



Key Voice[®] Voice Processing

SYSTEM INSTALLATION AND MAINTENANCE



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REVISION HISTORY

Version	Changes	Owner	Date
4/00	Updated to reflect functionality enhancements incorporated into the NT-based VP system release 10.2 and the DOS-based VP system release 8.3. Sections affected: 2, 5, 10, 12, 15, 20, 21, 22, 23.	Serena Smith	04-10-2000

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1. Overview

1.1 What Does This Voice Processing System Do?

In its simplest form, this voice processing system, or *VP system* as it is referred to as in this manual, acts like a telephone receptionist. It answers incoming calls and transfers them to the appropriate extension. If the called extension is not available (busy or no answer), the VP system offers to take a message or try an alternative extension.

VP system functionality includes:

- Automated attendant features
- Voice mail features

These two functions work together to provide smooth call coverage for your application.

1.1.1 What is an Automated Attendant?

The VP system automated attendant features perform the tasks of a live attendant. The following table illustrates how.

Live Attendant	VP System Automated Attendant
Answers an incoming call by lifting telephone.	Answers an incoming call by going "off-hook."
Greets the caller with a phrase such as, "Welcome to [XYZ Company]."	Greets the caller by playing a pre-recorded greeting such as, "Welcome to [XYZ Company]."
Asks to whom the caller wishes to speak.	Plays a pre-recorded greeting that prompts the caller to either dial the extension of the party they are trying to reach or choose from a list of voiced options to route the call to a specific department or group.
Listens to the caller's response.	Listens to the digits dialed by the caller.
Says, "Please hold."	Plays a pre-record phrase, "Please hold..."
Calls the required extension by hook-flashing and dialing the extension number.	Calls the required extension by hook-flashing and dialing the extension number.
Listens for busy tone, ring tone, answer, etc.	Listens for busy tone, ring tone, answer, etc.
If the extension is busy, offers to let the caller hold. If the extension does not answer, offers to take a message or try another extension.	If the extension is busy, plays a pre-recorded prompt offering the option to hold. If the extension does not answer, plays a pre-recorded prompt offering to take a message or try another extension.

1.1.2 What is Voice Mail?

The term *voice mail* refers to systems that can record a voice message and treat it like a mail message.

In a typical office environment, the live attendant takes a message from a caller and writes it down on a piece of paper. The attendant then places the slip in the recipient's in-box or *mailbox*. The box owner then retrieves and reads the message placed in the box.

In contrast, the VP system records a message from a caller and places it in a voice mailbox. The mailbox owner can later retrieve the message by calling into the VP system and listening to the recording. The table below compares how the VP system processes voice messages compared to a live attendant.

Live Attendant	VP System Voice Mail
Attendant listens as the caller dictates his/her message, writing it down on a piece of paper.	VP system records the message as the caller speaks.
Attendant places the message slip in a mailbox belonging to the recipient.	VP system stores the voice message electronically in the recipient's voice mailbox.
Attendant dials the code to turn on message waiting lamp on the recipient's telephone.	VP system dials the code to turn on the message waiting lamp on the recipient's telephone.
Recipient sees the message waiting lamp is on, and retrieves message slips from the message mailbox.	Recipient sees the message waiting lamp is on and dials the VP system to retrieve messages.
Recipient reads messages left on message slips.	VP system plays messages recorded by callers in the voice mailbox.

1.2 Understanding the VP System Product Design

All VP systems are designed using the Box concept. A box contains a set of instructions that tells the program what to do with a call it is handling. By setting up the system to send calls to different boxes created on the system, you can have it effectively process calls—including playing certain prompts or greetings to callers, collecting information and messages from callers, and routing calls to certain extensions based on digits dialed by callers.

Note: All VP system products use the same general software design, but each has different limitations on the number of boxes you can set up on the system and whether you have access to certain optional modules. Information provided in this manual is designed to accommodate all VP system types. Therefore, certain sections and procedures may not be applicable to certain VP system users. If you have questions regarding the availability of a specific feature or option on a particular system, contact your sales representative.

1.2.1 Understanding Box Types

Routing boxes are used to answer incoming calls, play a list of options to callers, and route calls to a specific mailbox based on the digits dialed by the caller. The mailboxes transfer calls to their associated extensions and store messages for system subscribers, and they can be set up to forward calls to another phone or extension number, deliver messages to another phone or pager, play one of 10 pre-recorded greetings to callers, screen calls, queue calls when the extension is busy, or record call conversations.

Routing boxes and mailboxes are the two core boxes used on VP systems. The following table identifies other available box types and provides a brief synopsis of how each box is used on the VP system.

Box type	Function
Mailbox	Performs call transfers. Plays personal greetings. Takes messages. Activates pagers. Delivers messages internally or externally. Activates message waiting lights.
Question box	Performs question/answer sessions. Records caller responses verbally or in a text file.
Routing box	Offers menu choices, and routes calls. Plays system recordings.
Group box	Houses a list of mailboxes, allows users to easily send one message to more than one mailbox owner.
Directory box	Allows callers to spell out (via their touch-tone dial-pad) the name of the person to whom they want to speak, or to simply listen to the entire directory listing.
ACD box	Searches a list of extensions for one that is not busy, then transfers the call to that extension.
Account Number box	Asks the caller to enter an account number (or phone number, Zip Code, etc.), which is tagged to the call and used for other functions.

Each of these boxes is described in detail in section 5.

Note: No matter where you are in the system, you can get help by pressing the <F1> key from VP system screens.

1.2.2 Understanding the Default Database

The VP system contains a default database with a setup configuration that allows the system to perform fundamental call processing tasks efficiently with minimal system adjustments by the installing technician. This default database configuration includes 2 pre-defined classes of service (0 and 7), 1 supervisor mailbox (mailbox 70), and 3 Routing boxes—800, 801, 821.

As you proceed through these setup instructions, you will make adjustments to specific information relating to the default setup. As you make any changes, keep in mind that **we urge you to maintain the initial general configuration of Routing boxes 800, 801, and 821, Class of Service 7, and supervisor mailbox 70.** This configuration allows the VP system to perform fundamental call processing tasks efficiently. Maintaining it helps both the installing technician and VP system technical support to service the system and resolve any call processing issues. For these reasons we urge you **not to deviate from this general system setup default configuration.**

The information below highlights the set up configuration provided with the default database included on the VP system. Refer to this information as needed while you customize the VP system for the customer's specific application. For additional information on Routing box, mailbox, and prototype mailbox functionality, see section 5.5. For additional information on Class of Service setup, see section 4.10.

Note: Though you may make adjustments to specific information relating to this default setup, you are urged to maintain the general configuration of Routing boxes 800, 801, and 821, Class of Service 7, and supervisor mailbox 70. This configuration allows the VP system to perform fundamental call processing tasks efficiently. Maintaining it helps both the installing technician and VP system technical support to service the system and resolve any call processing issues.

Technician Password:

1234

Business Hours (specified on the BUSINESS HOURS screen):

8:00 AM - 5:00 PM

Routing Box 800:

Answers all incoming calls during day/lunch hours (specified on the BUSINESS HOURS screen)

Owned by mailbox 70

Routing Box 801:

Answers all incoming calls during non-day/lunch hours (specified on the BUSINESS HOURS screen)

Owned by mailbox 70

Routing Box 821:

Routes calls that have already passed through Routing box 800 or 801

Owned by mailbox 70

Class of Service 0:

Set up with the following parameter settings (for information on specific parameter fields, refer to section 4.10:

MAXIMUM NUMBER OF GREETINGS: **10**
MAXIMUM NUMBER OF MESSAGES: **200**
MAXIMUM GREETING LENGTH (SECS): **60**
MAXIMUM MESSAGE LENGTH (SECS) **60**
AUTO-DELETE OLD MESSAGES AFTER **30** DAYS.
AUTO DELETE NEW MESSAGES AFTER **99** DAYS.
SUPERVISOR STATUS? **No**
ACCESS TO GROUP-BOXES? **Yes**
DIAL-OUT ALLOWED? **No**
ACCESS TO P.A.? **Yes**
PLAY MENU AFTER GREETING? **No**
ALLOWED TO RECEIVE FAXMAIL? **No**
OPERATOR BOX (DAY): **888** (NIGHT): **888**
WHEN EXITING OPEN MAILBOX, GO TO BOX: **821**
MAX LINES ALLOWED TO HOLD FOR ONE BOX: **2**
WHILE IN QUEUE, SAY POSITION IN LINE? **No**
TRY EXTENSION **3** TIMES BEFORE GOING BACK TO CALLER
RESTRICTED DIGITS: **[None]**

Class of Service 7:Set up with the Class of Service 0 options, but with SUPERVISOR STATUS **enabled**

Extension Length:

3 digits

Password Length:

4 digits

Default Passwords:

Equal the mailbox numbers

Mailbox 70:

Set up as the Supervisor mailbox with Class of Service 7

Prototype mailbox 9994 (characteristics are automatically assigned to all mailboxes created):TRANSFER TYPE: **Wait for Ring**CLASS OF SERVICE: **0**to: **x** (*signifies the mailbox number*)CURRENTLY ENABLED: **Yes**TRANSFER SCHEDULE: **Always**PASSWORD: **x** (*signifies the mailbox number*)SEQUENCE TO TURN ON/OFF MESSAGE WAITING LAMP: (*set by Integration program*)AFTER PLAYING GREETING: **Wait for digit**

1.2.3 Understanding Product Differences

All VP system products use the same software base, but each has different limitations on the number of boxes you can set up on the system and whether you have access to certain optional modules.

Information provided in this manual is designed to accommodate all VP system types. Therefore, certain sections and procedures may not be applicable to certain VP system users. If you have questions regarding the availability of a specific feature or option on a particular system, contact your sales representative.

Also be advised that the NT-based VP systems offer users a graphical screen interface, which provides slide bars, tabbed pages, buttons, and icons that are not available with other VP systems. For information on navigating NT-based VP system screens using graphical screen elements such as tabbed pages and buttons, consult a Microsoft NT or Windows user's manual.

The functionality of system and box setup screens, fields on screens, and most configuration file parameters is identical throughout the entire line of VP system products, including the NT-based products. With the NT-based products, however, there are differences in the techniques you use to access system and box setup screens and navigate through those screens. The NT-based VP systems allow you to display multiple VP system windows simultaneously, for example, and to access some screens from within others, whereas other VP systems do not. These differences equip NT-based system users with additional navigational and display flexibility.

To ease dealer and technician transition to the NT-based VP systems, most screen and system navigation techniques provided with other VP systems are also provided with the NT-based systems. You can, for example, use the same function keys in both types of systems to navigate through program screens.

Because this manual is designed to accommodate all VP systems, it references these common navigational techniques in discussions and procedures wherever possible. Keep in mind, therefore, that if

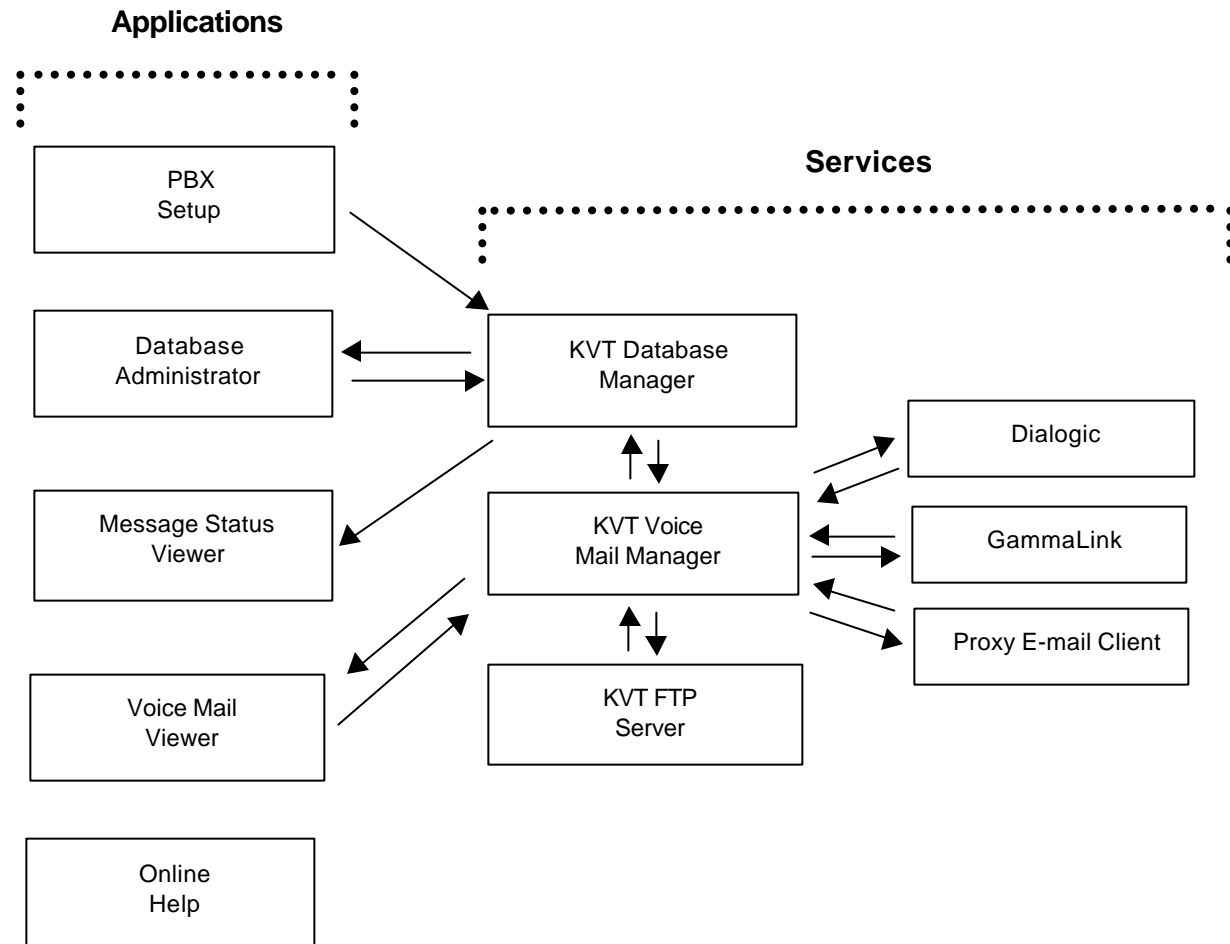
you are working with an NT-based VP system, you may choose to use navigational techniques other than those documented here to access and work with VP system screens.

With this in mind, also be advised that you may choose to use Windows tools such as File Manager or Explorer to complete tasks that are performed from a DOS prompt on other VP systems. Because NT-based system users can perform these tasks from a DOS prompt or using other techniques, for the sake of simplicity, only the DOS prompt method is discussed in this manual.

1.2.4 Understanding the Services and Applications in NT-based VP Systems

When the VP system is installed on a PC running Windows NT, 5 separate applications and 6 separate services are set up on the PC. Each of these is listed below.

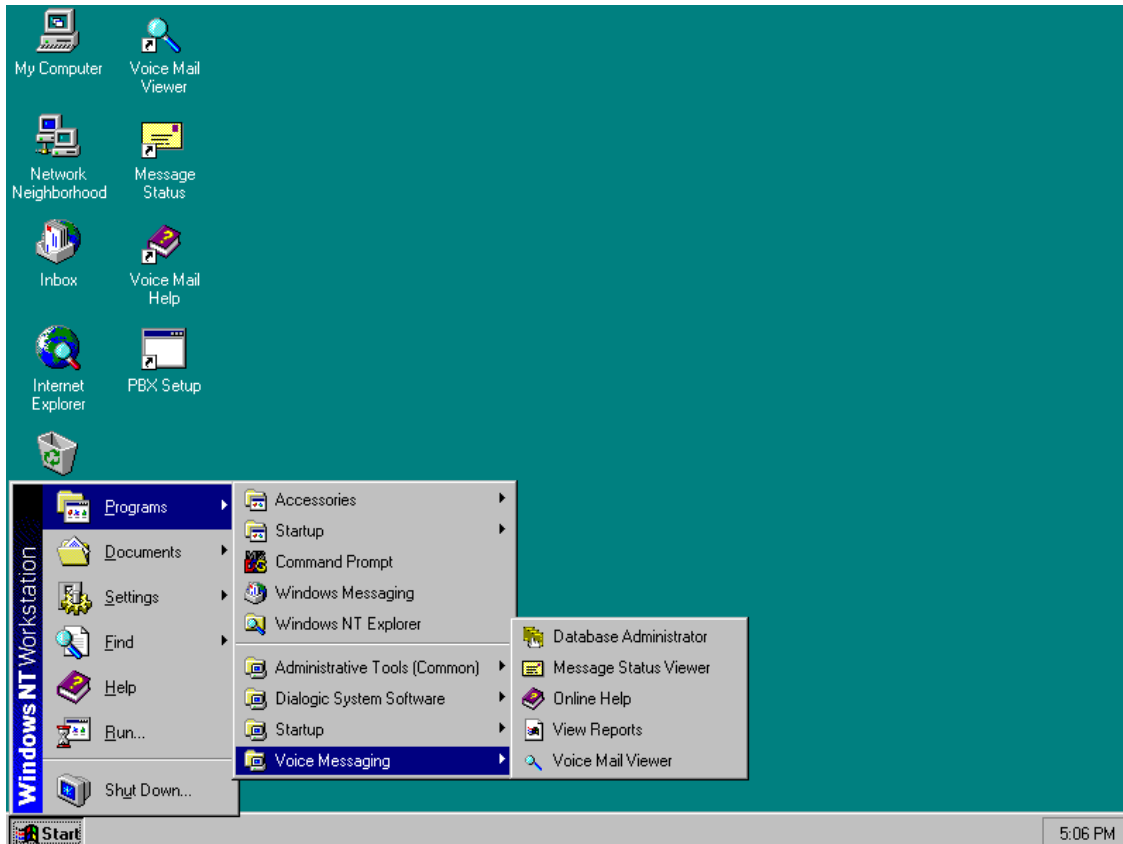
Note: An *application* is a program launched by a user. Applications typically include a graphical user interface (GUI) that allows a user to easily make modifications that affect how the program operates. A *service* is a program typically launched by the operating system. Services do not have a graphical user interface (GUI), and under normal operation, they are not directly modified by the user. In some cases, however, a service may be designed to monitor a specific application and use information a user enters onto that application's screens.



Understanding VP System NT Applications

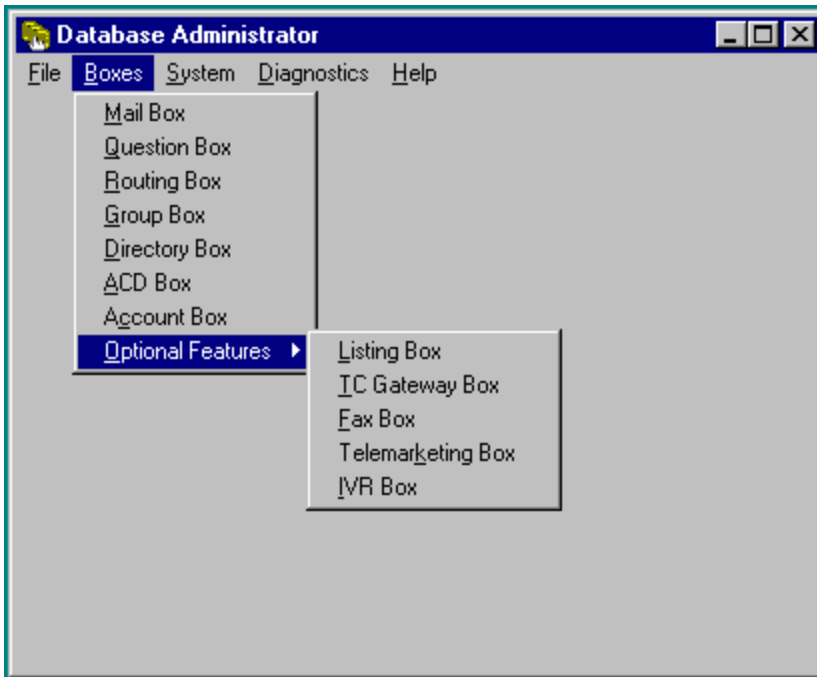
The following illustration depicts an example of the VP system applications menu that displays on PCs running Windows NT-based VP systems.

Note that an additional application, PBX Setup, is also provided with NT-based VP systems. Because the PBX Setup application should only be run the first time the system is set up, it is not included on the applications menu.



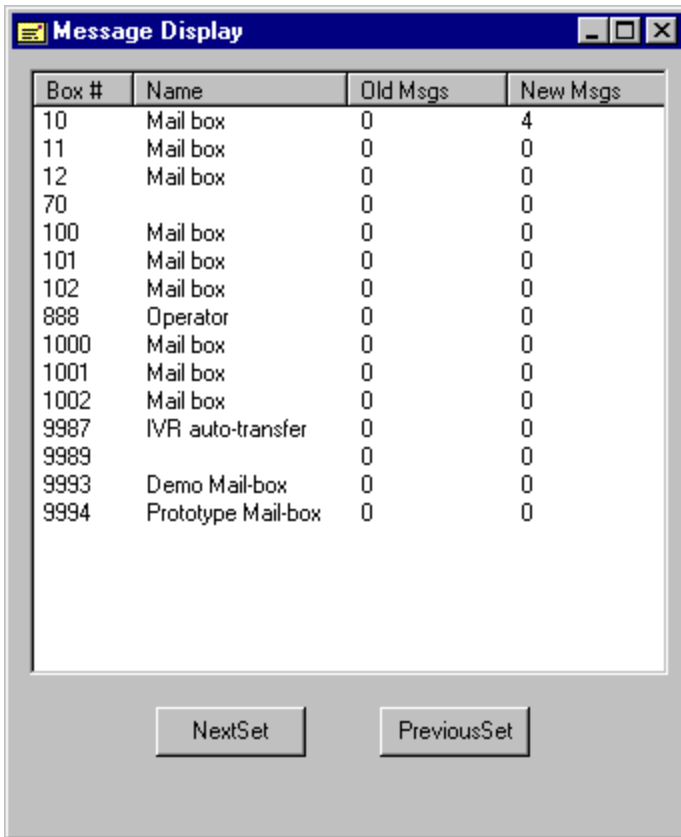
Database Administrator Application

- Purpose:** Allows the user to view and modify system and box setups.
- Location:** VP system PC (but can be moved to another PC on the LAN).
- Filename:** DBA.EXE.
- Interaction:** Data entered by the user is used by the **KVT Database Manager service**.



Message Status Viewer Application

- Purpose:** Allows the user to view the number of Old and New messages in mailboxes.
- Location:** VP system PC (but can be moved to another PC on the LAN).
- Filename:** BOXDISPLAY.EXE.
- Interaction:** Displays data stored in the **KVT Database Manager service**.



Box #	Name	Old Msgs	New Msgs
10	Mail box	0	4
11	Mail box	0	0
12	Mail box	0	0
70		0	0
100	Mail box	0	0
101	Mail box	0	0
102	Mail box	0	0
888	Operator	0	0
1000	Mail box	0	0
1001	Mail box	0	0
1002	Mail box	0	0
9987	IVR auto-transfer	0	0
9989		0	0
9993	Demo Mail-box	0	0
9994	Prototype Mail-box	0	0

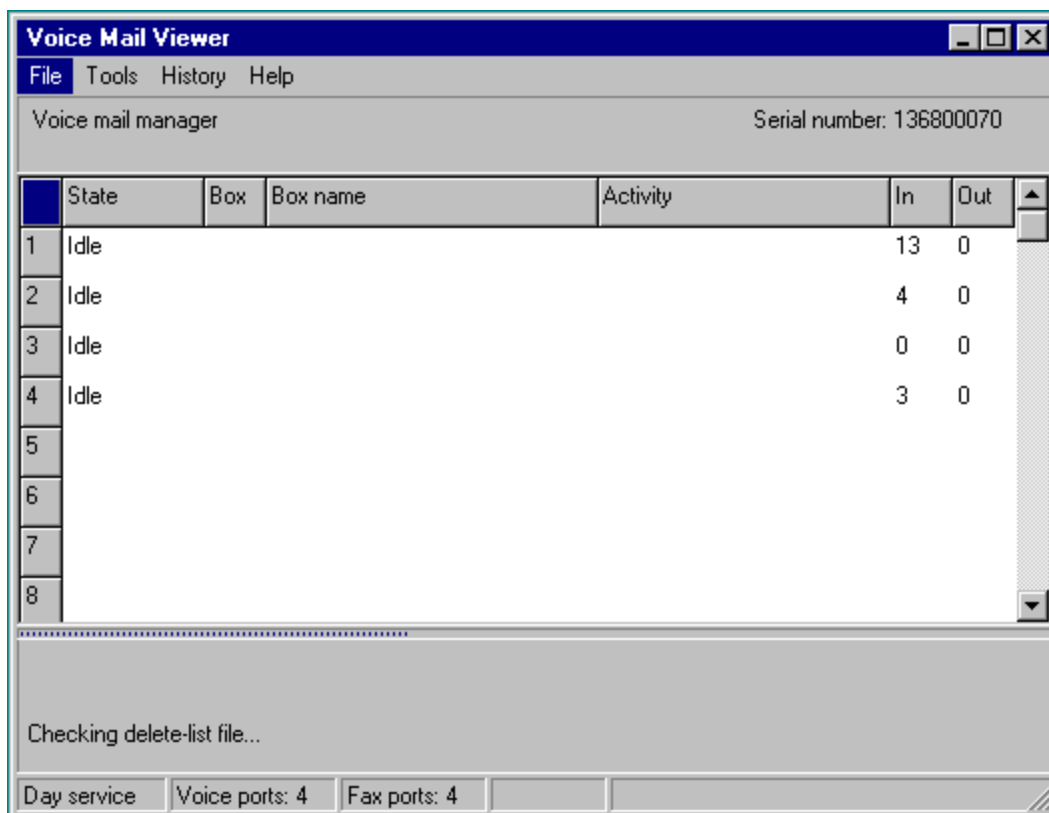
Voice Mail Viewer Application

Purpose: Allows the user to view the status of the KVT Voice Mail Manager service, including the current line activity, and the storage available. Also allows the user to enable or disable a port on the system.

Location: VP system PC (but can be moved to another PC on the LAN).

Filename: VIEWER.EXE.

Interaction: Displays data stored in the **KVT Voice Mail Manager service** and provides port enabling or disabling data to that service.



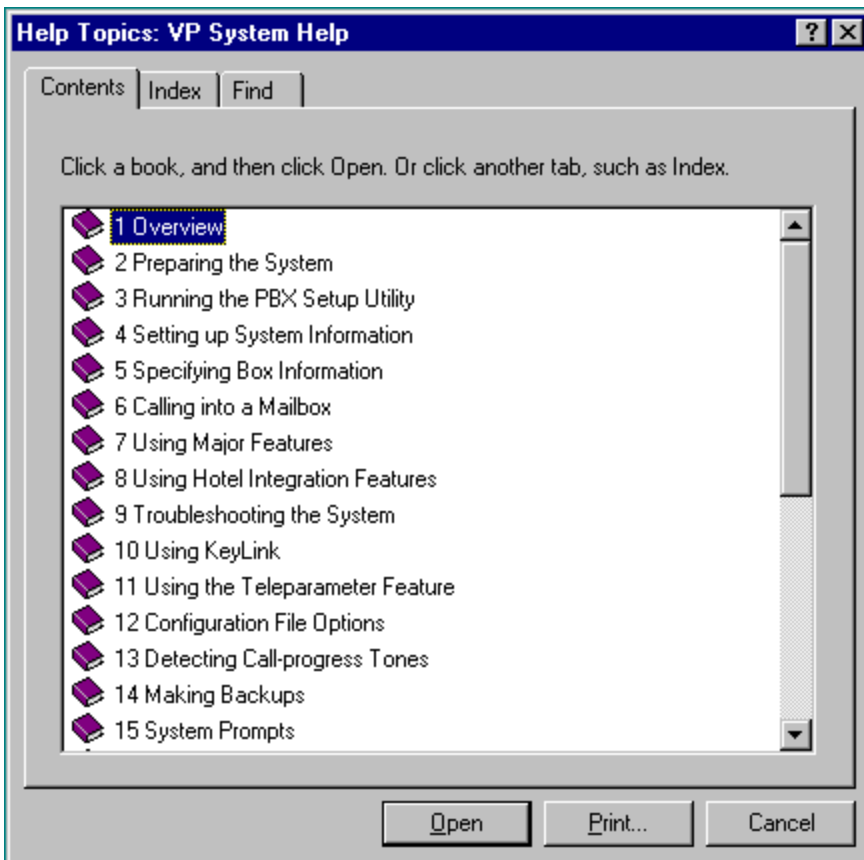
Online Help Application

Purpose: Provides online access to the information in the *Installation and Maintenance Manual*. Information provided covers installing, setting up, and working with the VP system using the system's screens and telephone interface.

Location: VP system PC (but can be moved to another PC on the LAN).

Filename: DBA.HLP.

Interaction: Online help can be run as an independent application on any computer running Windows 95/98 or Windows NT. It is also accessible through the Voice Mail Viewer application and the Database Administrator application.



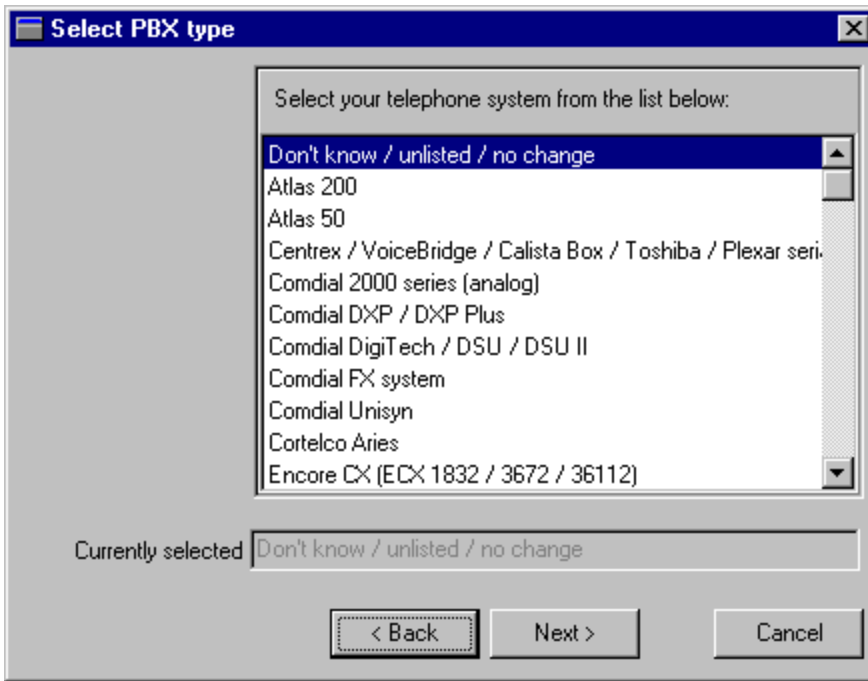
PBX Setup Application

Purpose: Allows the user to specify the PBX type, extension length, and other system setup and integration-related information.

Location: VP system PC.

Filename: PBXSETUP.EXE.

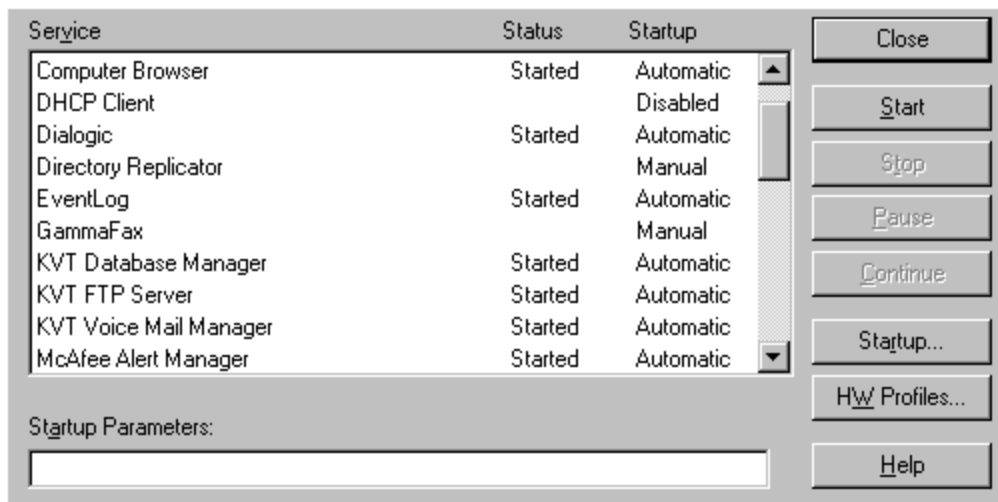
Interaction: Data entered by the user is used by the **KVT Database Manager service**.



Understanding VP System Services

The following illustration depicts an example of a Services dialog box that displays on PCs running Windows NT-based VP systems. (You access this box by clicking on the Start button, then selecting Control Panel / Services.) The VP system services are listed below:

- Dialogic Service
- GammaLink Service
- KVT Database Manager Service
- KVT Voice Mail Manager Service
- KVT FTP Server Service
- Proxy E-mail Client Service



Dialogic Service

Purpose: Operates the voice boards.
Location: VP system PC.
Filename: DLGC_SRV.EXE.
Interaction: Exchanges data with other services, primarily the **KVT Voice Mail Manager** service.

GammaLink Service

Purpose: Operates the fax boards.
Location: VP system PC.
Filename: GFDCP.EXE.
Interaction: Exchanges data with other services, primarily the **KVT Voice Mail Manager** service.

KVT Database Manager Service

Purpose: Holds the system setup and box setup information.
Location: VP system PC.
Filename: KVDBSERVER.EXE.
Interaction: Exchanges data with other services, primarily providing data to **the Database Administrator application** and the **Message Status Viewer application**.

KVT Voice Mail Manager Service

Purpose: Interacts with the GammaLink and Dialogic service hardware to process calls.
Location: VP system PC.
Filename: VMSERVICE.EXE.
Interaction: Exchanges data with other services, primarily providing data to the **Voice Mail Viewer application**.

KVT FTP Server Service

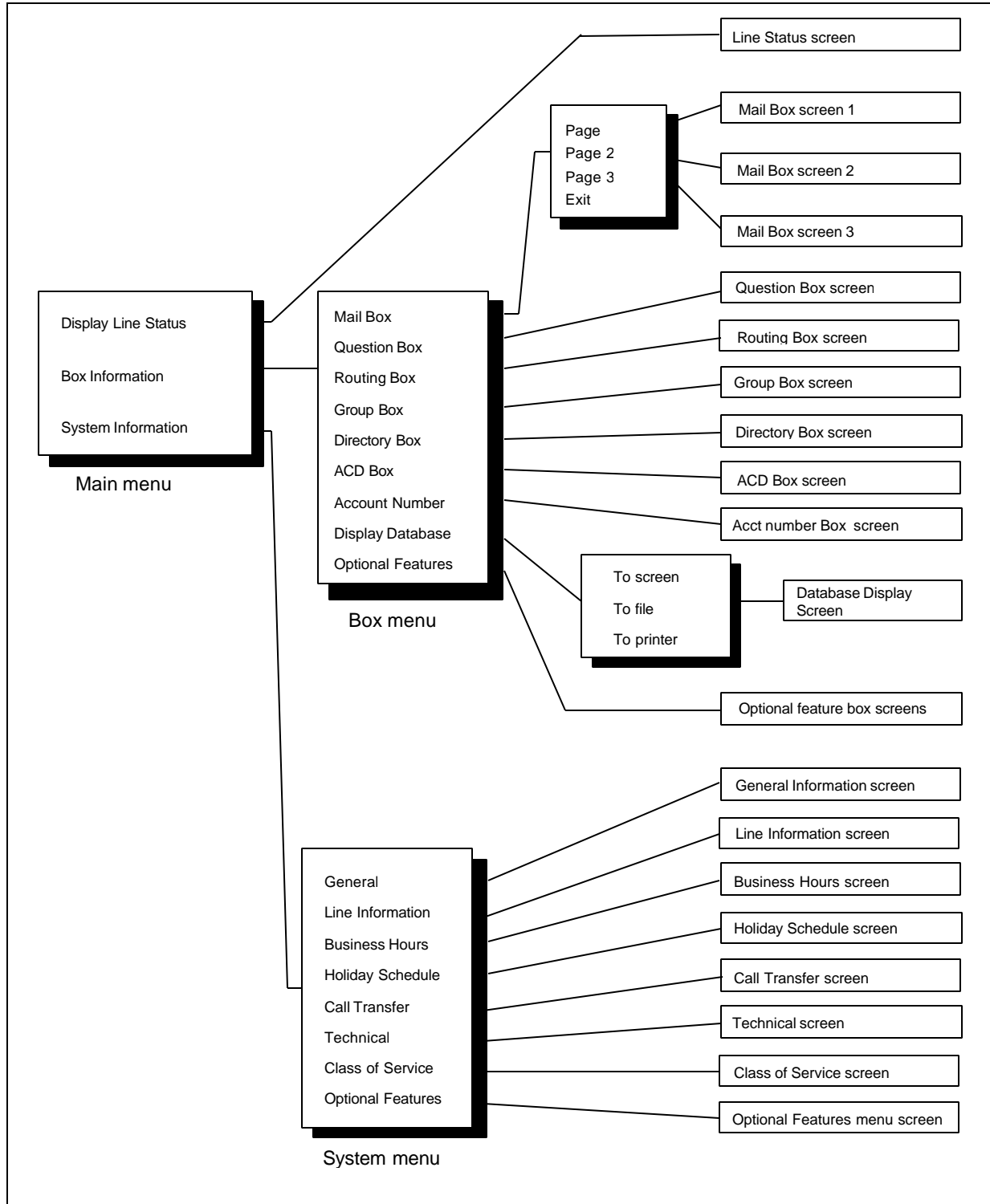
Purpose: Communicates with client PCs running VCM and unified messaging features.
Location: VP system PC.
Filename: KV_FTP_SERVICE.EXE.
Interaction: Exchanges data with other services and with applications installed on client PCs (application such as VCM, unified messaging, report generation programs, etc).

Proxy E-mail Client Service

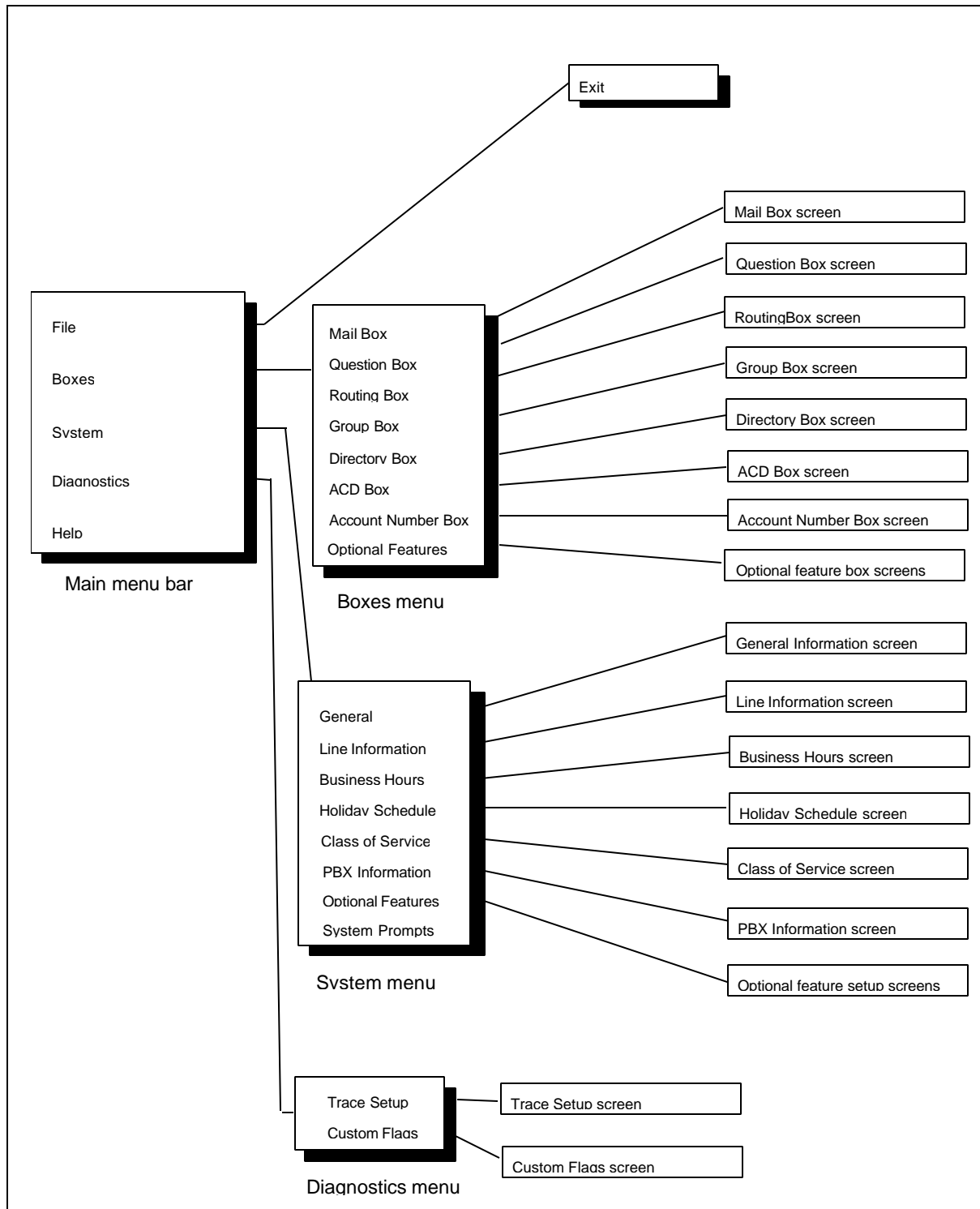
Purpose: Communicates with the e-mail server and client PCs running unified messaging client software.
Location: VP system PC.
Filename: PEC.EXE.

Interaction: Exchanges data with the e-mail server and the **KVT Voice Mail Manager service.**

1.3 Accessing DOS-based VP System Menu Options



1.4 Accessing NT-based VP System Menu Options



2. Preparing the System

2.1 Understanding Available System Setup Techniques

There are two techniques you can use to set up VP systems:

- Use the program's screen interface to run the System Setup utility then complete System Information and Box Setup screens (you may need to attach a laptop to the VP system PC, if the system does not have a monitor and/or a keyboard—procedures are provided in section 10)
- Call into the VP system and use the teleparameter feature to run the System Setup utility then enter parameter codes and corresponding values to set up system and box information

Technicians who have experience setting up VP systems may prefer to use the teleparameter feature to quickly make modifications and get VP system up and running at the customer's site. Detailed instructions on using the teleparameter feature to complete system setup steps are provided in section 11.

Be advised that because the teleparameter setup technique involves inputting codes that represent system parameters and corresponding values to which parameters are to be set, it is a bit more difficult to use effectively if you are unfamiliar with setting up VP systems. For this reason, we recommend that technicians unfamiliar with VP systems refrain from using the teleparameter feature and instead, use instructions provided in the following sections to complete all necessary system setup steps through the screen interface.

<p>Note: If you choose to set up the system using the teleparameter feature, be sure to first review section 1, so you clearly understand the setup of the default database provided with the VP system. For detailed information on using the teleparameter feature, see section 11.</p>
--

Note that if you choose to initially set up the system using the screen interface (either directly or via a laptop), you can later make additional modifications by simply calling into the VP system and using options on the Supervisor menu (see section 7.11) or using the teleparameter feature (see section 11).

To install, set up, and maintain a VP voice processing system, you need the equipment listed below.

Equipment Needed

- **VP System Unit**

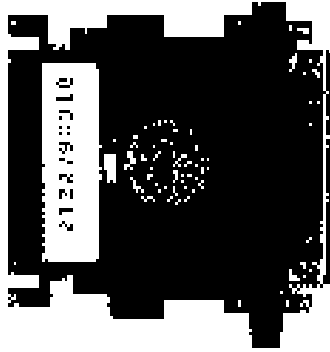
<p>Note: If you are installing a VP system purchased as a kit (the software and boards are <i>not</i> pre-installed in the system), see section 21 for kit installation requirements and procedures. Once you complete procedures provided in section 21 continue with information and procedures provided here.</p>

- **Portable Diskette Drive (only for systems without a diskette drive)**
Should an unusual situation arise, it may be necessary for you to service VP systems that do not include a diskette drive by attaching a portable diskette drive to the VP system unit. Therefore,

we strongly recommended that technicians servicing VP units without diskette drives have access to a portable diskette drive.

- **Authorization Key**

VP systems only run if the *authorization key* is attached to the PC's parallel port. This key is shipped in the packaging with the VP system. To attach the authorization key, simply plug the key into the parallel port in the back of the PC.



Authorization Key

If you choose to set up the system by connecting a laptop to the VP unit, you need the following additional equipment:

- **Laptop Computer**
- **Null Modem Serial Cable**
- **KeyLink Communications Software** (provided with the VP system)

This additional equipment is necessary to perform screen interface setups on VP systems that do not include a keyboard and monitor.

To set up the system using a laptop, you must use a null modem serial cable to attach the laptop PC to the VP unit. So that the laptop computer can communicate with the VP system unit, you must install KeyLink communication software, provided with the VP system, onto the laptop PC. The KeyLink installation procedure and instructions on using the program are provided in section 10.

Once the system is set up and tested, the system supervisor on-site can maintain the day-to-day aspects of the system (adding, deleting, modifying mailboxes; modifying greetings and call routing; etc.) by simply calling into the system using a telephone. No special teleparameter modification instructions or laptop computers are necessary for regular daily maintenance of the VP system. (See section 7.11 for details.)

2.2 Connecting the VP System to the Telephone System

The VP system unit can be connected directly to local telephone lines, typically Centrex service, or behind a key system or PBX. (For simplicity, the term *PBX* is used herein to mean "PBX or Key System").

2.2.1 Connecting Directly to the Telephone Lines

The VP system unit can be connected directly to the telephone lines as shown below.

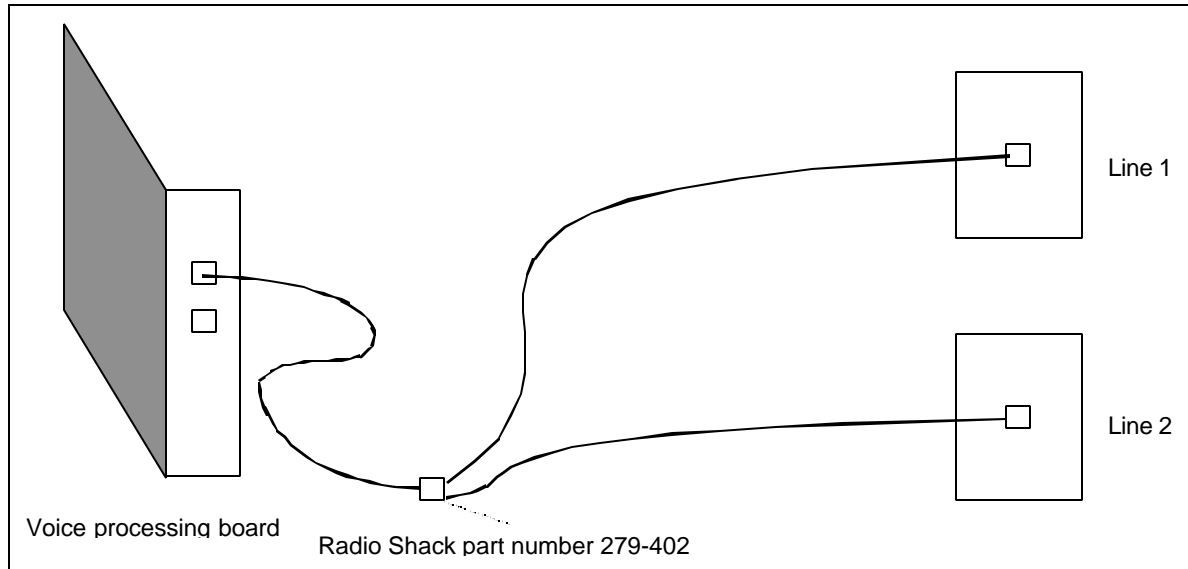


Figure 2-1 Connecting the VP System Directly to Telephone Lines

Note that the modular input connectors on the voice boards are RJ-14 jacks that contain two independent telephone lines. The modular adapter shown (or its equivalent) must be used if the telephone lines are terminated with RJ-11 (single line) jacks.

If you want the VP system to be able to transfer calls, make sure the telephone line has either the call-transfer or three-way calling feature. If you are unsure whether a line has these capabilities, contact the local telephone company.

Local C.O. lines connected to VP should *not* have the call-waiting feature assigned. Once again, if in doubt, contact the local telephone company.

2.2.2 Connecting to a PBX or Key System

The VP system unit connects to PBX station ports (each line to the VP system unit looks like an extension to the PBX), as shown below. The VP system thus functions as one or more extension on the PBX.

