On a Modular Option, the fanout cable needs to be installed.*

9. How does the PMSI cabling differ on a Card Option?

The PMSI cabling on a Card Option does not use any fanout cable. The PMS cable terminates directly on the BIX block, which is then jumpered to the Meridian Mail Card Option.

10. How do you install a GAC on a Modular Option or EC platform?

- *Run the Null Modem Cable for the GAC(s) from the switch room to where the GACs will be located.*
- *Connect one end of the Null Modem Cable for the GACs into either of the first two cables on the RS-232 fanout cable (labeled S5P0 or S5P1 for the EC's 5-port cable, and port A and B for the Modular Option's 4-port cable).*
- *Connect the other end of the Null Modem Cable to the "Comm" connection on the back of the GAC Console.*
- *Enter setup mode (F3) from the GAC's keyboard and configure the terminals as identified in the Terminal configuration appendix in the Installation and Maintenance Guides (NTP 555-70xx-250).*
- *The ports on the RSM/Utility card will have been configured at the factory to support the GAC according to the original order, so no additional configuring is required. If you are installing any additional GACs, contact your Nortel support facility to have the Utility Card reconfigured.*

11. How does the cabling for the GAC differ on a Card Option?

The GAC cabling on a card option does not use any fanout cable. The GAC cable terminates directly on the BIX block, which is then jumpered to the Meridian Mail Card Option.

12. Briefly describe how to install the HVS software on a Modular Option.

Using the appropriate keycode, follow the standard software installation procedures outlined in System Installation and Modification Guide (NTP 555-7001-215). HVS cannot be installed as part of a feature expansion.

13. Once the physical installation is complete, what must be configured before initiating a database swap on the PMS?

Make sure that the Meridian Mail, Meridian 1, and PMS systems have all been configured.

Lesson 6: Meridian 1 configuration

About this chapter	<p>In order to successfully complete this chapter, you must be familiar with how to install “regular” Meridian Mail on each of the following platforms:</p> <ul style="list-style-type: none">• Card Option (Option 11)• Modular Option EC (Enhanced Capacity)• Modular Option Classic
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• installation technician• maintenance technicians
Where this lesson should be completed	<p>In the switch room, at the Meridian 1 administration terminal.</p>
Estimated completion time	<p>Approximately 1 to 1.5 hours</p>
What you need before you start	<ul style="list-style-type: none">• pencil• <i>X11 Software Features Guide</i> - Release 18, Book 1 (NTP 553-3001-305 - P0738402)• <i>X11 Release 18 Input/Output Guide</i> - Release 18, Book 1 and 2 (P0738403)• <i>Meridian Mail System Administration Reference Manual</i> (NTP 555-7001-301)• <i>SL-1 Background Terminal User Guide</i> (P0735211)
What you will learn	<p>After completing this lesson, you will be able to do the following:</p> <ul style="list-style-type: none">• List the five items you should verify about the Meridian 1 before configuration begins.• Configure the Hospitality Voice Messaging queue according to the type of service planned.• Understand the role the background terminal plays in setting up the PMSI, and use the background terminal to

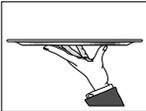
set up the Meridian 1 according to the PMS protocol and features chosen.

- For each PMS feature selected, use the appropriate Overlay to configure the Meridian 1 to support it.
- Configure the guest room telephone sets for one-touch access.
- Configure the guest room telephone sets using pre-translation.
- Perform all of the above on both the Meridian 1 and Card Option CPEs.

What to do

1. Read Chapter 5, “Meridian 1 Configuration,” in the *HVS Implementation Guide*. You will be referred to a number of NTPs, so make sure you have them available before you start. Feel free to refer to NTP 553-3001-305, the *X11 Release 18 Input/Output Guide*, or the *SL-1 Background Terminal User Guide*, if you wish.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 5 of the *HVS Implementation Guide* again, or talk to someone who is familiar with hotel property management systems, or both.

Practice scenario



Situation

You are part of the project team installing Meridian HVS at the Aquaventure Hotel. Yesterday, Mr. Jones, the hotel’s Systems manager, and Mr. Brown, the PMS vendor, had a meeting to identify the PMS features and services the hotel will use, and you can now configure the Meridian 1. As you complete the configuration, you are going to review the process with Jane Doe who will be the system administrator for the HVS installation at the Aquaventure Hotel.

Instructions

Answer the questions below by recalling the information provided in Chapter 5 of the *HVS Implementation Guide*. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate section in the guide. If you wish, find a colleague who is knowledgeable about the information covered in this chapter, and verbally provide the answers.

1. Before you begin to configure the Meridian 1, what five items should you verify first?

2. The Aquaventure Hotel is planning to perform a phased cutover. Briefly describe the set up of the Hospitality Voice Messaging Queues necessary to support this cutover plan.

3. Why is it important to deactivate the confirmation option on the background terminal if a PMSI link is going to be established?

4. Complete the following to configure the PMS port on the SDI.

Prompt	Response	Description
REQ		
TYPE		
ADAN		
CTYP		If using a QPC 139 card
		If using a QPC 841 card
		If using an NT8D41 card
USER		
CUST		
MANU		

5. In what Load is this configuration done?

6. Why does Nortel recommend that the PMS terminals not be able to activate the Do Not Disturb feature?

7. The Aquaventure Hotel will be providing automated wake-up calls using different languages. What five steps must you perform to make sure the Meridian 1 is configured to support this service?

8. The Meridian 1 is already using the CPND feature. What three steps are you going to perform to make sure the CPND feature on the Meridian 1 is properly configured to support HVS?

9. When guests request a Do Not Disturb, anyone calling a guest room will be forwarded to the guest's mailbox. What three items must be programmed in the Meridian 1 to support this setup?

10. The housekeeping department wants to update the housekeeping status of guest rooms by using some sort of telephone feature. What is the name of this feature, and how do you configure the Meridian 1 to support their request?

11. If housekeeping wanted to know who updated the housekeeping status of a guest room, what feature is required and what Meridian 1 programming is needed?

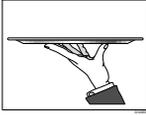
12. Complete the following to configure a guest room telephone set.

Prompt	Response	Description
REQ		
TYPE		
TN		
HUNT		
CLS		
FTR		

13. How do you configure one-touch access with autologon, on an analog set with multiple keys?

14. Some of the rooms at the Aquaventure Hotel use 2500 telephone sets. What is the most efficient way a guest can access Meridian Mail from these types of guest room phones, and how do you set it up on the Meridian 1?

15. The hotel wants to restrict and unrestrict the guest room telephones during the check-in and checkout process. What is the most efficient way of configuring the Meridian 1 to support this feature and still minimize the amount of traffic being sent across the link?

Practice feedback

1. Before you begin to configure the Meridian 1, what five items should you verify first?
 - a) *Check the system time and date.*
 - b) *Confirm that the system has the correct issue and release to support HVS.*
 - c) *Confirm that the system has the correct software packages to support HVS.*
 - d) *Identify the type of SDI card being used.*
 - e) *Confirm the background option settings.*

2. The Aquaventure Hotel is planning to perform a phased cutover. Briefly describe the setup of the Hospitality Voice Messaging Queues necessary to support this cutover plan.
 - a) *Configure a primary Voice Messaging queue containing the agents.*
 - b) *Configure a second Hospitality Voice Messaging queue, with no agents. This Voice Messaging queue should have NCFW to the operators, or wherever the message center is. All guests dialing the message center are connected directly. This is the queue used prior to the cutover.*
 - c) *Configure a third Hospitality Voice Messaging queue with no agents. This Voice Messaging queue should have NCFW to the primary voice messaging queue. When ready to cutover the guest rooms to voice mail, just replace the second Voice Messaging queue with this one. Guests are now forwarded to Meridian Mail.*

3. Why is it important to deactivate the confirmation option on the background terminal if a PMSI link is going to be established?

Because the confirmation option might affect the full control of the PMSI link.

4. Complete the following to configure the PMS port on the SDI.

Prompt	Response	Description
REQ	CHG	
TYPE	CFN	
ADAN	NEW	
	TTY	
	2	
CTYP	SD11	If using a QPC 139 card
	SD14	If using a QPC 841 card
	XSDI	If using an NT8D41 card
USER	PMS	
CUST	0	
MANU	PMSI	

5. In what Load is this configuration done?

Overlay 17, Configuration Record.

6. Why does Nortel recommend that the PMS terminals not be able to activate the Do Not Disturb feature?

The Do Not Disturb feature is used for more than just preventing calls from going to a guest room. It is the method most often used by the operators to “flag” that a guest wishes to have their calls routed somewhere else. The DND feature should, therefore, be controlled by the operators and no other hotel employee.

7. The Aquaventure Hotel will be providing automated wakeup calls using different languages. What five steps must you perform to make sure the Meridian 1 is configured to support this service?
- *Make sure the language identifier table is configured. Make sure the MLWU package and its associated software packages have been installed.*

- *Make sure the guest telephone sets are configured with CCSA class of service.*
- *Make sure each RAN has the wake up greeting recorded with the appropriate language, with RAN 0 being the default language.*
- *Activate the automatic clearing of the language for the room at checkout by entering the following command on the Meridian 1 background terminal:*

SE OP CH LA ON <CR>

8. The Meridian 1 is already using the CPND feature. What three steps are you going to perform to make sure the CPND feature on the Meridian 1 is properly configured to support HVS?
 - a) *In Overlay 95, configure CPND, with MXLN and DFLN prompts set to 23.*
 - b) *Configure the guest telephones to have the FTR set to CPND and have CCSA class of service.*
 - c) *Configure the staff display sets to have CNDA class of service.*
9. When guests request a Do Not Disturb, anyone calling a guest room will be forwarded to the guest's mailbox. What three items must be programmed in the Meridian 1 to support this setup?
 - a) *In Overlay 15 - Customer Data Block, configure DNDS as "yes" to allow the DND feature to hunt.*
 - b) *On the guest room telephone set, make sure the CLS HTS is configured.*
 - c) *On the guest room telephone set, make sure the FTR EHT is set to the Hospitality Voice Messaging DN.*
10. The housekeeping department wants to update the housekeeping status of guest rooms by using some sort of telephone feature. What is the name of this feature, and how do you configure the Meridian 1 to support their request?

The Room Status feature is used. Package 100 - RMS must be loaded on the Meridian 1, and the SPRE codes configured.

11. If housekeeping wanted to know who updated the housekeeping status of a guest room, what feature is required and what Meridian 1 programming is needed?

The Maid ID package is required (210 - MAID). No further programming is needed.

12. Complete the following to configure a guest room telephone set.

Prompt	Response	Description
REQ	NEW	
TYPE	500	
TN	xxx-x-xx-x	
HUNT	xxxx	Hunt to Voice Messaging DN
CLS	CCSA	Controlled Class of Service Allowed
CLS	MWA	Message Waiting Allowed
CLS	FNA	Forward No Answer
CLS	HTA	Hunting Allowed
CLS	LPA	Message Waiting Lamp Allowed
CLS	CFTA	Call Forward by Call Type Allowed
CLS	DTN	Digitone
CLS	XFA	Call transfer allowed. This will allow the call sender feature in Meridian Mail to work.
FTR	CPND	CPND name assignment allowed (if CPND is going to be used).
FTR	EFD xxxx	External Flexible call forward to voice messaging DN

Prompt	Response	Description
FTR	EHT xxxx	External Hunt to voice messaging DN
FTR	FDN xxxx	Flexible Call Forward No Answer to voice

13. How do you configure one-touch access with autologon, on an analog set with multiple keys?

Somewhere under the face plate is a programming “on/off” switch. Turn it “on” and then enter the appropriate programming command, according to the manufacturer’s instructions. When finished, turn the programming switch “off” and replace the face plate.

14. Some of the rooms at the Aquaventure Hotel use 2500 telephone sets. What is the most efficient way a guest can access Meridian Mail from these types of guest room phones, and how do you set it up on the Meridian 1?

Set up a pre-translation (X-list) (see NTP 553-301-305, chapter titled “Pre-Translation.”) Review the existing numbering plan to identify the number that will be assigned to Hospitality Voice Messaging DN. Determine the access restrictions for this service.

15. The hotel wants to restrict and unrestrict the guest room telephones during the check-in and checkout process. What is the most efficient way of configuring the Meridian 1 to support this feature and still minimize the amount of traffic being sent across the link?

Activate the “automatic change of the control of restriction” feature, so that when the Meridian 1 receives a checkout message from the PMS, it automatically restricts the guest room telephone set. To activate the automatic change to the level of restriction on check-in/checkout, one of the following commands must be entered at the Meridian 1 background terminal

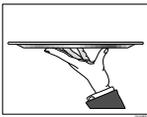
Background entry	Room checked in	Room checked out
SE OP CH CO ON <CR>	Unrestricted	CCOS active
SE OP CH E1 ON <CR>	ECC1 active	CCOS active
SE OP CH E2 ON <CR>	ECC2 active	CCOS active

Lesson 7: Hospitality Install Parameters

About this chapter	The Hospitality Install Parameters are used to define the Meridian Mail portion of the Property management system interface (PMSI). These parameters are configured after the physical links between Meridian Mail, the PMS and the Meridian 1 have been established. In this chapter you will learn how to configure the Hospitality Install Parameters in both a PMS and non-PMS environment.
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• installation technician• maintenance technicians• the customer's MIS staff• the customer's PBX manager
Where this lesson should be completed	Initially at the Meridian 1 administration terminal, and then in a quiet area.
Estimated completion time	Approximately 1 to 2 hours
What you need before you start	<ul style="list-style-type: none">• pencil• <i>HVS Implementation Guide</i>
What you will learn	<p>After completing this lesson, you will be able to do the following:</p> <ul style="list-style-type: none">• Explain what the Hospitality Install Parameters are.• Identify who is involved in planning the Hospitality Install Parameters.• Plan and configure the Hospitality Install Parameters in a non-PMS environment.• Plan and configure the Hospitality Install Parameters in a PMS environment.

What to do

1. Read Chapter 6, “Planning the Hospitality Install Parameters,” in the *HVS Implementation Guide*. Using this information, access the Hospitality Install Parameters screen from the Meridian Mail administration terminal. Feel free to move through the screens on your administration terminal.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 6 of the *HVS Implementation Guide* again, or talk to someone who is knowledgeable about the PMSI and the Hospitality Install Parameters, or both.

Practice scenario**Situation**

The HVS hardware has now been installed at the 2001 room Peyton Hotel. The Hospitality Install Parameters now need to be planned and configured.

Instructions

1. On the following page are notes from a conversation you had with Mr. Howell, the PMS vendor, and Miss Stone, the hotel’s MIS director. Using the Hospitality Install Parameters worksheet that follows the notes, sort through the information noted and plan the Hospitality Install Parameters. If no applicable information has been provided, you can assume that system defaults will be acceptable.
2. Answer the questions that follow the Hospitality Install Parameters worksheet by recalling the information provided in Chapter 6 of the *HVS Implementation Guide*. Check your answers against the recommended answers that follow the practice. If you miss a question, review the appropriate sections in the chapter.

Peyton Hotel**Notes from a meeting with Mr. Howell and Miss Stone**

- With so many international travelers anticipated to visit the hotel, the managers have purchased an HVS system with four languages: German, English, Spanish, and Finnish.
- The Peyton Hotel currently provides automated multi-language wakeup service in the following languages: Finnish, English, Portuguese, Spanish, German, and French. Finnish is the native language.
- Their Encore PMS system has enhanced PMSI capabilities and can respond to all polling messages.
- The PMS programs are written using the Finnish alphabet.
- Guests will be using their last name for passwords.
- CPND is supported on the Meridian 1.
- Meridian Mail is to wait for the appropriate ACK/NAK from the PMS during any message transmissions.
- Miss Jarvis wants to have a minor alarm show up on the attendant console if there is any kind of problem with the PMS link.
- Meridian Mail must provide a maximum of five NAKs when an error message is received.
- PMS1 will be the protocol used.
- The front desk clerks are being trained to check Meridian Mail for any remaining messages the guest may have, prior to checking out. They will do this using their PMS terminal, and any voice count information will automatically display on their screen.
- The RANs for the wake ups were defined using alpha-numeric mnemonics. A printout from the Meridian 1 shows the following:
LANG 0:SP 1:EN 2:FR 3:GE 4:FI 5:PO
- If the Encore system is inactive for more than five minutes, Meridian Mail must send a polling message.
- Meridian Mail must wait for four one-hundredths of a second for an ACK/NAK from the PMS before retranslating the message.