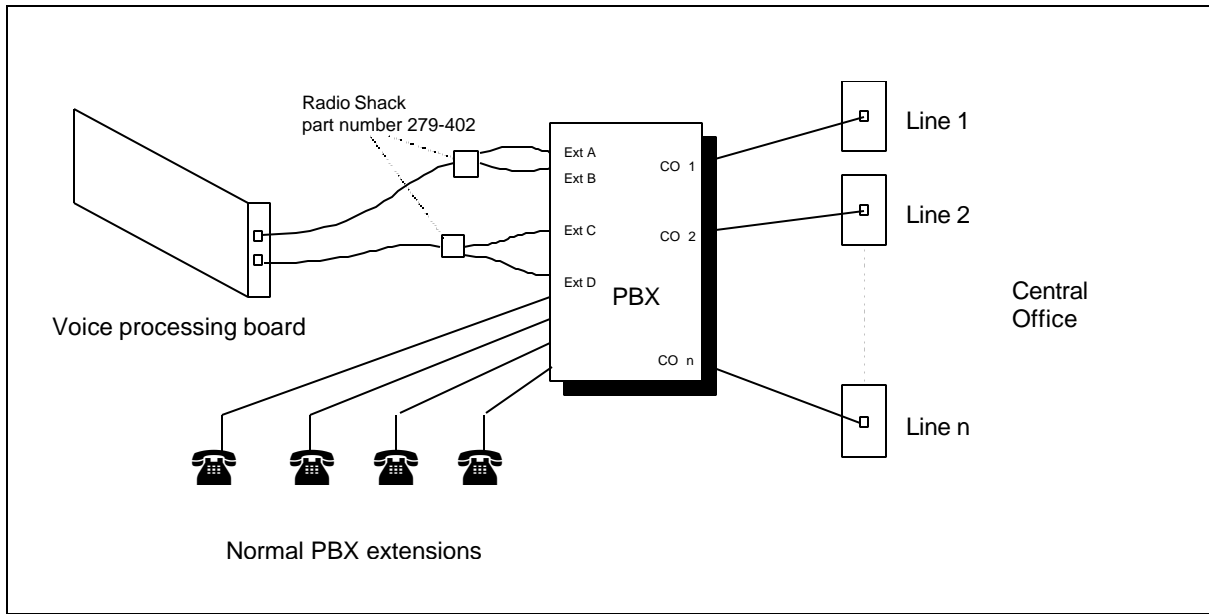


Figure 2-2 Connecting the VP System Behind a Key-System or PBX

Note that the modular input connectors on the voice boards are RJ-14 jacks, which contain two independent telephone lines. The modular adapter shown (or its equivalent) must be used if the PBX extensions are terminated with RJ-11 (single line) jacks.

Unless special digital voice boards are installed in VP system PC, each line to the VP system unit requires an industry-standard-telephone port on the PBX (this is also known by other names such as *analog port*, *2500 set interface*, *SLT port*). Some telephone systems do not provide single-line-telephone ports, and they require a special analog interface box between the PBX and the voice mail system, as shown below. If you have questions on the type of ports provided on the phone system, contact the local PBX manufacturer's representative. For information on digital voice boards, contact a VP system sales representative.

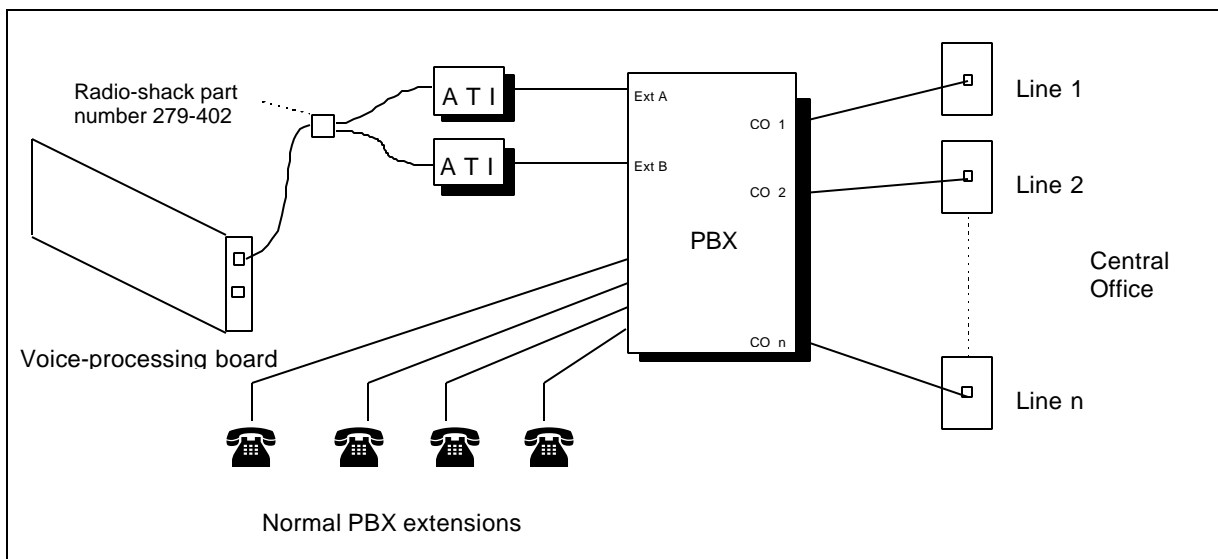


Figure 2-3 Connecting the VP system to a PBX via external Analog Telephone Interface (ATI) Equipment

2.2.3 Connecting the Serial Cable Between the VP System and PBX

If you are establishing a serial integration, you must attach a serial cable between the VP system and the PBX. The VP system unit is set up to use the COM 1 port to communicate with the phone system. Therefore, you should connect the serial cable to the VP unit's **COM 1** port.

Consult the phone system documentation for instructions on attaching the serial cable to the phone system COM port.

Note: If the phone system you are working with is a Comdial DSU (Impression 24, 48, 72), attach the serial cable to **COM 1** on the DSU. If the phone system is a DSUII (Impact 24, 48, 72), attach the serial cable to **COM 3** on the DSUII.

Typical Setup

For typical automated attendant service, program the PBX so that incoming calls are routed via the PBX to ring the VP system. The VP system answers the call and asks the caller to enter the required extension (or mailbox) number. The caller enters the number, and the VP system transfers the call just as a live attendant would.

2.2.4 Making Local Connections to the Board

When you create mailboxes, Routing boxes, or other boxes on the system, you have the option to record names and greetings at the time you create the box. You make these recordings by selecting from recording options available directly from box setup screens. On DOS-based VP systems, to make recordings from the VP system PC, you must attach a telephone directly to the voice board in the VP system using one of the two techniques detailed below.

Using Two Telephone Lines

To make a local connection to the voice board in the VP system, connect one line (call it *line A*) to the upper RJ-14 jack on the voice board. Connect the other line (*line B*) to a regular telephone, as illustrated in Figure 2-4.

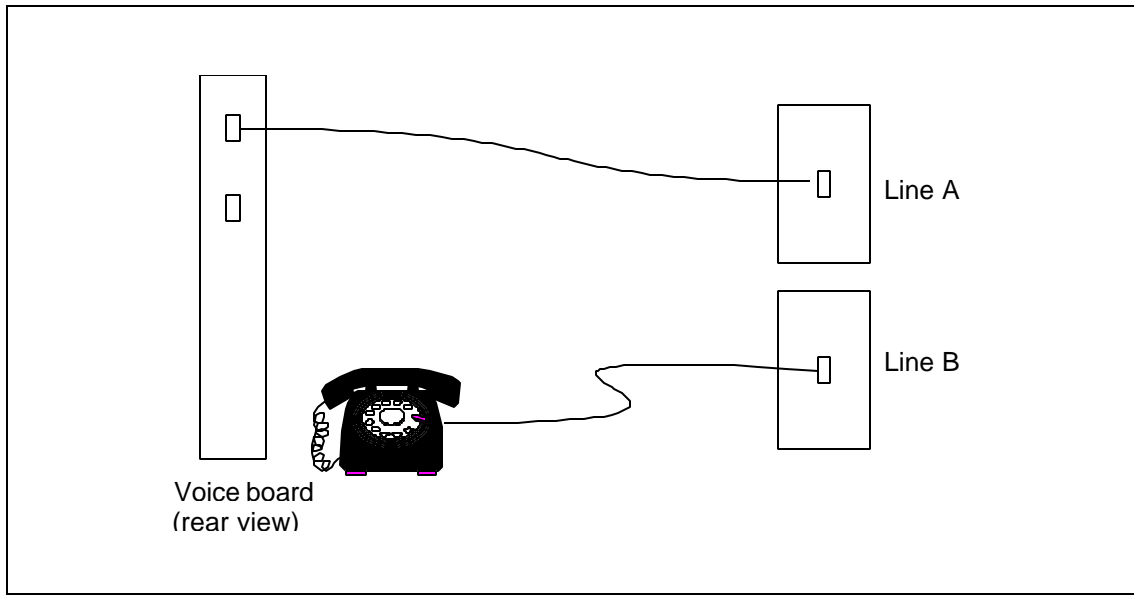


Figure 2-4 Using Two Telephone Lines to Record

Using an Audio Coupler or Single Channel Audio Connector

By using an audio coupler or single channel audio connector, you can play and record prompts and greetings from a DOS-based VP system PC without using two telephone lines.

Note: Audio couplers and single channel audio connectors function only with systems using Rhetorex voice boards.

To use a microphone or local speaker to play or record prompts or greetings, connect them to the PC by following the manufacturer's instructions.

To connect an audio coupler to the Rhetorex board, refer to Figure 2-5. This illustration identifies how you connect all devices.

To connect a single channel audio connector, insert the 3 pin audio connector into the Rhetorex board on the right side of the board below the RJ14 connector (when viewing the board with the bracket to the right). Next, connect the output, which is a small, silver phone jack, to the speaker. Finally, connect RCA jack (the remaining jack) to the recorder.

When using either an audio coupler or single channel audio connector with the VP system, you must include the parameter LOCAL SPKR in the VM.CFG configuration file (see section 12). If you are connecting to a Rhetorex 408 or 432 board, you must also change the VM.CFG file parameter DATABASE LINE from 1 to 4.

Note: When making recordings on DOS-based VP systems using an audio coupler or single channel audio connector, record using the MICROPHONE option.

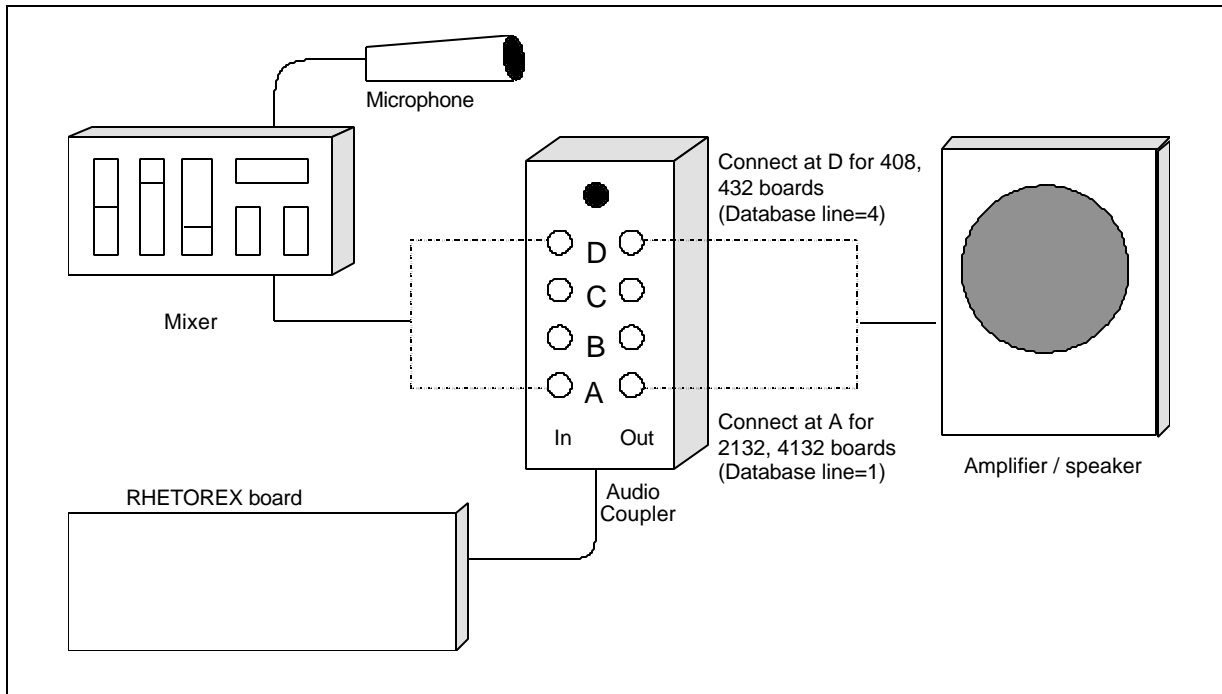


Figure 2-5 Recording via an Audio Coupler on a System with Rhetorex Boards

2.3 Moving Greetings, Prompts, Messages, and Mailboxes from DOS-based to NT-based VP Systems

BE ADVISED:

The DOS-based VP system must be running VP system software version 8.2 or higher. If the DOS-based system is running a VP system version prior to 8.2, you must upgrade the VP system software to version 8.2 or higher before moving greetings, prompts, messages, and mailboxes from DOS-based to NT-based systems.

The NT-based VP system includes a conversion utility that allows you to easily move greetings, prompts, messages, and mailboxes from DOS-based VP systems running software version 8.2 or higher to NT-based VP systems. To use the utility to convert and copy files between two separate PCs, you back up each subdirectory (and its files) indicated in step 3 below from the DOS-based PC onto a tape backup or Zip disk. Then, restore the directories and files from that media into subdirectories you create on the NT machine. Do not copy DOS-based files directly into the \VM, \VM\M, or \VM\P subdirectories on the NT machine. Instead, create a subdirectory structure such as the \VMDOS, \VMDOS\M, and \VMDOS\P on the NT machine, and restore the files into their associated subdirectories. Once the conversion is complete (and tested), you can delete the directory structure you created and the DOS-based files it contains from the NT machine.

The conversion utility is named `D CONVERT.EXE`, and it is located (by default) in the \VM directory.

To transfer files from the DOS-based VP system to NT-based VP system:

1. Shut down the VP system if it is running by following the instructions in section 2.5.

2. Create the following directories on the NT machine: \VMDOS, \VMDOS\M, \VMDOS\P. Back up and restore or copy files from the \VM, \VM\M, and \VM\P directories on the DOS-based machine into their associated \VMDOS directories on the NT machine.
3. From the Start button at the bottom of the Windows NT desktop, select Run.
4. In the Open field of the Run dialog box, type C:\VM\DCONVERT (where C: is the drive on which the VP system is installed) then select the OK button.
5. On the screen that displays, indicate in the appropriate fields the complete paths to the DOS-based VP system database (.DVM) files, message files, greeting files, and prompt files as they are stored on the NT-based PC. Refer to section 16 for information on the default VP system file organization structure. Also indicate in the appropriate fields the complete paths to the database files, message files, greeting files, and prompt files as they are to be stored on the NT-based VP system. The default directory structure is indicated. You must modify the drive designation letters as necessary to accommodate the file transfer technique you are using.
6. Indicate in the appropriate fields the type of conversion you need to perform : In the top half of the screen, select the Dialogic or Rhetorex option to identify whether the DOS-based VP system used Dialogic or Rhetorex boards. In the bottom half of the screen, it is recommended you retain the .WAV file format set as the default.
7. To initiate the conversion, select the Convert Now button. Files are copied and converted as necessary to the destinations you indicated. If you receive a Dr. Watson – KVDBServer.exe error, click on the OK button. This error does not affect the conversion process. When you see a message indicating the conversion completed successfully, click on the OK button.
8. From the Windows NT desktop, select the Start button then select Run. In the field, type C:\VM\DB2UM.EXE (where C: is the drive on which the VP system is installed) then select the OK button.
9. From the Windows NT desktop, select the Start button then select Run. In the field type C:\VM\LINECONVERTER.EXE (where C: is the drive on which the VP system is installed) select the OK button.
10. Reboot the PC as instructed to restart the VP system.

<p>Note: Be advised that fax documents stored in Fax boxes on DOS-based VP systems are in a .PCX file format. On NT-based systems, however, these documents must be stored in a .TIF file format. Therefore, you must re-enter fax documents into the NT-based system. See section 24.3 for details.</p>

2.4 Adding Features and Ports

2.4.1 Understanding Special Activation Codes to Add Features and Ports

All VP system software actually includes all program functionality, including capabilities available only in optional add-on modules and the ability to process calls on the maximum ports available, typically 32 on DOS-based systems and 64 on NT-based systems. Your access to some of this functionality is

controlled by activation codes and by the key that is attached to the parallel port on the back of the VP system PC. These activation codes and the key control the VP system software on the PC, so the software will provide users access to only the optional features or number of ports that were purchased with the system.

To upgrade a VP system so additional ports are available or so access to certain features is allowed, you must obtain a code from your sales or technical support person and input that code on the VP system. The type of code you use depends on the type of VP system you have and the capabilities you are trying to add. Once you obtain your code, enter it by following the appropriate procedure below.

2.4.2 Entering a Renew Code

You enter a Renew code by running Renew utility. Use one of the procedures detailed below.

To run Renew on DOS-based VP Systems:

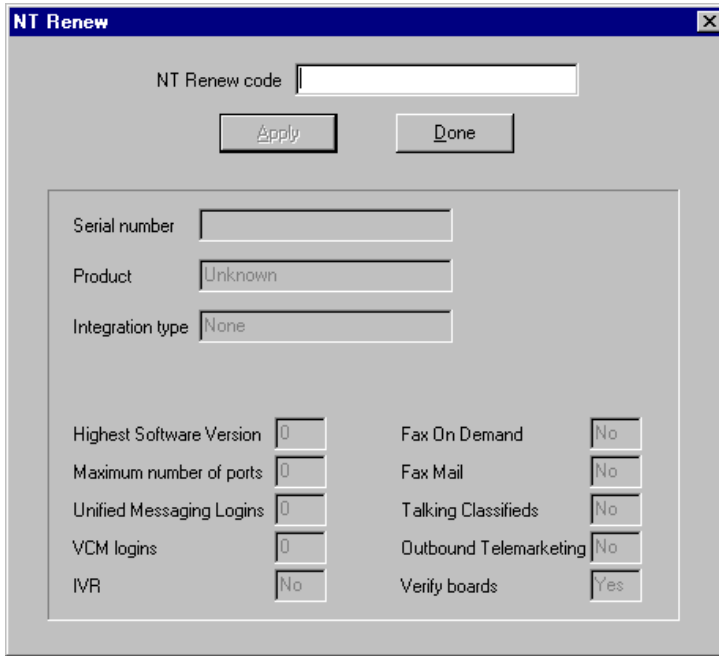
Note: If you are entering a Renew code to eliminate the 5-only limitation on Routing, Question, ACD, Group, and Account boxes, the system must be running VP system software version 8.2 revision 5B or higher. If it is not, the limitation will not be removed, even after you enter the Renew code.

1. Before you can obtain a Renew Code and run the Renew program, you must supply a VP system technical or sales person with 1) the serial number of your key and 2) a Renew Use number. To obtain these numbers, shut down the VP system if it is running. Change to the \ VM directory on the VP system, type RENEW then press <Enter>. The screen displays the serial number of the key attached to the PC, a Use number, and the current system date. Note these numbers and relay them to the technical or sales person with whom you are working. You can exit this screen by pressing <Esc> until you return to a DOS prompt.
2. To enter the 15-digit Renew code you are provided (with no spaces or hyphens), shut down the VP system if it is running. Change to the \ VM directory on the VP system, type renew then press <Enter>. From the screen that displays the serial number of the key attached to the PC, the Use number, and the current system date, press <Enter> again. Type the code you were provided when prompted. Press <Enter> when you finish.

Note: If you have a certain type of key, it may be necessary for you to initiate the Renew code program by typing RENEWOLD at the \VM prompt (instead of typing RENEW). If it is necessary for you to type RENEWOLD to initiate the program, you will be instructed to do so by the technical/sales person from whom you obtained the Renew code.

To run Renew on NT-based VP Systems:

1. Before you can obtain a Renew Code and run the Renew program, you must supply a VP system technical or sales person with the serial number of your key. To obtain this number, open Windows Explorer or some other type of file manager program and access the \ VM directory. Double-click on the file NTRENEW.EXE. A dialog box similar to that shown below displays. The serial number is shown near the top of the screen and the current system's statistics and optional module capabilities are identified. Note the serial number and relay it to the technical or sales person with whom you are working. You can exit this screen by selecting the Done button.



2. Shut down the KVT VOICE MAIL MANAGER SERVICE. If the site is also running the unified messaging feature, first also shut down the PROXY E-MAIL CLIENT SERVICE. To stop one or both services, from the Windows NT desktop, click on the Start button, then choose Settings / Control Panel / Services. From the SERVICES screen that displays, highlight KVT VOICE MAIL MANAGER and click on the Stop button. To exit the SERVICES screen, click on the Close button. To exit the Control Panel window, click on the X icon in the upper-right corner of the window.
3. Access the NTRENEW screen using the procedure detailed in step 1. Type the 21-digit code you are provided (with or without the hyphens) in the NT RENEW CODE field.
4. Select the Apply button. The screen updates to identify the new system's statistics and access to optional modules. Exit the screen by selecting the Done button.

Note: On NT-based VP systems, if the original system ordered is less than 16 ports, the authorization key shipped with the system is programmed to authorize a maximum of 16 voice mail ports. If the original system ordered is 16 or more ports, the key is programmed to authorize a maximum of 32 voice mail ports. Also, all keys are programmed to authorize a maximum of 50 VCM users, unless more user licenses are purchased at the time of the original order.

A key cannot be re-programmed using the procedure discussed above for authorizations beyond the maximums originally programmed. To add ports or VCM users beyond the maximums originally programmed on the key, you must replace the original key with a new key. Contact the VP system sales representative for additional information.

2.4.3 Entering SWITCHES.TXT, LOGINS.TXT, PBXLINK.TXT, and NUMLINES.TXT Activation Codes

On some VP systems, the codes listed below are used to activate the capabilities indicated next to them. If you purchase a kit VP system, and you need to enter one or more of these codes after installing the

software (to activate a certain capability), you can find the code(s) printed on the invoice shipped with the system.

- SWITCHES.TXT: Fax Distribution, Fax Mail, Talking Classifieds, IVR, Outbound Telemarketing
- LOGINS.TXT: VCM (DOS-based VP systems only)
- PBXLINK.TXT: Serial-port integration
- NUMLINES.TXT: Port additions when additional boards are added

You enter codes for NUMLINES.TXT, SWITCHES.TXT, LOGINS.TXT, and PBXLINK.TXT using teleparameters 4001, 4002, 4003, and 4004 respectively. See section 11.2 for instructions on using the teleparameter feature.

On DOS-based VP systems you can also use the VMCODES program to enter codes for NUMLINES.TXT, SWITCHES.TXT, LOGINS.TXT, and PBXLINK.TXT. Use the following procedure:

1. Shut down the VP system if it is running.
2. Change to the directory in which the VP system is installed (by default, the \VM directory).
3. Type VMCODES then press <Enter>.
4. From the list that displays, type a number to select the code you need to input.
5. Enter the authorization number , then press <Enter>. A message displays, indicating the authorization number has been written to the appropriate file.
6. Repeat the above steps for each code you must input.

2.5 Starting the VP System, Logging in, and Shutting It Down

By default, all VP systems are configured to start running the voice processing system automatically upon boot-up. Should you exit the system to perform maintenance or make configuration file changes, simply restart the VP system PC. The VP system loads after the restart.

To manually start the VP system:

- On DOS-based VP systems, you change to the \VM directory and type GOVM then press <Enter>.
- On NT-based VP systems, you select the Start button at the bottom of the Windows NT desktop, then choose Settings / Control Panel / Services. From the SERVICES screen that displays, you highlight one of the VP system services shown below then select the Startup button. On the screen that displays, you then select the AUTOMATIC option then click on the OK button. When completing this procedure, start each VP system service in the order shown:
 1. DIALOGIC
 2. GAMMAFAX
 3. KVT FTP SERVER
 4. KVT DATABASE MANAGER
 5. KVT VOICE MAIL MANAGER
 6. PROXY E-MAIL CLIENT

Before you can access the VP system database, you must log in by entering a password. On DOS-based VP systems, you access the password entry field by pressing <F10> from the `LINE STATUS` screen (the screen displayed when the VP system starts). On NT-based VP systems, you access the password entry field by clicking on the `DATABASE ADMINISTRATOR` icon on the Windows NT desktop.

There are two levels of password security, the *Customer* level (referred to as the *Administrator* level on NT-based systems) and the *Technician* level. If you enter the Customer / Administrator password, you are provided access to everything on the VP system except the technical setup fields on several system setup screens. Though you are able to view the technical information, you cannot modify it. If you enter the Technician password, you are provided access to everything on the VP system. The default Customer / Administrator password is blank, and the default Technician password is **1234**.

To shut down the VP system:

- To shut down a DOS-based VP system, press <Esc>. At the prompt to enter a password, enter either the Customer or Technician password. The system stops processing new calls and waits while calls in progress are completed. Once all ports are clear, the system shuts down the VP system software program.

If absolutely necessary, you can force a DOS-based VP system to shut down immediately by pressing <F10> when prompted. Use caution when forcing the system to immediately shut-down, as all calls in progress are immediately disconnected.

- To shut down an NT-based VP system, you must stop the VP system services in a specific order. To stop VP system services, from the Windows NT desktop, click on the Start button, then choose Settings / Control Panel / Services. From the `SERVICES` screen that displays, highlight each of the following services, in the order presented, and click on the Stop button after each time you highlight a service:
 1. PROXY E-MAIL CLIENT
 2. KVT VOICE MAIL MANAGER
 3. KVT DATABASE MANAGER
 4. KVT FTP SERVER

Be advised that when you stop the `KVT VOICE MAIL MANAGER` service, all calls currently being handled by the VP system are immediately terminated. To exit the `SERVICES` screen, click on the Close button.

<p>Note: A utility program named <code>STOPVM.BAT</code> is available in the <code>\VM</code> directory. When you run this utility, the VP system services are stopped in the necessary order. You can run this utility by double-clicking on the file <code>STOPVM.BAT</code> through Windows Explorer or another type of file management program.</p>
--

2.6 Upgrading VP Systems to the Latest Software Versions

Upgrading DOS-based VP Systems

Sites running DOS-based VP system versions prior to the latest available revision can obtain system software version upgrades by contacting VP system sales or technical support representatives. Use the procedure below to upgrade older versions to the latest available version once you receive an upgrade package.

To upgrade DOS-based VP System software to the version supplied in the upgrade package:

1. Follow the procedure in section 2.5 to shut down the VP system if it is running.
2. Follow the procedure in section 14.1 to make a complete back up of the existing VP system. It may be necessary for you to restore files from this backup in the unlikely event you experience problems during the upgrade process.
3. Insert Disk 1 from the set of VP system installation disks shipped with the VP system software you are attempting to upgrade into the diskette drive of the VP system PC.
4. From the DOS prompt, type `CD\VM` then press <Enter> to change to the \ VM directory.
5. Type `A:INSTALL` then press <Enter> to start the installation program.
6. From the list of options that display, highlight `UPGRADE OLD VERSION` then press <Enter>.
7. Follow the prompts to complete the upgrade. As prompted, insert the diskettes provided in the upgrade package.
8. When the upgrade completes, reboot the VP system PC as prompted. Once the PC reboots, the VP system starts automatically.

If you experience problems after you upgrade the system, you can restore the previous system software backup that you created in the procedure above. For information on restoring system backups, refer to section 14.2.

Upgrading NT-based VP Systems

Sites running NT-based VP system versions prior to the latest available revision can obtain system software version upgrades by contacting VP system sales or technical support representatives. Because the upgrade procedures for NT-based systems differ depending on the version currently installed at the site, the instructions you should use when performing the upgrade will be enclosed with the shipment containing the upgrade CD.

As with any software upgrade, it is imperative you create a comprehensive system backup before beginning the upgrade procedure. Depending on the upgrade you are performing, you may be prompted to allow the upgrade routine create this system backup for you. Consult the upgrade instructions for details on whether the system backup is automated during the upgrade routine, or whether you must perform a separate backup yourself, prior to running the upgrade.

2.7 Collecting Information Needed for New VP System Setups

2.7.1 Application and User Setup Information

While setting up the VP system, you may need to adjust default settings for the customer's regular business open hours and business closed hours. You also need to set up Routing boxes to handle incoming calls and set up mailboxes for subscribers who will be using the system. The following worksheets are provided to help the installing technician collect this information from the system supervisor.

<p>Hint: Additional worksheets for these and other system setup functions are provided in the Implementation Handbook.</p>

Business Hours/Holiday Worksheet (System Supervisor Completes)

On the lines corresponding to each day of the week, write in 24-hour format (for example 8:00 PM is 20:00) the normal hours the company opens and closes for business. If the business is open 24 hours on a particular day, enter 0:00 as the **DAY SERVICE BEGINS** time and 24:00 as the **DAY SERVICE ENDS** time. If the business is closed the entire day on a particular day, enter 0:00 on both lines.

Business hours				
	Day service begins	Day service ends	Lunch service begins	Lunch service ends
Sunday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Monday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tuesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wednesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thursday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Friday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Saturday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Indicate, if appropriate, any hour(s) during which the business closes during the day, for lunch or any other reason.

Below, indicate each holiday on which the business is closed by writing the month and day. Do not complete the INITIAL BOX field.

Holidays					
1.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
2.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
3.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
4.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
5.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
6.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
7.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
8.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
9.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
10.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
11.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
12.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
13.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>
14.	On	<input type="text"/>	<input type="text"/>	answer calls by routing to box	<input type="text"/>

Subscriber Mailbox Information Worksheet

(System Supervisor Completes)

Photocopy this page, then complete the form for each subscriber who is to have a mailbox.

Subscriber Data	
First name:	
Last name:	
Extension number:	
Should the system announce the caller's name to the subscriber upon transfer?	
Should all conversations be recorded?	
Paging Data	(complete only if subscriber is to use the feature)
Pager number	
Pager type (circle one)	TONE DIGITAL
Paging schedule (circle one)	Always During office open hours During closed hours Schedule*: A B C D
Auto Message Forward and Message Delivery Data	(complete only if subscriber is to use these features)
Auto forward new messages:	To box: _____ After _____ hours
Auto forward new messages schedule (circle one):	Always During office open hours During closed hours Schedule*: A B C D
Message delivery schedule 1: When should delivery be active? (circle one):	Number to call: _____ Always During office open hours During closed hours Schedule*: A B C D
Message delivery schedule 2: When should delivery be active? (circle one):	Number to call: _____ Always During office open hours During closed hours Schedule*: A B C D
Message delivery schedule 3: When should delivery be active? (circle one):	Number to call: _____ Always During office open hours During closed hours Schedule*: A B C D
Message delivery schedule 4: When should delivery be active? (circle one):	Number to call: _____ Always During office open hours During closed hours Schedule*: A B C D
Message delivery schedule 5: When should delivery be active? (circle one):	Number to call: _____ Always During office open hours During closed hours Schedule*: A B C D

*If specifying a particular schedule, complete a subscriber schedule worksheet for the individual.

Subscriber Schedule Worksheet (System Supervisor Completes)

Photocopy this page, then complete the form for each subscriber who is using the Paging, Auto Message Forwarding, or Message Delivery out-calling features according to a particular schedule, as indicated on his/her Subscriber Mailbox Information sheet.

You can designate up to 4 different schedules below, then apply one schedule to each out-calling feature the subscriber will be using. Enter information for 1 to 4 schedules below in 24-hour format (for example 8:00 PM is 20:00). You do not need to complete the **BOX NUMBER** field.

Schedules				
Box number	<input type="text"/>	Name	<input type="text"/>	<input type="text"/>
	Schedule A	Schedule B	Schedule C	Schedule D
	Begin End	Begin End	Begin End	Begin End
Sunday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Monday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Tuesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wednesday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Thursday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Friday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Saturday	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Routing Worksheet (System Supervisor Completes)

See section 5.7 to familiarize yourself with the function of Routing boxes. This section also provides a sample of greetings that are typically recorded in the 3 Routing boxes pre-configured on VP systems. After reviewing this information, complete this worksheet to indicate the wording for the greetings you want this VP system to voice.

Note that you should indicate in your greeting any single-digit call routing options you want to provide to callers (“...*Press 2 for Sales...*”) and identify the extension to which a caller pressing that single-digit number should be transferred.

Office Open Greeting:

Single digit routing paths:

Office Closed Greeting:

Single digit routing paths:

Office Holiday Greeting:

Single digit routing paths:

2.7.2 Phone System Information

When a company hires a new attendant, they must train the individual on how to work with the telephone system (for example, how to transfer calls, how to get a line on hold back if the called party is busy, etc.). The same information must be supplied to the VP system.

When you run the PBX Setup utility (see section 3), you are prompted to indicate which telephone system you are using with this VP system. You specify the telephone system by choosing it from a list of systems, which is shown below. If the customer's telephone system is on this list when you select it during Setup, the VP system pre-loads specific configuration information to set up (or "train") the VP system to work with the specific telephone system.

Note: Not all integrations listed below are available on all VP systems.

- Atlas 50 / 200
- Comdial DigiTech / Impact / DSU
- Comdial DXP / DXP Plus
- Comdial FX / FXS / FXT
- Comdial Executech 2000
- Comdial Unisyn
- Cortelco Aries
- Encore CX - ECX 1832 / 3672 / 36112
- Ericsson MD-110
- Fujitsu 9600 with Serial Integration
- Fujitsu Allegra 26
- Fujitsu Series 3 / Starlog
- Fujitsu Starlog
- Harris 20/20
- Harris Intellicom 500
- Harris Intellicom 2000
- Hatachi HCX 5000
- Intertel GX152D
- Isoetec IDS 108 / 228
- Isoetec System 96
- ITT / Cortelco System 3100
- ITT ECS 4.02P
- ITT ECS 6.3
- Iwatsu ADIX
- Iwatsu ZT-D
- Lucent Definity G3 – Calista Box – Vectoring – Bridged Mode
- Lucent Definity G3 – Inband – No VoiceBridge
- Lucent Definity G3 – VoiceBridge
- Lucent Definity G3 – VoiceBridge – Vectoring – Bridged Mode
- Lucent Definity G3 – Calista Box – Vectoring – Bridged Mode
- Lucent Definity Pro Logic
- Lucent Merlin II
- Lucent Merlin Legend
- Lucent Partner ACS
- Lucent Partner Endeavor
- Lucent Partner II
- Lucent Partner Plus
- Lucent System 25
- Lucent System 75
- Lucent System 75 – VoiceBridge
- Lucent System 85 and Definity Generic 2 – VoiceBridge
- Mitel COV with D/42D-SX Voice Boards
- Mitel SX100 Digital PABX with ONS Integration
- Mitel SX200 Light with COV (DOS only) Integration
- Mitel SX200 Light with DNIC Integration
- Mitel SX200 Light with DNIC – Calista 4X4 Integration
- Mitel SX200 Light with ONS Integration
- Mitel SX200D with COV (DOS only) Integration
- Mitel SX200D with ONS Integration
- Mitel SX2000 and SX2000 Light with COV (DOS only) Integration
- Mitel SX2000 and SX2000 Light with DNIC Integration
- Mitel SX50 with COV Integration
- Mitel SX50 with DNIC Integration
- Mitel SX50 with DNIC – Calista 4X4
- NEC Electra Professional Level I
- NEC Electra Professional Level II
- NEC Mark II
- NEC NEAX-1400 IMS
- NEC NEAX-2000
- NEC NEAX-2400 Serial Integration
- Nitsuko DSO-1 / ONYX / 124i / 384I
- Northern Telecom Meridian 1 – Calista Box – Vectoring – Bridged Mode

- Northern Telecom Norstar – Calista 4X4
- Northern Telecom Norstar – With VMI Adapters
- Northern Telecom SL-1 and Meridian-1/SL-1, (with D42-SL)
- Panasonic 1232 - Analog
- Panasonic DBS
- Panasonic KXT-336
- Panasonic KX-TD 1232 Digital
- Panther II 820 / 1032 / 2064 Release IV
- Philips SOPHO-S
- Premier ESP / Intertel GMX
- Redwood 3.2
- Rolm 8000 Series CBX – VoiceBridge
- Rolm 9000/9751 Series CBX – VoiceBridge
- Rolm 9200 BCS / Siemens HCM 200
- Rolm 9751 / Release 9006i – Inband
- Samsung Prostar 56EX / 120MX / 1224
- Samsung Prostar DCS – Digital
- Siemens Hicom 150
- Siemens Hicom 150 E
- Siemens Saturn I, II, III
- SMDI Installation Guide / Centrex
- Southwestern Bell Landmark DKS 308 / 616
- Sprint Protégé / Macrotel MT360 / 824 KSU
- SRX
- Sun Moon Star
- Tadiran Coral I, II, & III with SMDI
- Tadiran Coral I,II,& III – E&M – Inband with Voice Pro
- Tadiran Coral 9.87
- Telrad 2464
- Telrad Digital Key BX, 200 Digital
- Toshiba DK-16 / 24 / 56 / 96
- Toshiba DK-280
- Toshiba Perception E
- Toshiba Perception EX
- Toshiba Perception I & II
- Toshiba Strata E
- Vodavi DHS
- Vodavi Infinite DVX1, DVX2, & DVX3
- Vodavi Starplus 2448EX / 4896EX
- Vodavi Starplus 96EX
- Vodavi Starplus Digital
- Win 100D

If the customer's telephone system is not on the list, you may need to manually input the configuration information that sets up the VP system to work with the specific phone system. You can gather all configuration information you will need to enter by working with the telephone system to answer the following questions:

- If you are on a call on a single-line telephone, and you want to transfer the call to someone else, what action do you take?
- Once you have initiated the transfer and spoken to the called party, what action do you take to connect the two parties, then drop out of the call?
- If you initiated the transfer, but the new party is busy, how do you reconnect to the original caller?
- If you initiated the transfer, but the new party does not answer, how do you reconnect to the original caller?
- If the system includes message waiting lamps, how do you turn them on and off?
- What is the required duration of a hook-flash?
- Does the telephone system provide any form of in-band (DTMF) or out-of-band (serial link) voice mail integration?
- What is the maximum length of an extension number (usually 3 or 4 digits)?

To verify that the information you have collected is correct, try each of the actions discussed above *from the line or lines that the VP system will be using*. This can be done by connecting an industry-standard telephone to the extension port, and using this telephone to perform all the functions the VP system is to do. As you perform each function (for example, answering an incoming call and transferring it to another extension), make a note of the steps that were required. For example, to transfer a call on a PBX to an extension, you may need to hook-flash, wait for dial-tone, and then dial the extension number. When the extension answers, you may then have to go on-hook to complete the transfer. If the called party is busy, you may have to hook-flash again to get back to the original incoming call.

2.8 Understanding the New VP System Setup Steps

Once you connect VP system to the phone system and collect all necessary setup information, you are ready to begin customizing the system. Customizing the system involves:

- Running the PBX Setup utility (also referred to as the First Time Setup utility)
- Specifying system information on System Information screens and in the VM.CFG file
- Specifying Routing box, mailbox, and other box setup information on box screens

The sections in this manual detail the procedures for completing each of these tasks.

2.9 Accessing the NT-based VP System Database Administrator Application (DBA) from a Networked PC

On NT-based VP systems, you specify system information and box setup information using the Database Administrator application. When the NT-based VP system PC is installed as part of a LAN, you can adjust any client PC running Windows 95, 98 or NT so you can view and modify most information in the Database Administrator from that client workstation, as well as from the VP system PC. To do so, you must configure the client PC with a directory housing four specific files. Use the procedure below to set up this directory.

To set up a client PC so it can access the Database Administrator application from the VP system PC over a network:

1. Using Explorer, from the client PC desktop, create a new folder named DBA_LINK.
2. Using a text editor, create a file named SERVER.NAM. In that file, enter the computer name assigned to the VP system PC as a single line of text. Save the file in the DBA_LINK directory on the client PC.
3. Make a copy of the file DBA.EXE from the VP system PC's \VM directory. Paste the copy into the DBA_LINK directory on the client PC.
4. Make a copy of the files LED1OFF.BMP and LED1ON.BMP from the VP system PC's \VM directory. Paste the copies into the DBA_LINK directory on the client PC.

Once this set up is complete, you can access the Database Administrator application from the client PC by simply double-clicking on the DBA.EXE file from the DBA_LINK directory. Note that you are prompted to provide a system password before you are permitted access to database screens—as is the case when you work with the Database Administrator application from the main VP system PC.

Be advised that there are some limitations you may encounter when working with the Database Administrator application by accessing it over a network. The limitations emerge when you attempt to use the Database Administrator to complete actions that involve creating, retrieving, or modifying other files stored on the VP system PC. For example, though you can create, modify, or delete a Fax box from a network PC Database Administrator access, you cannot view a fax document stored in a Fax box, because the fax document is a separate .TIF file stored on the VP system PC. You cannot listen to or modify system prompts for the same reason.

2.10 Using Microsoft Exchange Administrator to Modify NT-based VP System Mailboxes

If the NT-based VP system PC is on a network running Microsoft Exchange, you can install a utility, VMAdmin, that allows you to create and/or modify aspects of VP system mailbox setups from any LAN workstation running the Microsoft Exchange Administrator program.

Once installed, the utility adds a Voice Messaging tab to each account owner's Exchange Administrator Properties screen. From this tab, you can use options to create a new voice mailbox on the VP system PC or bring information on an existing voice mailbox into Exchange Administrator. Once a voice mailbox is set up in Exchange Administrator, modifications you make on the Voice Messaging tab are automatically updated on the subscriber's MAILBOX screens in the Database Administrator application.

You can install the VMAdmin utility on any client PC installed with Exchange Administrator. The installation program for the utility, VMINST.EXE, is located in the \Utilities\Single Point Administration directory on the VP System Installation CD-ROM.

To install the utility, use Windows Explorer or some other file management program to locate the file VMINST.EXE on the VP system CD ROM. Double-click to open the file. The INSTALL EXCHANGE ADMIN EXTENSIONS window displays. In the first field, indicate the name assigned to the Exchange Server PC, then press <Tab>. The screen is refreshed with default field entries. Review these entries and make any necessary adjustments to the field entries (no adjustments should be required unless the top portion of the screen is incomplete), then click on the Install button. Follow the prompts to complete the installation.


For additional information on working with the Voice Messaging tab from within Exchange Administrator, click on the Help button at the bottom of the window when the Voice Messaging tab is active. If you find that online help for the Voice Messaging tab is not available on a certain PC, re-run the VMINST.EXE program from that PC as detailed above, and instead of selecting the Install button, select the Set Help Path button at the bottom of the EXCHANGE ADMIN EXTENSIONS window. This action will re-establish a link with the online help.

Properties [X]

Distribution Lists | E-mail Addresses | Delivery Restrictions | Delivery Options | Protocols

General | Organization | Phone/Notes | Permissions

Custom Attributes | Limits | Advanced | Voice Messaging

 **Mary Johnson**

Name
 First: Last:

Mail Box: Class of service:

Password: Uses VCM Play Tutorial
 Uses Unified Messaging Suspend Mbox

E-Mail account for voice access
 Account is active POP3 Server:
 Account number POP3 User Name:
 POP3 Password:

Voice Server: Create new account Select an existing account
 VSSERVER

OK Cancel Apply Help

3. Running the PBX Setup Utility

Even if the VP system software is pre-installed on the system before it is shipped to you, you must run the PBX Setup utility (also referred to as the First Time Setup utility) so you can configure certain installation parameters for each specific customer's site. Use the following procedures to run the PBX Setup utility using the VP system screen interface.

(If you installed a *kit* VP system using procedures in section 21, you ran the PBX Setup utility during the kit system installation. Therefore, you can skip this section.)

The procedure you use to run the Setup utility depends on whether you are working with a DOS-based VP system or an NT-based VP system.

Note: For procedures on running the PBX Setup utility through the teleparameter feature, see section 11.

To run the PBX Setup utility on DOS-based VP systems:

1. If the VP system has pre-loaded and is running on-screen, exit to a DOS prompt by pressing <Ctrl>-<Esc> then <Enter>.
2. To switch to the VM directory, type `CD\VM` then press <Enter>.
3. To invoke the Install program, type `INSTALL` then press <Enter>.
4. When the main Install menu displays, use the ↓ key to highlight `FIRST TIME SETUP` then press <Enter>.
5. When prompted, type `C:\VM` then press <Enter> to indicate the directory in which the VP system is installed.
6. The system warns that it may overwrite some changes to the database. To continue, press <Y>.
7. At the system prompt for the number of digits in the extension numbers, enter the appropriate number then press <Enter>. At the system prompt to confirm your entry, press <Enter>.
8. A list of telephone systems displays. Note that you can use the <PgUp> and <PgDn> keys to scroll through all available selections. Enter the number corresponding to the telephone system with which you are working, then press <Enter>. If the phone system is not on the list, select option 0 `DON'T KNOW (OR UNLISTED)` then press <Enter>.
9. The system prompts you to confirm your selection. To continue, press <Y>.
10. At the system prompt regarding message waiting lights, press <Y>.
11. The system prompts you to indicate the number of telephone lines connected to the VP system. Enter the appropriate number, then press <Enter>.
12. The system prompts you for the number of digits you want to use in mailbox passwords. Indicate the number of digits subscribers are to use, then press <Enter>. (You may want to consult the system supervisor, in case he/she has a digit-length preference.)

13. The system prompts you to confirm your selection. To continue, press <Y>.
14. The system prompts you to automatically create mailboxes at this point. Though you may elect to create mailboxes now, we strongly recommend that you select No, so you can first make any necessary modifications to the prototype mailbox, which serves as a template for creating mailboxes. By properly setting up the prototype mailbox, you simplify the number of adjustments you must make to refine the mailboxes for each user. To continue without setting up mailboxes at this time, press <N>.
15. Depending on the phone system you selected, you may be prompted for additional information. Enter the appropriate responses.
16. The system prompts you to use U.S. Daylight-Savings Time. To have the system automatically adjust the clock so it accommodates Daylight-Savings Time for the next 10 years, press <Y>. If you do not want the system to automatically adjust for U.S. Daylight-Savings Time, press <N>.
17. The main Install program screen displays. To continue, select Exit then press <Enter>.
18. The Install program must re-boot the VP system to make the changes indicated. Press <Y> when the system displays the re-boot prompt. After the system reboots, the Line Status screen displays.

To run the PBX Setup utility for NT-based VP systems running version 10.x and higher:

1. Shut down the VP system if it is running by stopping the KVT Voice Mail Manager service. For procedures, see section 2.5. Do not shut down the KVT Database Server or KVT FTP Server service, however, as the procedure in section 2.5 instructs. (The KVT Database Server service must run for the PBX Setup utility to function.)
2. From the Windows NT desktop, double-click on the PBX SETUP icon.
3. From the WELCOME screen that displays, click on the Next button.
4. On the SELECT PBX TYPE screen, highlight the phone system with which this VP system is being installed. Use the scroll bar to view all available options. Once you highlight a system, click on the Next button to continue.
5. On the EXTENSION LENGTH screen, indicate the maximum number of digits to be used in phone system extensions. To continue, click on the Next button.
6. On the PASSWORD LENGTH screen, indicate the maximum number of digits subscribers are to use in mailbox passwords. To continue, click on the Next button.
7. On the UNIFIED MESSAGING AND VCM screen, check the Use Unified Messaging box if at least one subscriber will be using Unified Messaging. If you check this box, enter in the IP ADDRESS field the IP address of the VP system PC on the network. (Note that the VP system must be assigned a static IP address. You can check the IP address by selecting Control Panel from the Start button at the bottom left of the VP system PC screen, then selecting Network tab / Protocol / TCP/IP/ Properties.) Also, select the PLAY E-MAIL HEADERS checkbox if you want the system to voice the e-mail header information when e-mails are voiced to subscribers over the telephone. Header information includes that listed in the FROM, TO, and DATE e-mail form fields.

Note that when you check the Use Unified Messaging box, the Use VCM box is automatically selected and cannot be de-selected. (The Use VCM box permits functionality also used by the unified messaging feature.)

If you are not setting up the system with the unified messaging feature, but at least one subscriber will be using the VCM feature, check the Use VCM box.

To continue, click on the Next button.

8. If you did not select a Comdial phone system, skip this step and the next. If you selected a Comdial phone system, at the prompt, indicate whether you want to use LCD and Record Call features as discussed on the screen. Also indicate whether all mailboxes will use a serial link to control message waiting lamps and whether the site is using PCIU devices with the VCM feature by checking or unchecking the boxes provided. To continue, click on the Yes button.
9. If you selected a Comdial phone system, indicate the extension number associated with each voice mail port on the system. Once you specify an extension number for *every* port, click on the OK button to continue.
10. On the CONFIRM SETUP INFORMATION screen, review the selections you made. To change a selection, click on the Change button and follow the prompts. Once all selections are acceptable, click on the Finish button.
11. On the PBX SETUP COMPLETE screen, select the OK button to continue.
12. You must re-start the VP system PC to invoke the changes you made. Select the option **YES, I WANT TO RESTART MY COMPUTER NOW**, then click on the Finish button. The PC reboots, and the VP system is started.

4. Setting up System Information

System Information screens contain setup information that applies system-wide, to all boxes set up on the system. VP systems include the following System Information screens:

- GENERAL INFORMATION screen
- LINE INFORMATION screen
- BUSINESS HOURS screen
- HOLIDAY SCHEDULE screen
- CALL TRANSFER screen / PBX INFORMATION screen
- TECHNICAL INFORMATION screen (DOS-based VP systems only)
- CLASS OF SERVICE screens
- OTHER CUSTOMIZATIONS screen (DOS-based VP systems only)
- Diagnostic menu screens (NT-based VP systems only)

Two important sets of fields found on the OTHER CUSTOMIZATIONS screen in DOS-based VP systems are housed on a separate pull-down menu in NT-based VP systems. These fields are the TRACE and CUSTOM/DEBUG fields. In NT-based VP systems, these fields are found on the Diagnostics pull-down menu under the options TRACE SETUP and CUSTOM FLAGS. Information on these options is provided at the end of this section.

Before you set up Routing boxes, mailboxes, or any other boxes on the system, it is best to ensure all System Information screens are properly completed.

Note: You can access online help on any screen at any time by pressing <F1>.

4.1 Integration Defaults Set by the Setup Utility

When you run the Setup utility (see section 3), you are prompted to indicate the type of telephone system the customer is using. If you are installing the VP system on one of the phone systems listed, the Setup utility automatically sets fields on several System Information screens to the phone system's default settings. Unless you customize the phone system defaults, you probably do not need to modify these settings.