Hospitality Administration

View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links

	PMS1	PMS2	PMS3
PMS Protocol:			
Maximum Length of PMS Name	_____		
Is Calling Party Name Display Supported?	No	Yes	
Activate SL-1 Alarm on PMSI Link Errors?	No	Yes	

PMS Link Parameters

PMSI Link to PMS Exists?	No	Yes
Expect ACK/NAK from PMS?	No	Yes
PMS supports "IS TEST" polling message?	No	Yes
Maximum Number of NAKs permitted:	_____	
PMS Link InActivity TimeOut in Minutes:	_____	
PMS Link Timeout in 100ths of a second:	_____	

SL-1 Link Parameters

PMSI Link to SL-1 exists?	No	Yes
---------------------------	----	-----

Voice Count Parameters

Asynchronous Voice Count Option:	None	AnyChange	ToFromZero
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Instances when a Voice Count message is sent to PMS:

None: Only in response to "IS QV" message from PMS

AnyChange: Any change in a guest's unread messages occurs.

ToFromZero: When guest unread voice message counts change zero to non-zero or vice-versa

Note: If the "Route Voice Counts to" field (below) is set to GAC, then the Asynchronous Voice Count Option must be set to NONE.

At Check Out, Issue Voice Counts:	No	Yes
Route Voice Counts to:	GAC	PM S

361782
080393

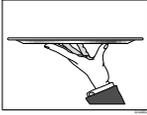
1. Who is responsible for planning the Hospitality Install Parameters?

2. If the Peyton Hotel decided not to use a PMS system, what fields in the Hospitality Install Parameters would need to be configured?

3. There are three language services available to guests. Which two are affected by the parameters defined in the Hospitality Install Parameters?

4. What is the third language service available to guests, and where is this service defined in the Meridian Mail database?

5. If you were installing a single language HVS system, what part of the Hospitality Install Parameters would require configuration?

Practice feedback

Your Hospitality Install Parameters should look like the following example.

Hospitality Administration

View/Modify Hospitality Install Parameters

PMSI Parameters

Parameters Common to PMS and SL-1 Links

PMS Protocol:	<input type="text" value="PMS1"/>	PMS2	PMS3
Maximum Length of PMS Name	<input type="text" value="23"/>		
Is Calling Party Name Display Supported?	<input type="text" value="No"/>	<input type="text" value="Yes"/>	
Activate SL-1 Alarm on PMSI Link Errors?	<input type="text" value="No"/>	<input type="text" value="Yes"/>	

PMS Link Parameters

PMSI Link to PMS Exists?	<input type="text" value="No"/>	<input type="text" value="Yes"/>
Expect ACK/NAK from PMS?	<input type="text" value="No"/>	<input type="text" value="Yes"/>
PMS supports "IS TEST" polling message?	<input type="text" value="No"/>	<input type="text" value="Yes"/>
Maximum Number of NAKs permitted:	<input type="text" value="5"/>	
PMS Link InActivity TimeOut in Minutes:	<input type="text" value="5"/>	
PMS Link Timeout in 100ths of a second:	<input type="text" value="4"/>	

SL-1 Link Parameters

PMSI Link to SL-1 exists?	<input type="text" value="No"/>	<input type="text" value="Yes"/>
---------------------------	---------------------------------	----------------------------------

Voice Count Parameters

Asynchronous Voice Count Option:	<input type="text" value="None"/>	AnyChange ToFromZero
Instances when a Voice Count message is sent to PMS:		
None:	Only in response to "IS QV" message from PMS	
AnyChange:	Any change in a guest's unread messages occurs.	
ToFromZero:	When guest unread voice message counts change zero to non-zero or vice-versa	

Note: If the "Route Voice Counts to" field (below) is set to GAC, then the Asynchronous Voice Count Option must be set to NONE.

At Check Out, Issue Voice Counts:	<input type="text" value="No"/>	<input type="text" value="Yes"/>
Route Voice Counts to:	GAC	<input type="text" value="PMS"/>

Hospitality Administration

More Above

View/Modify Hospitality Install Parameters

Language Identifier Table

Language ID Provided in PMSI messages No Yes

ID:	Language:	German	English	Finnish
<u>FI</u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>
<u>GE</u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>
<u>EN</u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>
<u>SP</u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>
<u>PO</u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>
<u> </u>	<u>Spanish</u>	<u>German</u>	<u>English</u>	<u>Finnish</u>

International Character Mapping on PMSI Link

Hexidecimal	Character Description	Character Equivalent	Mapping
40	Commercial AT	@	<u>A</u>
5B	Left Square Bracket	[<u>O</u>
5C	Reverse Solidus (Backlash)	\	<u>A</u>
5D	Right Square Bracket]	<u>U</u>
5E	Circumflex Accent	^	<u>e</u>
60	Grave Accent	`	<u>a</u>
7B	Left Curly Bracket	{	<u>o</u>
7C	Vertical Line		<u>a</u>
7D	Right Curly Bracket	}	<u>u</u>
7E	Tilde	~	<u> </u>
5F	Underscore	_	<u> </u>
23	Octothorpe	#	<u> </u>

1. Who is responsible for planning the Hospitality Install Parameters?

Planning the Hospitality Install Parameters is a team effort, involving the Meridian Mail/Meridian 1 representative, the PMS vendor, and the hotel's MIS staff.

2. If the Peyton Hotel decided not to use a PMS system, what fields in the Hospitality Install Parameters would need to be configured?
 - *Is Call Party Name Display Supported?*
 - *PMSI Link to PMS Exists*
 - *Voice Count Parameters*
3. There are three language services available to guests. Which two are affected by the parameters defined in the Hospitality Install Parameters?
 - *Automatic wakeup calls.*
 - *Meridian Guest Mailbox system prompts in their own language.*
4. What is the third language service available to guests, and where is this service defined on the Meridian Mail database?

Dual language prompting, which is defined in the Voice Administration section.
5. If you were installing a single language HVS system, what part of the Hospitality Install Parameters would require configuration?

Complete the first page of the worksheet, and on page two, just a NO in the field titled "Language ID Provided in PMSI messages."
6. When is it not necessary to map international characters in the Hospitality Install Parameters?

When the language being used by the PMS is the same as U.S. ASCII, and there are no unusual characters used by the PMS system for any PMSI messages.

7. a) In the Peyton Hotel configuration which you have just completed, were there any invalid characters identified? If so, list them.

Eight invalid characters were identified as follows.

Hex	22	2A	2B	3A	3F	40	5B	5C	5D	5E	5F	60
U.S. ASCII	"	*	+	:	?	@	[\]	^	_	`

G100551

- b) What should you do if there are any invalid characters?

These invalid characters should not be used in any of the PMS commands sent across the link because they conflict with the U.S. ASCII characters used in high-level programming commands on the Meridian 1, Hex 22, Hex 2A, and Hex 3A. If the Meridian 1 receives a message containing any of these characters, the entire message is rejected and a NAK is sent back to the PMS.

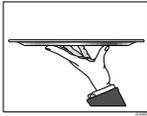
The remaining characters affect Meridian Mail. If Meridian Mail receives a message containing any of these characters, the message is accepted, but the offending character is stripped. If these characters were used in any of the guest names, when Meridian Mail strips the offending character, the guest will not be able to log on to the mailbox because the information in the PMS does not match that found in Meridian Mail.

Lesson 8: Hospitality profile

About this lesson	Not all hotels are alike. Each is capable of offering many different services. This is also true for Meridian Mail messaging. For this reason, hotels will want to customize the messaging services that can be offered to their guests. The hospitality profile is where this is done. In this lesson, you will learn how to plan and configure the hospitality profile.
Where this lesson should be completed	At a Meridian Mail administration terminal to begin with, and then in a quiet area.
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• installation technicians• maintenance technicians• end-user trainers• the customer's telecommunications management team
Estimated completion time	Approximately 45 minutes.
What you need before you start	<ul style="list-style-type: none">• pencil• <i>System Administration Guide</i>• <i>HVS Implementation Guide</i>
What you will learn	After completing this lesson, you will be able to do the following: <ul style="list-style-type: none">• Briefly describe what the hospitality profile is.• Identify who plans the hospitality profile.• Identify which parts of the hospitality profile are planned by the Meridian Mail expert.• Identify which parts of the hospitality profile require the hotelier's input.• Plan and configure the hospitality profile.• Verify and change any of the hospitality greeting.