If you are using a telephone system that is not listed in the Setup utility, the utility sets fields on System Information screens to commonly used defaults. You may need to adjust these settings.

4.2 Using Technical Bulletin Information

For almost every telephone system supported by the VP system, there is a technical bulletin that details telephone-specific installation considerations and telephone-specific default values that are pre-set on System Information screens when you run the PBX Setup utility. This information is particularly useful if you are working with a phone system that is not specifically listed when you run the PBX Setup utility—primarily because it is more likely you will need to adjust settings on System Information screens.

You can obtain technical bulletins off the web or via fax distribution. For details, contact your sales or technical support representative.

4.3 Accessing System Information Screens

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access System Information screens through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the screen you want to review or modify from the System Information menu. When you have made any necessary modifications to the screen, press <F10> to save the changes. You return to the System Information menu.

To access System Information screens through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the System pull-down menu.
4. Select the screen you want to review or modify from the System menu. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

4.4 Setting Up the General Information Screen

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

General Information Screens (DOS-based VP Systems)

```

GENERAL INFORMATION
-----
COMPANY NAME : ████████████████████████████████████████████████████████████
Database access password (customer): ████████████████████████████████████████
Database access password (technician): ████████████████████████████████████████

If call lasts more than 0 minutes, re-route to box ██████████

Seconds for fast-forward / rewind operations : 5

Number of lines detected: 0
Automatically exit to DOS at 0:00
Store call log to : No log Number of boxes to log : 10
Max calls on on-screen graph: 0
Digits to get a line on external call : 9, ████████████████████████████████████████

-----
Path for prompts : P ████████████████████████████████████████████████████████████
Path for greetings : 1 ████████████████████████████████████████████████████████████
Path for messages: 1 ████████████████████████████████████████████████████████████
Path for Question-box voice files: 1 ████████████████████████████████████████████████████████████
Path for call log information: LOG ████████████████████████████████████████████████████████████
    
```

General Information Screens (NT-based VP Systems)

General information [Window Title Bar]

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Enter the directory names where the various types of files are located.

Path for prompts

Path for greetings

Path for messages

Path for Question-box voice files

Path for call log files

General information [Window Title Bar]

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Administrator password

Technician password

Display Mailbox passwords on screen

General information [Window Title Bar]

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

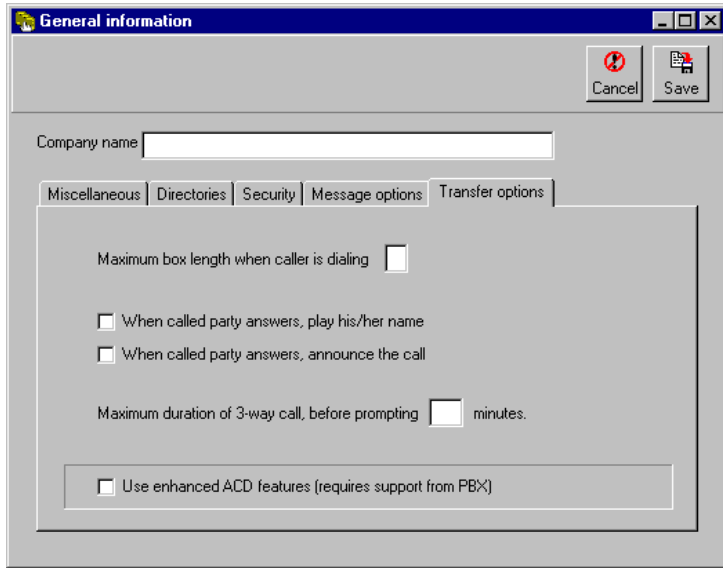
Stop recording after seconds of silence.

Disconnect if more than seconds of continuous sound detected.

Fast-forward / rewind should jump by seconds.

Play message date and time

- When caller requests it
- Before each message
- After each message



4.4.1 General Information Screen Field Descriptions

VP: Company Name
NTVP: Company Name

This field identifies the name of the company using the VP system. The company name appears on database listings and outgoing fax documents.

VP: Database Access Password (Customer)
Database Access Password (Technician)

NTVP: Administrator Password (*Security tab*)
Technician Password (*Security tab*)

To prevent unauthorized personnel from accessing the VP system database, choose database passwords, and enter them here. Each password can consist of up to 10 letters or digits.

There are two levels of password security, the *Customer* level (referred to as the *Administrator* level on NT-based systems) and the *Technician* level. If you enter the Customer / Administrator password, you are provided access to everything on the VP system except the technical setup fields on several system setup screens. Though you are able to view the technical information, you cannot modify it. If you enter the Technician password, you are provided access to everything on the VP system. The default Customer / Administrator password is blank, and the default Technician password is **1234**

When you access the GENERAL INFORMATION screen, the passwords are not displayed. Instead, the fields are filled with stars. You can still access the fields and change the passwords, but you cannot see the current password. If you accessed the VP system using the Technician password, you can access and change both password fields. If you accessed the VP system using the Customer / Administrator password, you can access and change only that password field.

VP: (See Other Customizations screen for comparable field)
NTVP: Display Mailbox Passwords on Screen (Miscellaneous tab)

When the VP system displays the MAILBOX screen on the PC screen, there is a field PASSWORD that contains the mailbox owner's password. If you do not want the password to display on the screen, choose NO here. The PASSWORD field will be filled with stars. You can still access the PASSWORD field, and change the password if required, but you cannot view the current password.

VP: If Call Lasts More Than x Minutes, Go to Box
NTVP: If Call Lasts More Than x Minutes, Go to Box (Miscellaneous tab)

This field allows you to limit the amount of time that a call remains in the VP system. For standard voice mail / automated attendant operation, caller activity is usually limited to transferring to an extension or leaving message in a mailbox (you can limit the amount of time for a message in the class of service assigned to the mailbox). There may be some cases, however, when you want to prevent callers from spending an unlimited amount of time on a single call. Some examples are:

- *Call queuing*—If you are allowing the VP system to queue calls to busy stations, you may want to limit the maximum amount of time that a caller can hold. In normal operation, the system returns to the calling party after a pre-determined number of tries to a busy extension and asks if he/she wants to remain on hold. If you do not set a time limit here, the caller can request to remain on hold for an unlimited amount of time.
- *Talking classifieds*—If the system includes the optional Talking Classifieds module, you may want to limit the time a caller may “browse” through the listings.

When you enter a time in the MINUTES field, the VP system keeps track of each incoming call. When the maximum time limit has been reached, the VP system completes the current operation (such as playing a prompt or greeting, recording a message, etc.), routes the caller to the box specified in the re-route to box field. This is typically a Routing box with a greeting such as:

“I’m sorry, you have exceeded the maximum allowed time for this call. Please call again at a later time.”

You can set up this box to disconnect the call after playing the greeting, or you can have it transfer the call to a live operator.

Note: When the MINUTES field is set to zero (0), this feature is disabled and there is no time limit in effect. Callers may stay connected to the VP system as long they stay on the line.

VP: (See Technical Information screen for comparable field)
NTVP: Automatically Update All MWI Lamps at (Miscellaneous tab)

Some telephone system automatically cancel all message waiting lamps at a pre-set time (such as Midnight). Also, many telephone systems do not restore the state of message waiting lamps following a power failure. You may program the VP system to automatically re-send the message waiting lamp ON sequence for every mailbox with new messages, and the OFF sequence for every mailbox with no new messages, once each day at this time. The following limitations must be considered:

- The VP system may need to make dozens or even hundreds of calls to update all message waiting lamps on the system. The time you enter here should be at the time of lowest activity on the system.

- On DOS-based VP systems, the time set here should not conflict with the daily EXIT TO DOS TIME (see below).

Some telephone systems do not allow unnecessary added MESSAGE WAITING ON indications to be set.

If you are not experiencing problems with message waiting lamps, leave this field blank. Intermittent performance of message waiting lamps may be caused by problems that are not related to the use of this feature.

<p>Note: If you have only an occasional problem with message waiting lamps (such as a power failure), you can invoke the message waiting update manually. From the main screen, press <Ctrl-F1> simultaneously. The update process begins, and you see an advisory message on the screen that the update is running. To cancel the update before it completes, press <Ctrl-F2>.</p>
--

VP: Number of Boxes to Log

NTVP: Number of Boxes to Track in Log (*Miscellaneous tab*)

In the call logging record for each call, the VP system stores an audit trail of all the boxes the caller accessed during the call. The default is for the VP system to store only the first 9 boxes, but you can set this number to any value between 1 and 99. The VP system includes this number of boxes in every call record in the log file. If the call used fewer boxes than the number you specify here, the VP system includes a blank box number in the log file for each missing box. If the log information is being sent to a file, each box number is enclosed in quotation marks, including the blank boxes.

VP: (*See Call Transfer screen for comparable field*)

NTVP: Digits that Mean YES in Response to a Yes/No Question (*Miscellaneous tab*)

There are several occasions when the VP system asks the caller for confirmation. For example, when the caller enters his/her pager callback number, the VP system repeats it and says, *“If this is correct, press 1.”* All digits you list in this field are considered “Yes” answers. Any other key is treated as “No.” Be advised that entries in this field affect all boxes set up on the system, not just a particular box.

If you choose to use another number instead of 1 to mean “Yes,” you must re-record the prompts that specify the number ‘1’ and change them to ask for the new number (see section 15). This includes prompts voiced in the following situations:

- Sending a message from within an open mailbox. The VP system says the recipient’s name, and then voices the prompt, *“If this is correct, press 1.”*
- During a message notification call. The VP system waits for the called party to answer, then says, *“Message for [name]. Press 1 if you would like to hear your messages.”*
- During a three-way call. To ensure the call is still active, the VP system periodically comes on the line and says, *“Excuse me, please press 1 if you wish to continue your call.”*

VP: (*See Other Customizations screen for comparable field*)

NTVP: Display Mail-Box Passwords on Screen (*Miscellaneous tab*)

When the VP system displays the MAILBOX screen on the PC screen, there is a field PASSWORD that contains the mailbox owner’s password. If you do not want the password to display on the screen, choose

NO here. The PASSWORD field will be filled with stars. You can still access the PASSWORD field, and change the password if required, but you cannot view the current password.

VP: Number of Lines Detected
NTVP: (No such field)

This field cannot be change from the keyboard. The VP system examines the hardware in the computer, counts the number of voice processing boards installed, and counts the number of lines each board can accommodate. It then displays the maximum number of lines here.

VP: Automatically Exit to DOS at
NTVP: (No such field)

DOS-based VP systems need to perform various maintenance tasks on a regular basis, such as de-fragmenting the PC's hard disk. To perform these tasks, it needs to exit to DOS. Use this field to specify a time that the VP system can automatically exit to DOS each day. It is important to choose a time of the day when the system is least busy (for example, 2:00 AM) and enter that time in this field to make the feature active (if you enter 00:00 in this field, this feature is disabled). The automatic exit to DOS feature is important for two reasons:

- When the VP system exits to DOS and re-loads, an AUDIT DATABASE program runs and checks the integrity of the voice prompts and system boxes.
- Every Wednesday, a batch file is programmed to run a hard disk drive defragmenting program. This keeps the VP system running at its peak operating performance. The batch program may take up to 30 minutes or more to run.

When the program exits to DOS to perform maintenance functions, you can schedule it to perform other tasks, such as backups. Program these other tasks to be called from the DISKM.BAT file.

VP: Store Call Log to
NTVP: (No such field)

When you move the cursor to this field, a menu displays, offering options for the call logging feature. You can turn call logging off or send the output to a printer or to a file.

If you select to send logs to the printer, verify:

- The printer is attached to LPT1 on the PC.
- The printer is turned on and is on-line.
- The printer is set to perform a CARRIAGE-RETURN and LINE-FEED when it receives a line feed character (such as an automatic carriage-return). Consult the printer documentation for information on adjusting these settings.

If you choose to store call logs to a file, the VP system creates a file called VOICMAIL.LOG in the \VM\LOG directory. All log information is written to that file. At midnight each night, the contents of VOICMAIL.LOG are transferred to another file in the subdirectory \LOG for long-term storage. The name of the long-term storage file is based on the month and day. On February 15, for example, the daily log file is stored as VOICEMAIL.LOG. At midnight, the contents of VOICEMAIL.LOG are copied to the file 0215.LOG, and the file VOICEMAIL.LOG is cleared to record the log of calls on February 16. At midnight

on February 16, the contents of VOICEMAIL.LOG are copied to the file 0216.LOG, and VOICEMAIL.LOG is cleared to record the log of calls on February 17.

Up to one year's worth of information can be stored. After that, the VP system begins over-writing the previous year's log files.

VP: (No such field)

NTVP: Generate Log Data for Reports

Select this option to allow the VP system to tabulate data on all incoming and outgoing calls in a log file. This data can then be used to generate several system reports, viewable using the Reports Generation Package (see section 7.10).

All log information is written to the file VOICEMAIL.LOG in the \VM\LOG directory. At midnight each night, the contents of VOICEMAIL.LOG are transferred to another file in the subdirectory \LOG for long-term storage. The name of the long-term storage file is based on the month and day. On February 15, for example, the daily log file is stored as VOICEMAIL.LOG. At midnight, the contents of VOICEMAIL.LOG are copied to the file 0215.LOG, and the file VOICEMAIL.LOG is cleared to record the log of calls on February 16. At midnight on February 16, the contents of VOICEMAIL.LOG are copied to the file 0216.LOG, and VOICEMAIL.LOG is cleared to record the log of calls on February 17.

Up to one year's worth of information can be stored. After that, the VP system begins over-writing the previous year's log files.

VP: Max Calls on On-Screen Graph

NTVP: (No such field)

One of the on-line displays is a set of graphs showing the number of incoming calls received per hour for the current and previous day. You can specify the maximum value for the vertical scale on the graph. If you set this value to 0, the VP system automatically chooses the best scale, according to the number of calls received.

VP: (See Technical Information screen for comparable field)

NTVP: Stop Recording After X Seconds of Silence (Message Options tab)

When the VP system is recording a message, it determines that the caller has finished speaking if he/she remains silent for a specific interval. Use this parameter to specify how many seconds of silence the VP system should detect before ending recording. If you enter 0 in this field, silence detection is disabled.

<p>Note: If the telephone system does not provide positive disconnect (DTMF tones or a break in loop current), you may experience silent messages in mailboxes when a caller hangs up before leaving a message. You may use a combination of this parameter and the parameter MINIMUM MESSAGE in the configuration file VM.CFG to minimize these "blank" messages. Use caution when setting the NUMBER OF SECONDS OF SILENCE TO END RECORDING parameter. If this time is set too short, you may stop recording caller's messages when they are simply pausing for a moment.</p>
--

See section 12 for information on the MINIMUM MESSAGE parameter.

VP: (See Technical Information screen for comparable field)

NTVP: Disconnect if More than X Seconds of Continuous Sound Detected (Message Options tab)

While the VP system is recording a message, it is monitoring the line for dial tone (continuous non-silence). If dial tone is detected, the VP system assumes the caller has hung up, and stops recording. This field lets you specify how many seconds of continuous non-silence needs to be detected before the system assumes it is dial tone.

Note: If you set this number too low, a caller who pauses and says "aaaahhhh" could trigger the dial tone detection. If you set the number too high, 15 seconds, for example, the C.O. or PBX might remove the dial tone before it has been on the line long enough to be detected.

VP: Seconds for Fast-Forward/ Rewind Operations

NTVP: Fast-Forward/Rewind Should Jump by X Seconds (Message Options tab)

When a mailbox owner is listening to his/her messages, he/she can use the *fast-forward* and *rewind* functions. *Fast-forward* forwards the message by a pre-defined number of seconds. *Rewind* reverses the message that number of seconds. Use this field to specify the number of seconds for both operations.

VP: (See Other Customizations screen for comparable field)

NTVP: Play Message Time and Date (Message Options tab)

When a mailbox owner is listening to his/her messages, one of the options is to press 5 to hear the time and date that the message was received. Use this field to control the play of the time and date of each message. The choices are:

- WHEN CALLER ASKS—The mailbox owner must press 5 to hear time and date
- BEFORE EACH MESSAGE—The time and date is played automatically before each message
- AFTER EACH MESSAGE—The time and date is played automatically after each message (this is the default)

VP: Digits to Get a Line on External Call

NTVP: (See PBX Information screen for comparable field)

If the VP system is working behind a key system or a PBX, enter the sequence of digits it should dial to get an outside (C.O.) line when calling an external number. This number is typically a 9 followed by a pause (9,).

Note: The digits in this field are not involved when the VP system is making an external call transfer. They are only used when it places an outgoing external call (for pager notification or message delivery, for example). See section 7.3 for information on external transfers.

VP: (See Other Customizations screen for comparable field)

NTVP: When Called Party Answers, Play His/Her Name (Transfer options tab)

This field affects only mailboxes using the WAIT FOR ANSWER or SCREEN transfer type. If this field is set to YES, when the called party answers, the VP system announces the call. The standard format is one of the following:

“I have a call for you, [name].”

“Call from [calling party’s name] for [name].” (if the option to get the caller’s name is active)

This prompt is useful if an extension receives calls from more than one mailbox and you want it to be answered with the correct name of the called party. For example, several mailbox owners could change their call transfer service to send their calls to a central answering point (see section 5.1). The person receiving these calls can now hear who these calls are for and answer with a personalized greeting such as, *“Mr. Smith’s office,” “Mr. Jones’ office,”* etc.

Setting this field to NO causes the VP system to omit the called party’s name and simply announce the call. The format is one of the following:

“I have a call for you.”

“Call from [calling party’s name].” (if the option to get the caller’s name is active)

VP: (See Call Transfer screen for comparable field)
NTVP: Max Duration of 3-Way Call (Transfer Options tab)

Since the VP system has to stay on the line for the entire duration of a three-way call, it has to know when both parties have finished their conversation, so it can hang up and release the line. To guard against the event that the end of the conversation is not detected, the VP system will come on the line after the amount of time you specify here, and prompt the parties to confirm that at least one of them is still on the call. It does this by playing the prompt, *“Excuse me, press 1 if you wish to continue your call.”* If either party presses 1, the timer resets and the call can proceed. If no digit is dialed, the VP system disconnects the call.

VP: No such field
NTVP: Use Enhanced ACD Features (Transfer Options tab)

This feature is available on VP system versions 10.1x and higher. If the phone system supports enhanced ACD integration, check this box to activate these features. Enhanced ACD integration:

- Allows you to specify on CUSTOMER SERVICE BOX screens that call hunting is to start from the longest idle extension
- Allows the VP system to identify non-idle agent extensions before attempting a call transfer (speeding call processing)
- Provides LCD display of queue statistics
- Allows agents to log into and out of an ACD group via the LCD controls on their phone

For additional information on enhanced ACD integration and the phone systems that support it, contact a VP system sales representative.

VP: (See Other Customizations screen for comparable field)
NTVP: When Called party Answers, Announce the Call (Transfer Options tab)

This parameter affects only the mailboxes using transfer type WAIT FOR ANSWER.

When using the WAIT FOR ANSWER transfer type, the VP system does not connect the calling and called parties until it confirms that the called party has answered. This is done two ways:

- Voice is detected on the line
- A break in the cadence of the ringback tone is detected (see section 13)

This process may take 1 to 2 seconds from the time that the called party goes offhook to answer an incoming call. Under normal operating conditions, the VP system informs the called party that it has detected answer by playing the system prompt:

“I have a call for you.”

Setting this parameter to NO prevents the prompt from playing. A short tone plays in its place (system prompt 166).

<p>Note: Users should be made aware that when they first go off hook and answer an incoming call, the calling party does not hear their initial answer (since the VP system does not connect the call until it detects the answer).</p>
--

VP: *(See Other Customizations screen for comparable field)*
NTVP: **Maximum Box Length When Caller is Dialing** *(Transfer Options tab)*

Box numbers in the VP system may be 2, 3, or 4 digits long (for example, you may have a mailbox 10, a mailbox 100, and a Routing box 1000). To speed up call processing, you may use this parameter to define the maximum box length that a caller might dial. Entering a number less than 4 does *not* mean you cannot have any 4-digit boxes in your system, just that any 4-digit boxes can not be dialed directly by a caller.

For example, if the telephone system uses only 3-digit extensions, you will probably have corresponding 3-digit mailboxes. In this case, enter **3** for MAXIMUM BOX LENGTH. When a caller dials a 3-digit mailbox number, the VP system processes the call immediately, not waiting for a fourth digit.

In this example, you can still use 4-digit box numbers on the system, especially for other box types, such as Routing boxes, provided that these boxes are accessed in a way other than the caller dialing the box number. For example, you may use 4-digit Routing boxes as the initial boxes indicated on the LINE INFORMATION screen, in the Routing box DESTINATION FOR DIGIT fields, in any system GO TO BOX field, etc.

<p>Note: If the system has Routing box numbers that are longer than the MAXIMUM BOX LENGTH parameter, the greeting can only be recorded by using the computer keyboard. Owners of Routing boxes are not able to remotely record or change a greeting because when the VP system prompts the box owner to enter the box number of the greeting he/she wants to change, the owner is not be able to dial more than the number of digits defined in MAXIMUM BOX LENGTH.</p>

Defining the Paths for the VP System Files

When VP system software is installed, the system automatically stores the files in the directory \ VM and several sub-directories under \ VM. You may move some of the file types to other directories (if required by your application) by setting a new path in the following fields. Note that changing the path here does *not* move any of the existing files stored in the current path—you must manually move the files.

If you choose to place files in a directory other than the default shown, you must indicate the complete path here. For information on indicating paths, consult documentation for the operating system.

VP: Path for Prompts
NTVP: Path for Prompts (*Directories tab*)

When the VP system is about to play a system prompt (such as, “*Please hold for...*” or, “*That extension is currently unavailable...*”), it looks for the speech file that contains that prompt. The system prompts are stored by default in the directory `\VM\P`. However, you can store them elsewhere if you use this field to tell the VP system where to find them.

VP: Path for Greetings
NTVP: Path for Greetings (*Directories tab*)

When the VP system is about to play a box greeting (“*For Sales, press 1, for Service, press 2,*” or, “*Hi, this is Mary. Please leave me a message after the tone...*”), it looks for the speech file that contains that greeting. The box greetings are stored by default in the directory `\VM\M`. However, you can store the greetings elsewhere if you use this field to tell the VP system where to find them.

VP: Path for Messages
NTVP: Path for Messages (*Directories tab*)

When the VP system is about to play a mailbox message to the owner of the mailbox, it looks for the speech file that contains that message. The mailbox messages are stored by default in the directory `\VM\M`. However, you can store them elsewhere if you use this field to tell the VP system where to find them.

VP: Path for Question Box Voice Files
NTVP: Path for Question Box Voice Files (*Directories tab*)

Question box questions and answers are stored by default in the directory `\VM\M`. However, you can use this field to tell the VP system to store them in another directory. Changing the path here for the questions and answers does not affect where Question box greetings are stored, which is the same path as that used for all other system greetings.

VP: Path for Call Log Information
NTVP: Path for Call Log Information (*Directories tab*)

If you selected `FILE` for the `VM.CFG` parameter `STORE CALL LOG TO:`, the VP system normally records this information in files stored in the sub-directory `VM\LOG`. You may use this field to tell the VP system to use another directory. Note that log files are automatically archived for one year, so you must have sufficient disk space available or you must periodically delete the files. See section 7.1 for more information on the call log.

For additional information on files, see section 16.

4.5 Setting Up the Line Information Screen

The `LINE INFORMATION` screen is divided into columns, and each row contains the information for one of the VP system’s ports. If the VP system has more lines than are displayed on the screen, you can display the additional lines by pressing `<F6>` or the previous 8 lines by pressing the `<F5>`. (NT-based VP system users can also scroll to see all line information.)

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Line Information Screens (DOS-based VP Systems)

LINE INFORMATION											
Day Service			Night service		Lunch service		Outgoing allowed?	Line Groups			
Line num	Initial box	Rings to ans	Initial box	Rings to ans	Initial box	Rings to ans		A	B	C	D
1	9999	1		1		1	Yes	No	No	No	No
2		1		1		1	Yes	No	No	No	No
3		1		1		1	Yes	No	No	No	No
4		1		1		1	Yes	No	No	No	No
5		1		1		1	Yes	No	No	No	No
6		1		1		1	Yes	No	No	No	No
7		1		1		1	Yes	No	No	No	No
8		1		1		1	Yes	No	No	No	No

Line Information Screen (NT-based VP Systems)

Line number	Day service		Night service		Lunch time		Outgoing calls allowed?	Member of line group			
	Rings to answer	Initial box	Rings to answer	Initial box	Rings to answer	Initial box		A	B	C	D
1	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.5.1 Line Information Screen Field Descriptions

VP: Initial Box (Day Service, Night Service, Lunch Service)

NTVP: Initial Box (Day Service, Night Service, Lunch Service)

When a call is first answered, the VP system checks the date and time to see if the business is open (in Day Service mode). To make this determination, it consults the BUSINESS HOURS screen.

If the VP system is in Day Service mode, it reads the box number from this field, and routes the call to that box. This box is typically a Routing box that plays a “welcome” greeting and offers various options to the caller. The same process is applied when the system is in the Lunch Service mode or Night Service mode.

VP: Rings to Answer
NTVP: Rings to Answer

The VP system answers incoming calls after the number of rings specified in this field. You can set this parameter for Day, Night, and Lunch Service modes.

If the telephone system rings all the VP systems ports simultaneously for each incoming call, set the value in this field to 99. This tells the VP system to answer on one port, then pause to see if the other ports stop ringing. If they do not, the VP system answers on another port (as there must have been at least two calls ringing in), and pauses again, etc.

<p>Note: If you have problems with the operation of this feature, adjust the pooled ring time (see section 12).</p>
--

VP: Outgoing Calls Allowed
NTVP: Outgoing Calls Allowed

If this field is set to NO for a particular line, the VP system does not use that line when it is making outgoing calls, to call a paging service, to perform message notification, and to set or clear message-waiting lamps, for example.

<p>Note: The settings in this field are ignored for any call that is made within a specific line group you have set up.</p>
--

VP: Line Groups
NTVP: Line Groups

Use these fields to specify which lines belong to which line group. Each line group can contain zero, one, or several lines, and each line can belong to zero, one, or several line groups. For more information on line groups, see section 7.16

4.6 Setting Up the Business Hours Screen

Use the BUSINESS HOURS screen to define the Day Service mode period and Lunch Service mode period. By default, any period not defined as part of Day Service or Lunch Service is considered part of Night Service mode.

The VP system automatically switches between Day Service mode, Night Service mode, and Lunch Service mode based on the times you enter in these fields.

<p>Note: A system supervisor has the ability to call into the system and override these times, forcing the system into Day Service or Night Service at any time.</p>

Before programming the system's BUSINESS HOURS, see section 7.7 for a complete discussion of Day Service, Night Service, and Lunch Service modes.

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Business Hours Screens (DOS-based VP Systems)

BUSINESS HOURS				
	Day service begins	Day service ends	Lunch service begins	Lunch service ends
SUN:	_____	_____	_____	_____
Mon:	_____	_____	_____	_____
Tue:	_____	_____	_____	_____
Wed:	_____	_____	_____	_____
Thu:	_____	_____	_____	_____
Fri:	_____	_____	_____	_____
Sat:	_____	_____	_____	_____

Change "Good afternoon" to "Good evening" at: _____

Business Hours Screens (NT-based VP Systems)

The screenshot shows a window titled "Business hours" with "Cancel" and "Save" buttons. The main area contains a table for setting business hours:

	Day service begins	Day service ends	Lunch service begins	Lunch service ends
Sunday	0:00	0:00	0:00	0:00
Monday	0:00	0:00	0:00	0:00
Tuesday	0:00	0:00	0:00	0:00
Wednesday	0:00	0:00	0:00	0:00
Thursday	0:00	0:00	0:00	0:00
Friday	0:00	0:00	0:00	0:00
Saturday	0:00	0:00	0:00	0:00

4.6.1 Business Hours Screen Field Descriptions

For each day of the week, enter the opening and closing times for the business. If the business is closed all day, enter **00:00** in both the DAY SERVICE BEGINS and DAY SERVICE ENDS fields. This places the VP system in the Night Service mode for that entire day .

If the business is open 24 hours on a particular day, enter **00:00** for the DAY SERVICE BEGINS time and **24:00** for the DAY SERVICE ENDS time.

Note: All times must be entered in 24-hour format—for example, enter 8:00 PM as 20:00).

The Lunch Service mode may be used for a variety of purposes. See section 7.7.

**VP: Change “Good Afternoon “ to “Good Evening” at
NTVP: Change “Good Afternoon” to “Good Evening” at**

If you have recorded system prompts 171, 172, and 173, the initial greeting (as programmed in the LINE INFORMATION screen) is automatically preceded with the appropriate prompt. Prompt 171, “*Good morning...*” is voiced from midnight until noon. Prompt 172, “*Good afternoon...*” is voiced from Noon until the time set here. At this time prompt 173, “*Good evening...*” is voiced until midnight.

If you have not recorded prompts 171, 172, and 173, you can ignore this field. These prompts are not pre-recorded, since they should be recorded in the same voice as the initial greetings for best quality and continuity.

4.7 Setting Up the Holiday Schedule Screen

Besides having the VP system answer calls differently at different times of the day, you can have the system answer calls in a special way during various holidays. For example, on New Year’s day, the company may be working with a smaller staff, so they may want the system to greet customers with:

“The XYZ Company wishes all its customers a Happy New Year. Our service personnel are not available today, but will be back as usual tomorrow. For Sales, press 1, or press 0 to speak to an operator.”

You may pre-define up to 20 holiday dates. For each holiday, you can specify a different greeting or a different call routing scheme. During the holiday, the VP system uses the greeting and call routing scheme you have defined.

The following programming example shows how to set up a New Year’s holiday greeting to play on January 1.

Access the HOLIDAY SCHEDULE screen and select JANUARY as the month, then enter **1** to indicate the first day of the month. In the field INITIAL BOX, enter a spare box number (which will be set up later in this example). In this example, box number 8500 is used.

The VP system is now advised of the New Year’s holiday. Each time a call arrives on January 1, the VP system routes the call to box 8500, ignoring all service periods assigned on the LINE INFORMATION screen.

Note: Holiday greetings are in effect for the entire 24-hour period of the calendar day.

To complete this example, Routing box 8500 must be created. You add Routing boxes by accessing the ROUTING BOX screen (see section 5.7). Press <F2> to add a Routing box and type 8500 in the window

that displays. Once you create a Routing box, you can record a greeting in it (in this example, a New Year's specific holiday greeting) and set up the various routing options as described in section 5.7 .

Holiday Schedule Screen (DOS-based VP Systems)

H O L I D A Y S C H E D U L E							
	Month	Day	Initial box		Month	Day	Initial box
Holiday 1:	None	1	9999	Holiday 11:	None	1	
Holiday 2:	None	1		Holiday 12:	None	1	
Holiday 3:	None	1		Holiday 13:	None	1	
Holiday 4:	None	1		Holiday 14:	None	1	
Holiday 5:	None	1		Holiday 15:	None	1	
Holiday 6:	None	1		Holiday 16:	None	1	
Holiday 7:	None	1		Holiday 17:	None	1	
Holiday 8:	None	1		Holiday 18:	None	1	
Holiday 9:	None	1		Holiday 19:	None	1	
Holiday 10:	None	1		Holiday 20:	None	1	

Holiday Schedule Screen (NT-based VP Systems)

Number	Status	Month	Day	Description	Value
1.	On	(None)	1	answer calls by routing to box	0
2.	On	(None)	1	answer calls by routing to box	0
3.	On	(None)	1	answer calls by routing to box	0
4.	On	(None)	1	answer calls by routing to box	0
5.	On	(None)	1	answer calls by routing to box	0
6.	On	(None)	1	answer calls by routing to box	0
7.	On	(None)	1	answer calls by routing to box	0
8.	On	(None)	1	answer calls by routing to box	0
9.	On	(None)	1	answer calls by routing to box	0
10.	On	(None)	1	answer calls by routing to box	0
11.	On	(None)	1	answer calls by routing to box	0
12.	On	(None)	1	answer calls by routing to box	0
13.	On	(None)	1	answer calls by routing to box	0
14.	On	(None)	1	answer calls by routing to box	0

4.8 Setting up the Call Transfer Screen (DOS-based VP System) / PBX Information Screen (NT-based VP Systems)

On the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems) you describe to the VP system how to transfer calls using the telephone system. Many of the entries on this screen are preset when you run the Setup utility and specify a telephone system. If you were able to select the specific phone system with which you are working when you ran the Setup utility, you probably do not need to adjust default entries made on these screens.

Note: In the following field descriptions, there are references to INTERNAL and EXTERNAL call transfers. The VP system determines that a transfer is INTERNAL if there are 6 or fewer digits in the telephone number it is to dial. If there are more than 6 digits in the number, the VP system assumes the transfer is EXTERNAL. You can change this default from 6 to any other number by entering the appropriate command in the configuration file VM.CFG. See section 12.

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Call Transfer Screen (DOS-based VP Systems)

CALL TRANSFER INFORMATION		
	INTERNAL	EXTERNAL
SEQUENCE TO INITIATE A TRANSFER :	?,	?,
Sequence to complete a transfer :		
Sequence to transfer 3-way call :		
Sequence to return from busy:	!,	!,
Sequence to return from no-ans :	!,	!,
Sequence to return call screening:	!,!,	!,!,
Detect dial tone?	Yes	
Detect call-progress tones?	Yes	
Use transfer bypass digit ?	Last digit	
Digits that mean YES, when asking for confirmation	1	
Max time for 3-way call (mins) :	5	

PBX Information Screens (NT-based VP Systems)

PBX information

Cancel Save

Miscellaneous Call transfer sequences

Digits to get a line on external call 9

Disconnect digit sequence a

On answer, pause for 2 seconds, waiting for PBX digits

Wait for dial tone when making a call

Hookflash length 500 ms.

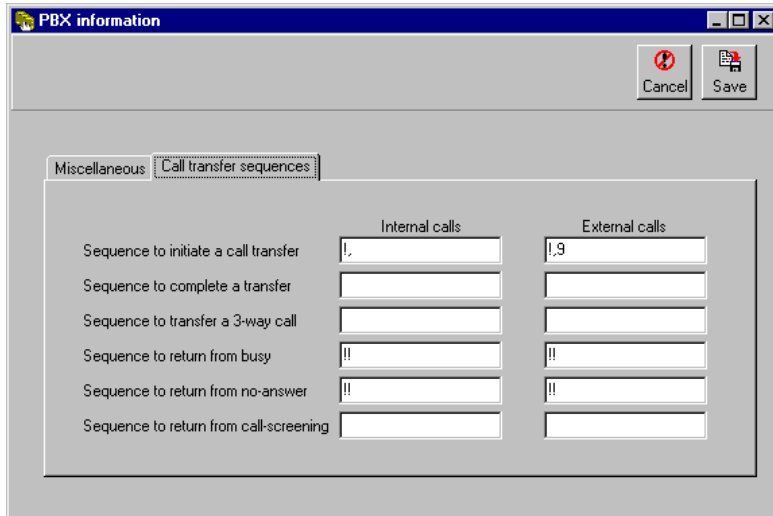
Pause length 1000 ms.

Transfer bypass digit arrives

Before extension number

After extension number

Not used



4.8.1 Call Transfer Screen / PBX Information Screen Field Descriptions

VP: Sequence to Initiate a Transfer (Internal / External)

NTVP: Sequence to Initiate a Transfer (Internal / External) (*Call Transfer Sequence tab*)

When the VP system is about to attempt a call transfer, it reads this field to determine how to initiate a transfer on the telephone system. The normal sequence is a hook-flash followed by a pause. The digits 0 through 9 and the characters * and # are dialed as they appear. You can also include the following special characters in these fields:

Character	Action Indicated
P	Use pulse (also known as 'rotary') dialing.
T	Use tone dialing (the default).
,	Short pause (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
%	Medium pause (equal in length to 4 commas).
L	Long pause (equal in length to 8 commas).
!	Hook-flash.
X	The VP system replaces the X with the box number of the mailbox performing the transfer.
F	The VP system replaces the F with the digits in the TRANSFER TO field of the mailbox performing the transfer.
\F	Long hook-flash (4 seconds, Rhetorex systems only).
Any other character	Can be used for punctuation and is ignored.

VP: Sequence to Complete a Transfer (Internal / External)
NTVP: Sequence to Complete a Transfer (Internal / External) (*Call Transfer Sequence tab*)

Once the VP system calls the party to which the call is to be transferred and determines the transfer is successful (see section 7.3), it reads this field to decide how to connect the two parties. It dials whatever sequence you enter in this field, then hangs up. Typically, this field is left blank, instructing the VP system to simply hang up.

The same special characters are available here as described above.

VP: Sequence to Transfer a Three-Way Call (Internal / External)
NTVP: Sequence to Transfer a 3-Way Call (Internal / External) (*Call Transfer Sequence tab*)

This field is similar to the previous field, but is used if the call is being transferred using three-way calling (see section 7.3). Once the VP system calls the party to which the call is to be transferred and determines that the transfer is successful, it reads this field to decide how to connect the two parties. It dials whatever sequence you enter in this field, then remains on the line for the duration of the call. Enter the sequence the VP system needs to dial to conference all three parties together (a single hook-flash on most telephone systems).

If you choose to record the conversation, the VP system also uses the sequence indicated in this field to complete the transfer.

The same special characters are available here as described above.

VP: Sequence to Return from Busy (Internal / External)
NTVP: Sequence to Return from Busy (Internal / External) (*Call Transfer Sequenced tab*)

If the VP system encounters a busy phone when it is transferring the call (except when performing a BLIND transfer), it returns to the caller and offers to place the caller on hold, or it plays the personal greeting in the mailbox. To determine how to return to the caller, the VP system consults this field, and dials the digit sequence it contains (one or two hook-flashes on most systems).

VP: Sequence to Return from No-Answer (Internal / External)
NTVP: Sequence to Return from No-Answer (Internal / External) (*Call Transfer Sequence tab*)

If the VP system is performing a supervised transfer (WAIT FOR ANSWER or SCREEN) and encounters a no answer condition, it returns to the caller and plays the personal greeting in the mailbox. To know how to return to the caller, the VP system consults this field and dials the digit sequence it contains (one or two hook-flashes on most systems).

VP: Sequence to Return from Call Screening
NTVP: Sequence to Return from Call Screening (*Call Transfer Sequence tab*)

If a party receiving a screened transfer chooses not to accept the call, the VP system consults this field and dials the sequence it contains. Note that this is a different than when the VP system cancels a transfer due to a busy or no answer condition, in that the called party answered the call and chose not to speak with the calling party. The sequence typically indicated in this field is two hook-flashes (the first hook-flash creates a momentary three-way conference, the second hook-flash releases the called party and retains the calling party on the line). The calling party then receives the call handling treatment selected by the called party.

Note: Be certain to test this sequence properly. If this sequence is not correct, the called and calling parties may be connected, even though the called party has chosen not to take the call.

VP: Detect Dial Tone

NTVP: Wait for Dial Tone When Making a Call (*Miscellaneous tab*)

When the VP system goes off-hook to make an outgoing call (for example, to call a paging service), it listens for dial tone. If it does not hear dial tone within 5 seconds, it assumes that it must have picked up just as a call was coming in (encountered a “call-collision”) Therefore, it treats the call as a normal incoming call by playing the initial greeting.

Some PBXs and key systems do not provide dial tone, or their dial tone is not standard. The VP system can detect most of the various types of dial tone, but you can disable this detection feature if the VP system cannot detect the dial tone on a particular system. If you enter NO in this field, the VP system does not listen for dial tone when making outgoing calls. Instead, it goes off-hook and pause 3 seconds before dialing.

Note: Because of the “call-collision” protection feature, verify you do not allow any outgoing calls on lines that are not connected. For example, if the VP system is equipped with 8 ports but at present you have only 6 lines connected, any outgoing call attempt on an unconnected line will cause the VP system to try to process an incoming call on that line.

VP: (*See General Information screen for comparable field*)

NTVP: Digits to Get a Line on External Call (*Miscellaneous tab*)

If the VP system is working behind a key system or a PBX, enter the sequence of digits it should dial to get an outside (C.O.) line when calling an external number. This number is typically a 9 followed by a pause (9,).

Note: The digits in this field are not involved when the VP system is making an external call transfer. They are only used when placing an outgoing external call (for pager notification or message delivery, for example). See section 7.3 for information on external transfers.

VP: (*See Technical Information screen for comparable field*)

NTVP: Disconnect Digit Sequence (*Miscellaneous tab*)

Some PBXs and key systems generate a sequence of touch tone (DTMF) digits to let the voice mail system know when a caller hangs up. If the telephone system you are working with can do this, enter the digits here. If the telephone system does not provide this feature, leave this field blank.

VP: (*See Technical Information screen for comparable field*)

NTVP: Hook-flash Length (*Miscellaneous tab*)

When the VP system hook-flashes (for example, to transfer a call), the length of the hook-flash is determined by the value in this field. Most telephone systems accept a hook-flash of between 350 and 650 milliseconds. If in doubt, contact the vendor of the telephone equipment or the local telephone company.

If you change this value, you must exit the system and re-boot the computer for the change to take effect.

VP: (See Technical Information screen for comparable field)
NTVP: Pause Length (Miscellaneous tab)

When you enter a comma in a digit sequence (for example, the digit sequence to initiate a transfer), the VP system interprets the comma as a pause and stops dialing for an interval. This field defines (in milliseconds) how long this interval is to be.

If you change this value, you must exit the system and re-boot the computer for the change to take effect.

VP: (See Other Customizations screen for comparable field)
NTVP: On Answer, Pause for X Seconds, Waiting for PBX Digits (Miscellaneous tab)

When the VP system answers an incoming call, it waits the number of seconds defined in this field before playing the initial greeting. This pause allows for the transmission of voice mail integration digits (either in the form of in-band DTMF or out-of-band serial data) from the telephone system to the VP system. This field *must* be set when the VP system is connected to any type of telephone system with voice mail integration. The typical entry in this field is 1 second.

Set this field to 0 if the telephone system does not have voice mail integration.

VP: Detect Call-Progress Tones
NTVP: (No such field)

Some PBXs and key systems do not provide standard call-progress tones (such as ring back tone, busy tone, etc.). If the VP system is not transferring calls correctly, it may be because it cannot detect the call-progress tones on the system. Run the call-progress tone training utility described in section 13.

Though it is not recommended, you can turn off call-progress tone detection. If you turn detection off, you must set the call transfer type to SCREEN in each mailbox. With this setup, when the VP system transfers a call, it does not listen for tones. Instead, it dials the number and immediately begins repeating:

"I have a call for you. Press 1 to accept the call, press 2 if you would like me to take a message..."

This message repeats the number of times you set in the RINGS TO ANSWER field (VP SYSTEMS) / ASSUME NO-ANSWER AFTER X RINGS field (NTVP systems) of the mailbox. If no digit is pressed after the prompt has played the specified number of times, the VP system treats the call as a no answer call, returns to the caller as normal, and plays the mailbox greeting.

<p>Note: The call queuing feature is not available when call-progress tone detection has been turned off. See section 13 for more information.</p>

VP: Use Transfer Bypass Digit
NTVP: Transfer Bypass Digit Arrives area (Miscellaneous tab)

Use this field to specify whether you want to use the transfer-bypass feature and whether the transfer bypass digit is to be expected as the first or last digit with the mailbox number. The transfer bypass feature is described in section 7.3.

VP: Digits that Mean YES When Asking for Confirmation
NTVP: (See General Information screen for comparable field)

There are several occasions when the VP system asks the caller for confirmation. For example, when the caller enters his/her pager callback number, the VP system repeats it and says, *"If this is correct, press 1."* All digits you list in this field will be considered as "Yes" answers. Any other key will be treated as "No." Be advised that entries in this field affect all boxes set up on the system, not just a particular box.

If you choose to use another number instead of 1 to mean "Yes," you must re-record the prompts that specify the number '1' and change them to ask for the new number (see section 15). This includes prompts voiced in the following situations:

- Sending a message from within an open mailbox. The VP system says the recipient's name, and then voices the prompt, *"If this is correct, press 1."*
- During a message notification call. The VP system waits for the called party to answer, then says, *"Message for [name]. Press 1 if you would like to hear your messages."*
- During a three-way call. To ensure the call is still active, the VP system periodically comes on the line and says, *"Excuse me, please press 1 if you wish to continue your call."*

VP: Max Time for Three-Way Call
NTVP: (See General Information screen for comparable field)

Since the VP system has to stay on the line for the entire duration of a three-way call, it has to know when both parties have finished their conversation, so it can hang up and release the line. To guard against the event that the end of the conversation is not detected, the VP system will come on the line after the amount of time you specify here, and prompt the parties to confirm that at least one of them is still on the call. It does this by playing the prompt, *"Excuse me, press 1 if you wish to continue your call."* If either party presses 1, the timer resets and the call can proceed. If no digit is dialed, the VP system disconnects the call.

4.9 Setting up the Technical Information Screen (DOS-based VP Systems)

Many of the entries on this screen are preset when you run the Setup utility and specify a telephone system. If you were able to select the specific phone system with which you are working when you ran the Setup utility, you probably do not need to adjust default entries made on this screen.

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Technical Information Screen (DOS-based VP Systems)

TECHNICAL INFORMATION	
DISCONNECT DIGIT SEQUENCE :	████████
Hookflash length (milliseconds) :	500
Pause length (milliseconds) :	1000
Seconds of silence to end recording :	5
Seconds of non-silence to end recording :	5
Automatically update all MWI lamps at:	0:00

4.9.1 Technical Information Screen Field Descriptions

VP: Disconnect Digit Sequence

NTVP: (See *PBX Information screen for comparable field*)

Some PBXs and key systems generate a sequence of touch tone (DTMF) digits to let the voice mail system know when a caller hangs up. If the telephone system you are working with can do this, enter the digits here. If the telephone system does not provide this feature, leave this field blank.

VP: Hook-flash Length

NTVP: (See *PBX Information screen for comparable field*)

When the VP system hook-flashes (for example, to transfer a call), the length of the hook-flash is determined by the value in this field. Most telephone systems accept a hook-flash of between 350 and 650 milliseconds. If in doubt, contact the vendor of the telephone equipment or the local telephone company.

If you change this value, you must exit the system and re-boot the computer for the change to take effect.

VP: Pause Length

NTVP: (See *PBX Information screen for comparable field*)

When you enter a comma in a digit sequence (for example, the digit sequence to initiate a transfer), the VP system interprets the comma as a pause and stops dialing for an interval. This field defines (in milliseconds) how long this interval is to be.

If you change this value, you must exit the system and re-boot the computer for the change to take effect.

VP: Number of Seconds of Silence to End Recording

NTVP: (See *General Information screen for comparable field*)

When the VP system is recording a message, it determines that the caller has finished speaking if he/she remains silent for a specific interval. Use this parameter to specify how many seconds of silence the VP system should detect before ending recording. If you enter 0 in this field, silence detection is disabled.

Note: If the telephone system does not provide positive disconnect (DTMF tones or a break in loop current), you may experience silent messages in mailboxes when a caller hangs up before leaving a message. You can use a combination of this parameter and the parameter MINIMUM MESSAGE in the configuration file VM.CFG to minimize these "blank" messages. Use caution when setting the NUMBER OF SECONDS OF SILENCE TO END RECORDING parameter. If this time is set too short, you may stop recording caller's messages when they are simply pausing for a moment.

See section 12 for information on the MINIMUM MESSAGE parameter.

VP: Number of Seconds of Non-Silence to End Recording
NTVP: (See General Information screen for comparable field)

While the VP system is recording a message, it is monitoring the line for dial tone (continuous non-silence). If dial tone is detected, the VP system assumes the caller has hung up, and stops recording. This field lets you specify how many seconds of continuous non-silence need to be detected before assuming it is dial tone.

Note: If you set this number too low, a caller who pauses and says "aaaahhhh" could trigger the dial tone detection. If you set the number too high, 15 seconds, for example, the C.O. or PBX might remove the dial tone before it has been on the line long enough to be detected.

VP: Automatically Update All MWI Lamps at
NTVP: (See General Information screen for comparable field)

Some telephone system automatically cancel all message waiting lamps at a pre-set time (such as midnight). Also, many telephone systems do not restore the state of message waiting lamps following a power failure. You may program the VP system to automatically re-send the message waiting lamp ON sequence for every mailbox with new messages, and the OFF sequence for every mailbox with no new messages, once each day at this time. The following limitations must be considered:

- The VP system may need to make dozens or even hundreds of calls to update all message waiting lamps on the system. The time you enter here should be at the time of lowest activity on the system.
- The time set here should not conflict with the daily EXIT TO DOS TIME set on the GENERAL INFORMATION screen.

Some telephone systems do not allow unnecessary added MESSAGE WAITING ON indications to be set.

If you are not experiencing problems with message waiting lamps, leave this field blank. Intermittent performance of message waiting lamps may be caused by problems that are not related to the use of this feature.

Note: If you have only an occasional problem with message waiting lamps (such as a power failure), you can invoke the message waiting update manually. From the main screen, press <Ctrl-F1> simultaneously. The update process begins, and you see an advisory message on the screen that the update is running. To cancel the update before it completes, press <Ctrl-F2>.

4.10 Setting up Class of Service Screens

Each mailbox on the system is assigned a class of service. The class of service assigned to the box dictates which VP system features the mailbox owner has access to and how he/she can use those features.

There are 8 classes of service (0 through 7) that can be set up then applied to mailboxes on the VP system. Two of them are pre-configured on the system. Class of service 0 is assigned by default to the prototype mailbox 9994, which serves as a template for every mailbox that you create on the system. Class of service 7 is assigned supervisor mailbox privileges. This class of service is assigned to mailbox 70, which is also pre-configured on the system. Mailbox 70, therefore, serves as the supervisor mailbox. By calling into the system and accessing the supervisor mailbox, the system supervisor can make necessary day-to-day modifications to the voice processing system, such as adding mailboxes and changing Routing box greetings.