What to do

1. Open the *HVS Implementation Guide* to Chapter 7, “Planning and Configuring the Hospitality Profile,” and read it. Using this information, access the Hospitality Profile screen from the administration terminal. As you read, feel free to move through the screens on your administration terminal.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts on the next page.
3. When you have finished the practice, review the answers that follow. If you still have questions, review the chapter again, or talk to someone who is knowledgeable about the hospitality profile.

Practice scenario**Situation**

HVS has been installed for the 846-room Granda Hotel, and the hospitality install parameters have been defined. You are now ready to plan and define the hospitality profile.

Yesterday, you had a meeting with Miss Jonsen, the Rooms Division Manager, to discuss the hospitality profile.

Instructions

1. On the following pages are notes from a conversation you had with Miss Jonsen. Using the hospitality profile and greeting worksheets that follow the notes, sort through the information noted and plan the hospitality profile. If no applicable response is noted, you can assume that the system defaults will be acceptable.
2. Answer the questions that follow the hospitality profile worksheet by recalling the information provided in Chapter 7 of the *HVS Implementation Guide*, and filling in the blanks. If you miss a question, review the appropriate sections in the chapter. If you wish, find a colleague who is knowledgeable about the information covered in this lesson, and verbally provide the answers.

Granda Hotel**Notes from the meeting with Miss Jonsen**

- Guest passwords are to be the first four letters of the guest's last name.
- If a text message is left in the PMS, the hotel operators are to retrieve it and read it to the guest.
- If the guest is on the phone when someone calls, the caller is to hear the standard system greeting.
- Rosy Dale, a sales manager, will be doing the customized recording.
- If someone calls a guest room where voice messaging has been disabled, the caller is to be routed to the hotel operator for assistance.
- If a guest's phone is not answered, the caller is to hear the standard system greeting.
- The introductory message is only played when guests receive their first message.

- Anyone calling a vacant room should be told, *“This room is vacant. You will now be forwarded to the hotel operator for assistance.”*
- If someone calls a guest room that is vacant, the caller is to be routed to the operator for assistance.
- When someone calls a room where Meridian Mail has been disabled, the greeting is to say, *“The guest in this room does not wish to use our voice messaging system. Forwarding you to the operator for alternate messaging services.”*
- The introductory greeting is to say, *“Welcome to the Granda Hotel’s voice messaging system. The system allows callers to leave you a recorded message which you can retrieve at any time. The red light on your phone will light up when you have a new message. When you have listened to your message, if you wish to delete it, just touch 7 and follow the prompts. Thank you.”*
- Guest rooms are four digits in length, except for rooms on floors 1 to 9 where they are four digits in length. To dial these rooms, you have to touch 7 and the room number.
- When an external caller is connected to a guest’s mailbox, he or she should hear the following: *“Welcome to the Granda Hotel’s voice messaging service.”*
- When a guest logs on to his or her mailbox, he or she should hear the standard system greeting.

Hospitality Administration

View/Modify Hospitality Profile

Initial Guest Password Length: _____ Generated Using: [Last_Name] Check_In_Date

Post Check Out Mailboxes

Unread Message Audit (Time): _____
 Read Message Audit (Hours): _____
 Unread Message Retention (Days): _____
 Read Message Retention (Hours): _____

Class Of Service For Guests: _____

Special Mailboxes and DNs

DN for Text Message Center: _____
 Revert DN for Vacant Rooms: _____
 Revert DN for Rooms with no VM: _____

Pad Characters for Room DNs

DN Length: Variable [Fixed] Digits: _____ Left Pad: _____

Instructions if there are Text Messages: None [Press_Zero] GoTo_TV

Customized Greetings Turn MWI On: No [Yes]

Introductory Message: None [Default] Custom Recorded [Voice]:
 Guest System Greeting: None [Custom] Recorded [Voice]:
 Guest Logon Greeting: None [Default] Custom Recorded [Voice]:
 Greeting When Guest's Phone Unanswered: None [Default] Custom Recorded [Voice]:
 Greeting When Guest's Phone Busy: None [Default] Custom Recorded [Voice]:
 Greeting For Vacant Rooms: None [Default] Custom Recorded [Voice]:
 Greeting For Rooms with No VM: None [Default] Custom Recorded [Voice]:

MORE BELOW

Select a softkey >

Customized greetings

Introductory greeting

Guest-system greeting

Guest-logon greeting

Greeting when phone is answered

Greeting when guest's phone is busy

Greeting for vacant rooms

Greeting for rooms with no voice messaging

Practice Questions

1. List two security issues to consider when deciding what kind of password will be used for guest mailboxes.

2. If a guest does not want to use voice messaging, why give them a mailbox in the first place?

3. What operational concern do you have to beware of when deciding whether to activate MWI for the introductory message?

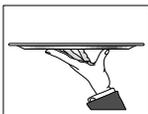
- 4. The hotel manager asks you to rerecord the introductory greeting using a new script. How can you do this?

- 5. If the Granda Hotel allowed guests to retrieve written messages by viewing them on their television sets, what two prompts in the Hospitality Profile would support this service, and how would they need to be configured?

- 6. If the Granda Hotel's room numbers were 101 to 846, and the room DN matched the room number, how would you configure the following?

Pad Characters for Room DNS
DN length: Variable (fixed) Digits: __ Left Pad: __

Practice feedback



- 1. Your hospitality profile should look like the following example:

Hospitality Administration

View/Modify Hospitality Profile

Initial Guest Password Length: 4 Generated Using: Check_In_Date

Post Check Out Mailboxes

Unread Message Audit (Time): 0:400
 Read Message Audit (Hours): 23
 Unread Message Retention (Days): 7
 Read Message Retention (Hours): 3

Class Of Service For Guests:

13

Special Mailboxes and DNs

DN for Text Message Center: 0
 Revert DN for Vacant Rooms: 0
 Revert DN for Rooms with no VM: 0

Pad Characters for Room DNs

DN Length: Variable Digits: 4 Left Pad: 7

Instructions if there are Text Messages: None GoTo_TV

Customized Greetings Turn MWI On:

Introductory Message: None
 Recorded

Guest System Greeting: None
 Recorded

Guest Logon Greeting: None Custom
 Recorded

Greeting When Guest's Phone Unanswered: None Custom
 Recorded

Greeting When Guest's Phone Busy: None Custom
 Recorded

Greeting For Vacant Rooms: None
 Recorded

Greeting For Rooms with No VM: None
 Recorded

Select a softkey >

361784
011195

You should also have a written copy of the customized script requests by Miss Jonsen.

Customized greetings

Introductory greeting

Welcome to the Granda Hotel's voice messaging system. This system allows callers to leave you a recorded message which you can retrieve at any time. The red light on your phone will light up when you have a new message. When you have listened to your message, if you wish to delete it, just touch 7 and follow the prompts. Thank you.

Guest-system greeting

Welcome to the Granda Hotel's voice messaging system.

Greeting for vacant rooms

This room is vacant. You will now be forwarded to the hotel operator for assistance.

Greeting for rooms with no voice messaging

The guest in this room does not wish to use our voice messaging system. Forwarding you to the operator for alternate messaging services.

Answers to the questions

1. List two security issues to consider when deciding what kind of password will be used for guest mailboxes.

If you use "Check-in Date" as the password it does not offer as high a level of security as does the last name because all the rooms that checked in on the same day will use the same password.

Even though you may be tempted to lengthen the guest's password to more than four digits, it is not recommended because guests can easily get themselves locked out of their mailboxes as they attempt to remember more than four digits.

2. If a guest does not want to use voice messaging, why give them a mailbox in the first place?

If a guest room is not assigned a mailbox, Meridian Mail thinks the room is vacant and will present the vacant greeting to the caller. Obviously, callers are going to be upset when they know the room is occupied. By assigning a mailbox and then disabling it, the disabled greeting plays and the caller is forwarded somewhere for assistance.

3. What operational concern do you have to beware of when deciding whether to activate MWI for the introductory message?

Guests equate an illuminated message light with a message. Even though they hear the introductory greeting, they are assuming it plays before the message plays. When they do not hear a message they become concerned and end up calling the operator, asking for their messages. This ties up the switchboard unnecessarily. For this reason, it is recommended that the MWI for the introductory greeting be set to No.