Note: Press <F6> to progress through the 8 available classes of service.

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

Class of Service Screen (DOS-based VP Systems)

CLASS OF SERVICE			
Class-of-service number: 0		CLASS-OF-SERVICE NAME: [REDACTED]	
Maximum number of greetings: 10	Maximum greeting length (secs): 60		
Maximum number of messages : 200	Maximum message length (secs): 60		
Auto-delete OLD messages from system after 30 days.			
Auto-delete NEW messages from system after 99 days.			
Supervisor status ?	No	Play menu after greeting?	No
Access to Group-boxes ?	Yes	Allowed to receive faxmail?	No
Dial-out allowed?	No	Operator Box (Day): 888	(Night): 888
Access to P.A.?	Yes	When exiting open Mail Box, go to box 821	
Max lines allowed to hold for one box: 2		Digits allowed while holding: [REDACTED]	
While in queue, say position in line? No			
Try extension 3 times, before going back to caller.			
RESTRICTED NUMBERS			
Digits: [REDACTED]	Digits: [REDACTED]	Digits: [REDACTED]	Digits: [REDACTED]
Digits: [REDACTED]	Digits: [REDACTED]	Digits: [REDACTED]	Digits: [REDACTED]

Class of Service Screen (NT-based VP Systems)

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Supervisor status
 Access to Group
 Dial-out allowed
 Callers can page via PA system
 Allowed to receive fax-mail

Messages Greetings Call holding Call restrictions

Maximum number of messages

Maximum message length seconds.

Automatically delete OLD messages after days.
 Automatically delete NEW messages after days.

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Supervisor status
 Access to Group
 Dial-out allowed
 Callers can page via PA system
 Allowed to receive fax-mail

Messages Greetings Call holding Call restrictions

Maximum number of greetings

Maximum greeting length seconds.

Play system menu after personal greeting

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Supervisor status
 Access to Group
 Dial-out allowed
 Callers can page via PA system
 Allowed to receive fax-mail

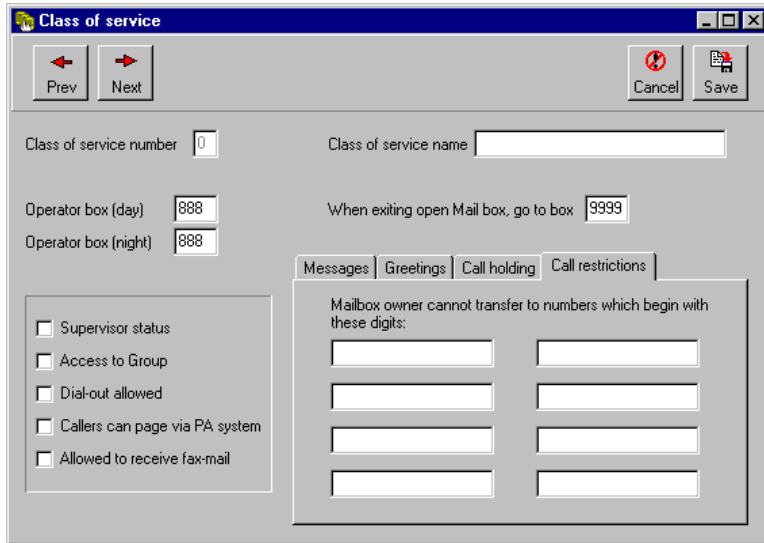
Messages Greetings Call holding Call restrictions

Maximum number of lines allowed to hold for this Mailbox

Digits caller can dial while holding

Try extension times before going back to caller.

While queueing, announce position in line



4.10.1 Class of Service Screen Field Descriptions

VP: Class of Service Number

NTVP: Class of Service Number

This field indicates the number of the class of service you are currently working with. To move to the next class of service number, press <F6>. Once you assign a class of service to a mailbox, the mailbox inherits all the privileges and restrictions defined in the class of service.

VP: Class of Service Name

NTVP: Class of Service Name

Use this field to give the class of service a meaningful name. This helps remind you of the purpose for the class of service. Sample names include *Supervisors*, *Subscribers*, etc.

VP: Maximum Number of Greetings

NTVP: Maximum Number of Greetings (*Greetings tab*)

A mailbox can have up to 10 pre-recorded personal greetings. The mailbox owner may record these greetings, store them in the mailbox, choose the greeting that is to be active at any specific time. You may want to offer use of all 10 greetings to users or restrict them to fewer greetings. Use this field to define how many personal greetings users with this class of service should be allowed to record. If you set the field to 0, callers who route to a mailbox belonging to this class of service always hear the pre-recorded system prompt, *“That extension is not available...”* The default setting is **10**.

Note that in class of service 7, this field must be set to allow at least 2 greetings. Class of service 7 is assigned to mailbox 70, the supervisor mailbox that by default controls the Routing boxes on the system. Because you usually set up Routing boxes with at least 2 greetings, this parameter must be set to at least **2** in the supervisor mailbox class of service.

VP: Maximum Greeting Length
NTVP: Maximum Greeting Length (*Greetings tab*)

When a mailbox owner calls in to re-record his/her personal greeting, the VP system limits the length of the new greeting to the value entered in this field. The default setting is **60**.

VP: Maximum Number of Messages
NTVP: Maximum Number of Messages (*Messages tab*)

The VP system can hold up to 200 messages per mailbox. However, you may want to restrict some mailboxes to a lower limit (to conserve disk space). Use this field to define the maximum number of messages that can be stored in mailboxes assigned this class of service. Once the limit is reached for a particular mailbox, callers attempting to leave more messages in the mailbox are told that the box is full. The default setting is **200**.

VP: Maximum Message Length
NTVP: Maximum Message Length (*Messages tab*)

The value in this field defines the maximum length of a message (in seconds) that a caller can leave for mailboxes belonging to this class of service. The default setting is **60**.

VP: Automatically Delete Old Messages from System After X Days
NTVP: Automatically Delete Old Messages from System After X Days (*Messages tab*)

The VP system deletes messages saved as Old from mailboxes belonging to this class of service after the number of days you specify. An old message is one the mailbox owner has listened to, but has not yet deleted. If you enter **0** in this field, an old message is deleted at midnight on the day the message became old. If you enter **1** in this field, an old message is deleted at midnight on the day following the day the message became old.

To disable deletion of Old messages, enter **99** in this field. However, do this with caution, since accumulating messages may create disk storage problems. The default setting is **30**.

VP: Automatically Delete New Messages After X Days
NTVP: Automatically Delete New Messages After X Days (*Messages tab*)

Note: Use this parameter with caution. Improper use may cause important messages to be lost.

The VP system deletes new messages from mailboxes belonging to this class of service after the number of days you specify. A new message is one the mailbox owner has not yet listened to. If you enter **0** in this field, a new message is deleted at midnight on the day the message was received. If you enter **1** in this field, a new message is deleted at midnight on the day following the day the message was received.

To disable the deletion of new messages, retain the default setting of **99** in this field. This is the default operating mode. **If you enter a number other than 99 in this field, remember that messages are deleted whether or not the mailbox owner has listened to them.**

VP: Supervisor Status
NTVP: Supervisor Status

This field defines whether mailboxes belonging to this class of service should have supervisor privileges. A supervisor can perform certain actions not available to regular mailbox owners. For example, a supervisor can add a mailbox or delete a mailbox by calling in from any telephone. The default setting in class of service 0 is NO, in class of service 7 is YES.

VP: Access to Group Boxes
NTVP: Access to Group Boxes

By setting this field to YES, you allow subscribers assigned this class of service to access all Group boxes set up on the system. The default setting is YES.

VP: Dial-Out Allowed
NTVP: Dial-Out Allowed

This field indicates whether the owner of a mailbox belonging to this class of service is allowed to place outgoing calls from the mailbox. The default setting is NO.

VP: Access to P.A.
NTVP: Callers Can Page via PA System

When a caller is listening to a mailbox owner's greeting, one of the features the VP system offers is the option to have the call announced over the P.A. system. Use this field to allow or deny access to the P.A. feature for callers to mailboxes belonging to this class of service. The default setting is YES.

VP: Play Menu After Greeting
NTVP: Play System Menu after Personal Greeting (*Greetings tab*)

If an extension is busy or does not answer, the VP system plays the mailbox owner's personal greeting. After playing the greeting, it can announce the options available to the caller (for example, *"If you would like to leave a message, press 1. To try another extension, press 3, or to speak with an operator, press 0."*). If the mailbox owners do not record these options as part of their greetings, set this field to YES so that the VP system plays the menu. If you want to allow each mailbox owner to decide which options to offer, set this field to NO and instruct each mailbox owner to include the options in his/her personal greeting. The default setting is NO.

VP: Allowed to Receive Faxmail
NTVP: Allowed to Receive Faxmail

This field applies only if the system has the optional FaxMail module. Select YES here if the mailboxes in this class of service are allowed to receive FaxMail. Select NO if you do not want callers to be able to send fax documents into these mailboxes. The default setting is NO.

VP: Operator Box (Day) (Night)
NTVP: Operator Box (Day) (Night)

When a caller is listening to a mailbox greeting, one of the options is to dial zero to reach an operator. Use these fields to indicate the mailbox to which the call should be routed if the caller indicates that he/she wishes to speak with an operator. The default setting is **888**.

VP: When Exiting Open Mailbox, Go To Box
NTVP: When Exiting Open Mailbox, Go To Box

When a mailbox owner has logged in to his/her box, has concluded listening to messages, changing options, etc., and has selected to exit from the Main menu, this field tells the VP system where to send the call. VP system users should retain the default setting in this field as **821**.

VP: Max Lines Allowed To Hold For One Box
NTVP: Maximum Number of Lines Allowed to Hold for this Mailbox (Call Holding tab)

You can limit the number of lines that can simultaneously hold for a mailbox belonging to this class of service. For example, if you set this number to 3, and lines 1, 3, and 6 are holding for a mailbox, subsequent callers are not offered the option to hold. Instead, they hear the personal greeting recorded for the box, so they can leave a message, try another extension, etc. The default setting is **2**.

Note: If you want to disable the call queuing feature for the class of service, set this field to **0**.

VP: Digits Allowed While Holding
NTVP: Digits Caller Can Dial While Holding (Call Holding tab)

While a caller is in the queue holding for an extension, he/she can press a digit to leave the queue and process the call differently. By default, the options open to the caller are the same as those available when the caller hears the personal greeting (*“If you would like to leave a message, press 1. To try another extension, press 3, or to speak with an operator, press 0.”*). If you want to restrict the caller to fewer choices while in the queue, use this field to specify which digits are allowed. All other digits are ignored by the VP system while the caller is in the queue. For example, if you enter **13** in this field, the only options available to the caller are:

- 1 To leave a message
- 3 To try another extension

VP: While In Queue, Say Position In Line
NTVP: While in Queue Announce Position in Line (Call Holding tab)

While a caller is in the queue, holding for an extension, the VP system can keep him/her informed on the progress of the call. If you set this field to **YES**, the VP system announces to the caller:

“That extension is still busy. You are number [#] in line. If you would prefer to leave a message, press 1, or to speak with an operator, press 0.”

If you select **NO** in this field, the VP system voices:

“That extension is still busy. If you would prefer to leave a message, press 1, or to speak with an operator, press 0.”

The default setting is NO.

VP: Try Extension X Times Before Going Back to Caller
NTVP: Try Extension X Times Before Going Back to Caller (*Call Holding tab*)

This parameter applies only if the MAX LINES ALLOWED TO HOLD field is greater than 0. If the caller chooses to hold, the VP system plays a series of hold prompts to the caller (these are typically music or commercials). At the end of each hold prompt, the VP system tries the extension again. If it is busy, the next hold prompt is played to the caller.

After the defined number of hold prompts have been played, the VP system goes back to the caller and offers the options to remain on hold, try another extension etc. This field allows you to specify the number of hold prompts that should be played before the VP system offers these options to the caller.

As shipped, the VP system has only one hold prompt recorded (system prompt 146, see section 15). Therefore, if you enter 3 in this field, a caller queued to a busy station hears this same prompt three times before being offered the options again. If you record a second hold prompt, the caller hears prompt 146, your prompt, and 146 again before being offered the options. You may record up to 100 different hold prompts, which are played in sequence. (Remember: At the end of *each* hold prompt, the VP system tries the extension again). For information on recording prompts, see section 15. After the VP system plays the highest number hold prompt recorded, it returns to the lowest number after the next try. The default setting is **3**.

<p>Note: The time between tries to a busy extension is determined by the length of each hold prompt recorded. The prompt supplied with the VP system (prompt 146) is approximately 30 seconds.</p>

VP: Restricted Numbers
NTVP: Restricted Numbers (*Call Restrictions tab*)

When a mailbox owner calls in to change his/her call-transfer number, pager number, or message notification number, you may want to prevent him/her from changing it to certain numbers, such as long-distance numbers.

These fields allow you to define digit sequences that are to be blocked. The VP system looks at each of these Digits fields to determine if any of them match the number entered by the mailbox owner. If the number entered by the caller begins with the digits specified in the Digits field, the VP system defines the number entered as a match.

For example, if you enter the digits **1900** in one of the Digits fields, the VP system considers the telephone numbers 1-900-555-1212, 1-900-123-4567, 1-900-111-2222 to be matches. Telephone number 1-901-555-1212 would not be considered a match.

If you enter the digit 0 in one of the Digits fields, the VP system considers all numbers beginning with 0 to be matches. This would include calls to the operator (0), calls to the long-distance operator (00), international calls (011), and any operator-assisted call (0 followed by telephone number).

If the caller enters a number that matches one of the digit strings you enter here, the VP system informs the mailbox owner that the number is not acceptable and retains the current set up.

4.11 Setting Up the Other Customizations Screen (DOS-based VP Systems)

Use the OTHER CUSTOMIZATIONS screen to set up certain system-wide parameters pertaining to feature options, integration, and testing/troubleshooting functions.

To access the OTHER CUSTOMIZATIONS screen, from the Main menu select SYSTEM INFORMATION. From the System Information menu select OPTIONAL FEATURES. From the Optional Features menu select OTHER CUSTOMIZATIONS.

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Other Customizations Screen (DOS-based VP Systems)

```

OTHER CUSTOMIZATIONS

Play message time and date:      After each message
When called party answers, play his/her name?  Yes
When called party answers, announce the call?  Yes
Display Mail-box passwords on screen?         Yes
Maximum box length (when caller is dialing):  2
Initial pause (seconds):              1

TRACE : 0
Custom : 0      Custom : 0      Custom : 0      Custom : 0
Debug  : 0      Debug  : 0      Debug  : 0      Debug  : 0
    
```

4.11.1 Other Customizations Screen Field Descriptions

VP: Play Message Time and Date

NTVP: (See General Information screen for comparable field)

When a mailbox owner is listening to his/her messages, one of the options is to press 5 to hear the time and date that the message was received. Use this field to control the play of the time and date of each message. The choices are:

- WHEN CALLER ASKS—The mailbox owner must press 5 to hear time and date (this is the default)
- BEFORE EACH MESSAGE—The time and date is played automatically before each message
- AFTER EACH MESSAGE—The time and date is played automatically after each message

VP: When Called Party Answers, Play His/Her Name
NTVP: (See General Information screen for comparable field)

This field affects only mailboxes using the WAIT FOR ANSWER or SCREEN transfer type. If this field is set to YES, when the called party answers, the VP system announces the call. The standard format is one of the following:

“I have a call for you, [name].”

“Call from [calling party’s name] for [name].” (if the option to get the caller’s name is active on the MAILBOX screen)

This prompt is useful if you receive calls from more than one mailbox and you want to answer with the correct name of the called party. For example, several mailbox owners could change their call transfer service to send their calls to a central answering point (see section 6.6). The person receiving these calls can now answer with a personalized greeting such as, *“Mr. Smith’s office,” “Mr. Jones’ office,”* etc.

Setting this field to NO causes the VP system to omit the called party’s name and simply announce the call. The format is one of the following:

“I have a call for you.”

“Call from [calling party’s name].” (if the option to get the caller’s name is active on the MAILBOX screen)

VP: When Called party Answers, Announce the Call
NTVP: (See General Information screen for comparable field)

This parameter affects only the mailboxes using transfer type WAIT FOR ANSWER.

When using the WAIT FOR ANSWER transfer type, the VP system does not connect the calling and called parties until it confirms that the called party has answered. This is done in two ways:

- Voice is detected on the line
- A break in the cadence of the ringback tone is detected (see section 13)

This process may take 1 to 2 seconds from the time that the called party goes off-hook to answer an incoming call. Under normal operating conditions, the VP system informs the called party that it has detected answer by playing the system prompt:

“I have a call for you.”

Setting this parameter to NO prevents the prompt from playing. A short tone plays in its place (system prompt 166).

<p>Note: Users should be made aware that when they first go off-hook and answer an incoming call, the calling party does not hear their initial answer (since the VP system does not connect the call until it detects the answer).</p>
--

VP: Display Mail-Box Passwords on Screen**NTVP: (See General Information screen for comparable field)**

When the VP system displays the MAILBOX screen on the PC screen, there is a field PASSWORD that contains the mailbox owner's password. If you do not want the password to display on the screen, choose NO here. The PASSWORD field will be filled with stars. You can still access the PASSWORD field, and change the password if required, but you cannot view the current password.

VP: Maximum Box Length When Caller is Dialing**NTVP: (See General Information screen for comparable field)**

Box numbers in the VP system may be 2, 3, or 4 digits long (for example, you may have a mailbox 10, a mailbox 100, and a Routing box 1000). To speed up call processing, you may use this parameter to define the maximum box length that a caller might dial. Entering a number less than 4 does *not* mean you cannot have any 4-digit boxes in your system, just that any 4-digit boxes cannot be dialed directly by a caller.

For example, if the telephone system has only 3-digit extensions, you will likely have corresponding 3-digit mailboxes. In this case, enter **3** for MAXIMUM BOX LENGTH. When a caller dials a 3-digit mailbox number, the VP system processes the call immediately, not waiting for a fourth digit.

In this example, you can still use 4-digit box numbers on the system, especially for other box types such as Routing boxes, provided that these boxes are accessed in a way other than the caller dialing the box number. For example, you may use 4-digit Routing boxes as the initial boxes indicated on the LINE INFORMATION screen, in the Routing box DESTINATION FOR DIGIT fields, in any system GO TO BOX field, etc.

<p>Note: If the system has Routing box numbers that are longer than the MAXIMUM BOX LENGTH parameter, the greeting can only be recorded by using the computer keyboard. Owners of Routing boxes are not able to remotely record or change a greeting because when the VP system prompts the box owner to enter the box number of the greeting he/she wants to change, the owner is not be able to dial more than the number of digits defined in the MAXIMUM BOX LENGTH field.</p>

VP: Initial Pause**NTVP: (See PBX Information screen for comparable field)**

When the VP system answers an incoming call, it waits the number of seconds defined in this field before playing the initial greeting. This pause allows for the transmission of voice mail integration digits (either in the form of in-band DTMF or out-of-band serial data) from the telephone system to the VP system. This field *must* be set when the VP system is connected to any type of telephone system with voice mail integration. The typical entry in this field is 1 second.

Set this field to 0 if the telephone system does not have voice mail integration.

VP: Trace**NTVP: (See Diagnostics menu options, Trace Setup)**

The VP system has several diagnostic tools called TRACE functions. Most are to be used only under the direction of Technical Support personnel.

Entries in these fields identify which trace operations will be viewed or recorded when the TRACE function is activated. Note that by making an entry in this field, you do not activate the trace, you simply define it.

See section 9 for detailed information on the VP system trace functions.

VP: Custom and Debug
NTVP: (See *Diagnostics menu options, Custom Flags*)

Because the VP system has been designed to interface or integrate with hundreds of different telephone systems, there are certain parameters that have been included or modified to accommodate specific applications and/or equipment. Since it is not practical to include screen information for all parameters, special application parameters have been numbered and are invoked by setting a CUSTOM flag or DEBUG flag in these fields.

A few of the CUSTOM and DEBUG items are discussed in this manual, but most are listed in Technical Bulletins that deal with certain telephone systems and special applications.

CAUTION:

The CUSTOM and DEBUG fields should be left blank unless you are specifically instructed to make an entry, either by this manual, a Technical Bulletin, or Technical Support personnel.

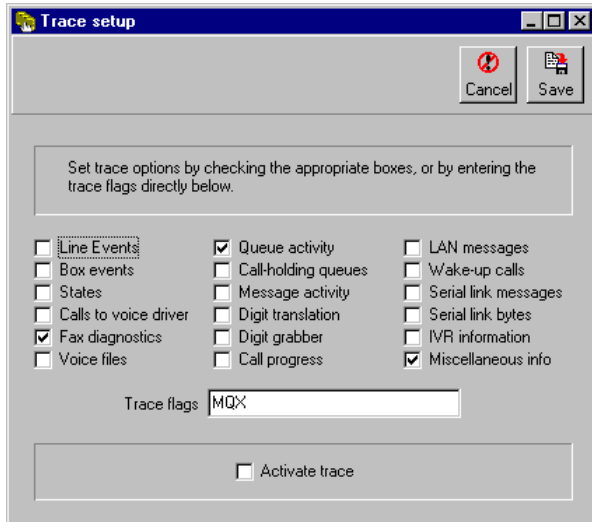
4.12 Setting up Diagnostic Menu Options (NT-based VP Systems)

The Diagnostic pull-down menu contains two options that lead to screens you can set up to perform diagnostic functions on the VP system:

- Trace Setup
- Custom Flags

4.12.1 Diagnostic Menu Option Descriptions

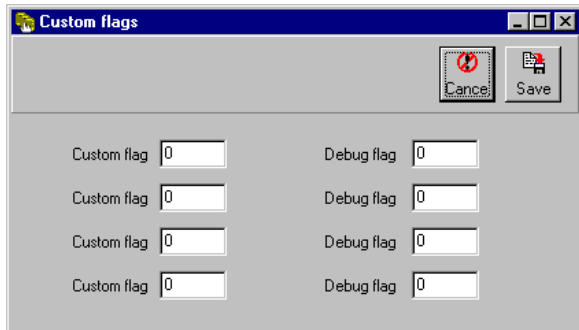
TRACE SETUP Screen



The VP system has several diagnostic tools called TRACE functions. Most are to be used only under the direction of Technical Support personnel.

On the TRACE SETUP screen, you can easily define which trace operations will be viewed or recorded when the trace function is activated. Note that by making an entry on this screen, you do not activate the trace, you simply define it. See section 9 for detailed information on the VP system trace functions.

CUSTOM FLAGS Screen



Because the VP system has been designed to interface or integrate with hundreds of different telephone systems, there are certain parameters that have been included or modified to accommodate specific applications and/or equipment. Since it is not practical to include screen information for all parameters, special application parameters have been numbered and are invoked by setting a CUSTOM flag or DEBUG flag on this screen.

A few of the CUSTOM and DEBUG items are discussed in this manual, but most are listed in Technical Bulletins that deal with certain telephone systems and special applications.

CAUTION:

The CUSTOM and DEBUG fields should be left blank unless you are specifically instructed to make an entry by a Technical Bulletin or Technical Support representative.

5. Specifying Box Information

5.1 What is a Box?

When the VP system answers a call, it processes it by sending it to a *box*. Each box performs a specific function (for example, playing a menu to the caller and waiting for a response). It then passes the call to another box, which in turn performs its specific function, etc.

When you use the automated attendant capabilities in the VP system, you set up Routing boxes to answer incoming calls, play a listing of options to callers, and route each call to a specific mailbox based on either digits dialed by the caller or on other criteria you set. The mailboxes transfer calls to their associated extensions and store messages for system subscribers. Each mailbox can also be set up to forward calls to another phone or extension number, deliver messages to another phone or pager, play one of 10 pre-recorded greetings to callers, screen calls, queue calls when the extension is busy, or record call conversations.

In addition to Routing boxes and mailboxes, the standard VP system provides several other types of boxes:

- Question box
- Directory box
- Account Number box
- Group box
- Directory box
- ACD box (or 'Customer Service box' on NT-based VP systems version 10.1x or higher)

You create each type of box by accessing then completing a box setup screen for the box type you want to create. Procedures you follow to access and set up each box type are discussed in this section.

Optional modules available with some VP systems provide additional boxes you can set up on the system:

- IVR box
- Telemarketing box
- Gateway box and Listing boxes
- Fax box

Optional modules are discussed in separate sections, presented later in this document.

5.2 Viewing the Current Box Setup on the System (DOS-based VP Systems)

On DOS-based VP systems, you can generate a report listing the complete box setup structure. Once you generate the report, you can review it on-screen, save it to a file, or send it to a printer.

To view the box setup structure on a DOS-based VP system:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the DISPLAY DATABASE option. From the menu that displays, select whether you want to view the report on screen, print it to a file (you are prompted for a filename, the file is placed in the \ VM directory), or send it to a printer. Once you make a selection, the VP system generates the box structure report. To exit the DISPLAY DATABASE screen, press <F10>. You return to the Box Information menu.

5.3 Accessing Box Information Screens

Note: Refer to section 29 for graphical illustrations of all VP system screens.
--

To access box information screens through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the screen you want to review or modify from the Boxes menu. When you have made any necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access box information screens through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the screen you want to review or modify from the Boxes menu. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Creating a Range of Boxes Using MAKEBOX.EXE

The VP system includes a Makebox utility that allows you to easily create several boxes at once. The Makebox utility is stored in the \vm directory by default. Each box is created by making a copy of the information in a prototype box you set up then specify in the utility.

On DOS-based VP systems, access the Makebox utility by simply changing to the \ vm directory (the VP system must not be running), typing MAKEBOX then pressing <Enter>. Follow the prompts to create a range of the box type you specify.

On NT-based VP systems, the Makebox utility provides advanced options to import or export files of Mailbox information. The export option creates a text file that includes the following information for mailboxes currently set up on the system: owner's last name, owner's first name, box number, class of service number. The import option instructs the program to reference a specific text file and use information in it to create new mailboxes. The text file it references must list information for each mailbox on individual lines. It must include the following information for each box, separated by commas: owner's last name, owner's first name, box number, class of service number. The file must also have the following header line: FirstName,LastName,Mbox,COS.

An example import or export text file is shown below.

```
FirstName,LastName,Mbox,COS
Ann,Baxter,102,4
Cliff,Johnson,103,4
Daniel,Peters,104,5
```

Once the boxes are created using MAKEBOX.EXE, you can access and modify their setups manually.

5.4 Understanding Reserved Boxes

The following reserved boxes are used by the VP system and cannot be assigned to new boxes you create. Those marked with a * are used internally and cannot be viewed on the screen.

Box Number	Function
9970 – 9974	Outbound Telemarketing boxes (for use with the optional Outbound Telemarketing module only).
9986	Automatic Fax box (for use with optional IVR and Fax Distribution modules only).
9987	Automatic mailbox (for use with optional IVR module only).
9988	Automatic Allocation box (for use with optional Talking Classifieds module only).*

Box Number	Function
9989	System VCM box (for use with optional VCM module only).*
9990	A "catch-all" box. If you programmed the VP system to go to a box that does not exist, it generates an error message and routes the call to this box instead.
9991	System Message Notification box.*
9992	The voice mail gateway. When calls are routed to this box, the VP system asks the caller for his/her box number and password. If the correct password is entered, the caller is given access to the mailbox as an owner (he/she can retrieve messages, change options, etc.).*
9993	The Demonstration mailbox. When a caller records a message in this box, it is immediately played back to him/her. This is normally used for demonstration purposes.
9994	The Prototype mailbox. When creating a new mailbox, the VP system initializes the data in the new mailbox by copying the contents of this box into the new mailbox.
9995	The Pager Notification box.*
9996	The Message Waiting Lamp box.*
9998	The Directory box. If a call is routed to this box, the caller is prompted to dial the last name of the person to whom he/she would like speak, or (optionally) to listen to the entire set of listings.
9999	Invalid box number. (Displayed as blank field on setup screens.)*

5.5 Setting up a Mailbox

5.5.1 What Does a Mailbox Do?

The mailbox is usually the most common box in the entire system. You allocate a mailbox to each person for whom you want the VP system to collect messages or transfer calls.

The mailbox performs the following tasks:

- Transfers calls to the box owner (using the call-transfer capabilities of the telephone system)
- Plays owner's personal greeting and takes messages
- Activates the owner's digital or tone pager
- Calls the owner (if required) to deliver new messages
- Defines the owner's privileges on the system.

Figure 5-1 shows the actions performed by a mailbox on a typical call. Note that the figure has been simplified for clarity. For example, it does not include features such as transfer-bypass or pager activation.

5.5.2 Understanding the Prototype Mailbox (9994)

When you set up the VP system, you create a mailbox for each subscriber who will use the system to record messages. Since most of the setup information is the same in every mailbox you create (for example, the sequence to turn message waiting lamps on and off), you should review and adjust the

system's prototype mailbox before creating any mailboxes. The prototype mailbox is a template mailbox, which is copied each time you create a mailbox. By customizing as much information as possible in the prototype mailbox, you save time later when you must customize the mailboxes you created for each subscriber. The prototype mailbox is box number 9994.

It is important to understand the use of "wild card" characters when setting up the Prototype mailbox. In most installations the mailbox number will be the same as the extension number of the box owner, which is entered in the transfer TO: field. By entering the "wild card" character **X** in the TO: field of the prototype box, you instruct the VP system that the box owner's telephone number is the same as the mailbox number.

You can also enter a wild card in the SEQUENCE TO TURN MESSAGE WAITING LAMPS ON and OFF fields at the point in the sequence where the extension number is indicated. Valid characters are **X**, which indicates the VP system is to use the box number, and **F**, which indicates the system is to use the number in the transfer TO: field.

Note: On the MAILBOX screen of the prototype mailbox, entries in the AFTER PLAYING GREETING, IF CALLER CHOOSES OTHER OPTIONS field, and AFTER LEAVING MESSAGE (VP systems) / AFTER RECORDING MESSAGE (NTVP systems) field are the same for most mailboxes.

Note: Every time you select to create a new mailbox, the system does so by making a copy of mailbox 9994.

To access the prototype mailbox 9994 through the DOS-based VP system screen interface:

1. From the Box Information menu, select **MAILBOX**. The mailbox setup screen displays with the Page Number menu.
2. Press <F4> to access the box selection screen. A small window displays prompting you for the box number. Type **9994** then press <Enter>.

To access the prototype mailbox 9994 through the NT-based VP system screen interface:

1. From the Boxes menu, select **MAILBOX**. The mailbox setup screen displays.
2. Press <F4> to access the box selection screen. A small window displays prompting you for the box number. Type **9994** then press <Enter> or highlight the box and click on OK.

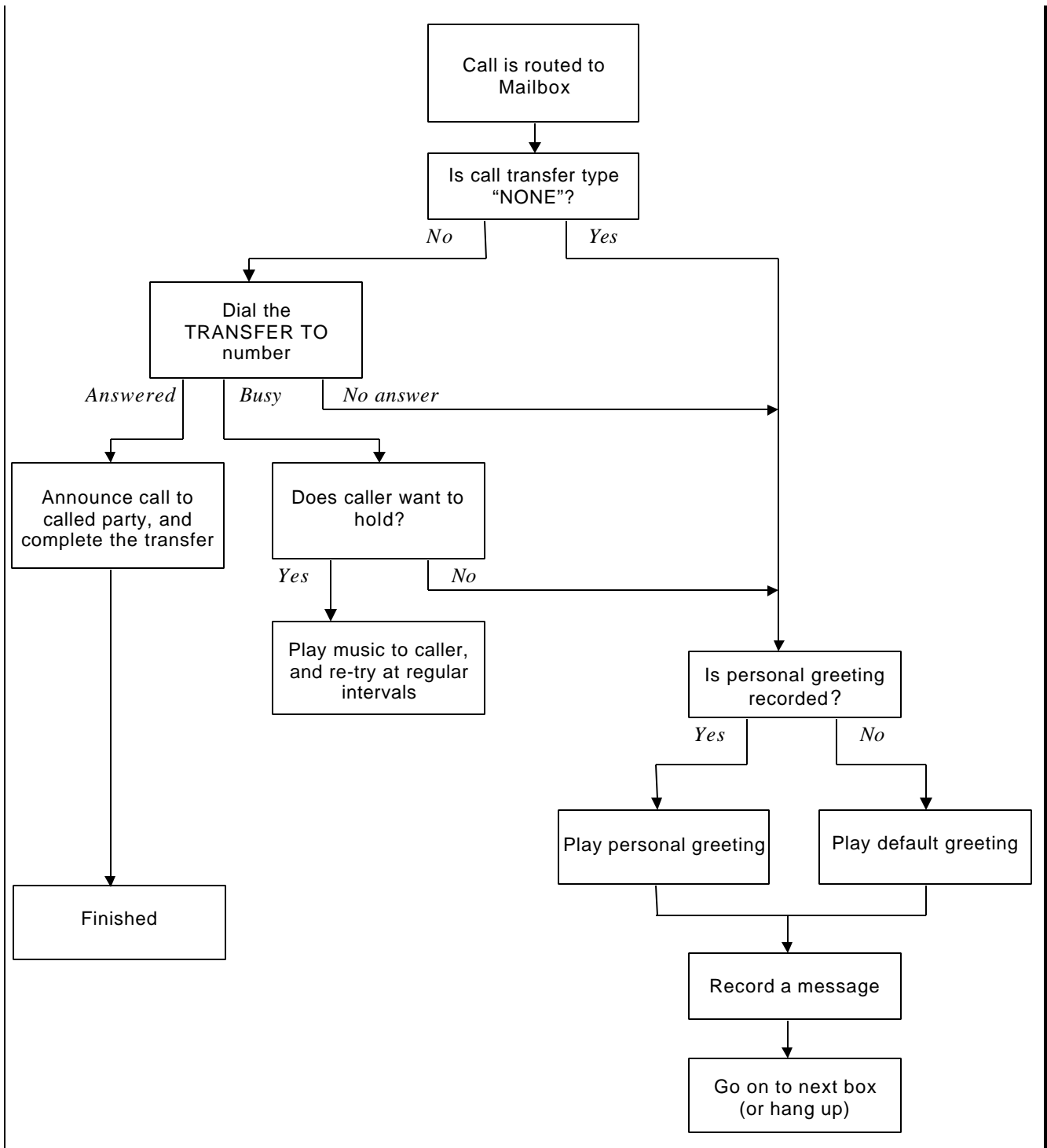


Figure 5-1 Sequence of Operations in a Typical Mailbox

5.5.3 Mailbox Screens

DOS-based VP System Mailbox Screens

```

MAIL BOX Page 1
Box number:10 FIRST NAME:Sample Last:Mail box

CALL TRANSFER INFORMATION          PERSONAL DATA
Transfer type:                     Password: 10
To: X                               Name recorded: No
Rings to answer: 4                 Greeting recorded: No
Use 3-way calling? No
Get caller's name? No
Record conversation? No
Currently enabled? Yes
Transfer schedule: Always          Class of service: 0
                                   Restricted - Client of:

Sequence to turn ON message-waiting lamp:      New: 0
Sequence to turn OFF message-waiting lamp:     Old: 0
    
```

```

MAIL BOX (Page 2)
Box number:10 First Name: Last:

PAGER NUMBER: Pager type:Digital
Times to call:1 Mins between calls:0 Schedule:Always Enabled?No

After playing greeting:
If caller chooses "other options": Go to box ... - box 321
After leaving message, Go to box ... - box 321
If call is via D.I.D. play greeting in language: 1
Auto-forward NEW msgs to box after 0 hours. Schedule:Always

MESSAGE DELIVERY - Where and When Repeat Interval Schedule
Call: 2 50 Schedule A
Call: 3 10 Schedule B
Call: 3 10 Schedule C
Call: 3 10 Always
Call: 3 10 Always
Run this cycle 1 times. Currently enabled? Disabled
    
```

```

MAIL BOX Page 3
Box number:10 First Name:Sample Last:Mail box

SCHEDULE A      Start End      SCHEDULE B      Start End
SUN: 0:00 0:00  Sun: 0:00 0:00
MON: 0:00 0:00  Mon: 0:00 0:00
TUE: 0:00 0:00  Tue: 0:00 0:00
WED: 0:00 0:00  WED: 0:00 0:00
THU: 0:00 0:00  THU: 0:00 0:00
FRI: 0:00 0:00  FRI: 0:00 0:00
SAT: 0:00 0:00  SAT: 0:00 0:00

SCHEDULE C      Start End      SCHEDULE D      Start End
Sun: 0:00 0:00  Sun: 0:00 0:00
Mon: 0:00 0:00  Mon: 0:00 0:00
Tue: 0:00 0:00  Tue: 0:00 0:00
Wed: 0:00 0:00  Wed: 0:00 0:00
Thu: 0:00 0:00  Thu: 0:00 0:00
Fri: 0:00 0:00  Fri: 0:00 0:00
Sat: 0:00 0:00  Sat: 0:00 0:00
    
```

M A I L B O X (Page 4)

Box number: 10 First Name: Last:

Hotel guest privileges only? No
 WAKE-UP TIME: 7:00 Currently scheduled? No

PERSONAL DISTRIBUTION LISTS

Enabled? Yes Members:	Enabled? Yes Members:	Enabled? Yes Members:	Enabled? Yes Members:
--------------------------	--------------------------	--------------------------	--------------------------

M A I L B O X (Page 5)

Box number: 10 First Name: C Last: Mail box

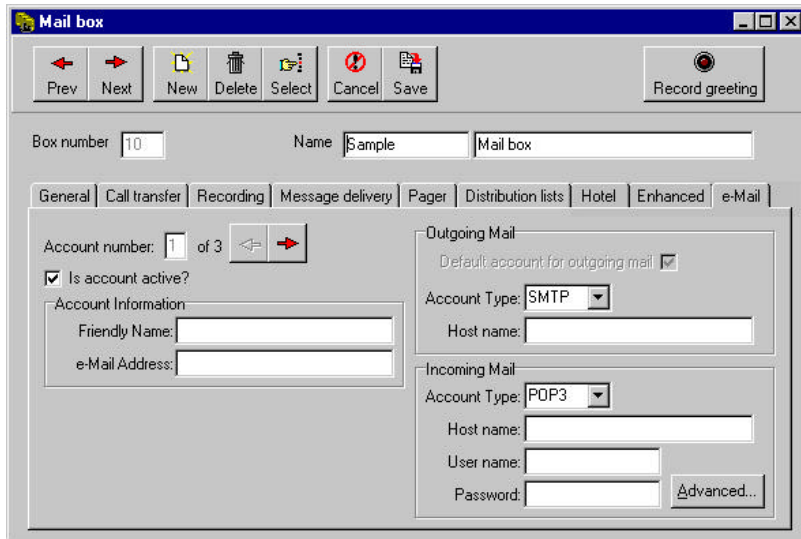
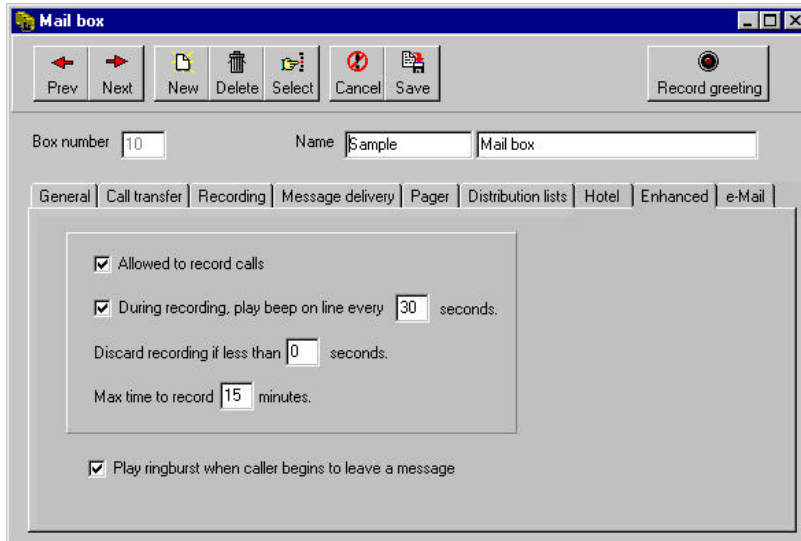
RECORDING CALLS (Comdial systems only)

Allowed to record calls? Yes
 MAXIMUM TIME TO RECORD (MINS): 15
 Discard recording if less than 3 seconds.
 Beep every 30 seconds.

MONITORING MESSAGES (Comdial systems only)

Play ringburst when caller begins to leave a msg? Yes

NT-based VP System Mailbox Screens



5.5.4 Mailbox Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number (Page 1 screen)
NTVP: Box Number

Every box has its own unique *box number*. On DOS-based VP systems, the box number range is 1 to 9999, and on NT-based VP systems, the box range is 1 to 99999. (Several Reserved boxes are omitted from these ranges. See information presented earlier in this section on Reserved boxes.) You cannot change this field on the screen. To view a different box, press <F4> (select a box number), <F5> (previous mailbox), or <F6> (next mailbox). If you want to add a new mailbox, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

The box number is the number an outside caller dials to reach the mailbox owner. The VP system looks inside the mailbox specified for the owner's extension number and transfers the call to that number. The mailbox number can be the same as its owner's extension number, or it can be different. For example, an arbitrary range of mailbox numbers 5100 through 5109 can transfer calls to extensions 20 through 29.

If the telephone system provides voice mail integration and the mailbox numbers and extension numbers do not match, you must specify translation rules in the file TRANS.TXT to identify the conversion between extension numbers and box numbers. See section 7.13.

Hint: For setup and system maintenance ease, create mailboxes with numbers that match the extensions to which they transfer calls.

VP: First Name (Page 1 screen)
NTVP: Name (first)

The first name of the individual to which the mailbox is assigned is used for record-keeping, and it appears on the database listing.

Prior to initiating a transfer, in standard operation the VP system plays the system prompt "*Please hold while I transfer your call to [name],*" inserting the called party's name.

If you insert the @ symbol before the name in this field, (for example, "Mary" becomes "@Mary"), the recorded name is substituted with the system prompt "*that extension.*"

If you insert the & symbol before the first name, no system prompt or recorded name plays.

VP: Last Name (Page 1 screen)
NTVP: Name (last)

The last name of the individual to which the mailbox is assigned is used in conjunction with the Directory box feature. It also appears on the database listing.

The mailbox is not included in the system directory voiced to callers requesting it if the @ symbol is inserted before the first letter of the last name (for example, "Jones" becomes "@Jones"). (The mailbox is also not included in the system directory if no Name prompt has been recorded for the mailbox.)

VP: Transfer Type (Page 1 screen)
NTVP: Transfer Type area (Call Transfer tab)

When a call is routed to the mailbox, the first action taken is to transfer the call to the number specified in the TO: field. The VP system offers several options as to how the call is transferred.

The TRANSFER TYPE options are:

- **NO TRANSFER**

The VP system does not transfer the call. Instead, it plays the mailbox owner's personal greeting (if one has been recorded) or a system default greeting. The caller then has several available options before recording a message.

- **BLIND**

The VP system transfers the call by dialing the number, then dropping out of the call. It transfers the call without monitoring to check whether the called party is busy, answers, etc. The final outcome of the call is the total responsibility of telephone system. If the telephone system has transfer-recall capabilities, when the telephone system transfer-recall timer expires, the call is returned to the VP system. If the telephone system provides voice mail integration, unanswered calls then go to the mailbox's personal greeting via the VP system's TRANS.TXT (digit translation) file. Otherwise, the VP system treats the call as a new call, and answers it with the initial greeting. (The VP system cannot perform call queuing when the mailbox is set up to perform BLIND transfers.)

- **WAIT FOR RING**

WAIT FOR RING can be thought of as a combination of the WAIT FOR ANSWER and BLIND transfer types. If the called party is busy, the calling party is offered the same options as with the WAIT FOR ANSWER transfer type. If ringing is detected on the line, the VP system executes a BLIND transfer and drops out of the call. (The VP system can perform call queuing when the mailbox is set up to perform WAIT FOR RING transfers.)

- **WAIT FOR ANSWER**

The VP system dials the number and monitors the line. If the called party is busy, the VP system offers the caller the options to hold, leave a message, call another extension, etc. If the called party is not busy, the VP system monitors the line, waiting for the called party to answer. If the called party does not answer within a specified number of rings, the VP system abandons the transfer and plays the personal greeting, takes a message, etc. If the called party does answer, the system announces the call with the prompt, *"I have a call for you, [mailbox owner's name],"* and completes the transfer. (The VP system can perform call queuing when the mailbox is set up to perform WAIT FOR ANSWER transfers.)

- **SCREEN**

The SCREEN transfer type works exactly the same way as WAIT FOR ANSWER until the called party answers. Once the called party answers, the VP system plays a system prompt offering the called party several options:

- * Press 1 to accept the call. The parties are connected.
- * Press 2 to have the system voice the mailbox owner's currently active greeting to the called party.
- * Press 3 to send the calling party to the destination selected in the IF CALLER CHOOSES OTHER OPTIONS field on the MAILBOX screen.
- * Press 4 plus a greeting number (0-9) to play the selected greeting to the caller, provided the greeting has been recorded.

- * Press 5 plus any valid box number to send the calling party to that box, where the call is treated as would any other call to that box.
- * Press 6 to accept the call. The parties are connected, but the VP system remains connected to the call and records the conversation. The recording is stored as a message in the called party's mailbox (provided the host telephone system allows conferencing on voice mail ports).

(The VP system can perform call queuing when the mailbox is set up to perform SCREEN transfers.)

VP: To (Page 1 screen)
NTVP: Transfer to (Call Transfer tab)

This field contains the number to which the VP system transfers the calls that route to this mailbox. Up to 30 characters can be specified. Valid digits are 0 through 9, characters * and #, and the following special characters:

Character	Action Indicated
P	Use pulse (also known as "rotary") dialing.
T	Use tone dialing (the default).
,	Short pause (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
%	Medium pause (length equal to 4 commas).
L	Long pause (length equal to 8 commas).
!	Hook-flash (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
[]	Enclosing the number inside these brackets prevents the mailbox owner from being able to call in from outside and change the number.
\F	Long hook-flash (4 seconds, Rhetorex systems only).
I	Instructs the VP system that the number is an internal number (must be the first character). This entry instructs the system to override the INTERNAL parameter (in the configuration file VM.CFG) and treat this number as an internal call regardless of the number of digits. The VP system does not dial the sequence specified in GENERAL INFORMATION / DIGITS TO GET A LINE ON EXTERNAL CALL.
E	Instructs the VP system that the number is an external number (must be the first character). This entry instructs the system to override the EXTERNAL parameter (in the configuration file VM.CFG) and treat this number as an external call regardless of the number of digits. The VP system does not dial the sequence specified in the DIGITS TO GET A LINE ON EXTERNAL CALL on the GENERAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems).
Any other character	Can be used for punctuation and is ignored.

The owner of the mailbox can call in and remotely change the number in the TO: field (unless the number is enclosed in brackets). After logging into a mailbox and selecting the Options menu, he/she is prompted, *“To change your call transfer feature, press 4.”*

The contents of this field work in conjunction with those entered on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems). Calls will not be transferred correctly unless the setup information has been entered to correspond to your telephone system.

When the VP system is about to transfer a call, it first consults the CALL TRANSFER / PBX INFORMATION setup screen. If the number to which the call is being transferred is external (outside the PBX), the VP system dials the digits in the field SEQUENCE TO INITIATE A TRANSFER - EXTERNAL. Otherwise, it dials the digits in the field SEQUENCE TO INITIATE A TRANSFER - INTERNAL. After dialing these digits, it then dials the actual number of the extension to which the call is being transferred.

VP: Rings to Answer (Page 1 screen)
NTVP: Assume no-answer after X rings (Call Transfer tab)

If the transfer type is WAIT FOR ANSWER or SCREEN, this field indicates how long the VP system waits for the called party to answer before abandoning the transfer. Note that units indicated are rings, except in certain integrations when the units are in seconds.

If you turn off call-progress tone detection (see section 7.3), the number in this field represents the number of times the VP system plays the screening prompt, *“I have a call for you. Press 1 to take the call, press 2 if you would like me to take a message...”*

If the transfer type is WAIT FOR RING or BLIND, any entry in this field is ignored.

VP: Use Three-Way Calling (Page 1 screen)
NTVP: Use 3-Way Calling (Call Transfer tab)

In general, three-way calling is simply a conference call involving three parties. One of the parties is a VP system mailbox. This mailbox should be part of the call only as long as needed to perform its call-processing functions. During normal call transfer functions, a three-way call may exist for just a few seconds, when the VP system performs the action indicated in the field SEQUENCE TO COMPLETE A TRANSFER on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP) systems. There are some cases, however, when limitations of the telephone system demand that the VP system remain a part of the call for its entire duration.

If the system is connected directly to a residential (R1), single business (B1) line, or multiple business lines assigned to a multi-line hunt group, it is likely that the call transfer service is not available. (This limitation does not apply to Centrex service.)

Many key systems and PBXs allow the VP system to set up a three-way conference that consists of two outside parties connected to C.O. lines (trunks) with the VP system as the third, internal station party. They do not, however, allow the VP system to drop out of the call leaving the two outside parties connected (a trunk-to-trunk connection). If the telephone system does not provide trunk-to-trunk connections, use the three-way calling feature. Note that some telephone systems do not allow voice mail ports to originate a conference call.

If the VP system is to use three-way calling, it begins the call transfer sequence exactly the same way as with a normal call transfer (it places the calling party on hold, and dials the transfer to number). Once the called party answers, the VP system performs an action (usually a hook-flash) to conference all three parties. This action is defined in the field SEQUENCE TO TRANSFER A THREE-WAY CALL on the CALL

TRANSFER screen / PBX INFORMATION screen (NTVP systems). At this time, the VP system remains a party in the three-way conference.

During the three-way call, the VP system continually monitors the line for an indication that the call has ended. To ensure the call has not ended without being detected, the VP system periodically interrupts the conversation with the prompt, “*Excuse me, please press 1 if you wish to continue your conversation.*” If neither party presses 1, the VP system assumes the parties have hung up and frees the lines for additional calls.

You can specify how often the VP system is to interrupt the conversation by adjusting the field `MAX TIME FOR A THREE-WAY CALL` on the CALL TRANSFER screen / `MAX DURATION FOR A 3-WAY CALL` on the GENERAL INFORMATION screen (NTVP systems). Enter in the field the interval (in minutes) between interruptions.

Note: Do not use three-way calling if the call transfer feature is available on the phone system. If in doubt, contact the telephone system manufacturer or local telephone company.

VP: Get Caller's Name (*Page 1 screen*)
NTVP: Get Caller's Name (*Call Transfer tab*)

If you select YES in this field, the VP system prompts the caller for his/her name before transferring the call (if the caller does not speak a name, the VP system transfers the call anyway). If the transfer type is set to SCREEN, when the called party answers, the VP system prompts:

“I have a call from [caller's name] for [mailbox owner's name]. Press 1 to take the call, press 2 if you would like me to take a message...”

If the transfer type is set to WAIT FOR ANSWER, when the called party answers, the VP system simply announces the caller's name and connects the call.

By default, the VP system allows the caller 4 seconds to say his/her name. To adjust this time, modify the `XFER NAME TIME` parameter in the `VM.CFG` file. See section 12 for more information.

VP: Record All Calls (*Page 1 screen*)
NTVP: Record Every Call (*Call Transfer tab*)

If you select YES in this field, the VP system remains on the line after completing the transfer and records the conversation. The recorded conversation is stored as a message in the mailbox.

VP: Currently Enabled (*Page 1 screen*)
NTVP: Currently Enabled (*Call Transfer tab*)

Use this field to turn the call transfer service on or off from the keyboard. The owner of a mailbox also can call in and remotely change his/her call transfer setup. If this field is set to YES, the VP system transfers calls to the specified number. If the field is set to NO, the VP system does not transfer calls, but takes messages instead.

VP: Transfer Schedule (Page 1 screen)
NTVP: During This Schedule (Call Transfer tab)

If the mailbox transfer type is any value other than NO TRANSFER, this field indicates when calls to this box are transferred. The options are:

Schedule	Result
ALWAYS	Calls to this mailbox are transferred at all times.
DAY SERVICE	Calls are transferred only during Day Service, as defined in the BUSINESS HOURS screen.
NIGHT SERVICE	Calls are transferred only during Night Service, as defined in the BUSINESS HOURS screen.
SCHEDULE A, B, C, or D	Calls are transferred only during the schedule, as defined on the MAILBOX PAGE 3 screen (VP systems) / by pressing the View Schedules button (NTVP systems).

Setting the CURRENTLY ENABLED ? field to NO overrides the transfer schedule feature. The VP system does not attempt transfers, but does play the greeting and takes a message.

NT-based VP system users can view and modify the schedules defined for the mailbox by clicking on the View Schedules button.

VP: Password (Page 1 screen)
NTVP: Password (General tab)

When an owner tries to open his/her mailbox to retrieve messages, the VP system asks for a password. The password can be up to 10 digits long and can consist of the digits 0 through 9 and the character *. For security reasons, it is recommended that box owners use passwords at least 4 characters long and that they change them regularly.

If the password is set to 0000 (four zeros), the VP system allows access to the mailbox without asking for a password. **Use this feature with caution.**

If the password is enclosed in brackets [], it cannot be changed remotely by the mailbox owner.

The maximum password length can be set for the system by adjusting the configuration file option MAX PASSWORD LENGTH (see section 12). The initial setting is 4 digits.

You can choose whether or not the mailbox password is displayed in this field. To hide the password, access the OTHER CUSTOMIZATION screen (VP systems) / GENERAL INFORMATION screen (NTVP systems), and select NO in the field DISPLAY MAILBOX PASSWORDS ON SCREEN. If you choose to hide passwords, this field is displayed with stars. You can still access the PASSWORD field, and change the password, but you cannot view the current password.

If the password begins with two question marks (for example, ??1234), the VP system ignores the question marks when checking the password (the user enters 1234 when asked for the password). The question marks do, however, instruct the VP system to allow access to the mailbox via the digit translation file TRANS.TXT and the database lookup feature, if either of these features use the 'wild-card' password. See section 7.13 and section 7.15.

VP: Name Recorded (Page 1 screen)
NTVP: Name button

This field indicates whether the mailbox owner has recorded his/her own name. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the name. By selecting RECORD you can record the name via a telephone line connected to the voice processing board. To record the name, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the name. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the name by clicking on the Record Name button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

Note: If there is no name recorded for the mailbox, the mailbox is not included in the system directory and the system prompt *"that extension"* is used instead of the name in various phrases.

The name is used:

- When the VP system initiates a transfer:
"Please hold while I transfer your call to [name]."
- When the called party is busy:
"[Name] is busy. You are number [number] in line."
- When the called party does not answer and there is no personal greeting recorded:
"[Name] is not available right now. If you would like to leave a message press 1."
- When the VP system calls the owner to deliver his/her new messages (message notification):
"Message for [name]. Press 1 if you would like to hear your messages."
- When another mailbox owner uses the send message feature to send a message to this box. The VP system plays the name for this box and asks for confirmation:
"[Name]—if this is correct, press 1."
- When the directory feature is being used. The VP system plays each name that matches the letters entered by the caller.
"[Name]—if this is the person you want, press 1."
- When a mailbox owner opens his/her mailbox.
"[Name]—You have [number] new messages."

VP: Greeting Recorded (Page 1 screen)
NTVP: Record Greeting button

This field indicates whether the mailbox owner has recorded his/her own personal greeting. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

If this mailbox is allowed multiple greetings in its assigned class of service, this field only reports the status of the first greeting, greeting 0.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the options to play, delete, copy, or record the greeting. By selecting `RECORD`, you can record the greeting via the telephone line connected to the voice processing board. To record the greeting, select `RECORD`, press <Enter>, and call in to voice mail line 1. When the VP system answers, select `RECORD` and speak the greeting. To end the recording, press <Enter> again. To hear the recorded greeting, select `PLAY`.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

The personal greeting is played when a caller is routed to the mailbox and any of the following occur:

- The VP system attempts to transfer the call, but the called number does not answer
- The transfer type is set to `NO TRANSFER`
- The transfer-bypass feature is used

If no personal greeting is recorded, the VP system plays the default greeting prompt:

“[Name] is not available right now.”

This default greeting prompt, like every other recorded phrase in the system, can be re-recorded to suit a particular application. If neither the name nor the greeting is recorded, the VP system plays:

“That extension is not available right now.”

After playing the personal or default greeting, the VP system offers several options to the caller. If the caller does not select any of these options, the call proceeds as programmed on the `MAILBOX` screen in the field `AFTER PLAYING GREETING`.

Note: If you want each mailbox owner to offer the options from the table shown below in his/her own personal greeting, configure the class of service for the mailbox so the VP system does not automatically offer these options.

Digit	Feature	Description
1	Message	The VP system says, “ <i>Please speak after the tone,</i> ” and takes a message.
2	Page	If the pager type is tone, the VP system takes a message, then calls the pager. If the pager-type is digital, the VP system asks for the caller’s telephone number, then calls the pager and transmits the number (see section 7.5).
3	Other options	The VP system routes the caller via information entered in the field <code>IF CALLER CHOOSES OTHER OPTIONS</code> .
4	Blind transfer	The VP system transfers the call to the number listed in the mailbox, then hangs-up.
5	P.A.	The VP system announces the call over the public-address system, then transfers the call to the extension listed in the mailbox (see section 7.8).

Digit	Feature	Description
6	Hold	The VP system keeps the caller on hold, then re-tries the extension at regular intervals (see section 7.9).
7	Send FaxMail (with voice message)	(Only valid if the optional FaxMail module has been installed and the class of service of this mailbox allows it to receive FaxMail messages.) The VP system prompts the caller to speak a brief description of the document to be faxed, then prompts the caller to begin sending.
8	Send FaxMail (no voice message)	(Only valid if the optional FaxMail module has been installed and the class of service of this mailbox allows it to receive FaxMail messages.) The VP system prompts the caller to begin sending the fax document.
0	Operator	If the system is in Day Service mode, the call is routed to the box designated as the Day Service operator box. If the system is in Lunch Service or Night Service, the call is routed to the box designated as the Night Service operator box. The operator boxes are defined in the class of service assigned to each mailbox.
#	Open mailbox	The caller is asked for the mailbox password. If it is entered successfully, he/she is able to access to the mailbox (see section 6).

Table 5-1 Caller Options when Listening to Mailbox Greeting

Note that a mailbox can have up to 10 pre-recorded greetings (numbered 0-9), with 0 being the default greeting). The number of greetings a mailbox owner can pre-record is specified in the class of service assigned to the mailbox (see section 4.10). By calling in from any telephone and opening his/her mailbox, each mailbox user can record his/her greetings or select one of their pre-recorded greetings as their active greeting (the greeting played to callers).

VP: Class of Service (Page 1 screen)
NTVP: Class of Service (General tab)

This field indicates the class of service assigned to the mailbox. A class of service is a set of privileges that are assigned to the mailbox owner. There are 8 classes of service available, numbered 0 through 7.

For example, class of service 7 may have supervisor privileges. This class of service should be assigned only to mailboxes whose owners are to be provided access to the Supervisor menu functions. Class of service 1 may be designed to be assigned to mailboxes that are issued to temporary employees. As such, class of service 1 may provide its mailboxes with access to only 1 personal greeting and no other additional privileges. Class of service 3 may be designed to be assigned to most “average” employees. This class of service may provide its mailboxes access to a certain set of features, such as call queuing and P.A. call announce capabilities. See section 4.10 for more information.

NT-based VP system users can view and modify the classes of service by clicking on the Review Class of Service button.

VP: Restricted - Client Of (Page 1 screen)
NTVP: Restricted Access (General tab)

If a valid mailbox number is entered into this field, the VP system treats this mailbox as a *restricted* mailbox. A restricted mailbox can receive messages only from other mailbox owners and can send messages only to its host mailbox, which is the mailbox number entered in this field. The restricted mailbox cannot perform any other mailbox functions.

VP: (No such field)
NTVP: Uses VCM / Uses Unified Messaging (General tab)

This field indicates whether the mailbox owner is permitted to use the VCM feature and/or unified messaging feature.

Note: The VCM, unified messaging, and e-mail reader features are available as optional add-on features to the NT-based VP system. Access to the VCM and unified messaging feature is sold on a per-seat license. Though you can check the USES VCM and USES UNIFIED MESSAGING checkbox on as many subscriber MAILBOX SETUP screens as you like, the VP system will not permit access to the feature by more users than the number of licenses purchased with the system. If, for example, a 5-seat unified messaging license was purchased with the system, only 5 subscribers can have the unified messaging feature running with their desktop Inbox at one time. Similarly, access to the e-mail reader feature is sold on a by-port license. If a 2-port license is purchased, for example, up to 2 subscribers can access use the e-mail reader feature to hear their e-mail over the telephone at one time.

VP: Sequence to Turn ON Message-Waiting Lamp (Page 1 screen)
NTVP: Sequence to Turn on Message-Waiting Lamp (General tab)

This field indicates the sequence of digits the VP system uses to turn on the message-waiting lamp at the extension associated with this mailbox. The VP system turns on the message-waiting lamp to inform the owner that he/she has new messages. If this extension does not have a message-waiting lamp, leave this field blank. The field may contain digits 0 through 9 and the characters * and # as well as the following special characters:

Character	Action Indicated
P	Use pulse (also known as "rotary") dialing.
T	Use tone dialing (the default).
,	Short pause (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
%	Medium pause (length equal to 4 commas).
L	Long pause (length equal to 8 commas).
!	Hook-flash (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
\F	Long hook-flash (4 seconds, Rhetorex systems only).
F	The VP system replaces this with the number in the TRANSFER TO field of the mailbox.
X	The VP system replaces this with the mailbox number itself.
W	The VP system inserts the current new message count. Use this character only when connecting to telephone systems that use this information to update the user's display telephone set. If the telephone system always expects a two-digit number (such as 5 new messages must be sent as 05), enter WW. Also include the statement REPEAT MW in the system VM.CFG file (See section 12).

Character	Action Indicated
{ }	Used to specify a line-group (for example, {A}555-1212 indicates the system is to select any line in line group A and dial the number 555-1212). See section 7.16.
Any other character	Can be used for punctuation and is ignored.

For the VP system to turn on and off a message-waiting lamp, it must be able to make a call. Ensure that at least one line is set for outgoing calls (see section 4.5) or that the specified line group has at least one line in it (see section 7.16).

Note: You can specify a time that the VP system is to refresh all message waiting lamps each day. During the refresh, the VP system sends the message waiting ON sequence to each mailbox containing at least one new message and sends the message waiting OFF sequence to each mailbox containing no new messages. See section 4.9 for more information.

VP: Sequence to Turn OFF Message-Waiting Lamp (Page 1 screen)
NTVP: Sequence to Turn off Message-Waiting Lamp (General tab)

Enter the sequence of digits the VP system is to use to turn off the message waiting lamp at the extension associated with this mailbox. If there is no message waiting lamp at this extension, leave this field blank. The field may contain digits 0 through 9 and the characters * and pound # as well as the special characters listed above.

Note: By default, the VP system checks to see if it needs to turn off an extension's message waiting lamp each time the mailbox owner exits from his/her mailbox. If there were new messages in the mailbox when it was opened and none when it was closed, the VP system dials the sequence to turn off the message waiting lamp. If you want the VP system to dial the message waiting OFF sequence every time the owner exits from his/her mailbox, use the REPEAT MW parameter in the VM.CFG configuration file (see section 12).

VP: New (Page 1 screen)
NTVP: New Messages (General tab)

This field cannot be changed from the keyboard. It indicates the number of new messages in the mailbox. A message is *new* if the mailbox owner has not yet listened to it. Once the owner has listened to the message, it becomes an *old* message. A mailbox can hold a maximum of 200 messages.

VP: Old (Page 1 screen)
NTVP: Old Messages (General tab)

This field cannot be changed from the keyboard. It indicates the number of old messages in the mailbox. Once the owner has listened to and/or saved a message, it becomes an *old* message. A mailbox can hold a maximum of 200 messages.

VP: Pager Number (Page 2 screen)
NTVP: Pager Number (Pager tab)

This field indicates the telephone number of the paging service. The mailbox owner may change the number remotely. Normally, access codes for outside lines are not required here. Instead, enter that information on the GENERAL INFORMATION screen (VP systems) or PBX INFORMATION screen (NTVP systems). Note that to use the call paging feature, at least one line must be allowed outgoing calls on the LINE INFORMATION screen, or the pager number must be assigned to a line group.

To restrict pager calls to use lines in a particular line group, enter the letter (A, B, C, or D) of the line group in braces { } before the telephone number (for example, {A}5551212).

Tone or Voice pagers can be set up under the Message Delivery portion of this screen. See section 7.5 for more information on setting up pagers.

The pager number can contain the digits 0 through 9 and the characters * and pound #, as well as the following special characters:

Character	Action Indicated
P	Use pulse (also known as "rotary") dialing.
T	Use tone dialing (the default).
,	Short pause (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
%	Medium pause (length equal to 4 commas).
L	Long pause (length equal to 8 commas).
!	Hook-flash (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
\F	Long hook-flash (4 seconds, Rhetorex systems only).
N	No progress tones (must be last character). The VP system ignores all call progress tones during the course of the call. When it has finished dialing, it immediately assumes the pager system has answered.
[]	Enclosing the number inside brackets prevents the mailbox owner from being able to call in and change it. (See section 6.6 for information on remote control of features.)
{}	Used to specify a line-group (for example, {A}555-1212 indicates the system is to select any line in line group A and dial the number 555-1212). See section 7.16.
Any other character	Can be used for punctuation and is ignored.

VP: Pager Type (Page 2 screen)
NTVP: Pager Type area (Pager tab)

The VP system supports both Tone and Display (digital) pagers in this section of the mailbox programming. This field specifies which type of pager the mailbox owner has.

When a caller asks the VP system to page a mailbox owner, the VP system looks for a free line on which to call the paging service. If no lines are free to make the call, the VP system queues the request and re-tries every 10 seconds for about 10 minutes.

VP: Times to Call (Page 2 screen)
NTVP: Call the Pager X times (Pager tab)

The VP system calls the pager the number of times indicated in this field. This can be useful in circumstances when the pager is turned off for a period or is temporarily out of pager range.

VP: Minutes Between Calls (Page 2 screen)
NTVP: At Intervals of X Minutes (Pager tab)

If you enter a number greater than 1 in the above field, this field instructs the VP system how long it is to wait between the re-calls.

Note: This field is used to tell the VP system how long to wait between calls to the paging service.

VP: Call Schedule (Page 2 screen)
NTVP: Activate Pager During These Times (Pager tab)

The pager notification feature follows a time schedule. The options are:

Schedule	Result
ALWAYS	Pager notification is available at all times.
DAY SERVICE	Pager notification is available only during Day Service, as defined on the BUSINESS HOURS screen.
NIGHT SERVICE	Pager notification is available only during Night Service, as defined on the BUSINESS HOURS screen.
SCHEDULE A, B, C, or D	Pager notification is available only during the schedule, as defined on the MAILBOX PAGE 3 screen (VP systems) / by pressing the View Schedules button (NTVP systems).

VP: Enabled (Page 2 screen)
NTVP: Currently Enabled (Pager tab)

If this field is set to YES, the pager feature for this mailbox is currently on. If this field is set to NO, the pager feature is off. Use this field to turn the service on or off from the keyboard. Note that the mailbox owner also can call in and remotely turn the pager notification service on or off.

Setting this field to NO overrides the call schedule set in the previous field.

VP: After Playing Greeting (Page 2 screen)
NTVP: After Playing Greeting area (Recording tab)

When a caller has been routed to a mailbox and is listening to the greeting, he/she *always* has various options available by dialing the appropriate digit (see Table 5-1 Caller Options when Listening to Mailbox Greeting, earlier in this section). If the caller does *not* dial a digit by the time the VP system

finishes playing the greeting, the VP system immediately takes whatever action is specified in this field. If the caller *does* dial a valid digit from the available options, his/her selection overrides the action entered in this field.

- **WAIT FOR A DIGIT**

This option is to be used only if the mailbox owner instructs the caller to choose an option in the personal greeting. This option provides the caller more time to enter a digit. The actual amount of time is specified using the `RESPONSE TIME` parameter (see section 12). If the caller does not enter a digit, the VP system then takes whatever action is specified in the field `AFTER LEAVING MESSAGE`.

If a caller hangs up during the playing of the mailbox greeting, there are times when the VP system might begin recording a message before it detects that the call has ended. In these cases, the mailbox ends up containing a short, blank message. By using the `WAIT FOR DIGIT` option rather than `RECORD IMMEDIATELY`, you will eliminate these false messages.

- **RECORD IMMEDIATELY**

The VP system voices the prompt, *"Please speak after the tone,"* and records the caller's message.

Note: If a caller hangs up during the playing of the mailbox greeting, there are times when the VP system may begin recording a message before detecting the call has ended. In these cases, the mailbox ends up containing a short, blank message. By using the `WAIT FOR DIGIT` option rather than `RECORD IMMEDIATELY`, you eliminate these false messages.

- **PAGE IMMEDIATELY**

The VP system looks at what type of pager this mailbox is using. If the `PAGER TYPE` field is set to `NONE` or the `PAGER NUMBER` field is blank, the VP system takes whatever action is specified in the `AFTER LEAVING MESSAGE` field (VP systems) or `AFTER RECORDING MESSAGE` field (NTVP systems).

If the `PAGER TYPE` is `TONE`, the VP system takes a message and calls the mailbox owner's pager.

If the `PAGER TYPE` is `DISPLAY / DIGITAL`, the VP system asks the caller to enter his/her own telephone number then calls the mailbox owner's pager and relays that number (no message is taken).

Note: If the `PAGER TYPE` is `DISPLAY / DIGITAL` and the Pager notification service is currently turned off (either manually or due to the call schedule), callers hear the system prompt, *"I'm sorry, I am unable to page that party right now,"* and the call continues by taking whatever action is specified in the `AFTER LEAVING MESSAGE` field (VP systems) or `AFTER RECORDING MESSAGE` field (NTVP systems).

See section 7.5 for more information on setting up pagers.

- **RECORD THEN PAGE**

The VP system looks at what type of pager this mailbox is using. If the `PAGER TYPE` field is set to `NONE` or the `PAGER NUMBER` field is blank, the VP system records a message, but does not activate the pager.

If the PAGER TYPE is TONE, the VP system takes a message, then calls the pager. If the PAGER TYPE is DISPLAY / DIGITAL, the VP system records a message, then calls the pager. It sends the mailbox number to the pager display.

VP: If Caller Chooses “Other Options” (Page 2 screen)
NTVP: If Caller Chooses “Other Options” (Recording tab)

The caller chooses other options by pressing 3 during the mailbox greeting.

You have the following options:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, “Good-bye,” and hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

VP: Box (Page 2 screen)
NTVP: (Unlabeled Box field) (Recording tab)

This field contains the box number to which the call is to be transferred when the option GO TO BOX is selected in the corresponding field. This box is usually a Routing box containing a greeting or menu, or it is the mailbox number of an individual taking calls for this mailbox owner.

VP: After Leaving Message (Page 2 screen)
NTVP: After Recording Message (Recording tab)

You have the following options:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, “Good-bye,” then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

The VP system follows the action specified here when:

- The caller has recorded his/her message, pressed # for further options, and pressed 1 to send or 4 to cancel the message.
- The AFTER PLAYING GREETING field specified WAIT FOR DIGIT, and the caller did not enter a digit.

- The AFTER PLAYING GREETING field called for a paging option, but the pager's ENABLED field is set to NO (in this case, the caller first hears the system prompt, "I am not able to page that party right now.").

VP: Box (Page 2 screen)

NTVP: (Unlabeled Box field) (Recording tab)

This field contains the box number to which the call is to be transferred when the option GO TO BOX is selected in the corresponding field. This box is usually a Routing box containing a greeting or menu, or it is the mailbox number of an individual taking calls for this mailbox owner.

VP: If Call is via D.I.D., Play Greeting in Language (Page 2 screen)

NTVP: Use Language (General tab)

This field indicates the language that callers hear when a call is routed to this mailbox via D.I.D. This entry is required, since the D.I.D. digits are received before the VP system is able to ask the caller which language he/she wants to use. See section 7.12 for more information on the multi-lingual option. (If the system is not using the multi-lingual option, direct-inward-dialing (D.I.D.) or in-band integration, ignore this field.)

VP: Automatically Forward NEW Messages to Box X After X Hours (Page 2 screen)

NTVP: Automatically Forward New Messages to Box X After X Hours

If a message has been in a mailbox for the number of hours specified in this field and has not yet been listened to by the owner, the VP system forwards the message to another mailbox or to a Group box. To disable the auto-forward feature, leave this field blank.

There is also an option, available on a system-wide basis, to change the *hours* units to *minutes*. This feature is enabled by entering **256** in a CUSTOM field on the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOM FLAGS screen (NTVP systems). Entering **30** in the HOURS field then indicates 30 minutes, not 30 hours. If zero is entered in this field, the message is forwarded immediately (on a busy system this may actually take up to 15 minutes). Note that the entry in this field is not automatically updated when custom code 256 is used to change hours to minutes.

Note: When a message is automatically forwarded in this way, the original copy is deleted from the original mailbox. When a mailbox receives a message that has been auto-forwarded, the VP system informs the mailbox owner by saying, "This message was automatically forwarded from [name of original recipient]."

VP: Schedule (Page 2 screen)

NTVP: During X (Recording tab)

Use this field to select when new messages are to be automatically forwarded. The options are:

Schedule	Result
ALWAYS	Messages are auto-forwarded at all times.
DAY SERVICE	Messages are auto-forwarded only during Day Service, as defined on the BUSINESS HOURS screen.

Schedule	Result
NIGHT SERVICE	Messages are auto-forwarded only during Night Service, as defined on the BUSINESS HOURS screen.
SCHEDULE A, B, C, or D	Messages are auto-forwarded only during the schedule, as defined on the MAILBOX PAGE 3 screen (VP systems) / by pressing the View Schedules button (NTVP systems).

NT-based VP system users can view and modify the schedules defined for the mailbox by clicking on the View Schedules button.

Message Delivery

This section describes each field associated with the message delivery feature. See section 7.6 for more information on message delivery.

VP: Call (Page 2 screen)

NTVP: Call (Message Delivery tab)

Enter the telephone number the VP system is to call to inform the mailbox owner that there are new messages in his/her mailbox.

The field can contain the DTMF digits 0-9, the characters * and #, and any of the following special characters:

Character	Action Indicated
P	Use pulse (also known as "rotary") dialing.
T	Use tone dialing (the default).
,	Short pause (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
%	Medium pause (length equal to 4 commas).
L	Long pause (length equal to 8 commas).
!	Hook-flash (duration can be changed on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems). The default is 1 second).
\F	Long hook-flash (4 seconds, Rhethorex systems only).
N	No progress tones (must be the last character). The VP system ignores all call progress tones during the course of the call. When it has finished dialing, it immediately assumes the pager system has answered.
[]	Enclosing the number inside brackets prevents the mailbox owner from being able to call in and change it.
{ }	Used to specify a line-group (for example, {A}555-1212 indicates the system is to select any line in line group A and dial the number 555-1212). See section 7.16.

Character	Action Indicated
H	Hang up immediately after dialing the number (must be last character in the number).
M	Instructs the VP system that the number has an answering-machine attached (must be the last character in the number). When the VP system calls the number, it announces that there are messages, as usual. The announcement plays the number of times specified by the NOTIFY REPS parameter in the configuration file (see section 12). If the VP system does not receive a DTMF digit (1 for YES, anything else for NO) by the end of the announcement cycle(s), it assumes that it is talking to an answering machine and plays each new message in turn.
V	Instructs the VP system to immediately begin playing the message upon answer. Include V as the last character when setting up delivery to a voice pager or when setting up network message delivery between VP systems across sites. (See sections 7.5 and 7.26.)
I	Instructs the VP system that the number is an internal number (must be the first character). This entry instructs the system to override the INTERNAL parameter (in the configuration file VM.CFG) and treat this number as an internal call regardless of the number of digits. The VP system does not dial the sequence specified in GENERAL INFORMATION / DIGITS TO GET A LINE ON EXTERNAL CALL.
E	Instructs the VP system that the number is an external number (must be the first character). This entry instructs the system to override the EXTERNAL parameter (in the configuration file VM.CFG) and treat this number as an external call regardless of the number of digits. The VP system does not dial the sequence specified in the DIGITS TO GET A LINE ON EXTERNAL CALL on the GENERAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems).
Any other character	Can be used for punctuation and is ignored.

The owner of a mailbox can call in and remotely change the first message notification number, but cannot indicate special characters.

VP: Repeat (Page 2 screen)

NTVP: X Times (Message Delivery tab)

This field indicates the number of successful calls that the VP system is to make to each telephone number. A successful call is generally defined as one where the VP system has seized an available line port, dialed the number, and detected an answer. If the call is not successful (for example, the called number was busy) the VP system automatically re-tries every few seconds up to twenty times.

VP: Interval (Page 2 screen)

NTVP: Intervals of X (Message Delivery tab)

If the field to the left of this field contains a number greater than 1 or there are additional call number sequences, this field indicates the interval (in minutes) between calls to this number and/or the interval before proceeding to the next call number sequence.

VP: Schedule (Page 2 screen)
NTVP: During X (Message Delivery tab)

This field indicates when the VP system is to deliver messages to this number. The options are:

Schedule	Result
ALWAYS	This number is called any time there are new messages in the mailbox.
DAY SERVICE	This number is called only during Day Service, as defined on the BUSINESS HOURS screen.
NIGHT SERVICE	This number is called only during Night Service, as defined on the BUSINESS HOURS screen.
SCHEDULE A, B, C, or D	This number is called only during the schedule, as defined on the MAILBOX PAGE 3 screen (VP systems) / by pressing the View Schedules button (NTVP systems).

NT-based VP system users can view and modify the schedules defined for the mailbox by clicking on the View Schedules button.

VP: Run This Sequence X Times (Page 2 screen)
NTVP: Run This Cycle X Times (Message Delivery tab)

This field indicates the number of times the VP system is to run the message delivery sequence. Once the VP system calls every number listed, it has run the message delivery sequence one time.

VP: Currently Enabled (Page 2 screen)
NTVP: Deliver These Messages (Message Delivery tab)

This field indicates which messages the VP system is to deliver. On DOS-based VP systems, the options are:

Option	Action Indicated
DISABLED	The VP system does not deliver any messages received in the mailbox.
URGENT MSGS ONLY	The VP system delivers only messages marked received in the mailbox as urgent. Non-urgent messages are not delivered.
ALL MESSAGES	The VP system delivers all messages received in the mailbox.

Setting this field to DISABLED overrides the field indicating the schedule.

On NT-based VP systems, the options are:

Option	Action Indicated
VOICE	The VP system delivers voice messages received in the mailbox.
E-MAIL	The VP system delivers e-mail messages received in the mailbox via the unified messaging feature.

Option	Action Indicated
ONLY WHEN MARKED URGENT	The VP system delivers only messages voice mail and/or e-mail messages marked as urgent. Non-urgent messages are not delivered.

The owner of a mailbox can call in remotely and turn his/her message delivery feature ON or OFF or change the first number to be called. The other telephone numbers, if in use, cannot be changed remotely.

VP: Schedule (Page 3 screen)
NTVP: Schedule (Schedule dialog box)

The four schedules (A, B, C, and D) can be applied to any of four features: call transfer, pager notification, automatic forwarding of new messages, and message delivery. The feature or features assigned to a schedule operate only between the START and END times for the days specified.

VP: Start (Page 3 screen)
NTVP: Start (Schedule dialog box)

This field indicates the time at which this schedule begins on the day. Time is indicated in 24-hour format (for example, 8:00 PM is specified as 20:00).

VP: End (Page 3 screen)
NTVP: End (Schedule dialog box)

This field indicates the time at which this schedule ends on the day. Time is indicated in 24-hour format (for example, 8:00 PM is specified as 20:00).

Note: If you want the schedule to be active all day, enter 00:00 for the START time and 24:00 for the END time.

VP: Hotel Guest Privileges Only (Page 4 screen)
NTVP: Hotel Guest Privileges Only (Hotel tab)

When set to YES, this field restricts the options available to the mailbox. When the mailbox owner opens his/her mailbox, the only options are listening to his/her messages or scheduling a wake-up call. See section 8.

VP: Wake-Up Time (Page 4 screen)
NTVP: Wake-Up Time (Hotel tab)

This field displays the time the VP system places a call the extension indicated in the TRANSFER TO field. The VP system does not actually place the call at the time specified here unless the CURRENTLY SCHEDULED field (below) is set to YES. The mailbox owner can also schedule a wake-up call by calling into the system. (See section 8).

VP: Currently Scheduled (Page 4 screen)
NTVP: Currently Scheduled (Hotel tab)

If this field is set to YES, the VP system calls the extension indicated in the TRANSFER TO field at the time specified in the WAKE-UP-TIME field. (See section 8 for more information).

VP: Enabled (Page 4 screen)
NTVP: Enabled (Distribution lists tab)

Each mailbox can create up to 4 personal distribution lists, each containing up to 20 mailbox numbers. This field controls how many lists are available to the mailbox. Use this field to indicate whether the corresponding list is available to the mailbox owner.

VP: Members (Page 4 screen)
NTVP: (Unlabeled Members fields) (Distribution lists tab)

Each distribution list can contain up to 20 members. Only mailboxes can be members of a personal distribution list (you cannot include a Group box on the list). These fields indicate the mailboxes currently included as part of each distribution list.

VP: (Page 5 screen)
NTVP: (Enhanced Tab)

This screen contains fields that are functional only with certain phone systems that provide call recording capabilities. Field entries indicate whether the mailbox owner is permitted to use the record call feature; whether and how often a beep, audible to all conversation participants, is to sound during recordings; the minimum length in seconds a recording must be to be retained on the system; the maximum number of recording minutes allowed per call; and whether, when a caller is prompted to leave a message in the mailbox, a short ringburst is to sound on the subscriber's phone. Each recorded call is stored as a new message in the mailbox owner's voice mailbox.

VP: (No such field)
NTVP: Account Number (E-mail tab)

If the mailbox owner has more than one e-mail account, the E-MAIL tab can include information for up to 3 different accounts. Once all fields are completed on this screen for the first e-mail account, you can access a second and third e-mail tab to enter information for additional accounts by clicking on the left and right arrow buttons next to the ACCOUNT NUMBER field.

<p>Note: The e-mail reader will not be able to voice e-mail over the telephone for any account that is not set up on the subscriber's desktop.</p>

VP: (No such field)
NTVP: Is Account Active (E-mail tab)

When un-checked, this box indicates an account that is currently not an active account for the mailbox owner. The e-mail reader will not access voice and e-mails for this account.

VP: (No such field)

NTVP: Account Information Area – Friendly Name (E-mail tab)

This field indicates the name that is to display in the From field on messages recipients receive in their e-mail Inbox from this mailbox owner. Typically, the Friendly Name is simply the mailbox owner's first and last name.

VP: (No such field)

NTVP: Account Information Area – E-Mail Address (E-mail tab)

This field indicates the e-mail address to be used to send the subscriber's e-mail messages.

VP: (No such field)

NTVP: Outgoing Mail Area – Default Account for Outgoing Mail (E-mail tab)

This field is active only if more than one E-MAIL tab is completed for the subscriber because he/she has multiple e-mail accounts. Check the field on the appropriate E-MAIL tab to indicate which account is to be used to send outgoing e-mail the subscriber sends.

VP: (No such field)

NTVP: Outgoing Mail Area – Account Type (E-mail tab)

This field cannot be changed at this time. (The VP system requires that e-mail client software sends messages via SMTP.)

VP: (No such field)

NTVP: Outgoing Mail Area – Host Name (E-mail tab)

This field indicates the name assigned to the e-mail server that is to be used to send the subscriber's outgoing e-mail.

VP: (No such field)

NTVP: Incoming Mail Area – Account Type (E-mail tab)

This field cannot be changed at this time. (The VP system communicates with the e-mail server via POP3 technology.)

VP: (No such field)

NTVP: Incoming Mail Area – Host Name (E-mail tab)

This field indicates the name assigned to the e-mail server that receives the subscriber's incoming e-mail.

VP: (No such field)

NTVP: Incoming Mail Area – User Name (E-mail tab)

This field indicates the User Name the subscriber uses to log on to the e-mail server that receives the subscriber's incoming e-mail.

VP: (No such field)
NTVP: Incoming Mail Area – Password (E-mail tab)

This field indicates the password the subscriber uses to log on to the e-mail server that receives the subscriber's incoming e-mail.

Note: Alert subscribers that if they change their e-mail server access password at any time, the system administrator must update it on the MAILBOX SETUP screen. If the password is not up-to-date, subscribers attempting a system log in may find that their computer is locked. This occurs because when the Inbox is not up and running on a client PC desktop, the PEC attempts to access e-mails from the e-mail server on the client PC's behalf. It must log on to e-mail server using the password you provide here. If it attempts to log on with the password you enter in this field after this password has been changed by the subscriber, after several log in attempts, the server may lock down the client PC.

Be particularly aware of this in an Exchange Server environment, since anytime subscribers change their *network* login password in this setting, they must inform their system administrator.

(This is a temporary issue that will be resolved in an upcoming release of the unified messaging feature.)

On NT-based VP systems, if you click on the **Advanced** button from the **E-MAIL** tab on the MAILBOX SETUP screen, the **ADVANCED PROPERTIES** screen displays. This screen is only applicable in environments where an Exchange Server e-mail server is used with the Exchange Service. Do not alter the defaults on this screen unless authorized to do so by a technical support representative.

5.5.5 Resetting a Mailbox

When you reset a mailbox, the VP system:

- Deletes all messages from the mailbox
- Enables the mailbox tutorial
- Deletes all personal greetings recorded in the mailbox
- Resets the password to a default password (copied from the prototype mailbox)
- Removes the mailbox from the dial-by-name directory

There are 3 ways to reset a mailbox:

- A supervisor can reset the mailbox via his/her Supervisor options.
- You can press <Ctrl-F3> and enter the number of the mailbox to be reset.
- If the VP system is integrated with a hotel/motel PMS system, the PMS informs the mailbox that a new guest is checking into the room.

5.5.6 Using the Demo Mailbox 9993

Demo mailbox 9993 functions like other mailboxes, but it does not store messages. As soon as a caller leaves a message in this mailbox, the message is played back to the caller. This feature allows users to

experience a demonstration of the VP system's recording capabilities. It can also be used as a training device. For example, the greeting in the demo mailbox 9993 may be recorded as:

“Please record a short message after the tone, and press any key to hear it played back to you.”

Note that the VP system does not play the normal prompt (*“Please speak after the tone”*) prior to recording the caller's test message. This is to allow more flexibility in setting up the greeting.

After the message has been re-played to the caller, the VP system takes whatever action is specified in the MAILBOX screen AFTER LEAVING MESSAGE field (VP systems) / AFTER RECORDING MESSAGE field (NTVP systems).

5.6 Setting up a Question Box

5.6.1 What Does a Question Box Do?

When a caller is routed to a Question box, the VP system plays the box greeting (if one is recorded). After playing the greeting, the VP system begins asking questions and storing the answers, which can be either verbal or keypress. The sequence of actions in a Question box is summarized in Figure 5-2.

Note that for simplicity, some actions, such as owner notification, have been omitted from the chart.

<p>Note: When a Question box is set up to collect keypress responses, the data is stored in a file, which can then be processed by other third-party software packages. Keypress answers can also be sent to a printer at the conclusion of each set of questions. See section 7.19 for more information on using the Question box data entry features.</p>
--

The VP system can prompt callers with up to 10 questions per box. It asks each question in turn and stores the answer, until it reaches either a question that has not been recorded or question number 10. The VP system then plays system prompt 100, *“Thank you for answering our questions,”* and it takes whatever action is specified in the field AFTER QUESTIONS on the QUESTION BOX screen. You can re-record this prompt if necessary to meet the requirements of a particular application.

You can record the greetings and questions for the Question box either from the PC, as you complete the Question Box screen, or by calling in as a Supervisor (see section 7.11).

When the owner of the Question box logs into his/her mailbox, he/she is told by the VP system how many messages and Question box answers are in the mailbox. If the mailbox owns at least one Question box, an extra option (Option 4 - Listen to Question box answers) is included in the main menu voiced to the mailbox owner.

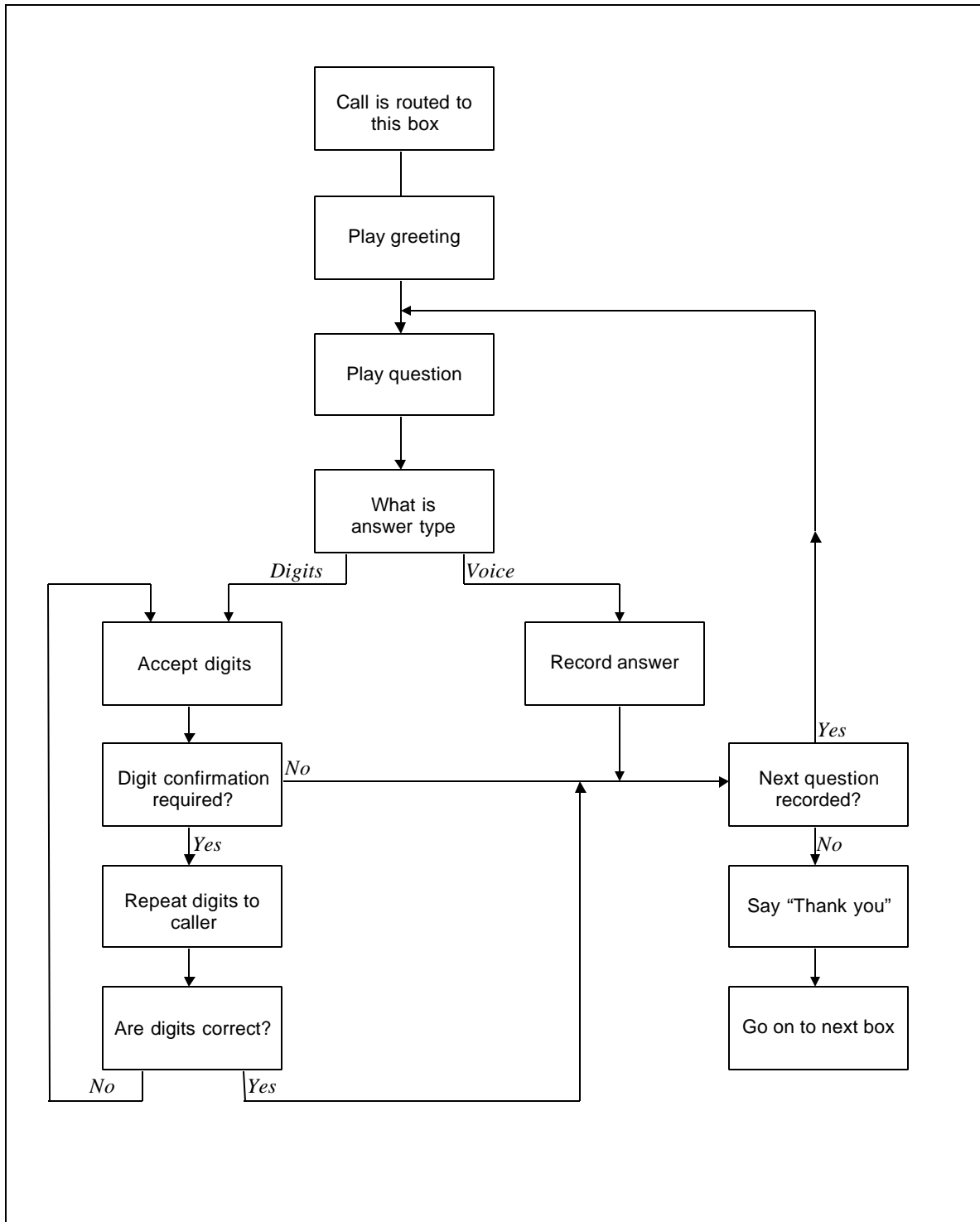


Figure 5-2 Sequence of Actions in a Question Box

5.6.2 Question Box Screens

DOS-based VP System Question Box Screen

QUESTION BOX					
Box number :	200	BOX NAME :			
Greeting recorded:	No	Owner box:			
Replay digit answers for verification :	No	Voice answers:	No		
Trigger notification?	No	Exit digits:			
After questions, Say Goodbye - box - Exit digits:					
Question Recorded?	Answer Type	Min # of digits	Max Length	Max Silence	
Question 1: No	Voice	1	30	3	
Question 2: No	Voice	1	30	3	
Question 3: No	Voice	1	30	3	
Question 4: No	Voice	1	30	3	
Question 5: No	Voice	1	30	3	Old msgs : 0
Question 6: No	Voice	1	30	3	New msgs : 0
Question 7: No	Voice	1	30	3	
Question 8: No	Voice	1	30	3	
Question 9: No	Voice	1	30	3	
Question 10: No	Voice	1	30	3	

NT-based VP System Question Box Screen

	Answer type	Min time	Max time	Max silence
1	Record question Voice	1	30	3
2	Record question Voice	1	30	3
3	Record question Voice	1	30	3
4	Record question Voice	1	30	3
5	Record question Voice	1	30	3
6	Record question Voice	1	30	3
7	Record question Voice	1	30	3
8	Record question Voice	1	30	3
9	Record question Voice	1	30	3
10	Record question Voice	1	30	3

5.6.3 Question Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the Question box number. A box number can be any number between 1 and 9899 (boxes 9900 - 9999 and 0 are reserved for the system). You cannot change the box number on the screen. To view a new box, use keys <F4> (select a box number), <F5> (previous Question box), or <F6> (next Question box). To add a new Question box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name
NTVP: Box Name

This field contains the name assigned to the Question box. The name appears on the database listing and is used for record keeping. If you insert the @ symbol in front of the name ("Interview questions" becomes "@Interview questions"), you instruct the VP system to treat the Question box as a "data entry" box. See section 7.19.

VP: Greeting Recorded
NTVP: Record Greeting button

This field identifies whether a greeting has been recorded for the Question box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played as soon as a caller is routed to the Question box.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting RECORD you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Owner Box
NTVP: Owner

This field contains the mailbox number of the owner of the Question box. The owner is the only person who can listen to responses left in the Question box.

VP: Replay Digit Answers for Verification
NTVP: Play Digit Answers for Confirmation

For each question, the VP system can accept one of two types of answers, voice or digits, as explained below. If you are collecting digit answers (dialed via the keypad), set this field to YES to have the VP system repeat the digits to the caller. The caller can then indicate whether or not the digits were entered correctly, and if not, enter them again.

VP: Replay Voice Answers for Verification
NTVP: Play Voice Answers for Confirmation

For each question, the VP system can accept one of two types of answer, voice or digits, as explained below. If you are collecting voice answers, set this field to YES to have the VP system replay the recorded answer to the caller. The caller can then review and, if necessary, re-record the answer. If this field is set to YES, the VP system prompts:

“If you would like to review your answer, press 1. Or to move on, press 2.”

If the caller presses 1, the VP system prompts:

“The answer is currently recorded as [plays answer here] ... If this is correct, press 1, if not, press #.”

If the caller presses #, the VP system plays the question again and allows the caller to re-record the answer. If the caller presses any other digit or presses no digit, the VP system moves on to the next question.

VP: Trigger Notification
NTVP: New Answers Activate Message Delivery in Owner’s Mailbox

If this field is set to YES, the VP system leaves a short message in the Question box owner’s mailbox: *“You have new questionnaire answers.”* This message triggers all of the normal mailbox notification functions (message waiting lamps, pagers, etc.).

If this field is set to NO, Question box answers do not trigger notification functions in the Question box owner’s mailbox. The owner is informed that there are new questionnaire answers each time he/she logs into his/her mailbox.

VP: Exit Digits
NTVP: Bail-out Digits

This field is active only if the ANSWER TYPE field is set to DIGITS. Enter a range of 1 to 5 digits that are to terminate the question sequence. (You must inform callers of the exit digits in the prompt you record for the Question box.) If the caller presses the exit digit(s), the VP system takes whatever action is specified in the AFTER QUESTIONS field. Any answers the caller has entered up to this point are stored. If, for example, 10 questions are recorded, the caller may choose to answer only the first five questions, then press the exit digit(s), to route the call on to the next box.

<p>Note: Although any digit 0 – 9 and the characters * and # can be used as exit digits, it is recommended you do not use a single # as the exit digit. The VP system treats the # as an “end of dialing” digit that allows frequent callers to speed up the process of the call. A caller may press # to simply speed the flow of questions, and unintentionally exit the question sequence.</p>
--

VP: After Questions
NTVP: After Answering Questions

After the VP system asks all the questions and records the answers, or the caller has pressed the exit digit sequence, the VP system plays a thank-you message (system prompt 100) and looks at this field to determine what to do with the call. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on hook.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option GO TO BOX was selected in the corresponding field. This field contains the box number to which the call is to be routed after all the questions are answered.

VP: Question Recorded
NTVP: Record Question button

This field identifies whether a question has been recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

On DOS-based systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the question. By selecting RECORD you can record the question via a telephone line connected to the voice processing board. To record the question, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the question. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the question by clicking on the Record Question button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

The VP system prompts callers with each recorded question, until it encounters a question that has not been recorded.

VP: Answer Type
NTVP: Answer Type

Each question can be set up to collect either a voice or keypress response. If you select VOICE in this field, the VP system records the response spoken by the caller and stores it as a voice file. If you select DIGITS in this field, the VP system stores the digits entered by the caller in response to the question and reads these digits to the box owner when he/she listens to the responses.

VP: Min # of Digits
NTVP: Min Time

If the ANSWER TYPE field is set to DIGITS, this field specifies the minimum number of digits the caller must enter for the response to be considered valid. If the caller enters fewer digits than specified, the VP system says, “*You entered an invalid number of digits,*” and asks the question again, up to 3 times.

VP: Max Length
NTVP: Max Time

If the ANSWER TYPE field is set to DIGITS, this field specifies the maximum number of digits the caller can enter for the response to be considered valid. If the caller enters more digits than specified here, the VP system says, “*You entered an invalid number of digits,*” and asks the question again, up to 3 times.

Note: If the caller enters not less than the minimum number of digits specified in the MIN # OF DIGITS field and not more than the maximum number indicated in the MAX LENGTH field, the VP system records the digits at the expiration of the Max Silence timer. The caller may also press # to indicate that he/she has finished dialing.

If the ANSWER TYPE field is set to VOICE, this field specifies the maximum number of seconds of recording time the VP system allows the caller to answer this question.

VP: Max Silence
NTVP: Max Silence

If the ANSWER TYPE field is set to DIGITS, this field instructs the VP system how long it is to wait (in seconds) after a digit has been received before determining the caller has finished dialing.

If the ANSWER TYPE field is set to VOICE, this field instructs the VP system how many seconds of silence it is to detect before determining the caller has finished speaking.

VP: New Msgs
NTVP: (No such field)

This field cannot be changed from the keyboard. It indicates the number of new messages in the Question box. A message is new if the Question box owner has not yet listened to it. Once the owner has listened to the message, it becomes an old message. Each Question box can hold up to 200 messages.

VP: Old Msgs
NTVP: (No such field)

This field cannot be changed from the keyboard. It indicates the number of old messages in the Question box. A message is new if the Question box owner has not yet listened to it. Once the owner has listened to the message, it becomes an old message. Each Question box can hold up to 200 messages.