4. The hotel manager asks you to rerecord the introductory greeting using a new script. How can you do this?

Log back in to the administration terminal and access the Hospitality profile. Use the arrow key to select the language and introductory greeting, and use the [Voice] softkey to rerecord the greeting.

5. If the Granda Hotel allowed guests to retrieve written messages by viewing them on their television sets, what two prompts in the Hospitality Profile would support this service, and how would they need to be configured?

Instructions, if there are text messages, would be set to GoToTV, and the DN for the text message center prompt would be left blank.

6. If the Granda Hotel's room numbers were 101 to 846, and the room DN matched the room number, how would you configure the following?

Pad Characters for Room DNS

DN length: Variable (fixed) Digits: 3 Left Pad: __

No left pad is required because all the rooms have three digits and no dialing prefix is being used.

Lesson 9: HVS - General administration

About this lesson

When you administer a Meridian Mail system equipped with HVS, a number of screens are configured a little differently than those found on a “regular” Meridian Mail system. This lesson will review the database and show you where the differences are, give you points to consider when planning the database from a hotelier’s perspective, and show how to configure those areas that are different.

Who should complete this lesson

- system administrators
- installation technicians
- maintenance technicians
- the customer’s telecommunications management team

Where this lesson should be completed

At the Meridian Mail administration terminal.

Estimated completion time

1 to 2 hours

What you need before you start

- pencil
- *System Administration Guide*
- *HVS Implementation Guide*

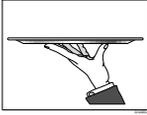
What you will learn

After completing this lesson, you will be able to do the following:

- Navigate through all the screens available on the Meridian Mail administration menu.
- Identify the screens that are specific to HVS only.
- For each individual screen on the system, state what items change as a result of having HVS on the system.
- Plan and configure the general database for an HVS customer.

What to do

1. Open the *HVS Implementation Guide* to Chapter 8, “HVS General Administration,” and read it.
2. When you feel comfortable with the information you have read, complete the practice exercise noted on the next page.
3. When you have finished the practice exercise, review the answers that follow the practice. If you still have questions, review the chapter again, or talk to someone who is familiar with administering a Meridian Mail system equipped with HVS, or both

Practice scenario**Situation**

HVS is being installed at the Rocky Mountain Resort. Ms. Easton, an experienced Meridian Mail system administrator, is on site to help you administer the database. Ms. Easton has not yet administered a system equipped with HVS. As you work together, planning and administering the database, you show her how the database is different.

Instructions

Answer the following questions by recalling the information provided in Chapter 8. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate sections in Chapter 8 of the *HVS Implementation Guide*. If you wish, find a colleague who is knowledgeable about the information covered in this chapter, and verbally provide the answers.

1. If Ms. Easton was looking at the main menu, how would she know she was working on a system equipped with HVS?

2. For each of the following, briefly describe to Ms. Easton which parts of the Meridian Mail HVS database are different from those found on a regular Meridian Mail system.

- a) User administration

b) General administration

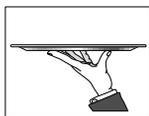
c) Voice administration

d) Hardware administration

e) System Status and Maintenance

f) Operational Measurements

g) TOOLS

Practice feedback

1. If Ms. Easton was looking at the main menu, how would she know she was working on a system equipped with HVS?

There would be one more option titled “Hospitality Administration.”

2. For each of the following, briefly describe to Ms. Easton which parts of the Meridian Mail HVS database are different from those found on a regular Meridian Mail system.

- a) *User administration*

Guest mailboxes do not require the name to be included, and are only added once because they are associated with the guest room itself, not the guest.

Guest mailboxes are not viewed or modified in User Administration. They are viewed or modified in Hospitality Administration.

- b) *General administration*

General Administration does not change on a system equipped with HVS.

- c) *Voice administration*

Channel Allocation Table has two additional services: Hospitality messaging and Post-Checkout Mailbox.

VSDN table has two additional services: Hospitality Messaging and Post-Checkout Mailbox. Hospitality Messaging provides a pop-up window for setting auto login, if desired.

Voice Menu definitions offer two additional services: Hospitality Messaging and Post-Checkout Mailbox.

Outcalling Administration offers guest limited services: delivery to non-users is not available and guests cannot create or modify their own remote notification schedules from their telephones.

- d) *Hardware administration*

The Node configuration will show at least one RSM card in Node 1.

The View Node screen will show the RSM card as being assigned to terminals and PMS.

The Data Port configuration will show the device types as terminals and PMS.

e) System Status and Maintenance

System Status and Maintenance does not change on a system equipped with HVS.

f) Operational Measurements

There are two reports specific to HVS: the Guest Console Statistics Report and the Hospitality Statistics Report.

Other reports will generate different results because of the unique way hotels put demands on a voice messaging system.

g) TOOLS

Two additional utilities are provided: Configure GACs and Check Out all Rooms (also known as Global Check Out).

Lesson 10: Guest administration console

About this lesson

Hotel staff use the guest administration console (GAC) to manage guest messaging. Whether or not it is installed in a hotel that has a Property Management System (PMS), the GAC is an important part of the Hospitality Voice Services system.

In this lesson, you will learn more about the GAC and how it works.

Who should complete this lesson

- system administrators
- installation technicians
- maintenance technicians
- end-user trainers
- the customer's telecommunications management team

Estimated completion time

Approximately 1 to 1.5 hours

What you need before you start

- pencil and paper
- *GAC User Guide*
- a colleague who is knowledgeable about the GAC

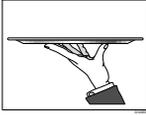
Where this lesson should be completed

At the Guest Administration Console.

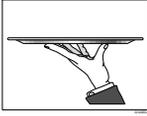
What you will learn

After completing this lesson you will be able to do the following:

- Explain what a guest administration console (GAC) is.
- Describe how the GAC is used in both a PMS and non-PMS environment.
- Demonstrate how to use each of the menu functions on the GAC.
- Describe where a GAC should be located and why this location is important.
- Demonstrate how to change the GAC's logon password.

What to do

1. Open the *HVS Implementation Guide* to Chapter 8, “HVS General Administration,” and refer to the section on the GAC.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts on the next page.
3. When you have finished the practice, review the answers that follow. If you still have questions, review the chapter again, or talk to someone who is knowledgeable about the GAC.

Practice scenario**Situation**

HVS is being installed at the Dallas hotel. You are the system administrator and have scheduled a guest administration console training session with Rick Tracy, the hotel's telecommunications manager, and Wendy Mahoney, Tracy's assistant.

Instructions

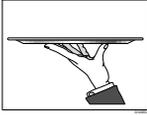
1. Locate a guest administration console (GAC). If it is installed in an operating hotel, make arrangements with the hotel to use it, and ask for three "dummy" room numbers with which to practice.
2. Obtain the *HVS GAC User Guide* and read it. As you work through it, use the accompanying GAC to try each of the commands. Practice as much as you like until you feel confident that you can freely use the features without referencing the user guide.
3. If possible, find a colleague who is familiar with the GAC. Demonstrate your knowledge by accessing each screen and administering guest mailboxes without referencing the user guide. For each command, explain to your colleague what you are doing, and under what circumstances you would do it.
4. Answer the questions below by recalling the information provided in Chapter 8 of the *HVS Implementation Guide*. Check your answers against the recommended answers following the practice. If you miss a question, review the appropriate sections in Chapter 8 of the *HVS Implementation Guide*. If you wish, find a colleague who is knowledgeable about the information covered in this lesson and verbally provide the answers.
 - a) What is a Guest Administration Console?

- b) List the seven services that can be performed using the GAC.

- c) When a GAC is being used on a system interfaced to a PMS, what services are used most frequently, and what services are only used if there is an interface failure?

d) Where in a hotel should the GAC be installed? Why is this location important?

e) How do you change the GAC's logon password?

Practice feedback

1. You should have been able to freely use each of the screens on the Guest Administration Console without referencing the user guide.

2. The answers to the questions are as follows:

a) What is a Guest Administration Console?

The Guest Administration Console is a peripheral terminal attached to the Meridian Mail system through the fanout cable. It is different from the administration terminal in that it is used by the hotel staff, and only allows them to administer guest mailbox services, and manage the interface between Meridian Mail, the PMS, and the Meridian I.

b) List the seven services that can be performed using the GAC.

- 1) Manual Mailbox check-in
- 2) Manual Mailbox checkout
- 3) View/Modify a Mailbox
- 4) Hospitality System Status
- 5) Copy a Mailbox to Another Room
- 6) View PostCheckout Mailboxes
- 7) Manual Mailbox Re-check in

c) When a GAC is being used on a system interfaced to a PMS, what services are used most frequently, and what services are only used if there is an interface failure?

The services used most frequently are

- 1) Hospitality System Status
- 2) View/Modify mailboxes
- 3) View Post-Checkout Mailboxes

The services used only when there is an interface failure are:

- 1) Manual Mailbox check-in
- 2) Manual Mailbox checkout
- 3) Copy a Mailbox to Another Room
- 4) Manual Mailbox Re-check in

- d) Where in a hotel should the GAC be installed? Why is this location important?

The GAC should be installed as close to the hotel operators as possible. This is because they are normally the first person guests contact when they encounter a messaging problem. If more than one GAC is being installed, the other terminals can be located at or near the front desk.

- e) How do you change the GAC's logon password?

Using the administration terminal, from the main menu, select Hospitality Administration and follow the prompts to change the password.

Lesson 11: Hospitality System Status

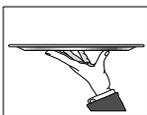
About this lesson	Once the Meridian Mail system has been installed and is up and running, managing the PMSI will be one of your most important <i>ongoing</i> tasks. This lesson will show you how to do this.
Where this lesson should be completed	In the switchroom.
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• installation technicians• maintenance technicians• end-user (Attendants, Front Office, and MIS staff) trainers• the customer's telecommunications and MIS management team
Estimated completion time	1 to 1.5 hours
What you need before you start	<ul style="list-style-type: none">• pencil• the <i>Meridian Mail System Administration Guide</i> applicable to your site• <i>Maintenance Messages (SEERs)</i> (NTP 555-7001-510)• <i>HVS Implementation Guide</i> (NTP 555-7001-221)
What you will learn	<p>After completing this lesson, you will be able to do the following:</p> <ul style="list-style-type: none">• List activities that might be a precursor to an interface problem.• List the people responsible for managing the PMS interface, and describe their roles.• List the two resources used to monitor the PMS interface.• Describe what the Hospitality System Status screen looks like when all links are functioning properly.

- Read and interpret any HVS-related SEER, and describe what action to take.

What to do

1. Open the *HVS Implementation Guide* to Chapter 9, “The Hospitality System Status,” and read it. Feel free to refer to each of the other NTPs (that is, *System Administration Guide* or *SEERs*) when appropriate.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts on the next page.
3. When you have finished the practice, review the answers that follow. If you still have questions, review the chapter again, or talk to someone who is knowledgeable about using the Hospitality System Status and SEERs to manage the PMSI link.

Practice scenario



Situation

You get paged by your local dispatcher to call the Wellson Hotel, Lana Smith, an operator, answers your call. She tells you they have been having a problem with the interface. Kent Jones, the MIS director, has checked things out on the PMS side and it appears fine, but the link is still not working. The hotel is in the middle of a big turn (large group checking out, another large group checking in), and they need the system back up as soon as possible. After talking with Kent, you take a look at the Hospitality System Status, and then go down to the switchroom to look at the information coming off the Meridian Mail printer.

Instructions

Answer the questions that follow by recalling the information provided in Chapter 9 of the *HVS Implementation Guide*. Check your answers against the recommended answers that follow the practice. If you miss a question, review the appropriate sections in the chapter. If you wish, find a colleague who is knowledgeable about the information covered in this lesson, and verbally provide the answers.

1. Take a look at the following screen and answer the questions that follow.

Hospitality Administration

Hospitality System Status

Link from Meridian Mail to PMS:	Link_is_OK
Link from Meridian Mail to SL-1:	Link_is_Down
Switch Between SL-1 and PMS:	Meridian_Mail_On_Line
Room Re-synchronization Mode:	Disabled

Select a Softkey >

Exit	Change Re-sync Mode	Test Links and Update Screen	Change Switch	Acknowledge Alarm
------	---------------------	------------------------------	---------------	-------------------

Having looked at the screen, answer the following questions:

a) Which link is causing the problem?

b) List three symptoms that are associated with this link.

2. Who manages the PMS interface?

- 3. Briefly describe who does what when an interface problem is discovered.

- 4. If there is a problem with Meridian Mail, but the PMS and Meridian 1 are both working, what should you do to the PMSI while troubleshooting the Meridian Mail problem, and how do you do it?

- 5. List the steps to follow when troubleshooting Meridian Mail as a result of a PMSI problem.

- 6. List the steps to follow when troubleshooting the Meridian 1 as a result of a PMSI problem.

- 7. a. What is meant by the phrase “Room Re-synchronization Mode?”

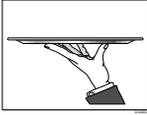
- b. How does it differ from a PMS database swap?

- 8. What are the three classes of SEER that are specific to HVS? Briefly describe them.

- 9. a. What are the two Meridian 1 error codes that are specific to the PMS link?

- b. When you see them, what type of problem is occurring?

- 10. How do you perform a restore and recovery on an HVS system?

Practice feedback

1. a. Which link is causing the problem?

The link between Meridian Mail and the Meridian 1.

- b. List three symptoms that are associated with this link.

MWI is not working.

Housekeeping cannot update Room Status.

Guest room restrictions are not being enabled/disabled.

No VIP wakeup service is available.

2. Who manages the PMS interface?

- the hotel attendants
- the hotel's MIS staff
- the Meridian 1/Meridian Mail team

3. Briefly describe who does what when an interface problem is discovered.

The attendants acknowledge the problem, use the GAC to test the links, and ,if the problem persists, contact the MIS staff.

The MIS staff check to see if the problem is being caused by the PMS. If possible, they will fix the problem, and then initiate a database swap to synchronize all systems again. If the problem persists, they contact the Meridian 1/Meridian Mail technicians.

The technician troubleshoots the Meridian Mail and the Meridian 1. When the problem is resolved, he or she coordinates with the hotel's MIS staff to initiate a PMS database swap. If the problem cannot be resolved, the technicians contacts a Nortel representative.

4. If there is a problem with Meridian Mail, but the PMS and Meridian 1 are both working, what should you do to the PMSI while troubleshooting the Meridian Mail problem, and how do you do it?

The Meridian Mail system should be taken out of the interface, while still allowing the PMS and Meridian to communicate. This is done by either accessing the Hospitality System Status screen and setting the prompt “Switch between SL-1 and PMS” to bypass mode, or physically enabling the bypass switch on the RSM/Utility card. When the problem has been fixed, the bypass should be disabled.

5. List the steps to follow when troubleshooting Meridian Mail as a result of a PMSI problem.
 1. *Activate the bypass switch to remove Meridian Mail from the link.*
 2. *Check all cabling to make sure that all physical connections are secure.*
 3. *Verify if PMS vendor has installed new software. If necessary, modify Hospitality Installed Parameters to support new software.*
 4. *Identify the symptom. Review the Meridian Mail screen that supports the feature, and make sure it is configured properly.*
 5. *Make sure all guest mailboxes have been configured properly.*
 6. *If any database changes are made, perform a full backup.*
6. List the steps to follow when troubleshooting the Meridian 1 as a result of a PMSI problem.
 1. *Check all cabling.*
 2. *Make sure the baud rate on the SDI card matches the PMS.*
 3. *Make sure the background terminal configuration command is turned off.*
 4. *Identify the symptom and review the Meridian 1 configuration that supports the feature and make sure*

it is configured properly.

5. *Disable the SDI port and reenable it.*
6. *Change or replace the SDI port.*
7. *Contact a Meridian 1 engineer and ask for a more detailed analysis using a datascope or protocol analyzer, or the ULMA utility. If the problem still persists at this point, the specific message going across the link needs to be monitored.*

7. a. What is meant by the phrase “Rooms Re-synchronization Mode?”

When “room re-synchronization mode” is enabled, the Meridian Mail database will be updated incrementally on a room-by-room basis. For each PMS message, Meridian Mail updates its database. The update is based on the name of the guest. If a check-in message is received for an occupied room, the room is checked out, and the new guest is checked in. Typically, resynch is enabled when a PMS database swap is initiated after an extended link outage.

- b. How does it differ from a PMS database swap?