5.7 Setting up a Routing Box

5.7.1 What Does a Routing Box Do?

The Routing box serves as the mechanism for sending (*routing*) calls to boxes throughout the VP system. Typically, Routing boxes are set up to play an announcement (greeting) to callers that prompts them to select a choice from a voice-menu. For example:

“You have reached our service department. If you are calling to inquire about the status of a repair, please press 1. For all other inquiries, please press 2. If you need assistance, please press 3.”

You can also set up Routing boxes to route calls based on certain criteria, such as the time of day or day of week on which the call is received, the order in which the call is received, or based on a database lookup match. All of these routing options are discussed in this section.

When a call is sent to the Routing box, the VP system plays the greeting recorded for the box. It then consults the ROUTING TYPE field indicated on the Routing box screen and routes the call based on the type indicated. The sequence of actions within a Routing box is summarized in Figure 5-3. (This chart has been simplified and does not list all possible options.)

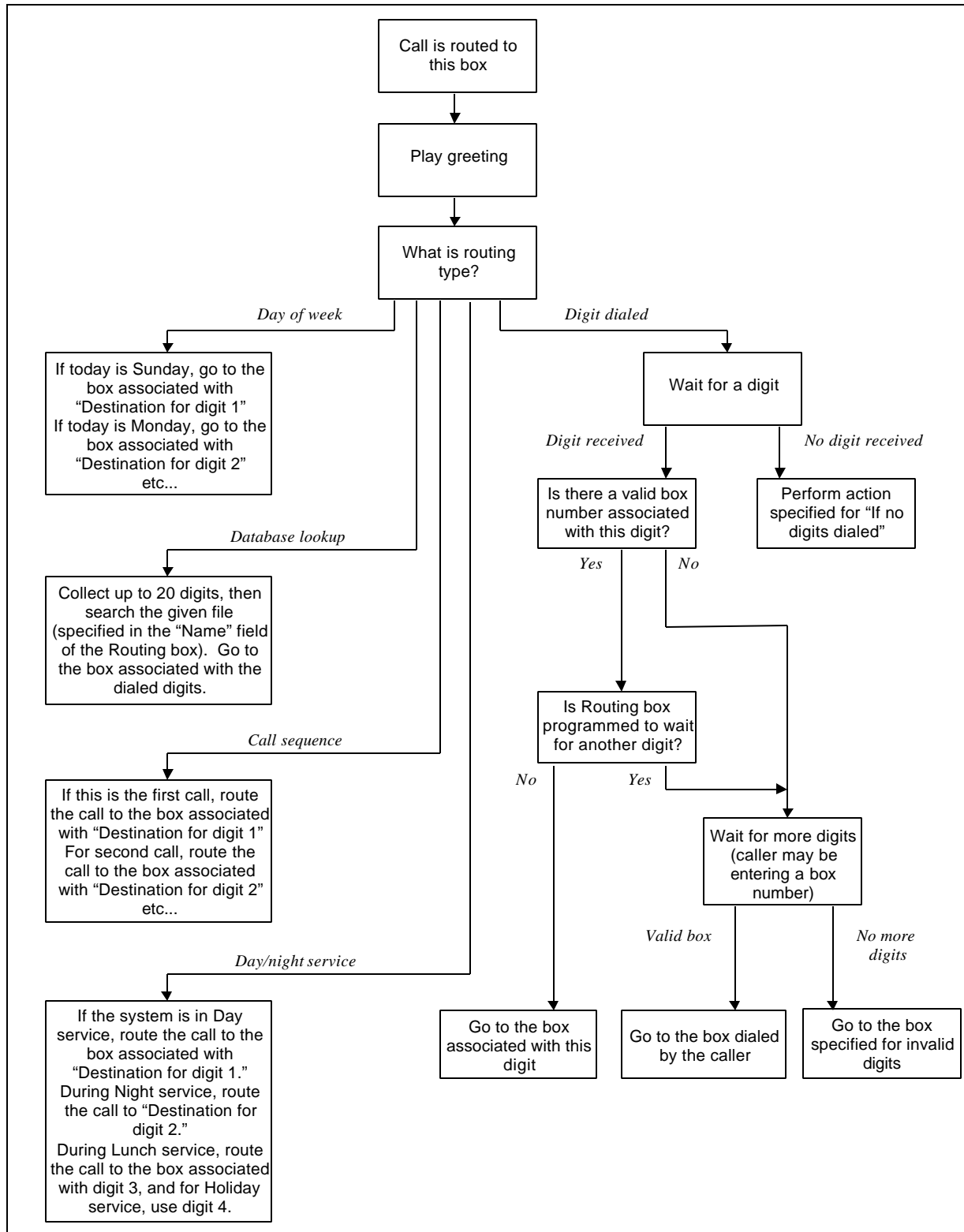


Figure 5-3 Sequence of Actions within a Routing Box

5.7.2 Understanding Routing Box 800, 801, and 821

As discussed in section 1 the VP system contains a default database with a setup configuration that allows the system to efficiently perform fundamental call processing tasks with minimal system adjustments by the installing technician. This default database configuration includes 2 pre-defined classes of service (0 and 7), 1 supervisor mailbox (mailbox 70), and 3 Routing boxes—800, 801, 821.

By default, entries specified on the `LINE INFORMATION` screen set up the VP system to route all incoming calls to Routing box 800. This box answers calls during the day and lunch service hours and plays a greeting to callers. After day/lunch service hours, the system routes calls to Routing box 801. Typically, companies offer more extensive call routing options to callers during day/lunch service hours than during closed hours. Often, for example, single-digit call routing (“...*Press 2 for Sales...* ”) is not offered during closed hours. Therefore, the greeting voiced by and options available in Routing box 801 are often different than those in Routing box 800.

Routing Box 821 is designed by default to take over and route calls once they have passed through Routing box 800 or 801. A call may go to Routing box 821, for example, after the caller leaves a voice message in a subscriber’s mailbox. Routing box 821 offers callers a menu similar to Routing box 800, but box 821 is pre-configured so if a caller does not enter an extension or select a menu option, the call is disconnected. In Routing box 800 and 801, callers who do not enter an extension or select an option are transferred to the operator. This is a safety measure designed to assist callers who use rotary phones or are too slow to respond to system prompts. By disconnecting non-responsive callers in box 821, the system simply assumes that the caller knew how to select menu options in box 800 or 801, and therefore, since no option was selected in box 821, the caller hung up.

5.7.3 Specifying Routing Box Owners

When a mailbox is designated as the owner of a Routing box, two parameters of the owner mailbox’s class of service apply to the Routing box:

- The maximum number of greetings. The owner mailbox must be allowed at least one greeting.
- The maximum greeting length.

Owners of Routing boxes can remotely re-record the Routing box greeting or change the active greeting remotely from any telephone. To do so, the owner must first log into his/her mailbox then select option 3—Options menu from the main menu. The owner then selects option 2—change greeting, and follows the prompts to change the greeting in the Routing box(s) he/she owns.

5.7.4 Routing Box Screens

DOS-based VP System Routing Box Screen

```

ROUTING BOX

Box number : 800      BOX NAME : Main Greeting

Greeting recorded : No      Owner: 70

Number of times to play the greeting : 1
Number of seconds to wait for a digit: 1

If no digits dialed, Go to box ... - box 821
If invalid digit dialed, go to box 800
Route the call based on : Digit dialed
When digit received, wait for more digits? Yes

Destination for digit 1 :      6 :      * : 9998
                        2 :      7 :      # : 9992
                        3 :      8 :
                        4 :      9 :      Voice:
                        5 :      0 : 888
    
```

NT-based VP System Routing Box Screen

5.7.5 Routing Box Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the Routing box number. A box number can be any number between 1 and 9899 (boxes 9900 - 9999 are reserved for the system). You cannot change the box number on the screen. To view a new box, use keys <F4> (select a box number), <F5> (previous Routing box), or <F6> (next Routing box). To add a new Routing box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name
NTVP: Box Name

This field contains the name assigned to the Routing box. The name appears on the database listing and is used for record keeping.

If you want to use this Routing box to look to an external database, enter the file name of the database file here. For example, if this Routing box is to look up a list of Zip Codes in a file named SALESZIP.TXT, enter SALESZIP.TXT in this field. See section 7.15 for more information on how the VP system can access external files.

If you want the VP system to announce the current time after it plays the Routing box greeting, insert the word TIME inside brackets before the box name (for example, if the box name is NEW PRODUCTS, change it to [TIME]NEW PRODUCTS). If you want the VP system to play the current date, insert [DATE] before the box name. A single Routing box can play the time or the date, but not both. By chaining two Routing boxes together, however, you can play both the time and the date to the caller.

VP: Greeting Recorded
NTVP: Record Greeting button

This field identifies whether a greeting has been recorded for the Routing box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played as soon as a caller is routed to the Routing box.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting RECORD you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

The greeting can also be recorded remotely by the owner of the Routing box. Note that once a Routing box has been assigned an owner, the Routing box is allowed the same number of greetings as the owner mailbox, as defined in the mailbox's assigned class of service. The greetings are numbered 0 - 9.

Once the VP system has finished playing the greeting, it may optionally play the time or date, depending on the contents of the BOX NAME field (see above).

VP: Owner
NTVP: Owner

This field contains the mailbox number of the owner of the Routing box. The owner has the ability to call in to the system to re-record the Routing box greeting or select a different active greeting. If you do not want to provide this remote administration option, or if not more than 1 greeting is required for the Routing box, leave this field blank.

VP: Number of Times to Play Greeting
NTVP: Play Greeting X Times

While the VP system is playing the greeting for the Routing box, it is also listening for the caller to enter a digit. If the VP system gets to the end of the greeting without detecting a digit from the caller, it waits the amount of time specified in the NUMBER OF SECONDS TO WAIT FOR A DIGIT field (VP systems) / WAIT X SECONDS FOR A DIGIT field (NTVP systems). If no digits are detected before this time has elapsed, the system repeats the Routing box greeting the number of times specified here.

VP: Number of Seconds to Wait For a Digit
NTVP: Wait X Seconds for a Digit

This value represents the number of seconds the VP system waits to detect the first digit from the caller. Once the first digit has been received, the system either waits for additional digits or immediately routes the call based on the other fields in the Routing box.

VP: If No Digits Dialed
NTVP: If No Digits Dialed

If no digits are received after the VP system plays the greeting the specified number of times and waits the specified number of seconds, the system takes whatever action is specified in this field. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

Note: Remember that the absence of a digit may mean that the caller has hung up. If your telephone system does not offer consistent and reliable disconnect supervision, do not instruct the VP system to go back to this same box if no digits are dialed, otherwise it might stay in this box continually and not disconnect the call.

For example, depending on how you record the greeting in the Routing box you may set up the VP system using one of the following techniques:

Select GO TO BOX and send the caller to another Routing box with a greeting containing additional instructions, or that simply prompts:

"Press 1 if you would like to continue."

If a digit 1 is not detected in response to this prompt, it can safely be assumed that the caller has hung up. See section 17 for more information on how the VP system determines that the caller has disconnected.

If the system has the potential of receiving calls from rotary dial telephones, select GO TO BOX and enter mailbox number of the person assigned to handle these calls. Be aware, however, that lack of disconnect supervision may cause many "hang-up" calls to be routed to this box. Also see DESTINATION FOR VOICE later in this section for other options pertaining to rotary dial callers.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option GO TO BOX is selected in the corresponding field. This field contains the box number to which the call is to be routed if no digits are received during the Routing box greeting.

VP: If Invalid Digit Dialed, Go To Box
NTVP: If Invalid Digit Dialed, Go To Box

If the caller enters an invalid digit, the VP system voices the prompt, *"That was not a valid entry,"* and goes to the box specified in this field. By default, the system re-plays the same Routing box greeting. You may choose to specify another Routing box that offers similar options, but provides additional helpful information to the caller.

The invalid digit dialed field is only used if the routing is set up based on DIGIT DIALED, and either:

- The caller dials a single digit, but the DESTINATION FOR DIGIT field is blank for that digit.
- The caller dials a sequence of digits, but there is no box number corresponding to the dialed digits.

VP: Route Call Based On
NTVP: Route Call Based On area

There are 5 techniques you can use to route calls:

- Based on the digit(s) dialed by the caller
- Based on the day-of-week (Sunday, Monday, etc.) the call is received

- Based on the call's sequence number (first call goes to box [number], second call goes to box [number], etc.).
- Based on the results of a database lookup
- Based on whether the VP system is in Day Service, Lunch Service, or Night Service mode or the call is received on a defined holiday

DIGITS DIALED

While the VP system is playing the Routing box greeting, callers can press a key at any time to make a selection from the menu, or they can dial a mailbox directly. When the caller presses a key, the VP system immediately stops playing the greeting and processes the dialed digit.

If the caller does not dial a digit and the end of the greeting is reached, the VP system pauses to wait for a response, then, if no response (DTMF or spoken word) is detected, the system performs whatever action is specified in the field `IF NO DIGITS DIALED`.

If a digit is dialed, the VP system checks the field `DIGIT RECEIVED, WAIT FOR MORE DIGITS`:

- * If this field is set to `NO`, the VP system immediately attempts to route the call based on the single digit dialed. If the `DESTINATION FOR DIGIT` field contains a valid box number, the call is immediately sent to the new box. This means that menu selections take priority over extension numbers (for example, if the `DESTINATION FOR DIGIT 1` is a valid box, the caller cannot dial mailboxes beginning with a 1, as the VP system routes the call as soon as it received the first `1` in the extension number).
- * If this field is set to `YES`, the VP system waits to see if the caller is dialing a sequence of digits (for example, entering a box number). If additional digits are detected, and they correspond to a valid mailbox, Routing box, etc., the call is routed to that box. If only one digit is detected, the VP system consults the `DESTINATION FOR DIGIT` fields and routes the call to the box specified. Since the VP system must wait for additional digits, call routing is not executed as quickly as when this field is set to `NO`.

DAY-OF-WEEK

The VP system plays the Routing box greeting. Once the greeting ends, the call immediately routes to the box specified in one of the digit destination fields. On NT-based VP systems, routing is as indicated on the Routing box screen. On non-NT-based VP systems, routing is as follows:

Day on Which Call is Received	Box to Which Call is Routed
Sunday	Box specified in <code>DESTINATION FOR DIGIT 1</code> field
Monday	Box specified in <code>DESTINATION FOR DIGIT 2</code> field
Tuesday	Box specified in <code>DESTINATION FOR DIGIT 3</code> field
Wednesday	Box specified in <code>DESTINATION FOR DIGIT 4</code> field
Thursday	Box specified in <code>DESTINATION FOR DIGIT 5</code> field
Friday	Box specified in <code>DESTINATION FOR DIGIT 6</code> field
Saturday	Box specified in <code>DESTINATION FOR DIGIT 7</code> field

If the caller dials any digit while the Routing box greeting is playing, the VP system stops the greeting and routes the call based on the day (not based on the digit dialed).

CALL SEQUENCE NUMBER

The VP system plays the Routing box greeting. Once the greeting ends, the call immediately routes to the box specified in one of the digit destination fields, in numerical order. On non-NT-based VP systems, the first call to the Routing box goes to the box specified in the field DESTINATION FOR DIGIT 1. The second call goes to the box specified in the field DESTINATION FOR DIGIT 2, etc. When the VP system reaches digit 0 (or encounters a digit for which no box is specified), it repeats the cycle starting with digit 1.

Call Number	Box to Which Call Will Be Routed
First call to this box	Box specified in DESTINATION FOR DIGIT 1 field
Second call to this box	Box specified in DESTINATION FOR DIGIT 2 field
Third call to this box	Box specified in DESTINATION FOR DIGIT 3 field
Fourth call to this box	Box specified in DESTINATION FOR DIGIT 4 field
Fifth call to this box	Box specified in DESTINATION FOR DIGIT 5 field
etc.	etc.

If the caller dials any digit while the Routing box greeting is playing, the VP system stops the greeting and routes the call based on call number (not based on the digit dialed).

DATABASE LOOKUP

The VP system has the ability to accept up to 20 digits from the caller and use these to look up a database entry. The system converts these digits to a box number, based on the contents of the database. The VP system then routes the call to that box. See section 7.15 for more information on using the database-lookup feature.

DAY/NIGHT SERVICE

The VP system plays the Routing box greeting. Once the greeting ends, the call immediately routes to the box specified in one of the digit destination fields, based on the VP system's current service mode. On non-NT-based VP systems, if the VP system is in Day Service mode, the call routes to the box associated with DESTINATION FOR DIGIT 1. During Night Service mode, the call routes to the box associated with DESTINATION FOR DIGIT 2, etc., as shown in the table below.

Service Mode	Box to Which Call is Routed
DAY SERVICE	Box specified in DESTINATION FOR DIGIT 1 field
NIGHT SERVICE	Box specified in DESTINATION FOR DIGIT 2 field
LUNCH SERVICE	Box specified in DESTINATION FOR DIGIT 3 field
HOLIDAY SERVICE	Box specified in DESTINATION FOR DIGIT 4 field

If the caller dials any digit while the Routing box greeting is playing, the VP system stops the greeting and routes the call based on the service mode (not based on the digit dialed).

VP: When Digit Received, Wait for More Digits
NTVP: If Digit Received, Wait for More Digits

This parameter is used only if the ROUTE CALL BASED ON field specifies DIGITS DIALED. If there are conflicts between menu digits in the DESTINATION FOR DIGIT fields, set this field to YES.

For example, if you used digit 1 as a menu digit in the Routing box (*“For Sales, press 1”*) and there are also mailboxes that begin with the digit 1 (100, 101, etc.), you must set this field to YES to instruct the VP system to pause after a caller dials a 1 to determine whether the caller is dialing additional digits.

To speed call processing in the VP system, it is best to avoid such digit conflicts. Therefore, if mailboxes are in a range such as 100 - 299, use only digits 3 - 9, 0, and characters * and # as Routing box destination digits (*“For Sales, press 3”*). You can then enter NO in this field. The VP system can immediately route any single-digit entries for which it finds a match in any DESTINATION FOR DIGIT field. If there is no box specified in the DESTINATION FOR DIGIT field, the VP system pauses to allow additional digits.

VP: Destination for Digit fields
NTVP: Destination for Digit fields

While the VP system is playing the Routing box greeting, the caller can press a key at any time to make a selection. When the caller presses a key, the VP system immediately stops playing the greeting and consults these fields to see where the call is to be routed.

Traditionally, the VP system uses the # key to allow mailbox owners to access the voice mail gateway (box 9992). Therefore, it is strongly recommended you program DESTINATION FOR DIGIT# as **9992** in every Routing box so mailbox owners can access the gateway at any time. Though you can program any other digit as the voice mail gateway, all user documentation is written based on you using the # key.

VP: VOICE
NTVP: VOICE

If you leave this field blank, the operation of the Routing box is not affected. If it is set to any valid box number, when the VP system finishes playing the Routing box greeting, it continues listening for either digits or a sound on the line for the period defined in the SECONDS TO WAIT FOR A DIGIT field. If a sound is detected on the line, and that sound is not a DTMF digit, it is assumed to be voice. The VP system then routes the call to the box number specified in this field.

Note: Even though the VP system is listening for digits while playing the greeting, voice detection is activated only after the VP system plays the greeting. The greeting should be worded to ask the caller to speak during this time. For example:

*“Welcome to the XYZ Company. For our Sales department press 1. For Service press 2.
 If you are calling from a rotary telephone, please say the word ‘Operator’ now.”*

5.8 Setting up a Group Box

5.8.1 What Does a Group Box Do?

A Group box is the voice mail equivalent of a distribution list. (Another form of message distribution is the *personal distribution list*—see section 5.5).

If mailbox owners frequently send messages to the same group of mailboxes, you can set up a Group box to reduce the time it takes to address the message to each mailbox. A Group box contains a listing of mailbox numbers. If a mailbox owner sends a message to a Group box, the Group box automatically distributes the message to all the mailboxes listed in it.

For example, a company may create one Group box that contains the mailbox numbers of every box assigned to a department manager. If anyone in the company needs to send the same message to all department managers, the individual can simply address the message by entering the Group box number, instead of entering each department manager mailbox number individually. The Group box then distributes the message.

When a mailbox owner wants to send a message to a Group box, he/she logs into his/her mailbox, then selects the option to send the message. At the prompt, *“Please enter the box number,”* the mailbox owner enters the number of the Group box containing the mailboxes to which the message is to be sent. The VP system voices the name of the Group box and prompts the sender to confirm it is the correct Group box. For example,

“Department managers. If this is correct, press 1.”

When the sender presses 1, a tone sounds to signal the start of the recording. At the end of the message, the VP system treats the message as if it had been sent to all the department managers’ mailboxes individually (it activates message notification, message waiting lamps, etc.).

Note: Even though it appears that each mailbox owner has his/her own copy of the message, the message is actually stored only one time on the disk. The single copy remains on the disk until all members of the group have selected to delete it.

Note: Group boxes can only be used by mailbox owners. It cannot be used by external callers (who do not own mailboxes).

5.8.2 Group Box Screens

DOS-based VP System Group Box Screen

G R O U P B O X

Box number : 300 Box name : ██████████

Name recorded : No Number of messages : 0

Max message time : 60

List of members:

10				
11				
12				
100				
101				
102				
1000				

NT-based VP System Group Box Screen

Group box
_ _ X

Record greeting

Box number Box name

Max message length seconds.

Number of messages currently in box

9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999

5.8.3 Group Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

VP: Box Number
NTVP: Box Number

This field displays the Group box number. A box number can be any number between 1 and 9899 (boxes 9900 - 9999 are reserved for the system). You cannot change the box number on the screen. To view a new box, use keys <F4> (select a box number), <F5> (previous Group box), or <F6> (next Group box). To add a new Group box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Name Recorded
NTVP: Record Name button

This field identifies whether the name of the Group box has been recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The name is played as soon as a caller selects to send a message to the Group box.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the name. By selecting RECORD you can record the name via a telephone line connected to the voice processing board. To record the name, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the name. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the name by clicking on the Record Name button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Number of Messages
NTVP: Number of Messages Currently in Box

This field cannot be changed from the keyboard. It indicates the number of messages in the Group box.

VP: Max Message Time
NTVP: Max Message Length X Seconds

This field is used to specify the maximum length of a message (in seconds) that can be sent to this Group box.

VP: List of Members
NTVP: (Unlabeled List of Members area)

These fields indicate the current members of the Group box. To add a mailbox to the group, enter the mailbox number on this list. To delete a mailbox from the group, move the cursor to the mailbox number to be deleted, and delete the number from the field. A Group box can contain up to 50 members.

To send messages to groups containing more than 50 mailboxes, use one of the following methods:

- Use the Send to Multiple Mailboxes option to send the message to additional Group boxes. After selecting the first Group box and recording the message, press the # key for more options. From the menu that plays, choose option 6 to send the message to several mailboxes or Group boxes.

- Connect a Group box to a text file, which can contain an unlimited number of members. Create a text file in the system directory (by default \VM). Name the file GBOXxxxx.LST, where xxxx is the number of an existing Group box. Note that if the existing Group box number is less than 4 digits, you must include leading zeros before the mailbox number in this filename. For example, to create an extended member file for Group box 601, create a text file named GBOX0601.LST and list each additional mailbox on a separate line in the file (do not duplicate members in the Group box screen and the text file). Save the file you create in the \ VM subdirectory on the VP system PC. In the BOX NAME field of the Group Box screen, indicate the complete path to the file, for example, C:\VM\GBOX0601.LST or C:\VM\GBOX0601.LST.

5.9 Setting up a Directory Box

5.9.1 What Does a Directory Box Do?

The Directory box is a unique system box. There is only one Directory box in the system (box number 9998), and it cannot be deleted. See section 7.14 for more information on the directory.

The Directory box is used to provide a directory service to callers. Calls can be routed to the Directory box from anywhere in the system (usually via a Routing box). For example, the initial Routing box on the system may voice the prompt:

“Welcome to XYZ Company. If you know your party’s extension number, you may dial it now. If you do not know your party’s extension number, press star for a company directory. Otherwise, stay on the line for a live operator.”

In this initial Routing box, the destination for digit * is then set to Directory box 9998. Once the call is routed to the Directory box, the VP system plays the recorded greeting for the Directory box. The default greeting is:

“Enter the first three letters of the last name of the party you wish to speak with. Use the 1 button for Q and Z, or press star for a complete directory listing.”

The VP system then begins accepting digits. It keeps accepting digits until it reaches the maximum of digits specified (the default is 3 digits, maximum is 7 digits), or until the caller stops dialing, whichever happens first. Using the numbers provided by the caller, it searches its database of mailboxes to find all that have entries in the LAST name field that match the keys entered by the caller. The VP system plays each name in turn, asking the caller if this is the person he/she wants to call. If, for example, the caller enters 764 (indicating S-M-I to search for Mike Smithers), the VP system may respond with:

*“Anne Smiley. If this is the person you want, press 1 <pause>.
Bill Smith. If this is the person you want, press 1 <pause>.
Mike Smithers. If this is the person you want, press 1 <pause>.”*

You can program the VP system to also provide the mailbox number of the individual selected by the caller (so the caller can note it for future reference) before the system transfers the call. For example:

“That number is four-two-one-six. Please hold for Bill Smith.”

A caller can also press * in place of spelling out the party's name to hear a complete listing of mailbox owners included in the directory.

Note: If you do not want a mailbox owner's name to be listed as part of the directory, enter the @ symbol as the first letter of the mailbox owner's last name on the mailbox's MAILBOX screen (for example, change "Jones" to "@Jones").

The mailbox is also not included in the directory if no name is recorded for the mailbox.

As each mailbox owner's name is played, the VP system accepts any of the following keypresses from the caller:

Keypress	Action Indicated
1	Transfer to that person.
2	Skip to the next name. (This also happens if the caller does not press any key.)
3	Try a different spelling.
#	Exit from the directory area. This causes the VP system to take whatever action is specified in the field IF NAME NOT FOUND.

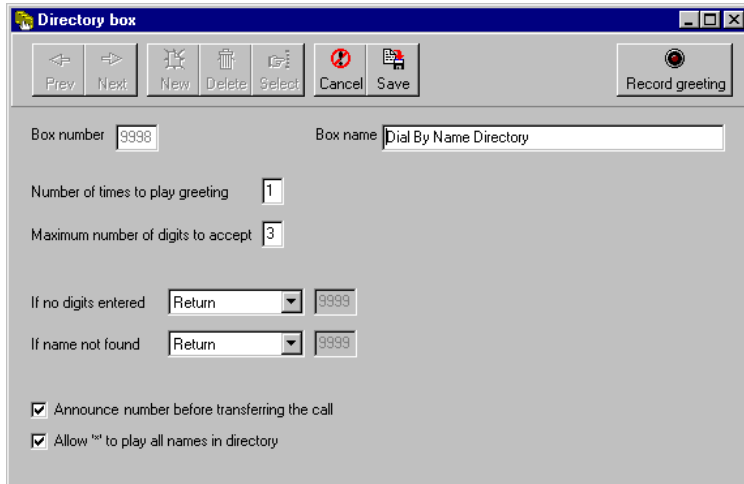
5.9.2 Directory Box Screens

DOS-based VP System Directory Box Screen

```

D I R E C T O R Y   B O X
Box number : 9998   BOX NAME : Dial By Name Directory
Greeting recorded : No
Number of times to play greeting : 1
Max number of digits to collect : 3
If no digits dialed: Return - box
If name not found: Return - box
Say box number before transferring? Yes
Allow complete directory listing? Yes
    
```

NT-based VP System Directory Box Screen



5.9.3 Directory Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the Directory box number (9998). It is assigned by the system, and it cannot be changed or deleted.

VP: Box Name
NTVP: Box Name

This field identifies the name of the box. The name is used when the VP system is displaying line activity on the screen while the system is running.

VP: Greeting Recorded
NTVP: Record Greeting button

This field identifies whether a greeting has been recorded for the Directory box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played as soon as a caller is routed to the Directory box, and it should instruct the caller to spell out the first few letters of the person's last name (maximum of 7). If no greeting is recorded, the default greeting is used (see above).

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting **RECORD** you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select **RECORD**, press <Enter>, and call into voice mail line 1. When voice mail answers, select **RECORD** and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select **PLAY**.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Number of Times to Play Greeting
NTVP: Number of Times to Play Greeting

While the VP system is playing the Directory box greeting, it is also monitoring the line to detect if the caller dialed a digit. If no digit is detected by the time the VP system finishes the greeting, it repeats the greeting the number of times specified in this field. For example, if you enter **2** in this field the VP system plays the greeting two times before taking the action specified in the **IF NO DIGITS DIALED** field (VP systems) / **IF NO DIGITS ENTERED** field (NTVP systems).

VP: Max Number of Digits to Collect
NTVP: Maximum Number of Digits to Accept

Once the VP system has asked the caller to spell the name of the requested party, it keeps accepting digits until it reaches the number of digits specified in this field, or until the caller stops dialing, whichever happens first. If you use the default value (3 digits), the VP system begins its search of the database as soon as the caller enters the first 3 letters of the person's name. If the caller enters only 2 digits (letters), the VP system pauses for a few seconds to ensure the caller has finished dialing. It then begins the search, using the digits that were entered.

Be advised that if you set this field to a low number, such as 3, and the caller enters additional digits, for example, 4, the VP system treats the additional digit(s) as a response to its prompt "*[Name], if this is the person you want, press 1.*" For this reason, it is recommended you keep the number in this field higher than the number of digits you expect callers to dial, thus allowing the VP system to determine when the caller has finished entering digits.

VP: If No Digits Dialed
NTVP: If No Digits Entered

If the caller has not entered a digit by the time the VP system finishes playing the Directory box greeting the specified number of times, the VP system executes whatever action is specified in this field. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.

Option	Action Indicated
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. This field contains the box number to which the call is to be routed if the caller does not enter a digit.

VP: If Name Not Found
NTVP: If Name Not Found

Once the caller has entered the digits, the VP system begins searching for all names that match the given letters. The VP system plays each name in turn, asking if it is the correct one. If no match is found, or if the caller answers NO in response to all the matching names, the VP system performs whatever action is specified in this field. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the action in the corresponding field is set to GO TO BOX. It contains the box number to which the call is to be routed if the VP system was unable to find the correct name.

VP: Say Box Number Before Transferring
NTVP: Announce Extension Number Before Transferring the Call

If this field is set to YES, the VP system voices the mailbox number of the called party before transferring the call. Setting the field to NO disables this feature, and the VP system simply transfers the call, without saying the mailbox number.

VP: Allow Complete Directory Listing
NTVP: Allow * to Play All Names in Directory

If this field is set to YES, a caller can hear the name of every mailbox owner included in the directory by pressing * when asked to spell out the party's name. To prevent callers from having this option, set this field to NO.

See section 7.14 for additional information on the VP system's directory feature.

5.10 Setting up an ACD Box / Customer Service Box

<p>Note: The ACD box is referred to as the Customer Service box in VP system versions 10.1x and higher.</p>
--

5.10.1 What Does an ACD Box / Customer Service Box Do?

The ACD box / Customer Service box provides a level of Automatic Call Distribution (ACD) functionality, even if the telephone system does not have ACD or hunt-groups. In the ACD box / Customer Service box, you specify a list of extension numbers. When a call is routed to the ACD box / Customer Service box, the VP system hunts through the list for a free extension and transfers the call to that extension. Figure 5-4 shows how a typical call can be handled by an ACD box / Customer Service box.

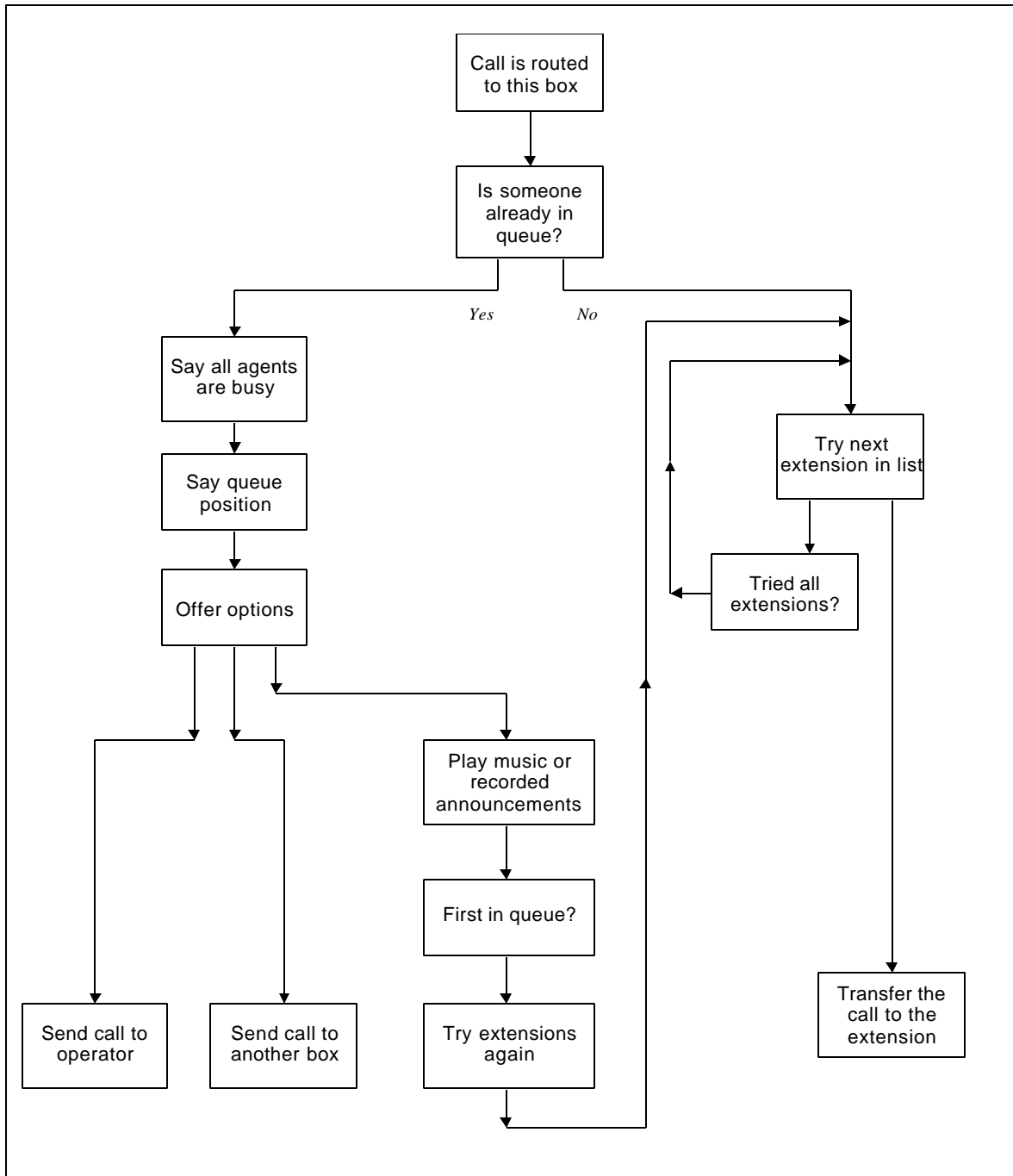


Figure 5-4 Typical Operation of an ACD box / Customer Service box

When a call is routed to an ACD box / Customer Service box, the VP system immediately transfers the call to the first extension in the box's list of extensions. If that extension is busy, the VP system tries the next extension etc., until all extensions have been tried. Once a non-busy extension has been found, the VP system transfers the call to that extension and releases itself from the call.

If all extensions are busy, the VP system places the call in a queue, plays a series of pre-recorded announcements to the caller, and keeps the caller informed of his/her position in the queue.

Individuals can add or remove their extensions to and from the ACD box / Customer Service box. Typically, they do so by dialing special code (see section 7.4 for details on logging into and out of and ACD box / Customer Service box).

5.10.3 ACD box / Customer Service Box Screens

DOS-based VP System ACD Box Screen

```

      A C D   B O X
-----
Box number: 400          BOX NAME: ██████████
Box name recorded? No
Owner: ██████████
Operator box (day): 888   Operator box (night): 889
-----
Extn: 111      Extn: 123      Extn: 1099      Extn: ████████
Extn: 118      Extn: 106      Extn: ████████      Extn: ████████
Extn: 119      Extn: 104      Extn: ████████      Extn: ████████
-----
When trying an extension Transfer if free      Rings to answer: 3
Start hunting from First extension ██████████
If all extns busy Queue the call ████████ box: ██████ Say position in line? Yes
Offer other options after 3 announcements.
If caller does not want to remain in queue Go to box ... box: 821
-----
Queue announcement #1 recorded: No   Queue announcement #4 recorded: No
Queue announcement #2 recorded: No   Queue announcement #5 recorded: No
Queue announcement #3 recorded: No   Queue announcement #6 recorded: No
    
```

NT-based VP System ACD Box / Customer Service Box Screens

Customer Service Box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

General Queuing options Recorded announcements Enhanced

If all extensions busy:

- Queue the call, do not announce position
- Queue the call, and announce position in line
- Do NOT queue. Go to box

Offer other options after announcements.

If caller does not want to queue

If there are no extensions active

Number

Record name

Customer Service Box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

General Queuing options Recorded announcements Enhanced

Record announcement 1

Record announcement 2

Record announcement 3

Record announcement 4

Record announcement 5

Record announcement 6

Number

Record name

Customer Service Box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

General Queuing options Recorded announcements Enhanced

Agent wrap-up time seconds.

Number

Record name

5.10.4 ACD Box / Customer Service Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the ACD box / Customer Service box number. A box number can be any number between 1 and 9899 (boxes 9900 - 9999 and 0 are reserved for the system). You cannot change this field on the screen. To view a different box, use keys <F4> (select a box number), <F5> (previous ACD box / Customer Service box), or <F6> (next ACD box / Customer Service box). If you want to add a new ACD box / Customer Service box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name
NTVP: Box Name

This field identifies the name of the ACD box / Customer Service box. The name appears on the database listing and is used for record keeping.

By default, every ACD box / Customer Service box is included in the VP system's directory. If you do not want the ACD box / Customer Service box to be included in the directory, insert the @ symbol in front of the box name (for example "SALES" is changed to "@SALES").

VP: Box Name Recorded
NTVP: Record Name button

This field indicates whether a name has been recorded for the ACD box / Customer Service box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The recorded ACD box / Customer Service box name is used in the directory, as in:

"The sales department. If this is correct, press 1."

On DOS-based NT systems, when you bring the cursor into this field, a menu appears offering the option to play, delete, copy, or record the name. By selecting RECORD you can record the name via a telephone line connected to the voice processing board. To record the name, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the name. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the name by clicking on the Record Name button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button

to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Owner
NTVP: Owner

This field contains the mailbox number of the owner of the ACD box / Customer Service box. Individuals with extensions (VP system versions 10.0x and lower) or mailboxes (VP system versions 10.1 and higher) that are included in the ACD box / Customer Service box use this mailbox when they want to log themselves into or out of the ACD box / Customer Service box.

For example, assume the owner of ACD box / Customer Service box 1000 is mailbox 2222. If an extension owner wants to be listed as a member of ACD box / Customer Service box 1000, he/she calls into the VP system, logs into mailbox 2222, selects 3—Options menu from the main menu, then presses 0 for ACD options. The VP system then prompts the extension owner for the ACD box / Customer Service box number and asks whether the extension is to be logged into or out of that ACD box / Customer Service box.

VP: Operator Box (Day)
NTVP: Day Operator Box

While a caller is in the ACD queue, he/she can press 0 at any time to get out of the queue and speak with an operator. If the caller presses 0 while the system is in Day Service mode, the VP system routes the call to the box listed in this field. Typically, this box is a mailbox that is set up to transfer the call to a live operator.

VP: Operator Box (Night)
NTVP: Night Operator Box

While a caller is in the ACD queue, he/she can press 0 at any time to get out of the queue and speak with an operator. If the caller presses 0 while the system is in Night Service mode, the VP system routes the call to the box listed in this field. Typically, this box is a mailbox that is set up to transfer the call to a live operator.

VP: Extn
NTVP: Number

On DOS-based VP systems, these fields contain the numbers of extensions currently included in the call rotation for the box. The VP system dials each of these extensions in turn, looking for one that is not busy. Up to 12 extensions can be listed in a single ACD box. Each mailbox owner can add his/her extension to the list in the ACD box or remove it from the list. See section 7.4 for more information on how to add or remove extensions.

On NT-based systems, these fields contain the numbers of mailboxes currently included in the call rotation for the box. The VP system dials the number specified in the TO field of each of these mailboxes in turn, looking for one that is not busy. Up to 50 mailboxes can be included in a single ACD box / Customer Service box. Each mailbox owner can add his/her mailbox to the list in the ACD box / Customer Service box or remove it from the list. See section 7.4 for more information on how to add or remove mailboxes.

If the NT-based VP system supports advanced ACD integration features and the USE ENHANCED ACD FEATURES option is checked on the GENERAL INFORMATION screen, the NUMBER fields contain the

numbers of mailboxes that are able to log in and log out of the call rotation for the box. On these systems, this listing is static—it does not update as agents log in and log out of rotation. When an agent logs on to his/her mailbox and selects the ACD softkey to put the telephone in ACD mode, the VP system takes note of the extension from which the agent is calling. The system then uses that extension number as the number it dials when it wants to direct a call to the agent. This functionality allows any agent to use any telephone to participate in call rotations.

VP: When Trying an Extension

NTVP: When Trying an Extension area (General tab)

When a call is routed to the ACD box / Customer Service box, the VP system tries each extension in turn, looking for one to which it can transfer the call. This field tells the VP system how to determine when to transfer the call. The options are:

Transfer Option	Result
TRANSFER IF FREE	This is the recommended option. The VP system dials the extension number and listens to see if it is busy. If it is busy, the VP system moves on to the next extension. If it is not busy, the VP system transfers the call to that extension (without waiting for an answer).
ALWAYS TRANSFER	The VP system dials the extension number, pauses for a second, then transfers the call, whether or not the extension is busy or free.
TRANSFER IF ANSWERED	The VP system dials the extension number and listens to see if it is busy. If the extension is busy, the VP system moves on to the next extension. If the extension is not busy, the VP system continues to monitor the call to see if the called extension answers. If the extension answers, the VP system transfers the call. If the extension does not answer within a pre-defined period, the VP system moves on to the next extension. This method is not as efficient as the TRANSFER IF FREE method, as the VP system has to remain on the line while waiting for the extension to answer.

VP: Rings to Answer

NTVP: Transfer if Answered within X Rings (General tab)

This field is effective only if TRANSFER IF ANSWERED transfer option is selected. When the VP system dials the extension number and determines the extension is not busy, it continues to monitor the call to see if the called extension answers. If the extension does not answer within the number of rings specified in this field, the VP system moves on to the next extension.

VP: Start Hunting From

NTVP: Start Hunting From area (General tab)

When a call is routed to the ACD box / Customer Service box, the VP system begins hunting for a non-busy extension. Use this field to tell the VP system with which extension it is to start hunting:

Extension	Action Taken
FIRST EXTENSION	The VP system always starts hunting from the first extension listed in the ACD box / Customer Service box.

Extension	Action Taken
NEXT EXTENSION	The VP system keeps a record of which extension handled the previous call and starts hunting from the extension following that one. This ensures that calls are distributed evenly among the extensions in the ACD box / Customer Service box.
LONGEST IDLE EXTENSION	This option is available only if the system supports advanced ACD integration features and the USE ENHANCED ACD FEATURES option is checked on the GENERAL INFORMATION screen. The VP system identifies non-idle extensions before attempting a call transfer (speeding call processing).

VP: If All Extns Busy
NTVP: If All Extensions Busy area (*Queuing Options tab*)

Use this field to tell the VP system what to do if it is not able to find a free extension. The options are:

Option	Action Indicated
QUEUE THE CALL	The VP system informs the caller that all extensions are busy and that his/her call has been placed in a queue. It will (optionally) tell the caller his/her position in the queue. NT-based VP system users can specify that option in this area. DOS-based VP system users must use the SAY POSITION IN LINE field on this screen. While the call is queued, the VP system plays pre-recorded announcements to the caller.
GO TO BOX	The VP system routes the call to the box you specify in the corresponding field. This can be a Routing box that offers other options to the caller or a mailbox that transfers the call to a pre-defined overflow extension.

VP: Box
NTVP: (Unlabeled Box field) (*Queuing Options tab*)

This field is valid only if the option in the corresponding field is set to GO TO BOX. This field contains the box number to which the call is to be routed if all extensions are busy.

VP: Say Position in Line
NTVP: (*No such field.*)

While a call is in the queue, the VP system keeps the caller informed on the progress of the call. If you set this field to YES, the VP system announces to the caller his/her position in the queue:

"[ACD box / Customer Service box name] is still busy. You are number [number] in line. If you would prefer to speak with an operator, press 0, or for other options, press 1."

If you set this field to NO, the VP system says:

"[ACD box / Customer Service box name] is still busy. If you would prefer to speak with an operator, press 0, or for other options, press 1."

VP: Offer Options After
NTVP: Offer Other Options After X Announcements (*Queuing Options tab*)

While a call is in the queue, the VP system plays a series of pre-recorded announcements to the caller (these are typically music or commercials). At the end of each announcement, the VP system tries the extension again. If it is busy, the next announcement is played to the caller.

After a number of announcements, the VP system goes back to the caller and offers the option to remain on hold, speak with an operator, or try another extension. This field allows you to specify the number of announcements that are to play before the VP system offers these options to the caller.

VP: If Caller Does Not Want to Remain in Queue
NTVP: If Caller Does Not Want to Queue (*Queuing Options tab*)

While a call is in queue, the VP system periodically goes back to the caller and offers the option to remain on hold, speak with an operator, or try another extension. If the caller chooses to try another extension, the VP system performs whatever action you specify in this field. For example, you could send the call to a Routing box that offers the caller the chance to try another extension. Also, on DOS-based VP systems, if there are no extensions in the ACD group (for example, everyone logged out of the group at closing time), calls routed to the ACD box / Customer Service box take whatever action is specified here.

VP: (*No such field*)
NTVP: If There Are No Extensions Active (*Queuing Options tab*)

If there are no extensions in the ACD group (for example, everyone logged out of the group at closing time), calls routed to the ACD box / Customer Service box take whatever action is specified here.

VP: Box
NTVP: (Unlabeled Box field) (*Queuing Options tab*)

This field is valid only if the option the corresponding field was set to GO TO BOX. This field contains the box number to which the call is to be routed if all extensions are busy or if there are no extensions (*mailboxes* in versions 10.1x and higher) in the ACD box / Customer Service box.

VP: Queue Announcement x Recorded
NTVP: Record Announcement buttons (*Recorded Announcements tab*)

While a call is in the queue, the VP system plays a series of pre-recorded announcements to the caller (these are typically music or commercials). At the end of each announcement, the VP system tries the extension again. If it is busy, the next announcement plays to the caller.

To play announcements, the VP system first looks in these fields to determine if you have recorded announcements for this ACD box / Customer Service box. If you have, the VP system uses them. If there are no announcements recorded for this ACD box / Customer Service box, the VP system plays the default hold prompt (prompt 146).

If you have recorded more than one announcement for this ACD box / Customer Service box, the VP system plays each announcement in turn. If the call is at the head of the queue, the VP system pauses at the end of each announcement and tries to find a free extension. If the call is not at the head of the queue, the VP system plays each announcement in turn. When it reaches the last recorded announcement, it goes back to the first and restarts the cycle.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the announcement. By selecting `RECORD` you can record the announcement via a telephone line connected to the voice processing board. To record the announcement, select `RECORD`, press `<Enter>`, and call into voice mail line 1. When voice mail answers, select `RECORD` and speak the greeting. To end the recording, press `<Enter>` again. To hear the recording, select `PLAY`.

On NT-based VP systems, you can record the announcements by clicking on the Record Announcement buttons, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: (No such field)

NTVP: Agent Wrap-up Time (Enhanced tab)

This field is available only if the system supports advanced ACD integration features and the `USE ENHANCED ACD FEATURES` option is checked on the `GENERAL INFORMATION` screen. The field identifies the amount of time (in seconds) that the ACD agent's phone is to remain idle (no additional calls will be transferred to it) after each call is completed. This idle time allows the agent to perform any necessary administrative tasks associated with each call (logging information about the call into a database, for example).

5.11 Setting up an Account Number Box

5.11.1 What Does an Account Number Box Do?

The VP system can collect an “account number” for each call and use that number in various places. For example, if the caller records a message, the account number is stored with the message. The account number can be any sequence of digits, such as a telephone number, Zip Code, or a customer account number.

See section 7.23 for more detailed information on account numbers.

The VP system can collect the account number for the call several ways. If the telephone system sends the calling party number at the beginning of a call, you can have the VP system store that number as the account number. You can also collect account numbers by setting up an Account Number box.

If you route the call to an Account Number box, the VP system prompts the caller to enter his/her account number (Zip Code, telephone number, or any other identifying number you want the system to collect). When the caller enters the digits, the VP system stores them as the account number for the call.

5.11.2 Account Box Screens

DOS-based VP System Account Box Screen

```

A C C O U N T - N U M B E R   B O X

Box number 199          Box name :Customer Acct. Number

Greeting recorded :No

Owner:                █

Minimum number of digits required: 3
Maximum number of digits allowed : 10
Number of seconds to wait for a digit: 3
Repeat the number for confirmation? No
If acct number already collected on this call: Use existing number

-----

If invalid account number entered, allow 1 more attempts,
and then Return █ box █

-----

If valid account number entered: Go to box ... BOX 112
    
```

NT-based VP System Account Box Screen

5.11.3 Account Number Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the Account Number box number. A box number can be any number between 1 and 9899 (boxes 9900 – 9999 and 0 are reserved for the system). You cannot change this field on the screen. To view a different box, use keys <F4> (select a box number), <F5> (previous Account Number box), or <F6> (next Account Number box). If you want to add a new Account Number box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name
NTVP: Box Name

The field contains the name of the Account Number box. The name appears on the database listing and is used for record keeping.