The PMS database swap, which is initiated by the PMS, automatically checks each and every room, regardless of occupancy. This is performed after the PMSI link has been down for an extended period of time.

8. What are the three classes of SEER that are specific to HVS? Briefly describe them.

*Class 70—Hospitality Administration Server (HAS)
There is a problem with the HAS server which supports the execution of commands passed to it from the hotel’s PMS and the GAC.*

Class 71—PMS Link Handler (PLH) There is a problem with the PMS link handler which supports the execution of commands between the Meridian Mail, the PMS and the Meridian 1.

Class 72—Hospitality Administration Consoles There is a problem with the GACs.

9. a. What are the two Meridian 1 error codes that are specific to the PMS link?

PMS 610: PMS input/output block printer does not exist.

PMS 611: PMS link does not exist.

- b. When you see them, what type of problem is occurring?

Both of these Meridian 1 error codes indicate that the Meridian 1 database is not configured to support the PMSI link.

10. How do you perform a restore and recovery on an HVS system?

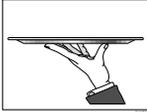
- 1. Put Meridian Mail into bypass mode.*
- 2. Perform restore and recovery according to NTPs.*
- 3. Perform Global Checkout using the TOOLS utility.*
- 4. Disable the bypass mode and put Meridian Mail back into the link.*
- 5. Initiate a PMS database swap.*

Lesson 12: Operational Measurement - HVS Reports

About this chapter	Meridian Mail generates a number of operational measurements reports, two of which are specific to Hospitality Voice Services. In this chapter you will learn how to read and interpret data on the two hospitality reports, and also identify points to consider when reading the other reports from a hospitality perspective.
Who should complete this lesson	<ul style="list-style-type: none">• system administrators• maintenance technicians• the customer's telecommunications management team
Where this lesson should be completed	At the Meridian 1 administration terminal.
Estimated completion time	Approximately 1 to 1.5 hours
What you need before you start	<ul style="list-style-type: none">• pencil• <i>HVS Implementation Guide</i>• <i>System Administration Reference Manual</i> (NTP 555-7001-301)
What you will learn	<p>After completing this lesson, you will be able to do the following:</p> <ul style="list-style-type: none">• List the reports that are specific to a system equipped with HVS.• List points to consider when interpreting reports.• Read and interpret the Hospitality Statistics report.• Read and interpret the Guest Console Statistics report.• For each of the other Meridian Mail reports, identify points to consider that are specific to the hospitality environment.

What to do

1. Read Chapter 8, “HVS General Administration,” in the *HVS Implementation Guide*. You will be referred to the NTPs, so be prepared to use them.
2. When you feel comfortable with the information you have read, complete the practice exercise that starts below.
3. When you have finished the practice exercise, review the answers provided. If you still have questions, review Chapter 8 of the *HVS Implementation Guide* again, or talk to someone who is knowledgeable about Operational Measurements, or both.

Practice scenario**Situation**

It is Tuesday morning at the Villa Hotel (1436 rooms), and you are managing the Meridian Mail system. This hotel is using a Lodgistix property management system. On your desk are the printouts for yesterday’s Hospitality Statistics report and Guest Console Statistics report.

Instructions**Part One: Hospitality Statistics Report**

1. Review the Hospitality Statistics report on the next page.
2. Read the report and define each of the columns, jotting down your answer on the back of the report, or above each column.
3. Interpret the report by answering the questions following the report. Jot down your interpretations in the space below each question.
4. Review Part 1 of the answers at the end of the practice, and compare your interpretations.

Part Two: Guest Console Statistics Report

1. Review the Guest Console Statistics report on page C-123.
2. Read the report and define each of the columns, jotting down your answer on the back of the report, or above each column.
3. Interpret the report by answering the questions following the report. Jot down your interpretations in the space below each question.
4. Review Part 2 of the answers at the end of the practice, and compare your interpretations.

Hospitality Statistics Report

Operational Measurements							
Hospitality Statistics							
Interval Start	#Guests Checked In	#Guests Checked Out	#Exprd with Unread Messages	#New with Unread Messages	Total Unread Msg Length (in minutes)	#Messages Unread	#Messages Read
06/24 0:800	7	104	1	11	96	12	2
06/24 09:00	6	97	0	5	81	10	2
06/24 10:00	32	54	0	4	84	11	1
06/24 11:00	47	61	1	5	74	10	3
06/24 12:00	31	38	1	3	51	8	2

Select a softkey>

EXIT	Next Report	Next Page
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Guest Console Statistics Report

Operational Measurements										
Guest Console Statistics										
Interval Start	View Mbox	Updt Mbox	View PCO Mboxes	Copy Mbox	Check In	Check Out	Re-Check In	Status	View Status	Updt Status
06/24 0:800	40	20	3	0	2	3	0	70		1
06/24 09:00	43	19	1	0	1	4	1	65		0
06/24 10:00	90	47	0	0	3	2	2	63		1
06/24 11:00	56	32	1	1	3	3	3	59		1
06/24 12:00	47	29	1	1	2	3	2	61		2

Select a softkey>

EXIT	Next Report	Next Page
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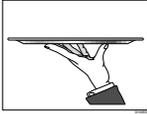
a. Will the counts in the columns be higher or lower if a Property Management System is being used in the hotel? Why?

b. If a lot of mailboxes are being updated, what could be the reason(s), and what should you do about it?

c. If the Copy Mailbox feature is being used, why is it important to keep this count at zero in a hotel with a PMS system?

d. How often should the status be viewed and why? If the status has been updated, what should you do, and why?

Practice feedback



Part One: Hospitality Statistics Report

1. You should have been able to define the columns as follows:
 - *Interval/Start: The day and date data was compiled.*
 - *#Guests Checked In: The number of guests checked in during the interval.*
 - *#Guests Checked Out: The number of guests checked out during the interval.*
 - *#Expired with Unread Messages: Total number of post-checkout mailboxes that expired while still holding unread messages.*
 - *#New with Unread Messages: Total number of post-checkout mailboxes that were created during the interval to hold unread messages.*
 - *Total Unread Message Length (In Minutes): Total length (in minutes) of unread messages in all post-checkout mailboxes.*
 - *#Messages: Unread: Total number of unread messages in all post-checkout mailboxes.*
 - *#Messages: Read: Total number of read messages in all post-checkout mailboxes.*
2. Your notes should have included the following points:
 - a) What is the most important factor to look for when viewing the numbers of guests checked in and the number of guests checked out?

You need to make sure that the number of guests checked in and out in Meridian Mail match the number of guests checked in and out through the PMS (or manually by the Front Desk clerks if no PMS is being used). If the numbers do not match, guest service will be negatively impacted. Each guest checking in should get a mailbox, and each guest checked out should have his or her mailbox disabled. This report shows characteristic check-in and checkout numbers. Check in numbers increase as the time gets closer to the hotel's official check-in time, which is normally some

time in the afternoon. Checkout numbers are high at the start of the morning, and decrease closer to the hotel's checkout time (normally, later morning).

- b) If there are unread messages in post-checkout mailboxes, what should you do?

The primary goal is to have guests retrieve all their messages prior to checking out of the hotel. You are always going to have one or two post-checkout mailboxes, especially in large hotels (with 400 rooms or more), but the aim is to keep the numbers as low as possible. This can be done in the following ways:

- *improving guest collateral about voice messaging services to encourage guests to monitor messages prior to checkout*
- *having the bellmen monitoring the guest room phone when assisting guests with bags at checkout*
- *having the front desk staff checkout routine include a reminder about checking messages prior to leaving the hotel*
- *establishing efficient post checkout message retrieval procedures at the hotel switchboard. Pay special attention to the “total unread message length (in minutes)” column. If this is high, you are taking up valuable disk space.*

Part Two: Guest Console Statistics Report

1. You should have been able to define the columns as follows:
 - *Interval/Start: The day and date data was compiled.*
 - *View Mailbox: Number of times the GAC was used to view a guest's mailbox.*
 - *Update Mailbox: Number of times the GAC was used to update a guest's mailbox.*
 - *View Post Check Out Mailboxes: Number of times the GAC was used to view the list of post checkout mailboxes.*
 - *Copy Mailbox: Number of times the GAC was used to copy (or move) a mailbox to another room.*
 - *Check In: Number of times the GAC was used to check in a guest mailbox.*
 - *Check Out: Number of times the GAC was used to check out a guest mailbox.*
 - *Re-Check In: Number of times the GAC was used to re-check in a guest mailbox.*
 - *View Status: Number of times the GAC was used to view the Hospitality System Status.*
 - *Update Status: Number of times the GAC was used to update the Hospitality System Status.*
2. Your notes should have included the following points:
 - a) Will the counts in the columns be higher or lower if a property management system is being used in the hotel? Why?

If a property management system is being used by the hotel, the counts in the columns will be significantly lower. This is because the hotel's property management system is initiating the commands for the Meridian Mail services. The GAC will only be used when there is an interface (Hospitality System Status) problem. This report shows very low counts across all columns, indicating that the property management system interface is working properly.

b) If a lot of mailboxes are being updated, what could be the reason(s), and what should you do about it?

Mailbox updates may occur for a number of reasons:

- *Guest name spelled incorrectly. If this occurs and a PMS is being used, the name should be corrected through the PMS system.*
- *Mailbox disabled: This can be caused by a password violation. The mailbox would, therefore, have to be reenabled to allow the guest to log on to his or her mailbox. Some mailboxes are intentionally disabled to support guests who cannot (hearing impaired) or do not wish to use guest messaging services.*
- *Password change: Guests may forget their custom password or want a hotel staff member to change it for them. The primary concern is to make sure that the hotel's operating procedures are such that this service is used as little as possible. Make sure reservations and front office staff have procedures that confirm the spelling of guest names, so no time-consuming corrections are necessary. Make sure the guest voice messaging collateral is simple and easy to use, and is readily available throughout the hotel. Make sure all hotel staff in guest contact positions know how to use the guest services, and are aware of procedures to follow should the guest encounter a problem. In this report the number of mailbox updates is minimal, indicating no undue concern during this particular time period.*

c) If the Copy Mailbox feature is being used, why is it important to keep this count at zero in a hotel with a PMS system?

- *Ideally, when a guest is moved to a different room using the PMS system, the PMS will command Meridian Mail to relocate (copy mailbox) to the new room through the PMS interface. Therefore,*

the GAC does not need to be used. A zero count is shown on the Copy Mailbox column, and quality guest service is maintained. Maintaining the PMSI is essential for efficient use of the guest messaging feature.

The problem starts when the link is repeatedly down and the hotel staff do not have airtight manual procedures for ensuring the Meridian Mail system is updated when a change is made in the PMS.

Consequently, guests move to new rooms and messaging services are not updated. Inadequate guest service is the result.

d) How often should the status be reviewed, and why? If the status has been updated, what should you do and why?

- *The hotel staff should develop a system of manually checking the Hospitality System Status regularly, especially if no alarm feature has been installed. Ideally, the system status should be checked hourly. In a hotel with a property management system interface, this is essential.*

Large hotels like the one in this practice exercise generate a significant amount of activity at the front desk and hotel switchboard. If the interface is down, guest service will be significantly impacted and hotel staff will have a difficult time keeping up with all the necessary procedures. If the “update status” column shows activity, find out what happened and why. If it is a human error, rewrite the procedures if necessary, or retrain the staff involved. If it is a system error, try to find the initial cause and aim to prevent it from occurring again.

Glossary

ACK/NAK	<p>ACK is a character transmitted by the receiver of data to ACKnowledge a signal, information, or packet received from the sender.</p> <p>NAK is a character transmitted by the receiver of data to Negatively AcKnowledge that the signal, information, or packet received from the sender contains an error of some kind.</p>
Bellstand	<p>The department, consisting of bell persons, door persons and valet parkers. The bell persons assist guests with their luggage and escort the guest to the room. They also provide a brief orientation of the room and voice messaging services.</p>
BIX block	<p>A modular cross-connect terminal block for in-building use. It consists of a mount (a sheet-metal base with two fire-retardent plastic fanning strips), which can hold up to ten BIX connectors and five designation strips with the associated colored designation labels.</p>
concierge	<p>A person (or department) that assists guests with making restaurant reservations, arranging tours, buying tickets to local attractions, handling mail, getting directions, buying unusual gifts, and other personalized services.</p>
database swap	<p>See PMS database swap.</p>

DCE	Data Communications Equipment. A device that provides all the functions required to establish, maintain, and terminate a connection, including signal conversion and coding between the data terminal equipment (DTE) and the common carrier's line. With an RS-232-C connection in a hospitality setting, a modem is usually regarded as a DCE, and the user device (the PMS system) is a DTE. DCEs typically transmit on pin 3 and receive on pin 2.
DTE	Data Terminal Equipment. Any piece of equipment at which a communication path begins or ends, such as a terminal. The main difference between a DTE and a DCE is the wiring of pins two and three. DTEs typically transmit on pin 2 and receive on pin 3. With an RS-232-C connection in a hospitality setting, a modem is usually regarded as a DCE, and the user device (the PMS system) is a DTE.
folio	A file or account. Each guest staying in a hotel will receive a folio, to which all charges are posted.
front desk	The area of the hotel where guests check in and check out, receive mail, and generally direct questions and concerns.
front office	The room or area located behind the front desk where the hotel's room inventory is controlled. This includes tasks such as updating room status (clean/dirty/out-of-order), room assignments, room blocking, and managing the activities of the clerks who work at the front desk.
GAC	Guest Administration Console. A peripheral terminal attached to the Meridian Mail system through the fanout cable. It is different from the administration terminal in that it is used by the hotel staff, and only allows them to administer guest mailbox services, and monitor the interface between Meridian Mail, the PMS, and the Meridian 1. It is normally located near the hotel operators.
general manager	The senior manager in a hotel.

HEX (hexadecimal)	A numbering system of 16 characters, 10 digits (0-9) and six letters (A-F). It is used to condense the long strings of zeros and ones in large binary numbers.
LAN	Local Area Network. A combination of terminals and other peripheral equipment connected by cables to a central processor. LANs cover a small geographic area, normally a building or campus environment.
MIS	Management Information Systems. The department responsible for managing and maintaining the hotel's property management system and many of the other technologies that may interface with it (that is, point of sale terminals). In small hotels, the MIS manager is often also responsible for the hotel's telecommunications system.
parity	Describing a self-checking method of minimizing transmission errors in received data signals. An extra binary signal is added to each character signal to make the total number of 1s or 0s even or odd for each character.
polling	The process of an intelligent terminal sending a query message to another device (normally, to ask it if it has any data to send).
PBX	<ol style="list-style-type: none">1. A private branch exchange (private telephone system).2. The department in the hotel that provides telecommunications services. It is staffed by the hotel operators and a PBX supervisor or manager. In large hotels, this department is responsible for managing and maintaining the telecommunications system and all associated equipment. In smaller hotels, the MIS manager normally assumes this role.
PMS	Property Management System. A specialized computer system whose principle function is to control room inventory and billing in hotels and resorts.

PMS database swap	The exchange of information between a PMS and the PBX, to resynchronize the status of each guest room. A database swap is initiated by the PMS, either manually or automatically.
PMSI	Property Management System Interface.
RAN	Recorded announcement. A prerecorded greeting or message supplied by the Meridian 1 switch.
real time	At the time the event occurs. It is commonly associated with the posting of a charge to a guest's folio, which happens in real time. The guest pays for a service, the charge is posted electronically and the information is immediately posted to the guest's folio. (It is not stored in a database for batch-posting at a later time.)
room turn	To check a guest out of a room, clean it, and check a new guest right back in. This is normally heard in the context of "we have a big turn today." This is when the hotel is checking out a large group of guests and immediately (same day) checking in another large group. This is very common in convention hotels. Big turn days generate a large amount of PMSI traffic, and are often a reason for interface problems when the link simply cannot handle the traffic.
Rooms Division	All the departments that have direct guest contact, but do not provide food and beverage. The rooms division is most often made up of the Front Desk, Concierge, PBX, Housekeeping, Laundry, Reservations, and Bell Desk. The counterpart to the Rooms Division is the Food and Beverage division (made up of all the restaurants, bars, catering, and banquet departments).
Rooms Executive	The person who is overall manager of the Rooms Division (also known as the Rooms Division Manager) who normally reports directly to the General Manager. The PBX department normally reports to the Rooms Executive.
Systems Department	The hotel's MIS department is sometimes known as the Systems department. <i>See</i> MIS for more details.

List of Fields

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#Guests Checked-Out 276

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