VP: Greeting Recorded
NTVP: Record Greeting button

This field indicates whether a greeting has been recorded for the Account Number box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played as soon as a caller is routed to the Account Number box. A typical greeting is:

“Please enter your account number.”

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting RECORD you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Owner
NTVP: Owner

This field contains the mailbox number of the owner of the Account Number box. The owner has the ability to call into the system to re-record the Account Number box greeting. If you do not want to offer this option, leave this field blank.

VP: Minimum Number of Digits Required
NTVP: Minimum Number of Digits in Account Number

When the caller has entered digits to indicate his/her account number, the VP system consults this field to determine whether the digits entered represent a valid account number. If the caller entered too few digits, the VP system says, *“That was not a valid entry,”* and can (optionally) ask the caller to re-enter the number. Use this field to specify the minimum number of digits that are necessary for a valid account number.

VP: Maximum Number of Digits Allowed
NTVP: Maximum Number of Digits in Account Number

When the caller has entered digits to indicate his/her account number, the VP system consults this field to determine whether the digits entered represent a valid account number. If the caller entered too many digits, the VP system says, *“That was not a valid entry,”* and can (optionally) ask the caller to re-enter the number. Use this field to specify the maximum number of digits that can constitute a valid account number. The VP system allows account numbers up to 30 digits.

VP: Number of Seconds to Wait for a Digit
NTVP: Number of Seconds to Wait for a Digit

Once the VP system has finished playing the box greeting, it waits for the caller to begin entering digits. If the caller enters no digits within the amount of time specified in this field, the VP system assumes the caller has finished dialing. For example, if this field is set to 3 and the caller enters 5555 then pauses 3 seconds, the VP system assumes that the account number is 5555 and continues processing the call. (To speed call processing, you can inform callers to press # after entering their number, *“Please enter your account number, followed by the pound key.”* Once the system detects the # key, it immediately continues processing the call, without pausing to detect additional digits .

VP: If Acct Number Already Collected For This Call
NTVP: If Account Number Already Collected area

Every time you route the call to an Account Number box, the VP system consults this field to determine what it is to do if it has already collected an account number for this call. If the VP system has not yet collected an account number, it plays the greeting for this box and continues as normal. If it has already collected an account number, it performs the action indicated in this field. The options are:

Option	Action Indicated
USE EXISTING NUMBER	The VP system does not ask for the account number again, and instead, uses the account number that was already collected. The system then performs whatever action is specified in the field IF VALID ACCOUNT NUMBER ENTERED.
ASK FOR NUMBER AGAIN	The VP system plays the Account Number box greeting, prompting the caller to enter the account number again.

VP: Repeat Account Number for Verification
NTVP: Play Back the Number for Confirmation

If this field is set to YES, the VP system repeats the entire account number back to the caller. This allows the caller to verify he/she entered the digits correctly. For example:

“The number is 5557700, if this is correct, press 1.”

If the caller presses any digit other than 1, the VP system prompts the caller to enter the number again. The caller may attempt to enter the number as many times as specified in the following field.

VP: If Invalid Account Number Entered, Allow X More Attempts
NTVP: If Invalid Account Number Entered, Allow X More Attempts

If the caller does not verify the account number when prompted or if he/she entered too many or too few digits, the VP system prompts the caller to re-enter the number. The caller may attempt to re-enter the number as many times as specified in this field.

VP: And Then X
NTVP: And Then X

If the caller does not verify the account number when prompted or if he/she entered too many or too few digits, the VP system prompts the caller to re-enter the number. The caller may attempt to re-enter the account number the number of times specified in the corresponding field. If the caller does not enter a valid number in the number of attempts specified, the VP system takes whatever action is specified in this field. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. This field contains the box number to which the call is to be routed if the caller has not entered a valid account number after the pre-defined number of attempts.

VP: If Valid Account Number Entered
NTVP: If Valid Account Number Entered

Once the caller enters a valid account number, the VP system takes whatever action is specified in this field. The options are:

Option	Action Indicated
GO TO BOX	Allows the call to route to another box. The new box number is entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the previous box that handled this call (usually a Routing box).
HANG UP	The VP system immediately terminates the call by going on-hook.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. This field contains the box number to which the call is to be routed if the caller enters a valid account number.

6. Calling Into a Mailbox

6.1 Identifying Yourself as the Mailbox Owner

When you call in to the VP system, you are treated as an outside caller and you can leave messages, transfer to an extension, and access features available to outside callers. To listen to the messages in a mailbox, you must identify yourself to the VP system as the mailbox owner by logging into the mailbox.

To log into a mailbox, you must access the voice mail gateway by calling into system box 9992. Normally, you access this system box via a Routing box. By default, on all Routing boxes set up on the system, the # key routes callers who press it to box 9992 (the gateway box). If you set up additional Routing boxes, it is strongly recommended that you retain the 9992 setting beside the # key on Routing box setup screens. This way, a caller can press # from almost anywhere in the system to access the voice mail gateway, which provides access to system mailboxes.

You can also access the voice mail gateway by pressing # when the VP system is playing the greeting for a mailbox (for example, *“Hi, this is Mary. Sorry I can't take your call. Leave me a message after the tone...”*). (You can use a digit other than # to provide this access, see section 12 for information.)

When your call is routed to the voice mail gateway (box 9992), the VP system prompts you to enter your mailbox number. Once you enter a valid mailbox number, the system prompts you for the password to the mailbox. Once you enter the valid password, you gain access to the mailbox, including all the messages it stores.

Hint: If the VP system pauses for a few seconds after you finish entering the password, press the # key. This informs the VP system you have finished dialing.

If everyone on the system uses passwords of the same length, indicate the length using the MAX PASSWORD LENGTH parameter in the VM.CFG file. By specifying this parameter, you tell the VP system to continue processing the call as soon as a password of the specified length is dialed. See section 12 for information.

If the password entered is invalid, the VP system asks the caller for the mailbox and password up to two more times. If the correct password is not entered during the second or third attempt, the VP system says, *“Good-bye,”* and disconnect the call.

If you press # once when asked for the password, the VP system assumes you do not want to log in to the mailbox. The system then looks to the field WHEN EXITING OPEN MAILBOX, GO TO BOX in the class of service assigned mailbox and routes the call as indicated in the field.

6.2 Completing the New User Tutorial

6.2.1 Tutorial Contents

The first time a new owner opens his/her mailbox, the VP system provides a brief tutorial session that explains a few basic functions, then allows the owner to record his/her name and personal greeting and select a password. The tutorial text and functionality is described below.

Tutorial Part	Tutorial Text	Keypress Results
Tutorial Introduction	<p><i>"Welcome to your new mailbox. In order to familiarize you with your new mailbox, we would like to briefly describe some of its features. You may exit from this tutorial at any time by pressing the pound key."</i></p>	<p>If you press #, the tutorial stops and the system voices the mailbox Main menu. Pressing # does <i>not</i> permanently remove the tutorial, the next time you log into the mailbox the tutorial starts again.</p> <p>If you press *, the tutorial stops and the system voices the mailbox Main menu. Pressing * does permanently disable the tutorial. It will not be played the next time you log into the mailbox.</p>
Recording Your Name	<p><i>"There are times when I need to say your name. For example, when the system is about to transfer a call to your extension, the caller will hear: 'Please hold while I transfer your call to Mary Jones.' I need to record your name. Press 1 if you would like to record your name. Otherwise, press 2."</i></p>	<p>If you press 1, the system prompts you to record your name. After recording the name, the system voices it back to you and allows you to accept the recording or re-record or delete it.</p> <p>If you press 2, the VP system does not prompt you to record a name and proceeds to the next step in the tutorial.</p> <p>If you press # or * the tutorial ceases as described above, and the VP system voices the mailbox Main menu.</p> <p>Note: Until the mailbox owner records his/her name, the VP system substitutes the prompt, <i>"that extension"</i> as a default.</p>
Recording Your Greeting	<p><i>"If you are not able to answer your phone, I will play your personal greeting to the caller. Your greeting should sound something like this: 'Hello, this is Mary. I'm sorry I cannot take your call right now. If you would like to leave me a message, press 1, or press 3 if you would like to speak to someone else.' Once you have recorded your greeting, you can change it at any time. Press 1 if you would like to record your personal greeting now. Otherwise, press 2."</i></p>	<p>If you press 1, the VP system prompts you to record your greeting (if the mailbox is allowed multiple greetings in its assigned class of service, the greeting recorded here is greeting 0). After the system records the greeting, it plays it back to you and allows you to accept it or re-record or delete it.</p> <p>If you press 2, the VP system does not prompt you to record a greeting and proceeds to the next part of the tutorial.</p> <p>If you press # or * the tutorial ceases as described above and the VP system voices the mailbox Main menu.</p> <p>Note: Until the mailbox owner records his/her greeting, the VP system substitutes the system default greeting <i>"...is not available right now."</i></p>

Tutorial Part	Tutorial Text	Keypress Results
Entering a Password	<p><i>"To protect your privacy, you will be asked to enter your password each time you open your mailbox. This prevents unauthorized callers from gaining access to your messages. You should change your password frequently. If you would like to change it now, press 1. Otherwise, press 2."</i></p>	<p>Note: By default, each new mailbox uses the mailbox number as the initial password.</p> <p>If you press 1, the VP system prompts you to enter a new password up to the maximum number of digits allowed by the system (defined by the VM.CFG parameter MAX PASSWORD LENGTH, see section 12). When you enter a new password, the VP system repeats the digits and asks for confirmation. You can accept the new password or select to enter a different password.</p> <p>If you press 2, the tutorial does not prompt you to enter a new password, and the default password is retained.</p> <p>If you press # or *, the tutorial ceases as described above, and the VP system voices the mailbox Main menu.</p> <p>Note: When creating new mailboxes, you can elect to assign no password to mailboxes instead of the default password, which is the mailbox number. Do this by entering 0000 in the mailbox PASSWORD field. The mailbox owner will not be asked for a password until he/she assigns one. Use this option with caution, since anyone can listen to the mailbox owner's messages until he/she assigns a password.</p>
Including Your Name in the System Directory	<p><i>"If you would like to be included in the dial-by-name directory, press 1. Otherwise press 2"</i></p>	<p>If the LAST NAME field of the mailbox on the MAILBOX screen is blank (or if it consists entirely of digits), the VP system offers you the option to have your name included in the system's directory, which is available to callers attempting to access a specific party.</p> <p>If you press 1, the VP system prompts you to indicate the numbers on the telephone keypad corresponding to the letters that spell out the first 3 letters of your last name. Once you enter the numbers (letters), the VP system repeats them.</p> <p>If you press 2, your name is not included in the dial-by-name system directory.</p> <p>If you press # or *, the tutorial ceases as described above, and the VP system voices the mailbox Main menu.</p> <p>Note: If there is no name recorded for this mailbox, it will not be included in the directory.</p>
Concluding the tutorial	<p><i>"Thank you for taking part in the tutorial. The tutorial will be repeated each time you open your mailbox. If you would like to cancel it, press the star key now."</i></p>	<p>If you press *, the tutorial is disabled for the mailbox. If you press nothing, the mailbox Main menu plays and the tutorial will repeat the next time you log into the mailbox.</p>

6.2.2 Options for the Tutorial

If you do not want the tutorial to be offered to mailbox owners, the feature can be disabled on a system-wide basis. In the VP system configuration file `VM.CFG`, enter the following:

```
DISABLE TUTORIAL
```

You can customize the text of the tutorial. The text is recorded as system prompts 198-209. See section 15.

Once a mailbox owner disables the tutorial by pressing *, it can be re-activated at any time if the owner logs into his/her mailbox, presses 3 for the Options Menu, then presses 9. The tutorial re-sets to play each time the owner logs into his/her mailbox until it is again disabled.

6.3 Understanding the Main Menu

When you open your mailbox, the VP system voices your name and tells you how many messages you have. For example, *“John Smith, you have five new messages (two of these are marked urgent) and one old message.”*

The VP system then plays the Main menu, offering you various options:

<p>Note: Not every system or mailbox has access to every option. See section 15 for the contents of the default pre-recorded prompts, available optional pre-recorded prompts, and possible ways to customize system prompts for a specific installation.</p>
--

“To listen to your messages, press 1.

To send a message, press 2.

To change your options, press 3.

To listen to questionnaire answers, press 4.

(heard only if mailbox owns a Question box)

To change languages, press 5.

(heard only if multi-lingual capability is in use)

For supervisor functions, press 6.

To place an outgoing call, press 0.

Or, to exit, press #.”

Each of the Main menu choices is explained in this section. For an overview, a map of the voice menus you hear in the VP system is shown in Figure 6-1. Optional features (Fax Distribution, Talking Classifieds, Outbound Telemarketing, IVR) are not included.

<p>Note: If the VP system is equipped with one or more optional modules, this menu may be slightly modified.</p>

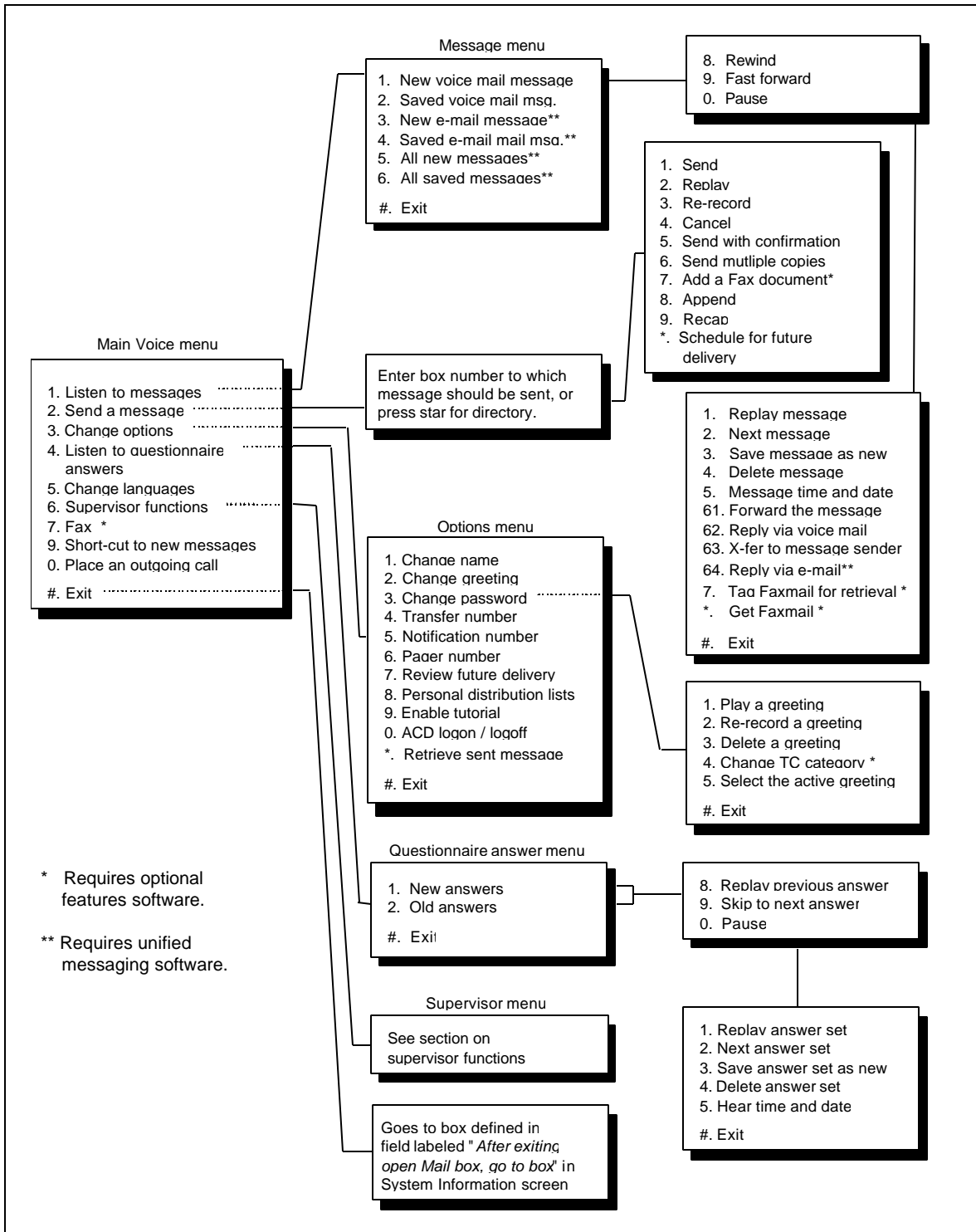


Figure 6-1 Map of the VP System Voice Menus

6.4 Listening to Messages

If you press 1 from the Main menu to listen to messages, the VP system prompts you to indicate the type of messages you want to listen to:

*“For new voice mail messages, press 1.
For saved voice mail messages, press 2.
For new e-mail messages, press 3.
For saved e-mail messages, press 4.
For all new messages, press 5.
For all saved messages, press 6.
Or, to exit, press #.”*

Note: Option 3 and option 6 are heard only by subscribers using the unified messaging feature on NT-based VP systems. Information on using unified messaging features is available in a help file accessible to users through a desktop icon installed on client PCs when the unified messaging client software is installed.

If you make no choice, or choose # to exit, the VP system returns you to the Main menu.

When the VP system voices messages, it plays each one in turn beginning with the oldest. If any of the messages are marked urgent, the VP system plays them first. As the VP system plays each message, it provides certain information about the message.

Before the message plays, the system provides the following information:

- If the sender indicated the message is urgent, the VP system says, *“This message is marked urgent.”* Urgent messages are played before non-urgent messages.
- If the sender indicated the message is private, the VP system says, *“This message is marked private.”* Private messages cannot be forwarded to another mailbox.
- If you indicated the message is to be deleted, the VP system reminds you that it is marked for deletion, *“You have asked for this message to be deleted.”* The message is deleted a few minutes after you exit from your mailbox.
- If the sender specified that he/she wants to be informed when you hear the message, the VP system says, *“The sender will be notified that you have received this message.”*
- If the message was sent to a Group box of which you are a member, rather than specifically to your mailbox, the VP system tells you the name of the Group box, for example, *“Message for all managers.”*

After the message plays, the system provides the following information:

- If there was an account number associated with the call (see section 7.23), the VP system says the account number, for example, *“from 5552211.”*
- If the message was sent by another mailbox owner from within his/her mailbox, the VP system says the name of the sender, for example, *“From Ted Smith”* (see note below).
- If the message was manually forwarded, the VP system says who the original recipient was, for example, *“This message was forwarded from Mary Jones”* (see note below).

- If the message was automatically forwarded, the VP system says who the original recipient was, for example, *“This message was automatically forwarded from Mary Jones”* (see note below).
- The VP system plays the message time and date (see note below).

Note: You can configure the VP system to automatically play the message time and date at the beginning or end of each message on the OTHER CUSTOMIZATIONS screen (VP systems) / GENERAL INFORMATION screen (NTVP systems). Otherwise, to hear the time and date of the message, you can press 5 during the message or during the menu played after the message.

6.4.1 Listening to New Messages

If you press 1 to listen to new messages, the VP system plays each of the new messages in turn. Any urgent messages are played first (oldest first), then any non-urgent messages are played (oldest first). The VP system pauses between each message to allow you to decide what to do with the message. When you have heard all new messages, the VP system says, *“You have no more new messages,”* and returns you to the Main menu.

Note: While listening to a message, you can fast-forward by pressing **9** or rewind by pressing **8**. The number of seconds the VP system forwards or rewinds is defined on GENERAL INFORMATION screen. You can also pause the message by pressing **0**. If you do not press **0** again to resume playing the message within 30 seconds, the VP system automatically resumes message playback.

6.4.2 Listening to Saved (Old) Messages

If you press 2 to listen to saved messages, the VP system plays each of the old messages. Any urgent messages are played (oldest first), then any non-urgent messages are played (oldest first). The VP system pauses between messages to allow you to decide what to do with the message. The fast-forward, rewind, and pause functions operate as they do during new message playback.

6.4.3 Selecting Options Between Messages

Each time the VP system plays a message, it ends by offering you the following choices:

*“To replay the message, press 1.
 To save and play the next message, press 2.
 To save the message as new, press 3.
 To delete the message, press 4.
 To adjust the volume, press 5.
 For more options, press 6.
 Or to exit, press #”*

Each option is defined below. If you do not press a digit, the VP system returns you to the Main menu.

- **Replay Message**—The VP system plays the current message again.

- **Next Message**—The VP system moves on to the next message in the mailbox, saving the current message as an old message. If you have just listened to the last new message, the VP system says, *“You have no more new messages.”*
- **Save As New**—The VP system moves on to the next message, but stores the current message as a new message (as if you have not yet listened to it). This option can also be used to *undelete* a message you have asked to be deleted (see below).

<p>Note: When you save a message as new, mailbox functions such as message waiting lamp control and message notification also treat the message as new (the message waiting lamp remains on).</p>
--

- **Delete Message**—The VP system marks the message to be deleted, and temporarily stores it as a saved message. The message is not actually deleted until you exit from the mailbox. If you play the message again, after requesting that it be deleted, the VP system says, *“You have asked for this message to be deleted,”* then plays the message. If you decide you do not want to delete the message, press 3 to save the message as new. Once you press 3, the message is no longer marked for deletion.

It is good practice to delete messages as soon as possible to prevent the mailbox from becoming full of old, unneeded messages. Saved messages may be scheduled for automatic deletion after a certain number of days (see section 4.10).

- **More Options**—The VP system offers the following options:

*“To forward a copy of this message, press 1.
 To reply to the message using voice mail, press 2.
 To speak with the sender of the message, press 3.
 To delete the message, press 4.
 To hear the time and date of the message, press 5.
 To reply to the message using e-mail, press 6.
 Or to exit, press #.”*

<p>Note: The VP system offers options 2, 3, and 6 only if it has enough information to perform the functions (see the description of these options below). Option 6 is only available if the subscriber is using the unified messaging feature on an NT-based VP system.</p>

- **Forward the Message**—The VP system prompts you to indicate the mailbox to which you want to forward the message, *“Please enter the box number. If you do not know the box number, press star.”* Enter the box number or press * to use the system dial-by-name directory. You have the following sending options:

*“To add your comments to the beginning of the message, press 1.
 To add your comments to the end of the message, press 2.
 To forward the message without comment, press 3.
 To exit without forwarding, press #.”*

If you select option 1 or 2, the VP system prompts you to speak your comments. Once you record your comments, they are added to the message, and the message is forwarded.

- **Reply to the Message Using Voice Mail**—The VP system places you in the mailbox of the sender (assuming the message came from another subscriber on the system). If the message

was manually forwarded, your reply is sent to the person who forwarded it. If the message was automatically forwarded (see section 5.5), the reply is sent to the person who sent the original message.

If the message was left by a caller rather than a mailbox owner, the VP system cannot send a voice reply. If in this case and you press 2 at the More Options menu, the VP system says, “*That was not a valid entry.*”

Note: The reply to message using voice mail option is available *only* if a message was sent by another mailbox owner from within his/her open mailbox (the sender has logged in to his/her mailbox and chosen option 2, Send a message, from the Main menu).

- **Transfer to Message Sender**—The operation is slightly different, depending on whether the message is from an outside caller or from a mailbox owner:

If the message is from an outside caller:

This option is available *only* if the sender's telephone number is attached to the message (as the account number). When you select the transfer to sender option, the VP system interprets the account number as a telephone number. It places you on hold and dials the digits stored in the account number, automatically using the out-dialing rules in the DIALRULE.TXT file (see section 7.25). When it has finished dialing the number, it connects you with the called party.

Certain additional conditions apply to this feature:

- * If you select this option, the VP system assumes the account number associated with the message is a valid telephone number and tries to dial it. Do not use this option if the account number is not a telephone number.
- * Before making the outgoing call, the VP system checks the RESTRICTED DIGITS fields in the mailbox's assigned class of service. If the telephone number is restricted, the VP system does not make the call.

If the message is from a mailbox owner:

The VP system places you on hold and dials the extension number associated with the sender's mailbox. Certain additional conditions apply to this feature:

- * The sender's mailbox call transfer feature must be enabled. If disabled, you hear the mailbox owner's personal greeting just as if you had called the VP system and entered the mailbox number.
- * Your telephone system must support extension-to-extension transfers.

- **Delete the Message**—See the delete message option description above.
- **Hear the Time and Date**—The VP system plays the time and date the message was received. The VP system consults the PC clock for this function, so it is important to ensure the clock is set to the correct date and time. You can configure the VP system to automatically play the message time and date at the beginning or end of the message on the OTHER CUSTOMIZATIONS screen (VP systems) / GENERAL INFORMATION screen (NTVP systems).
- **Reply to the Message Using E-Mail**—The VP system records your reply then attaches it as a .WAV file to an e-mail it sends to the original message sender. If the message was manually

forwarded, your reply is sent to the person who forwarded it. If the message was automatically forwarded (see section 5.5), the reply is sent to the person who sent the original message.

If the VP system does not have access to the e-mail address of the message sender, it cannot send an e-mail reply. If in this case and you press 6 at the More Options menu, the VP system says, *“That was not a valid entry.”*

6.5 Sending a Message

If you press 2 from the Main menu to send a message, the VP system prompts you to indicate the box number. You can send a message to any mailbox or Group box, or to several mailboxes or Group boxes. You can also send a message to one of the personal distribution lists defined for the mailbox.

To send a message to...	Do this
A single mailbox	Enter the mailbox number
Several mailboxes	Enter the first mailbox number
All members of a Group box	Enter the Group box number
All members of a personal distribution list	Enter the distribution list number

If you do not know the box number of the person to whom you want to send the message, press * to access the dial-by-name system directory.

Once you have entered the box number, the VP system plays the name of the owner of that box and asks you to confirm you have indicated the correct box. For example:

“John Smith. If this is correct, press 1.”

If you press 1, the VP system asks you to record your message after the tone. Once you record the message, the VP system offers the following options:

Digit	Function	Description
1	Send	Send the message. You are offered the following sending options: 1. Send with normal delivery (the default). 2. Send as an urgent message. Urgent messages are played first. 3. Send as a private message. Private messages cannot be forwarded. 5. Send and be notified when recipient has listened to the message. <i>(This is the same as choosing option 5 below).</i>
2	Replay	Play the message back, so you can hear how it sounds.
3	Re-record	Delete this message, and record a new one.
4	Cancel	Delete this message, without sending it.

Digit	Function	Description
5	Send with confirmation	Send the message, and have the VP system notify you when the recipient first listens to it. Once the message has been heard by the recipient, the VP system sends a message to your mailbox, telling you when the message was received and who received it (in case it was automatically forwarded to a third party). This message from the VP system is treated as a normal message in that it activates all the normal message notification, pager, message-waiting features. <i>(This is the same as choosing option 1 above, and then pressing 5).</i>
6	Multiple send	Send this message to several mailboxes or Group boxes. The VP system sends the message to the mailbox (or Group box) you first specified, then asks you for more box numbers. Enter each mailbox (or Group box) number when asked, then press # when you are finished.
8	Append	Continue making the recording of this message from the point where you left off. You may continue recording up to the total message length allowed by the receiving mailbox's assigned class of service.
9	Recap	Play back the last 5 seconds of the recorded message.
*	Schedule	Schedule this message for delivery at a future time and date. The VP system prompts you to enter the time and date for delivery of the message, then plays back the information you entered for confirmation. Choosing this option takes the place of pressing 1 (send), which would deliver the message immediately.

6.6 Changing Mailbox Options

If you press 3 from the Main menu to change the mailbox options, the VP system voices the Options menu:

*“To record your name, press 1.
 To record your greeting, press 2.
 To change your password, press 3.
 To change your call transfer feature, press 4.
 To change your message notification feature, press 5.
 To change your pager feature, press 6.
 To review messages scheduled for future delivery, press 7.
 To change your personal distribution lists, press 8.
 To reactivate the tutorial, press 9.
 To retrieve a message you have already sent to another mailbox, press *.
 Or, to return to the Main menu, press #.”*

<p>Note: If this mailbox is the owner of an ACD box, the menu also includes an option to log agents into or out of the ACD group.</p>
--

If you do not make a selection, the VP system returns you to the Main menu.

6.6.1 Recording a Name

If you press 1 from the Options menu to record a name in the mailbox, the VP system plays the current recording of the name and prompts you to change it:

*“To replay your name, press 1.
To re-record your name, press 2.
To delete your name, press 3.
Or, to exit, press #.”*

If you press 1, the VP system plays the current recording of the name, then plays the menu again.

If you press 2, the VP system asks you to record your name after the tone. Speak the name, then press # to end the recording. If you do not press #, the VP system will record a few seconds of silence before ending the recording. This will slow the progression of calls to the mailbox. Once the name has been recorded, the VP system plays the above menu again.

If you press 3, the VP system deletes the current recording of the name. If you press #, you return to the Options menu.

6.6.2 Recording a Greeting

If you press 2 from the Options menu to record a greeting, the VP system examines the class of service assigned to the mailbox (see section 4.10) and checks to see if you are the *owner* of any other box in the system (Routing box, Questions box, etc.). The next prompt you hear depends on:

- Whether the mailbox is allowed to record multiple greetings, a single greeting, or no personal greeting, as defined in the assigned class of service. If the mailbox is not permitted to record a personal greeting, the VP system says, *“That was not a valid entry,”* and plays the Options menu again. When a call is routed to this mailbox, the caller hears the default system greeting, *“[Name] is not available right now...”*
- Whether the mailbox is the owner of one or more other system boxes. If the mailbox is an owner of another system box, the VP system prompts you to select which box you want to change the greeting in, *“Please enter the box number.”*

If you enter a number for a box that you do *not* own, the VP system says, *“I’m sorry, you do not own that box.”* then re-plays the Options menu. If you enter a number of a box that you *do* own, the VP system plays the following menu:

*“To replay the greeting, press 1.
To re-record the greeting, press 2.
To delete the greeting, press 3
To select a new active greeting, press 5.
Or, to exit, press #.”*

Options 1, 2, and 3 function the same way as when you use them to record a name for the mailbox (see above). The only difference involves boxes that are allowed multiple greetings. If the box is allowed multiple greetings and you select option 1, 2, or 3, the VP system prompts you to indicate the number of the greeting (0 – 9) you want to modify.

Note: If a mailbox is not allowed any greetings, then any boxes “owned” by that mailbox are also not allowed any greetings.

Enter the greeting number (or press * if you want to work with whichever greeting is currently active). If the number you enter is higher than the maximum number of greetings allowed by the assigned class of service, the VP system says, “*That was not a valid entry,*” and replays the Greeting menu. If the greeting number is valid, the VP system allows you to play, re-record, or delete it using the same functionality it uses when you play, re-record, or delete the mailbox name (see above).

Note: If the mailbox is allowed multiple greetings, recording one of the greetings does *not* affect which greeting is active. That is, if greeting 0 is currently the active greeting, recording greeting 1 does not automatically make it the active greeting. You must use option 5 to activate a different greeting.

Option 5 allows you to select another greeting as the currently active greeting. The *active* greeting is the greeting played to callers when they are routed to the mailbox. Once you select a new active greeting, the VP system plays the greeting back to you for confirmation.

Note: If the class of service assigned to the mailbox allows multiple greetings (ranging from 0 to 9), record greeting 0 first since this is the active greeting by default. You can then record additional greetings 1 through 9, as allowed by the class of service.

6.6.3 Changing a Password

If you press 3 from the Options menu to change your password, the VP system prompts you to enter a new password. The password can contain the digits 0 – 9 and the character *, and it can be up to 10 digits/characters long. When the VP system is shipped, the maximum password length is set to 4 by default, but this can be modified using the parameter `MAX PASSWORD LENGTH` in `VM.CFG` configuration file (see section 12).

Once you enter a new password, the VP system prompts you to re-enter it for confirmation. This ensures you do not accidentally mis-enter the password you intended to use. Once you enter the same password twice, the VP system plays the prompt, “*Your password has been changed and will be in effect the next time you call.*”

If you do not re-enter the password when prompted or you do not enter two matching password as prompted, the VP system does not accept the new password and plays the prompt, “*Your password has not been changed.*”

Note: If you do not want to password-protect a mailbox, enter **0000** (four zeros) as the password. If the mailbox contains the password 0000, the VP system does not prompt the mailbox owner to enter a password when logging into the mailbox. Be advised that when the mailbox does not prompt for a password, anyone can open it. You are strongly urged to *always* password-protect a mailbox and change the password regularly for maximum security.

Note: Mailbox owners are barred from remotely changing their passwords if the password field entry is enclosed in brackets [] on the MAILBOX screen.

6.6.4 Changing the Call Transfer Service

If you press 4 from the Options menu to change the call transfer service, the VP system announces the current state of the service. If the service is currently enabled (on), you hear the prompt , “*Your calls are currently being transferred to [number]. Press 1 if you would like to change the number.*” If the call transfer service is currently disabled (off), you hear the prompt , “*Your calls are currently being transferred to voice mail. Press 1 if you would like to change the number.*”

Press * to toggle the call transfer service on (callers are transferred to the telephone) and off (callers hear the mailbox greeting immediately). After you press *, the VP system voices a confirmation prompt indicating the current state of service.

Press **1** if you want to enter a new call transfer number. The VP system asks you for the new number, “*Please enter the new number.*” Once you enter the new number, the VP system plays the confirmation prompt, “*Your calls are currently being transferred to [number].*” Press # to accept the number and return to the Options menu, or press **1** to enter a different number.

<p>Note: Mailbox owners are barred from modifying the call transfer number if the number is enclosed in brackets [] on the MAILBOX screen.</p>
--

When you specify a call transfer number, you can enter the following special characters:

- ### is interpreted as a hook-flash.
- *** is interpreted as a pause. The default length of the pause is equal to one comma (.). To remotely enter a longer pause, enter ***** (6 stars), or change the REMOTE PAUSE parameter in the VM.CFG configuration file (see section 12).

You may enter the number of a telephone outside of the telephone system, provided the telephone system supports this feature and the VP system has been programmed to perform external transfers (see section 7.3). Long distance (toll) numbers can be restricted in the mailbox owner's assigned class of service.

6.6.5 Changing the Message Notification Service

If you press 5 from the options menu to change the message notification feature, the VP system informs you of the current state of the feature, “*Your message notification feature is [telephone number],*” or, “*Your message notification feature is off. Press 1 to change the number or press pound if you're finished.*”

To change the message notification number, use the technique described above for changing the call transfer service. To toggle the message notification feature on or off, press *, also as described above.

<p>Note: This option allows you to change the first telephone number the VP system calls to inform you that you have new messages. You can also toggle message notification on and off using this option. (See section 7.6 for details on the message notification feature.) Be advised that you cannot change the second or subsequent message notification numbers remotely. You must access the mailbox's MAILBOX screen.</p>

6.6.6 Changing the Pager Service

If you press 6 from the Options menu to change the pager service, the VP system informs you of the current state of the feature, *“Your pager service is [telephone number],”* or, *“Your pager service is off. Press 1 to change the number or press pound if you're finished.”*

To change the pager service, use the technique described above for changing the call transfer service. To toggle the pager service feature on or off, press *, also as described above.

6.6.7 Reviewing Messages Scheduled for Future Delivery

If you press 7 from the Options menu to review future delivery messages, the VP system plays information about the next message you have scheduled for future delivery, *“ Message for [receiving mailbox owner's name] [date] at [time],”* or, *“You have no messages scheduled for future delivery.”*

If you currently have messages scheduled for future delivery, the VP system plays the following menu of options:

*“To listen to the message, press 1.
To hear the next message, press 2.
To cancel the message, press 4.
Or, to exit, press #.”*

You can only listen to or cancel future delivery messages from this menu. If the contents of the message are not satisfactory you must delete the message, then return to the Main menu and press 2 to re-record and reschedule the message.

If you do not have any messages scheduled for future delivery, or after you have listened to all of the future delivery messages, the VP system says, *“You have no [more] messages scheduled for future delivery,”*

6.6.8 Changing the Personal Distribution Lists

If you press 8 from the Options menu to change a personal distribution list, the VP system prompts you through the process of making personal distribution list modifications. This option allows you to add mailboxes to or remove mailboxes from a personal distribution list.

6.6.9 Retrieving a Message Already Sent to Another Mailbox

If you press * from the Options menu to retrieve a previously sent message, the VP system prompts you to enter the recipient's mailbox number. If the mailbox contains messages you have sent, and the mailbox owner has not yet listened to those messages, the VP system plays each one. After each message plays, the VP system allows you to skip it, re-play it, re-record it, or delete it.

6.6.10 Logging into and out of ACD Boxes

If you press 0 from the Options menu for ACD administration, the VP system asks you to indicate the number of the ACD box you want to modify. Enter the ACD box number. The VP system voices the following options:

*“To add an extension to this ACD group, press 1.
To remove an extension, press 2.
To exit, press #.”*

If you select option 1 or 2, the VP system asks you for the extension number.

<p>Note: Enter an <i>extension</i> number, <i>not</i> a mailbox number. The numbers listed in the ACD box are <i>extension</i> numbers.</p>
--

Once the VP system adds the extension you specified to or deletes it from the ACD group, the system voices the confirmation prompt, *“Extension [number] has been [added to / deleted from] ACD group [name].”*

For more information on ACD groups, see section 7.4.

6.7 Listening to Question Box Answers

If the mailbox owns one or more Question boxes, you can press 4 to listen to answers recorded as messages in the mailbox. If you press 4 from the Main menu to listen to answers, the VP system asks you whether you want to listen to new or old questionnaire answers:

*“For new questionnaire answers, press 1.
For old questionnaire answers, press 2.
Or, to exit, press #.”*

When you select option 1 or 2, the VP system searches through all the Question boxes owned by the mailbox and plays any old or new messages it finds.

<p>Note: Questionnaire answers are arranged in sets, with each set consisting of the answers supplied to the questions (1 through <i>n</i>) recorded in the Question box.</p>
--

While the VP system plays back a set of answers, you can press **8** to replay the last answer. You can also press **9** to skip forward to the next answer and press **0** to pause the playback. To resume playback you have paused, press **0** again or wait 30 seconds and the VP system will automatically resume playback.

After an entire set of questionnaire answers has played, the VP system voices the following options:

*“To replay the message, press 1.
To play the next message, press 2.
To save the message as new, press 3.
To delete the message, press 4.
For message time and date, press 5.
To exit, press #.”*

The same basic message play features apply when you are listening to Question box answers as when you listen to regular messages. Press 1 to replay the entire set of answers, press 2 to save the set as an old set and proceed to the next set of answers, press 3 to save the set as a new set of answers, and press 4 to delete the answers. When you have listened to all sets of answers, the VP system plays the system prompt, “*You have no more [new / old] messages.*”

Note: You cannot forward a Question box answer to another mailbox.

6.8 Changing Languages in a Mailbox

Note: This option is not in effect unless you are using multiple languages (see section 7.12).

If you press 5 at the Main menu, the VP system switches to the next language. For example, assume that the first language on the system is English, the second language is French, and the third language is Spanish. If you are listening to the Main menu in English, and you press 5, the VP system restarts the menu again in French. French is now the current language for the call. All menus and prompts are played in French. If you record a greeting, it should be in French.

If you go back to the Main menu, and press 5 again, the VP system starts playing the Main menu in Spanish. Spanish is now the current language for the call. All menus and prompts are played in Spanish. If you record a greeting, it should be in Spanish.

6.9 Using Supervisor Mailbox Options

If you have Supervisor privileges (defined by the class of service assigned to the mailbox), you can press 6 from the Main menu to access the Supervisor voice menu.

The Supervisor voice menu has the following options:

*“For mailbox administration, press 1.
For Routing box administration, press 2.
For Question box administration, press 3.
For port administration, press 4.
To change the system broadcast message, press 5.
To change the voice-mail day / night service, press 6.
To change the system time, press 7.
To change the system date, press 8.
To change the system parameters, press 9.
To run first time setup, press 0.
Or, to exit, press #.”*

See section 7.11 for more information on each of these options.

6.10 Placing an Outgoing Call from a Mailbox

If you press 0 from the Main menu to place an outgoing call, the VP system checks the class of service assigned to the mailbox to verify this feature is available to you. If it is not, the VP system says, *“I’m sorry, that was not a valid entry.”*

If you *are* authorized to use the outgoing call feature, the VP system prompts you for the number to which you want to be connected, and it places a conference (three-way) call to that number. For more information on three-way calling, see section 7.18.

6.11 Exiting a Mailbox

If you press # from the Main menu to exit, the VP system closes the mailbox and routes your call to a new box. To determine where to send your call, the VP system looks at the CLASS OF SERVICE screen in the field WHEN EXITING OPEN MAILBOX, GO TO BOX.

7. Using Major Features

In NT-based VP systems, certain fields and screens have names that differ from those in DOS-based VP systems. In this section, field or screen names that are followed by **(VP systems)** refer to DOS-based systems. Field or screen names that are followed by **(NTVP systems)** refer to NT-based VP systems.

Also, topics in this section sometimes reference setting certain fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

Note: Refer to section 29 for graphical illustrations of all VP system screens.
--

7.1 Using Call Logs

7.1.1 Understanding the Call Log

The VP system keeps a record of all incoming and outgoing calls. The record is called the *call log*.

On NT-based VP systems, the call log file is used to generate system and mailbox usage reports, which you can view using the Report Generation client software. For information on using this report generation feature, see section 7.10.8.

On DOS-based VP systems, you can specify whether you want call log information to be written to a file or printed on a printer attached to the VP system PC. Use the procedure detailed below to specify how you want the call log information to be output.

To specify where the log is to be output on DOS-based VP systems:

1. From the VP system main screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select GENERAL from the System menu. The GENERAL INFORMATION screen displays.
5. Move the cursor to the field STORE CALL LOG TO. From this field, you can make an output selection.

To send the log to a printer, select PRINTER and verify:

- The printer is attached to LPT1 on the PC.
- The printer is turned on and is on-line.

- The printer is set to perform a CARRIAGE-RETURN and LINE-FEED when it receives a line feed character (such as an automatic carriage-return). Consult the printer documentation for information on making these settings.

To store the log in a file, select STORE LOG INFORMATION IN FILE. The VP system creates a file called VOICMAIL.LOG in the \VM\LOG directory. All log information is written to that file. At midnight each day, the contents of VOICMAIL.LOG are transferred to another file in the directory \ VM\LOG for long-term storage. The name of the long-term storage file is based on the month and day. On February 15, for example, the daily log file is stored AS VOICEMAIL.LOG. At midnight, the contents of VOICEMAIL.LOG are copied to the file 0215. LOG, and the file VOICEMAIL.LOG is cleared to record the log of calls on February 16. At midnight on February 15, the contents of VOICEMAIL.LOG are copied to the file 0216. LOG, and VOICEMAIL.LOG is cleared to record the log of calls on February 17.

Up to one year' s worth of information can be stored. After that, the VP system will begin over-writing the previous year' s log files.

Note: Storing log files to disk can use a large amount of the disk space. Make sure that the hard disk drive is large enough, or plan a schedule to periodically delete the log files.

7.1.2 Specifying Call Log Formats (DOS-based VP Systems)

A sample DOS-based VP system log file entry displaying information for one call is shown below.

```
1 I 8-16-90 14:04:05 8-16-90 14:12:22 556-1234 2125551212 Busy 800 400
```

Figure 7-1 Log entry for one call when printed on a report

Reading from left to right, the fields represent:

Field	Description
1	The line on which the call originated or was received
I	Incoming call. Other valid characters for this field are: I – Incoming call P - Outgoing pager call M - Outgoing message-notification call W - Message waiting lamps - turning on or off L - Used with VCM only F - Used with Fax module only T - Used with Telemarketing module only Z - Wake-up call
8-16-90	Date the call started.
10:04:05	Time the call started.
8-16-90	Date the call ended.
14:12:22	Time the call ended.
555-1234	Number dialed (for call transfer, message notification, etc.)

Field	Description
2125551212	Account number for the call (see section 7.23)
Busy	Outcome of outgoing call.
800 400	Audit trail showing up to 99 boxes used by the call. The number of boxes to be traced is configurable on the GENERAL INFORMATION screen.

If log information is stored to a file, each field of the above information is enclosed in quotes and separated from the next field by a comma (see Figure 7-2). This format makes the log file compatible with popular database and spreadsheet programs.

```

"1","I","8/16/90","14:04:05","8/16/90","14:12:22","5561234","2125551212" . . . . .
"Busy","800","400"
```

Figure 7-2 Log entry as it displays in file

Note: If the log files contain long strings of empty quotes, reduce the number of boxes the VP system should log on each call. You specify this number on the GENERAL INFORMATION screen. When recording the audit trail of boxes used by the call, the VP system generates a box number enclosed in a set of quotes for as many boxes as you specify on the GENERAL INFORMATION screen. If a call uses fewer boxes than the number you specified to be logged, the VP system includes the remaining boxes as blank entries enclosed in quotes.

7.2 Using the Monitor

The Monitor feature allows you to obtain a more detailed account of the minute-by-minute activity within the VP system. When activated, Monitor records each of the following activities, writing special records to the log file VOICMAIL.MON in the \VM\LOG directory.

Record type	ID#	Description	Event name in log file
Move to new box	1	The call was routed to the given box.	Goto box
Start of call	2	Start of a call.	Start call
End of call	3	End of a call.	End call
Digits dialed	4	A sequence of digits was dialed.	Dialing
Call-progress result	5	The disposition of a call (busy, no-answer, etc.) was determined.	Call result
Start of recording	6	A message, greeting, name, etc. is about to be recorded.	Start record
Remote password change	7	Owner called in and changed his/her mailbox password.	Chg password
Transfer number changed	8	Owner called in and changed his/her Call Transfer number.	Chg xfer num

Record type	ID#	Description	Event name in log file
Message notification number changed	9	Owner called in and changed his/her Message-Notification number.	Chg notif num
Pager number changed	10	Owner called in and changed his/her pager number.	Chg page num
Mailbox being opened	11	The given mailbox was opened successfully.	Open Mailbox
Invalid password	12	An invalid password was entered to attempt to open the mailbox.	Bad password
End of recording	13	Recording of message, name, etc. has finished.	Stop record
Message recorded	14	A message was recorded in the given mailbox.	Add msg
Message deleted	15	A message was deleted from the given mailbox.	Delete msg
Disk-space remaining	16	Generated at midnight every night. Shows amount of free disk space.	Message space
Access to database lookup file	17	A caller was sent to a Routing box that uses the database lookup feature.	DB lookup
Call to digital pager	18	Records the callback number sent to a display (digital) pager.	Callback num
Track allocations	19	A new mailbox was automatically allocated by the Talking Classified module.	Auto allocate
Track de-allocations	20	A mailbox was automatically de-allocated by the Talking Classifieds module.	Auto de-alloc
Tandem call	21	A mailbox owner has placed an outgoing call from his/her open mailbox.	Relay call
ACD call	22	The VP system has attempted to transfer a call to an extension or mailbox in the specified ACD group.	ACD call
Change wake-up time	23	The wake-up time for the specified box has been changed. See section 8.2 for more information.	Wakeup time
Change wake-up state	24	The wake-up state for the specified box has been changed. See 8.2 for more information.	Wakeup state

To enable the Monitor feature for *all* of the events, add a line containing the word `MONITOR` to the configuration file `VM.CFG` (see section 12). To enable the Monitor feature for only specific events, enter the following line in the configuration file:

`MONITOR = n` where `n` is the ID number of the event to be monitored

For example, to monitor messages being left for mailboxes and invalid passwords, add the following two lines to the configuration file:

`MONITOR = 14`
`MONITOR = 12`

The first line instructs the VP system to monitor the arrival of mailbox messages (14), and the second line instructs it to monitor invalid password entries (12).

Each monitor event displays as a separate line in the file VOICMAIL.MON, and each has the following format:

```
"MON", "n", "date", "time", "event_name", "data1", "data2", "data3"
```

where:

n = line number

date = date on which event happened

time = time at which event happened

event-name = event name as shown in above table

data1 = first unit of information about event

data2 = second unit of information about event

data3 = third unit of information about event.

Note that not all Monitor events contain all 3 data units.

7.3 Performing Call Transfers

7.3.1 Understanding Call Transfers

The call transfer feature allows the VP system to act as an attendant, answering the calls and transferring them to the appropriate extensions. Since the VP system is connected to analog 2500-type station lines, it performs exactly the same actions as a live person does using a standard telephone instrument. To set up the VP system so it transfers calls properly, you must answer two basic questions based upon the specific installation:

- How do you want transferred calls to be handled when the called party answers, the called party is busy, and the called party does not answer (ring-no-answer)?
- Does the telephone system connected to the VP system have voice mail integration capabilities (such as in-band or out-of-band signaling)?

Because of the VP system's many features, there are several possible call transfer options.

7.3.2 Understanding Transfer Types

- **NO TRANSFER**—The VP system does not attempt to transfer the call to the mailbox owner's extension. Instead, the VP system immediately plays the active personal greeting and offers to take a message.
- **WAIT FOR RING**—The VP system dials the mailbox owner's extension, and monitors the line only for call progress tones. If the line is busy, the transfer is canceled and the same options are available as with **WAIT FOR ANSWER** and **SCREEN**. If ringing is heard, the VP system completes the transfer and drops out of the call. Unless some further action is taken by the telephone system, the VP system does not know the final outcome of this call (for example, whether the call was answered).

- **WAIT FOR ANSWER**—The VP system monitors the call for all possible outcomes (call is answered, line is busy, or ring-no-answer) and has options available for each possible outcome.
- **SCREEN**—Same as WAIT FOR ANSWER with the added feature of allowing answered calls to be accepted or rerouted by the answering party.
- **BLIND**—The VP system transfers the call unconditionally (even if the line is busy) and drops out of the call. Unless some further action is taken by the telephone system, the VP system has finished with this caller and does not know the outcome of the call.

7.3.3 Understanding Call Transfer Results

The results of a call transfer depend upon the transfer type selected.

- **NO TRANSFER**—The caller always receives the mailbox owner's active personal greeting (if one has been recorded) or a system default prompt (if a personal greeting has not been recorded). The caller has several available options (see section 5.5).
- **WAIT FOR ANSWER**—There are 3 general possibilities:
 - * The called party answers. The VP system announces the call, then disconnects.
 - * The called party is busy. The VP system cancels the transfer, announces to the caller that the station is busy and offers options (section 7.9). You can disable call queuing by placing the mailbox in a Class of Service that allows zero calls to hold (see section 4.10).
 - * The called party does not answer. The VP system cancels the transfer after the specified number of rings and plays either the active personal greeting or the system default greeting.
- **SCREEN**—Same as WAIT FOR ANSWER, except when the call is announced, the called party has the option to accept or reroute the call. If the call is rerouted, the calling party either receives the mailbox owner's active personal greeting (or the system default prompt if no greeting is recorded) or is transferred to another mailbox in the system.
- **WAIT FOR RING**—If the called station is busy, the call is handled exactly the same as with WAIT FOR ANSWER. If ringing is heard on the line, the VP system completes the transfer and drops out of the call. If the called party subsequently answers, he/she is connected immediately to the calling party with no call announcing or call screening. If the called party does not answer, the outcome depends on the capabilities of the telephone system. There are 4 general possibilities:
 - * The telephone system has no forward-no-answer capabilities . The caller hears ringing until he/she decides to hang up. This scenario usually occurs only when the VP system is connected directly to a standard C.O. line.
 - * The telephone has unanswered call transfer-recall capabilities, but does not offer voice mail integration. At the expiration of the telephone system transfer-recall timer, the call is returned to the VP system, which answers with the same initial greeting all new calls receive.
 - * The telephone system has the forward-no-answer feature, but does not offer voice mail integration. You can choose to forward the unanswered calls to a live person, or you can forward them back to the VP system where, depending on how you configure the system,

they receive the same initial greeting as new calls or a general secondary greeting (such as, *“I’m sorry, the party is not available...”*).

- * The telephone system has the forward-no-answer feature with voice mail integration . Unanswered calls can still be forwarded to a live person, but they can also be forwarded to a mailbox on the VP system, which answers each call with the mailbox owner’s active personal greeting, or to any other valid box type in the system (a Routing box, for example). See also section 7.13.
- **BLIND**—The VP system transfers the call unconditionally, and the telephone system is totally responsible for the final outcome of the call. Again, there are 4 general possibilities:
 - * The telephone system has no forward-busy or forward-no-answer capabilities . The caller simply hears busy or ringing tone until he/she hangs up.
 - * The telephone has unanswered call transfer-recall capabilities, but does not offer voice mail integration. At the expiration of the telephone system transfer-recall timer, the call is returned to the VP system, which answers with the same initial greeting as all new calls.
 - * The telephone system has the forward busy and forward-no-answer features, but does not offer voice mail integration . You can choose to forward the unanswered calls to a live person, or you can forward them back to the VP system where, depending on how you configure the system, they receive the same initial greeting as a new calls or a general secondary greeting (such as, *“I’m sorry, the party is not available...”*).
 - * The telephone system has the forward-busy and forward-no-answer features with voice mail integration Both types of calls can still be forwarded to a live person, but they can also be forwarded to a mailbox on the VP system, which answers each call with the mailbox owner’s active personal greeting, or to any other valid box type in the system (a Routing box, for example). See also section 7.13.

The following table summarizes the available configuration options. For simplicity, some options such as Reason codes (section 7.13) are omitted.

Transfer type	Call result	What you want to happen	Telephone System Capabilities Required			
			Normal call progress tones	Unanswered call recall timer only	Call fwd - no integration	Call fwd with integration
WAIT FOR ANSWER	Answered	Announce call	X			
	Busy	Queue the call	X			
		Personal greeting	X			
	No answer	Personal greeting	X			
SCREEN	Answered	Announce call and offer options	X			
	Busy	Queue the call	X			

Transfer type	Call result	What you want to happen	Telephone System Capabilities Required			
			Normal call progress tones	Unanswered call recall timer only	Call fwd - no integration	Call fwd with integration
WAIT FOR RING		Personal greeting	X			
	No answer	Personal greeting	X			
	Answered	Connect	X			
	Busy	Queue the call	X			
		Personal greeting	X			
BLIND	No answer	Play general "not available" greeting			X	X
		Personal greeting				X
	Answered	Connect	X			
	Busy	Play general "not available" greeting			X	X
		Personal greeting				X
	No answer	Play general "not available" greeting			X	X
		Personal greeting				X

Table 7-1 Call Transfer Cross-reference

7.3.4 Specifying Call Transfer Types

There are 2 main areas of programming that affect the call transfer process:

- Parameters in the CALL TRANSFER INFORMATION and OTHER CUSTOMIZATIONS screen (VP systems) / PBX INFORMATION screen (NTVP systems) as described in section 4.
- The individual mailbox screens, where you can tailor the call transfer options to suit the particular mailbox owner, as described in section 5.5.

The next few sections follow the call transfer process and describe the options in detail.

The Call Transfer Process Begins

When a call is routed into a mailbox, the VP system attempts to transfer the call to the number specified unless one of the following conditions is met:

- TRANSFER TYPE field of the mailbox is set to NONE.
- Transfer Bypass feature has been invoked.
- Call Transfer feature has been turned off remotely (see section 6.6)
- Call arrived outside the mailbox call transfer schedule times (see section 5.5)

If any of these conditions are met, the mailbox owner's active personal greeting is played and the call proceeds as described in section 5.5.

If none of these conditions are met, the VP system attempts to transfer the call. Before the caller is put on hold, there are several options:

- System default option. The VP system plays the prompt:
"Please hold while I transfer the call to John Smith."
- Individual mailbox @ option. Placing the @ symbol before the mailbox owner's first name on the MAILBOX screen causes the VP system to play the prompt:
"Please hold while I transfer the call to that extension."
- Individual mailbox & option. Placing the & symbol before the mailbox owner's first name on the MAILBOX screen prevents any prompt and/or the name from being played. The caller is simply put on hold.
- System-wide option. You can prevent the mailbox owner's name from *ever* being played to any caller prior to a transfer by entering NO in the field WHEN CALLED PARTY ANSWERS, PLAY HIS/HER NAME? on the OTHER CUSTOMIZATIONS screen (VP systems) / GENERAL INFORMATION (VPNT systems). The VP system plays the prompt:
"Please hold while I transfer the call."

Next, the VP system looks at the number in the TRANSFER TO field of the mailbox, counts the number of digits in the number, and determines whether this is an *internal* or *external* transfer. The system determines this by comparing the number of digits counted to the number specified by the MAX INTERNAL parameter in the system configuration file (see section 12).

If the number of digits in the TRANSFER TO field is less than or equal to the number defined by MAX INTERNAL, then the VP system treats the transfer as *internal*. If the number of digits is greater, the transfer is treated as *external*.

Note: Do not confuse the sequence of events that occur when the VP system makes an external transfer with the event sequence when the VP system originates an outgoing call (for example, for paging and message notification).

The VP system then looks at the appropriate column (INTERNAL or EXTERNAL) on the CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION screen (NTVP systems) and reads the field SEQUENCE TO INITIATE A TRANSFER. It dials this sequence of characters (typically "hook-flash, pause" for an internal transfer, "hook-flash, pause, the digit 9, pause" for an external transfer).

The VP system then dials the number indicated in the field `TRANSFER TO` on the `MAILBOX` screen. This field can contain the digits 0 through 9, characters *, and #, and the special characters listed in section 5.5.

Note: If the telephone system has more than one access code for external transfers (for example, “9” for local calls, “81” for WATS lines, “82” for tie-lines, etc.) these codes must be included in the `TRANSFER TO` field (for example, 9,5551234).

Once the VP system has dialed the complete number, it looks at the `TRANSFER TYPE` specified for the mailbox. If the `TRANSFER TYPE` is `BLIND`, the VP system pauses for a few seconds (to give the host telephone system time to do its processing), then disconnects, allowing the host telephone system to take control of the call. If the `TRANSFER TYPE` is not `BLIND`, the VP system handles the transfer by listening for a tone to decide whether the called party is busy or ringing (these tones are referred to as *call-progress tones*).

Called Party is Busy

If busy tone is detected, then the VP system cancels the transfer and returns to the caller. It does this by looking at the `CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION` screen (`NTVP` systems), in the field `SEQUENCE TO RETURN CALLER FROM BUSY`. The VP system dials this sequence to return to the caller. The special characters described above also apply here. A typical sequence is a hook-flash, or with some Centrex systems, two hook-flashes (such as ‘ !,!’).

If the number of lines currently holding has reached the limit allowed for this extension, or if this mailbox has been denied call queuing (both determined by Class of Service), the caller hears the mailbox owner’s active personal greeting. Otherwise, the VP system offers the caller the option to hold .

Called Party Rings

If the `TRANSFER TYPE` is `WAIT FOR RING`, once ringing tone or voice is heard on the line, the VP system completes the transfer by following the instructions in the field `SEQUENCE TO COMPLETE A TRANSFER` of the `CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION` screen (`NTVP` systems).

If the transfer type is `WAIT FOR ANSWER` or `SCREEN`, and there is no answer after a certain number of rings (specified in the field `RINGS TO ANSWER` on the `MAILBOX` screen), then the VP system goes back to the caller and plays the mailbox owner’s active personal greeting. It does this by looking at the `CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION` screen (`NTVP` systems), in the field `SEQUENCE TO RETURN FROM NO ANSWER`. The VP system dials this sequence, then plays the greeting. The special characters described above also apply here. A typical sequence is a hook-flash, or with some Centrex systems, two hook-flashes (such as “ !,!”).

Called Party Rings and Answers

The following applies only if the transfer type is `WAIT FOR ANSWER` or `SCREEN`.

The VP system detects that the called party has answered if either:

- The break between rings is longer than normal
- Voice is detected on the line (for example, the called party says “hello”)

When answer has been detected, the VP system examines the TRANSFER TYPE field defined for the mailbox once again. If TRANSFER TYPE is WAIT FOR ANSWER, then the transfer is considered successful. The VP system announces the call. The system default is the prompt:

“I have a call for you, [Name].”

If you have selected not to play the called party’s name (on the OTHER CUSTOMIZATIONS screen (VP systems) / GENERAL INFORMATION screen (NTVP systems)), the announcement is:

“I have a call for you.”

The VP system then completes the transfer by looking on the CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION screen (NTVP systems), in the field SEQUENCE TO COMPLETE A TRANSFER. If the way to complete a transfer is to hang up, this field is usually blank.

If the transfer type is SCREEN, the VP system gives the called party the choice of accepting the call or redirecting it with several options. The called party can:

- Press 1 to accept the call, and the parties are connected. The VP system completes the transfer as described above and drops out of the call.
- Press 2 to redirect the caller to the mailbox owner’s active personal greeting.
- Press 3 to redirect the caller as specified in IF CALLER CHOOSES OTHER OPTIONS field on the MAILBOX screen.
- Press 4 plus a greeting number digit 0 – 9 to redirect the caller to the greeting number selected, provided the mailbox owner is allowed multiple greeting and the greeting number selected has been recorded.
- Press 5 plus a valid box number to redirect the caller to that box.
- Press 6 to accept the call (as with pressing 1). The VP system remains on the line and records the conversation. The recorded conversation is stored as a message in the called party’s mailbox.

If the called party presses 6, the VP system completes the transfer by dialing the digits in the field SEQUENCE TO TRANSFER A THREE-WAY CALL on the CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION screen (NTVP systems). If the called party presses a redirect option (2-5), the VP system cancels the transfer as specified in the field SEQUENCE TO RETURN FROM CALL SCREENING on the CALL TRANSFER SCREEN (VP systems) / PBX INFORMATION screen (NTVP systems). The calling party is then redirected and the called party is disconnected.

7.3.5 Detecting Call-Progress Tones

The VP system can detect most call-progress tones. However, some key systems and PBXs provide non-standard ringing, busy, and re-order tones. In these cases, the VP system must be “trained” to recognize the tones. See section 13.

There may be instances when the VP system cannot be trained to recognize the phone system’s call progress tones. In these instances it is possible to instruct the system to stop listening for the call progress tones. This should be done only as a last resort, as certain VP system features, such as call queuing, are lost when call progress tone detection is disabled.

To turn off call-progress tone detection, access the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems) and move the cursor to the field DETECT CALL PROGRESS TONES. Set the value of this field to NO. Next, set the TRANSFER TYPE field on MAILBOX screens to SCREEN.

In this mode, once the VP system has dialed the transfer number, instead of listening for ringing or busy tones, it immediately begins playing the prompt:

“I have a call for you. Press 1 to accept the call, press 2 if you would like me to take a message I have a call for you, press 1...”

The VP system repeats this message several times, listening for a touch-tone to be entered. If no touch-tone digit is received, the VP system returns to the caller and plays the mailbox owner’s active personal greeting. The number of times the VP system repeats the message is specified on the MAILBOX screen in the RINGS TO ANSWER field (VP systems) / ASSUME NO ANSWER AFTER X RINGS field (NTVP systems).

7.3.6 Using the Transfer Bypass Feature

There are two ways that the transfer bypass feature is used:

- Manual transfer bypass
- Automatic transfer bypass

Manual Transfer Bypass

There are times when a caller wants to leave a message in a mailbox without having the VP system attempt to transfer the call to the mailbox owner (and ring the mailbox owner’s extension).

A caller (internal or external) can bypass the call transfer feature by dialing a * at the beginning or end of the mailbox number. Instruct the VP system whether to expect the * at the beginning or end of the number by completing the field USE TRANSFER BYPASS DIGIT on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems). Select one of the 3 options:

Menu option	Meaning
NONE	Do not use the transfer-bypass feature.
FIRST DIGIT	Expect the transfer-bypass digit to arrive before the mailbox number.
LAST DIGIT	Expect the transfer-bypass digit to arrive after the mailbox number. This is the default setting.

Note: Refer to Automatic Transfer Bypass, next in this section and section 7.13 before selecting a choice for the TRANSFER BYPASS DIGIT field.

Assume that the VP system in the XYZ company is set up to expect the * as the last digit. Mr. Smith calls XYZ company and asks to speak to Ms. Jones on extension 319. The operator knows that Ms. Jones is on vacation, but has a mailbox (319). To transfer the call directly to Ms. Jones’ mailbox:

- The operator dials the VP system.
- The VP system answers the call and begins playing the greeting in the initial box for the line.

- The operator dials 319*.
- The VP system routes the call to mailbox 319, then plays the prompt “*You may transfer the call now.*”
- The operator hangs up. Mr. Smith is connected to the VP system and hears Ms. Jones’ active personal greeting.

Note: The system prompt “You may transfer the call now,” is inserted as confirmation that the transfer bypass is successful (a valid mailbox number was dialed and the VP system understands the instructions). Although you can configure the system so this prompt is not voiced, it is recommended that you retain the prompt for manual transfer bypass calls. If the operator is not expecting confirmation and mis-dials the number, then hangs up, the caller could be lost.

Automatic Transfer Bypass

Automatic transfer bypass is available only if the telephone system has voice mail integration capabilities. Only in-band signaling is discussed here. Out-of-band signaling (typically via the PC serial port) requires an optional software package, which is supplied with specific documentation and instructions.

If a call is transferred to a ring-no-answer station using the transfer type `WAIT FOR RING`, or if a call is transferred to either a busy or ring-no-answer station using the transfer type `BLIND`, a telephone system with in-band signaling can be set to 1) forward unanswered calls back to the VP system and 2) transmit the called station’s extension number to the VP system via `DTMF` tones.

As with manual transfer bypasses, the call is to go directly to the mailbox owner’s personal greeting without completing the call transfer process.

You set up an automatic transfer bypass by creating a digit translation table. By using the table, the VP system analyzes incoming `DTMF` tones to determine whether they belong to a mailbox, and if so, automatically adds the transfer bypass digit. See section 7.13 for information on building the digit translation table.

How to Choose the Transfer Bypass Digit

The VP system uses the `*` digit and the placement `LAST DIGIT` as default transfer bypass settings. These defaults work well with most telephone systems. When setting up the transfer bypass feature, use these defaults and the example translation tables shown in section 7.13. Should you need to modify these defaults, consider the following points:

- A digit other than `*` can be used as the transfer-bypass digit (see section 12) .
- If you select `LAST DIGIT` on the `CALL TRANSFER` screen (VP systems) / `PBX INFORMATION` screen (NTVP systems), the transfer bypass digit cannot conflict with the system dialing plan. If the system had, for example, both 3 and 4 digit mailbox numbers and you chose “1” as the transfer bypass digit, the VP system cannot tell the difference between dialing mailbox 138 then 1 for transfer bypass, and dialing mailbox 1381. Using `*` for transfer bypass (the default) does not cause this conflict.

You can eliminate the prompt, “*You may transfer the call now.*” by entering the transfer bypass digit twice (for example, 319 * *).

- If you select FIRST DIGIT on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems), you cannot use that same digit as a DESTINATION FOR DIGIT choice in the initial Routing box (the menu choice would override the transfer bypass feature). Verify the DESTINATION FOR DIGIT field beside the digit you have chosen for the transfer bypass digit is blank on the ROUTING BOX screen.

You can eliminate the prompt, *“You may transfer the call now,”* by replacing it with an “empty” voice file. See section 15 for information.

The FIRST DIGIT option generally cannot be used when the VP system is connected to a telephone system that sends voice mail integration digits.

7.3.7 Prompting Callers for Their Names

If you are using transfer types WAIT FOR ANSWER or SCREEN, you can configure the VP system so that it asks for the caller’s name before attempting to transfer a call. To set up this option, set the field GET CALLER’S NAME? to YES on the MAILBOX screen.

<p>Note: Selecting the transfer type SCREEN does not automatically set up the system to ask for the caller’s name. You must adjust the MAILBOX screen.</p>

Once this option is active for a mailbox, when a caller enters the mailbox number, the VP system plays the system prompt:

“Please speak your name so I may announce who is calling.”

The system then records the response and inserts the caller’s name within the appropriate call-announcing prompt. If the transfer type is set to WAIT FOR ANSWER, the called party hears:

“I have a call for you [mailbox owner’s name] from [recorded caller’s name].”

If the transfer type is SCREEN, a similar prompt plays followed by:

“Press 1 to accept the call, press 2 if you would like me to take a message...”

By default, the VP system gives the caller 4 seconds to record his/her name. You can change the time allowed. Refer to section 12 (XFER NAME TIME).

7.3.8 Using Different Greetings for Busy and No-Answer

You can set up the system to play a different personal greeting to callers based on whether the caller encounters a busy extension or a ring-no-answer extension. To do this, you use the multiple greetings feature of the mailbox:

To Set Up the Multiple Greetings Feature:

1. Set the Class of Service for the mailbox to allow 2 greetings (the VP system numbers these 0 and 1).
2. Instruct mailbox owners to use greeting 0 as the ‘no answer’ greeting, and use greeting 1 as the ‘busy’ greeting.

3. Instruct mailbox owners to record greeting 0 using a statement such as:

“Hello, this is [name]. I’m sorry I am not available to take the call. If you would like to leave me a message, press 1.”

4. Instruct mailbox owners to record greeting 1 using a statement such as:

“Hello, this is [name]. I’m on another call right now. If you would like to leave me a message, press 1.”

5. **In-band (DTMF) integrations** : If part of the integration packet indicates why the call transfer did not complete (for example, the packet includes a Reason code), you can use the digit translation feature to specify which personal greeting the VP system should play for each Reason code. For more information, see section 7.13.

Non In-band integrations : Add the following lines to the configuration file `VM.CFG`:

```
GREETING.NO ANSWER=0  
GREETING.BUSY=1
```

See section 12 for more information on the `VM.CFG` configuration file.

7.3.9 Using Three-way Calling

What is Three-way Calling?

In general, three-way calling is simply a conference call involving 3 parties. In this context, one of the parties is the VP system, which should be part of the call only as long as necessary for it to perform its call processing functions. During normal call transfer functions, a three-way call may exist for just a few seconds, when the VP system performs the `SEQUENCE TO COMPLETE A TRANSFER`. There are some cases, however, when limitations of the telephone system require the VP system to remain a part of the call for the entire duration of the call.

You may need to use the three-way calling feature in three cases:

- **The VP system is connected directly to Central Office lines.**
If the system is connected directly to a residential (R1) line, single business (B1) line, or multiple business lines assigned to a multi-line hunt group, it is likely that the call transfer service is not available (this limitation does not apply to Centrex service). You may, however, be able to order the three-way calling service.
- **The VP system is connected to a key system or PBX with trunk-to-trunk restrictions.**
Many key systems and PBXs allow the VP system to set up a three-way conference that consists of two outside parties connected to C.O. lines (trunks) and the VP system as the third, internal station party, but they will *not* allow the VP system to drop out of the call leaving the two outside parties connected (a *trunk-to-trunk* connection). If this is the case with the telephone system, you will need to use the three-way calling feature.
- **When you have asked the VP system to record a conversation**
The VP system can optionally record the conversation when it performs a call transfer (see section 7.24). In this case, it must remain on the line, so it automatically uses the sequence in the field `SEQUENCE TO TRANSFER A THREE-WAY CALL`.

How Three-way Calling Functions

If you tell the VP system to use three-way calling (in the field `USE THREE-WAY CALLING?` on the MAILBOX screen), the VP system begins the sequence exactly the same as with a normal call transfer (it puts the calling party on hold, and dials the `TRANSFER TO` number). Once the called party has answered, the VP system must perform an action (usually a hook-flash) to conference all three parties. This action is defined in the field `SEQUENCE TO TRANSFER A THREE-WAY CALL` on the CALL TRANSFER INFORMATION (VP systems) / PBX INFORMATION screen (NTVP systems). At this time, the VP system must remain connected with the two outside parties for the duration of the call.

Terminating a Three-way Call

During the time that the VP system is a party in the three-way conference, it is continually monitoring the line for an indication that the call has ended. Because the use of three-way calling involves valuable system resources (two C.O. lines and a voice mail port), the VP system has a built in feature that ensures the conference is disconnected as soon as possible after the completion of the call.

The VP system interrupts the conversation at regular intervals, and prompts:

“Press 1 if you wish to continue your call.”

If a digit 1 is not detected, the VP system assumes the parties have hung up and frees the lines for other calls. You can define how often the VP system is to interrupt the conversation by accessing the `CALL TRANSFER SCREEN` (VP systems) / `GENERAL INFORMATION` screen (NTVP systems), going to the field `MAX DURATION FOR A 3-WAY CALL`, and entering (in minutes) the interval between interruptions.

7.3.10 Troubleshooting the Call Transfer Feature

The first rule in troubleshooting is to isolate the problem. If the VP system is not transferring calls correctly, the problem lies with either the telephone system or the VP system.

Hint: Remember, the VP system is connected to industry-standard analog lines (2500-type) and performs call transfers exactly as a person using a telephone instrument would do.

To determine if a problem relates to the telephone system or the VP system:

1. Disconnect the VP system from the telephone system.
2. Connect a regular telephone to the line where the VP system was connected.
3. Have someone (referred to here as *Party A*) call in to that line.
4. When the telephone rings, pick up the telephone, to answer the call.
5. Try to transfer the call to the telephone to which the VP system was unable to transfer (referred to here as *Party B*). Note the sequence of actions you perform to do this, and note any tones you hear during the transfer.
6. The Party B telephone should ring. Have someone pick up the ringing telephone and speak to you. You should be able to hold a two-way conversation.

7. Try to connect Party A to Party B and drop out of the call yourself. Note the sequence of actions you perform to do this.
8. Verify that Party A and Party B are able to hold a two-way conversation.
9. Repeat step 5 in a scenario where Party B is busy, and note the sequence of actions you had to perform to get back to Party A.
10. Repeat step 5 in a scenario where Party B does not answer, and note the sequence of actions you had to perform to get back to Party A.

If you were able to transfer the call as described above, then the telephone system is able to perform transfers successfully. The next step is to make sure the VP system knows how to perform transfers on this telephone system.

11. Go to the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems) (see section 4.8). In the field SEQUENCE TO INITIATE A TRANSFER, enter the sequence you performed in step 5 above. This sequence is typically a hook-flash (entered as !) and a pause for dial-tone (entered as ,) then the telephone number. Note that you do not enter the telephone number in the SEQUENCE TO INITIATE A TRANSFER field, since the VP system gets the telephone number from the TRANSFER TO field of the mailbox's MAILBOX screen.
12. In the field SEQUENCE TO COMPLETE A TRANSFER, enter the sequence of actions you performed in step 7. The VP system dials this sequence, then hangs up to complete the transfer. If you simply had to hang up to connect Party A to Party B, then leave the SEQUENCE TO COMPLETE A TRANSFER field blank.
13. Determine the steps necessary to cancel the transfer if the called station is busy or does not answer and return to the calling party. Enter this information in the SEQUENCE TO RETURN FROM BUSY and SEQUENCE TO RETURN FROM NO ANSWER fields. Typically, this is a hook-flash (!) and a pause (,).
14. Now that the VP system knows how to transfer calls on the telephone system, test the system again. It is recommended that you connect a monitoring device to the line, so you can hear exactly what the VP system hears during the transfer.

If the VP system gets as far as ringing the Party B telephone, but does not connect the call, or the call is connected even though the line was busy or no one answered, the problem is the VP system does not recognize the ringback tone and busy tone on the telephone system. Refer to section 13 for information on how to train the VP system to recognize these tones.

Troubleshooting Unsuccessful Call Attempts

A *successful* call transfer as defined here occurs when the called party answers his/her phone and is connected to the calling party. An *unsuccessful* call transfer occurs when the called party's phone is busy or the phone rings but goes unanswered. In these circumstances, the calling party is to be handled as you have specified during system setup. Troubleshooting techniques provided here address situations involving:

- Calls to ring-no-answer stations using the transfer type WAIT FOR RING
- Calls to busy and/or ring-no-answer stations using the transfer type BLIND.

In these cases, the VP system drops out of the call before confirming an answer. It is the responsibility of the telephone system to return the calling party to the voice mail system. Troubleshooting this function depends upon the method being used to return the caller to the VP system:

- **Transfer re-call timer**—This is usually the least desirable method to return unsuccessful calls to voice mail. The calling party can usually only return to the system initial greeting and usually returns to the exact port on the VP system that initiated the transfer. Problems usually arise when another call is in progress on that port at the time that the re-call occurs. If the telephone system is unable to queue the returning call, then the calling party hears a busy signal. In these scenarios, the only option is to disable the re-call feature in the telephone system, or extend the timer to its maximum.
- **Call forwarding without voice mail integration**—If the telephone system does not have voice mail integration capabilities but does offer the call forward on busy and/or no-answer feature, you can still take advantage of many VP system features. If this method is not functioning properly, check the following:
 - * Is the VP system configured with a sufficient number of ports to handle the volume of both new calls and calls forwarded by a busy/ring-no-answer condition?
 - * Are the system telephones programmed to forward to the *lead* or *pilot* number of the voice mail hunt group?
 - * Are callers to busy/ring-no-answer stations to receive a unique greeting (other than the main initial greeting)? If so, you must have dedicated VP system ports (connected to station ports in a separate hunt group) that are programmed (on the LINE INFORMATION screen) to answer with the proper greeting.

Call Forwarding Using Voice Mail Integration with In-Band Signaling

More information on troubleshooting voice mail in-band signaling is provided in section 7.13. A few basic steps are outlined here:

1. Verify the exact sequence of DTMF tones sent by the telephone system for both the busy and ring-no-answer conditions.
2. Determine if the in-band DTMF tones are sent by the telephone system immediately upon answer by the VP system or whether there is a delay. If there is a delay, how long is it?
3. Check the programming of the INITIAL PAUSE on the OTHER CUSTOMIZATIONS screen (VP systems) / PAUSE FOR X SECONDS on the PBX INFORMATION screen (NTVP systems). The pause time may not be long enough to accommodate the receipt of tones.
4. Check the programming of the transfer bypass feature.
5. Review the contents of the digit translation table TRANS.TXT (section 7.13).

7.4 Setting Up ACD Groups

If the telephone system does not support Automatic Call Distribution (ACD) groups, you can use the VP system to provide a form of this functionality.

You can define as many ACD groups as necessary, and you can chain ACD groups together. If all extensions in a group are busy, the VP system can re-route the call, take a message, offer alternatives, or place the call on a queue, playing specific messages for each queue position.

An administrator can add participants to the ACD group or remove participants from the group via his/her telephone. This allows the administrator to dynamically re-allocate employees as required (for example, people in the Sales ACD group can be easily moved to the Order-Taking ACD group by making one call into the system).

You can also allow each member of the ACD group to log in and out of the group as required.

Each ACD group is created using an ACD box (VP system versions 10.0 and lower) / Customer Service box (VP system versions 10.1 and higher). See section 5.10 for information on setting up an ACD box / Customer Service box. Since there are several options for the ACD box / Customer Service box, this section describes how the ACD feature typically operates.

Setting up Enhanced ACD Integration

Starting with VP system version 10.1x, with certain phone systems, the VP system can provide enhanced ACD integration features. Enhanced ACD integration:

- Allows you to specify on CUSTOMER SERVICE BOX screens that call hunting is to start from the longest idle extension
- Allows the VP system to identify non-idle agent extensions before attempting a call transfer (speeding call processing)
- Provides LCD display of queue statistics on agent telephones
- Allows agents to log into and out of an ACD group via the LCD controls on their phone
- Provides a configurable length of “wrap-up” time after each call, so upon hang-up, an agent’s extension will remain idle so the agent can complete additional call processing tasks.

For information on setting up enhanced ACD integration on phone systems that support it, consult the VP system technical bulletin for the specific phone system.

7.4.1 Understanding ACD Group Operation

<p>Note: The ACD box is referred to as the Customer Service box in VP system versions 10.1x and higher.</p>
--

When a call is routed to an ACD box / Customer Service box, the VP system checks to see if there is anyone else queued for that ACD group. If so, the VP system places the caller at the end of the queue.

If there is no one else queued for the ACD group, the VP system attempts to transfer the call to the first extension in the group. If the extension is free, the VP system releases the call to that extension and is finished with the call. If the extension is busy, the VP system tries the next extension, then the next, etc.

Note: After determining that an extension is busy, the VP system pauses for one second before trying the next extension. This pause allows the system to detect error tones, disconnect tones etc. If you want to give the VP system more time to detect these tones, adjust the ACD PAUSE time in the configuration file VM.CFG (see section 12).

If there are no free extensions, the VP system puts the call in a queue.

7.4.2 Putting a Call in the Queue

When the VP system finds that all extensions are busy, it puts the call in a queue and informs the caller:

“All agents are busy. You are number [number] in line. If you would like to try a different extension, press 1. Or press 0 if you would like to speak with the operator.”

If the caller chooses option 1, the VP system looks at the ACD BOX / CUSTOMER SERVICE BOX screen and performs the option specified in the field IF CALLER DOES NOT WANT TO REMAIN IN QUEUE.

If the caller chooses option 0, the VP system looks at the ACD BOX / CUSTOMER SERVICE BOX screen, and routes the call to the box specified in the field OPERATOR BOX (DAY) or OPERATOR BOX (NIGHT).

If the caller does not press a digit, the VP system assumes the caller wants to remain in the queue, and it plays a series of pre-recorded announcements, as described in the next section. While the call is in the queue and the caller is listening to the pre-recorded announcements, he/she always has the option to press 0 or 1 as described above.

7.4.3 Playing Announcements to Queued Calls

While the call is in the queue, the VP system plays a series of pre-recorded announcements to the caller. The system looks for these announcements in two places:

- If the announcements have been recorded for this ACD box / Customer Service box (see section 5.10), then the VP system uses these announcements.
- If no specific announcements are recorded for this ACD box / Customer Service box, the VP system plays a generic music-on-hold prompt (prompt 146). You may record up to 100 different hold prompts.

The VP system plays each announcement in turn. When it reaches the last recorded announcement, it goes back to the first one and repeats the cycle.

At the end of each announcement, the VP system checks to see if this caller is first in the queue:

- **If the caller is first in queue**—The VP system tries the extensions again, looking for one that is free. If there are no free extensions, the VP system informs the caller of his/her position in the queue and offers the options again:

“All agents are still busy. You are number one in line. If you would like to try a different extension, press 1. Or press 0 if you would like to speak with the operator.”

- **If caller is not first in queue**—Once the VP system has played a pre-defined number of announcements, it informs the caller of his/her position in the queue and offers the options again:

“All agents are still busy. You are number [number] in line. If you would like to try a different extension, press 1. Or press 0 if you would like to speak with the operator.”

If the caller does not press any digit, the VP system assumes that he/she wants to remain on hold and the cycle continues another rotation.

When the VP system goes back to the caller for the sixth time, informing him/her of his/her position in the queue, it tells the caller that he/she must enter a digit to remain in the queue.

“All agents are still busy. You are number [number] in line. If you wish to remain on hold, press 2. If you would like to try a different extension, press 1. Or press 0 if you would like to speak with the operator.”

If the caller does not press a digit, the VP system assumes the caller does not want to remain on hold and performs the action specified on the ACD BOX / CUSTOMER SERVICE BOX screen in the field IF CALLER DOES NOT WANT TO REMAIN IN QUEUE. This functionality is designed as a safeguard, moving the call onward and eventually freeing the port in the event the caller has hung up, and the telephone system does not offer a reliable disconnect signal.

Note: If you want the VP system to always assume that the caller wants to remain in the queue, add the following line to the configuration file VM.CFG (see section 12):

ASSUME HOLD = 99

7.4.4 Logging In and Out of an ACD Group

Logging in to an ACD group adds an extension to that group, so the VP system will try to send ACD calls to that extension. If an extension is logged in to an ACD group, it displays in NUMBERS field on the ACD BOX screen (see section 5.10).

Logging out of an ACD group means removing an extension from that group, so the VP system will not try to send ACD calls to that extension. If an extension is not logged in to an ACD group, it does not display in the NUMBERS field shown on the ACD BOX screen (see section 5.10).

Note: If the VP system is set up to use enhanced ACD integration fields, the functionality of the NUMBERS field varies from that described above. See section 5.10 for details.

To add or remove an extension to or from an ACD Box / Customer Service Box:

1. Call in to the VP system.
2. Log into the mailbox that is the owner of the ACD box / Customer Service box to be modified.
3. Choose option 3 from the Main menu.
4. Choose option 0 from the Options menu.
5. Choose option 1 from the ACD group administration menu.

6. Enter the ACD box / Customer Service box number.
7. Enter the extension number.
8. Press 1 to add the extension to the ACD group, or press 2 to remove the extension from the ACD group.
9. Listen to the confirmation, and hang up.

You can shorten this procedure using the database lookup feature (see section 7.15). By setting up an ACD database lookup application, you can provide each member of the ACD group with a specific ID number he/she is to enter to log in and log out of the call rotation. The following procedure illustrates how you set up this application:

Assume there are 5 extensions that are members of ACD group 4444. The extension numbers are 100, 101, 102, 103, and 104.

1. Create a mailbox to be the owner of ACD box / Customer Service box 4444. Assume this is mailbox 2000.
2. Enter 5678 as the password for mailbox 2000.
3. Call in to the VP system, and open mailbox 2000. When the tutorial starts, disable it by pressing *.
4. Hang up.
5. Display ACD box / Customer Service box 4444 on the VP system screen, and go to the field OWNER. Enter 2000 in this field. Mailbox 2000 is now the owner of ACD box / Customer Service box 4444.
6. Create a Routing box, box 2001 in this example. This box will serve as the database lookup box.
7. Display Routing box 2001 on the VP system screen. In the NAME field, enter the name of the file that will house the lookup information, ACDLOGON.DAT in this example.
8. In the field ROUTE DIGITS BASED ON, choose DATABASE LOOKUP.
9. Record a short greeting for Routing box 2001.
10. Using a text editor program, create a text file named ACDLOGON.DAT. For this example application, the contents of the file are as follows:

```
default=800, not found=800
100*,9992:2000,5678,3,0,4444,1,100
1009,9992:2000,5678,3,0,4444,2,100
101*,9992:2000,5678,3,0,4444,1,101
1019,9992:2000,5678,3,0,4444,2,101
102*,9992:2000,5678,3,0,4444,1,102
1029,9992:2000,5678,3,0,4444,2,102
103*,9992:2000,5678,3,0,4444,1,103
1039,9992:2000,5678,3,0,4444,1,103
104*,9992:2000,5678,3,0,4444,1,104
1049,9992:2000,5678,3,0,4444,2,104
```

11. Return to the VP system.

12. In the initial Routing box, set the DESTINATION FOR DIGIT 8 field to route callers to box 2001.

Now ACD members can log into and out of the ACD group using a few simple keystrokes:

To log in:

- Call in to the VP system
- Dial 8, followed by the extension number, followed by a *

To log out:

- Call in to the VP system
- Dial 8, followed by the extension number, followed by a 9

7.5 Setting Up Paging

The VP system supports Tone, Digital, and Voice pocket-pagers. Each of these pagers work slightly differently. Each is programmed differently and has different operational options. Before setting up paging, collect the following information:

- Which of the three types of pagers will be used?
- When does each subscriber want to be paged (always or only at certain times)?
- Who is to control whether or not a mailbox owner is paged (the caller or the mailbox owner)?
- What process is involved to manually complete the page—what call-progress and other tones are heard, is a recorded message played?
- Is the process to manually complete a page always the same (do you always receive just 1 cycle of ringing tone before the pager service answers, or does it sometimes require a longer period)?
Is the paging service number ever busy?

<p>Note: Unless you have your own pager service (a paging transmitter connected to an extension of the key system or PBX), the VP system places an external call to the paging service. For the pager notification feature to function properly, you must program the DIGITS TO GET A LINE FOR AN EXTERNAL CALL field on the GENERAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems), and define the parameter MAX INTERNAL in the VM.CFG configuration file (see section 12).</p>

7.5.1 Setting Up Tone Pagers

Tone pagers are perhaps the easiest to program, since the relaying of other information (DTMF tone or voice) is not involved. Most of the time Tone paging involves simply dialing the pager service, waiting for answer, pausing a few seconds, then hanging up. Therefore, you may choose to program a Tone pager either in the PAGER NUMBER section or the MESSAGE DELIVERY section of each MAILBOX screen.

Programming Tone Pagers in the PAGER NUMBER Section

By programming the tone pager in the PAGER NUMBER section, you have the option of:

- Paging the mailbox owner with each new message left in his/her mailbox.
- Paging the mailbox owner only when the caller chooses the page option.
- Allowing the mailbox owner to call in to remotely change the pager number and turn the service on and off.
- Set up a schedule to identifying when the box owner is to be paged.

To program a Tone pager in the PAGER NUMBER section:

1. Select the MAILBOX screen.
2. Enter the telephone number of the paging service (you can change the number remotely, see section 6.6). Normally, access codes for outside lines are not required here (see the note at the beginning of this section). If you want to restrict pager calls to use lines in a particular line group, enter the letter (A, B, C, or D) of the line group in braces { } before the telephone number (for example, {A}5551212, see section 7.16 for more information). Press <Enter>.
3. Select Tone as the PAGER TYPE. The pager type options are NONE, TONE PAGER, and DIGITAL PAGER.
4. Identify the number of times the VP system is to make *successful* calls to the paging service. The number of unsuccessful calls (for example, a call reaching a busy line) is determined by the parameter PAGER RETRY in the configuration file (see section 12). You may want to set this field to 2 or more times if, for example, the pager has “dead zones,” and you want to ensure the mailbox owner receives at least one of several pages.
5. If you set the previous field to 2 or more, identify the interval, or minutes between calls. This refers to *successful* pager calls. If a pager call is unsuccessful, the VP system automatically re-tries every few seconds.
6. Select the schedule of times the mailbox owner is to be paged. See section 5.5 for more information.
7. Set the ENABLED field to YES to turn the pager service on and set it to NO to turn the service off. This field can be changed from the PC keyboard or remotely by the mailbox owner (see section 6.6).
8. In the AFTER PLAYING GREETING field identify under what circumstances the mailbox owner is to be paged. Select one of the following options:
 - Select PAGE IMMEDIATELY to indicate the mailbox owner is to be paged each time a new message is received in his/her mailbox. The mailbox owner’s personal greeting should be recorded with wording such as:

“This is [name]. I’m sorry I’m not available right now, but if you leave a message at the tone, I will be paged immediately and return the call.”
 - Select RECORD IMMEDIATELY, if you want to give the caller the option of paging the mailbox owner. The mailbox owner’s personal greeting should be recorded with wording such as:

“This is [name]. I’m sorry I’m not available right now, but you may leave me a message at the tone. If this is an urgent call, please press 2 now and I will be paged immediately.”

If the caller does not press 2, the VP system simply records his/her message. If the caller presses 2, the VP system records his/her message, then immediately begins the paging process.

- Select WAIT FOR DIGIT if you want to force the caller to choose an option. The mailbox owner's personal greeting should be recorded with wording such as:

"This is [name]. I'm sorry I'm not available right now. Press 1 to leave me a message, or press 2 to leave an urgent message and I will be paged right away."

If the caller does not press any digit, no message is recorded and no page is sent.

You can choose to offer any other valid option(s) to the caller in the greetings such as :

"...press 3 to return to the main menu, press 0 for the operator..." etc.

Programming Tone Pagers in the MESSAGE DELIVERY Section

By programming the Tone pager in the MESSAGE DELIVERY section, you have the option of:

- Paging the mailbox owner with each new message left in his/her mailbox.
- Paging the mailbox owner only when the caller chooses the page option.
- Allowing the mailbox owner to call in to remotely change the pager number (even to a telephone number) and turn the service on and off.
- Set up a schedule to identify when the box owner is to be paged.
- Specifying more than one pager number, or specifying both pager numbers *and* regular telephone numbers to increase the mailbox owner's chances of being reached with messages.

A major difference in using the MESSAGE DELIVERY section to activate pagers is that you can *not* offer callers the option to page or to just leave a message. The option, *"Press 2 to have me paged"* applies only to a pager programmed in the PAGER NUMBER field.

Note: The PAGER NUMBER fields and the MESSAGE DELIVERY fields are two independent VP system features. Before proceeding, see section 7.6 to familiarize yourself with the message notification feature.

To program a Tone pager in the MESSAGE DELIVERY section:

1. In the AFTER PLAYING GREETING field identify under what circumstances the mailbox owner is to be paged. Select one of the following options:

- Select RECORD IMMEDIATELY, if you want the caller to simply begin recording at the tone. The mailbox owner's personal greeting should be recorded with wording such as:

"This is [name]. I'm sorry I'm not available right now, but you may leave me a message at the tone."

The VP system records his/her message.

- Select WAIT FOR DIGIT if you want to force the caller to press 1 to leave a message. The mailbox owner's personal greeting should be recorded with wording such as:

"This is [name]. I'm sorry I'm not available right now. Press 1 to leave me a message.

If the caller does not press 1, no message is recorded.

The other after-greeting options are not valid when programming a Tone pager using MESSAGE DELIVERY.

2. Move the cursor to the first field of the MESSAGE DELIVERY section. This is the first of five CALL fields. You can place the telephone number of a Tone pager in any of these five fields, but the first field is the only one that can be changed remotely (see section 7.6).

When you use the MESSAGE DELIVERY section to call a Tone pager, the VP system dials the number and, when it detects an answer, it plays the system prompt, *"Message for [name]. Press 1 to listen to the messages."* The prompt repeats the number of times specified by the VM.CFG parameter NOTIFY REPS (see section 12). Since this call is being answered by a paging service and not a live person, we must depend upon the paging service to terminate the call. This is usually not a problem, but if you find that pager calls programmed in the MESSAGE DELIVERY section are holding the line until all of the prompt repetitions have played, you may need to force the disconnect by adding a few pauses followed by the letter H (for hang up) after the number in the CALL field. For example,

5551212,,,,,H

In this example, the VP system dials the number , pause 6 seconds (the default value for 6 commas), then hangs up. Note, however, that the letter H can only be entered from the keyboard, and cannot be added to the pager number if it is changed remotely.

Note: When using the MESSAGE DELIVERY section to page, the VP system is not listening for call-progress tones (such as ringing or busy tones) during the pauses before hang-up. Therefore, every call is considered a successful call, even if the pager service was busy or did not answer.

The guidelines for using line groups and access codes are the same as when you use the PAGER NUMBER field to program Tone pagers, as discussed in earlier in this section.

3. You can enter a different pager number in each of the five CALL fields. For example, if the company had an on-call technician, you may want him/her to be paged 3 times at intervals of 30 minutes for each new message received in his/her mailbox. You may enter his/her pager number in the first CALL field and his supervisor's pager number in the second CALL field.

If the on-call technician checks his/her messages and clears his/her mailbox of all new messages before his/her cycle of pages is completed, the supervisor is not be paged. If he/she does not, the VP system proceeds with the next number on the list, the supervisor's number.

You can use a variation of this programming technique if there are two shifts of on-call technicians. You enter each of their pager numbers in the CALL fields, choose the number of times to repeat each page, then select a schedule from the pop-up menu in the SCHEDULE field. Each CALL number can be assigned its own schedule (see MAILBOX screen information in section 5.5).

Refer to section 7.6 for additional information on programming these fields.

7.5.2 Setting Up Digital Pagers

Unlike Tone pagers, activating Digital pagers is a two-step process—dialing the pager service, then sending DTMF tones. To program Digital pagers, you should use the `PAGER NUMBER` area on the `MAILBOX` screen. This area provides you with more parameters you can use to “fine tune” the paging operations. It is also possible to use the `MESSAGE DELIVERY` section of the mailbox to program Digital pagers. The programming and available options for each area are discussed in the following two sections.

Programming Digital Pagers in the `PAGER NUMBER` Section

By programming the Digital pager in the `PAGER NUMBER` section, you have the option of:

- Paging the mailbox owner with each new message left in his/her mailbox.
- Paging the mailbox owner only when the caller chooses the page option.
- Allowing the mailbox owner to call in to remotely change the pager number and turn the service on and off.
- Set up a schedule to identify when the box owner is to be paged.
- Having the system prompt the caller to enter a callback number, which is relayed to the pager.
- Having the system ask the caller to leave the message, then having the mailbox number automatically sent as the callback number to the pager.

To program a digital pager in the `PAGER NUMBER` section:

1. Select the `MAILBOX` screen.
2. Enter the telephone number of the paging service (you can change the number remotely, see section 7.6). Normally, access codes for outside lines are not required here (see the note at the beginning of this section). If you want to restrict pager calls to use lines in a particular line group, enter the letter (A, B, C, or D) of the line group in braces { } before the telephone number (for example, {A}5551212, see section 7.16 for more information). Press <Enter>.
3. Select Digital as the `PAGER TYPE`. The pager type options are `NONE`, `TONE PAGER`, and `DIGITAL PAGER`.
4. Identify the number of times the VP system is to make successful calls to make to the paging service. The number of unsuccessful calls (for example, calls that reach a line that is busy) is determined by the `VM.CFG` parameter `PAGER RETRY` (see section 12). You may want to set this field to 2 or more times if, for example, the pager has “dead zones” and you want to ensure the mailbox owner receives at least one of several pages.
5. If you set the previous field to 2 or more, identify the interval, or minutes between calls. This refers to the number of *successful* pager calls. If a pager call is unsuccessful, the VP system automatically re-tries every few seconds.
6. Select the schedule of times the mailbox owner is to be paged. See section 5.5 for more information.
7. Set the `ENABLED` field to `YES` to turn the pager service on and set it to `NO` to turn the service off. This field can be changed from the PC keyboard or remotely by the mailbox owner (see section 6.6).

8. Move the cursor to the AFTER PLAYING GREETING field. Choose under what circumstances you want the mailbox owner to be paged and what information you want the callback number to contain. Select one of the following options:

- Select PAGE IMMEDIATELY if you want the VP system to prompt the caller to enter his/her callback number then page the mailbox owner each time he/she receives a call. The mailbox owner's personal greeting should contain wording such as:

"This is [name]. I'm sorry I'm not available right now, but if you leave the telephone number, I will be paged, and I'll call you back as soon as possible."

When the greeting ends, a system prompt plays requesting that the caller enter his/her callback number (no voice message is recorded):

"Please dial your own telephone number now."

Note: If the VP system has collected an account number for the call, it offers to send the account number to the pager. For example, *"The number which will be displayed on the pager is 444-2345. If this is correct, press 1."* If the caller does not press 1, the system says, *"Please dial your own telephone number now,"* and it waits for the caller to enter the number.

When the caller has entered the number, the VP system repeats the number then asks for confirmation. For example:

"The number which will be displayed on the pager is 5551212. If this is correct, press 1. If not, press pound."

If the caller presses #, he/she is given a chance to enter the number again. If the caller presses 1, the VP system plays the prompt:

"That party will be paged right away."

If the caller does not press 1, the system default is not to send a page. If you want the system to send a page even if the caller does not press 1, you can enter the parameter ASSUME PAGE CONFIRM in the VM.CFG file (see section 12).

- Select RECORD IMMEDIATELY, if you want to give the caller the option of paging the mailbox owner (with a call-back number, not a voice message). The mailbox owner's personal greeting should contain wording such as:

"This is [name]. I'm sorry I'm not available right now, but if you leave a message at the tone, I'll get back to you as soon as possible. If this is an urgent call, press 2 now and enter the telephone number. I will be paged immediately and call you right away."

If the caller does nothing, the VP system simply records his/her message, but does not initiate a page. If the caller presses 2, he/she is prompted to enter a callback number. The same sequence of accepting the digits, replaying them, and asking for confirmation (as described earlier) then follows.

Note: If the VP system has collected an account number for the call, it offers to send the account number to the pager. For example, *“The number which will be displayed on the pager is 444-2345. If this is correct, press 1.”* If the caller does not press 1, the system says, *“Please dial your own telephone number now,”* and it waits for the caller to enter the number.

- Select RECORD THEN PAGE if you want the system to take a voice message from the caller and page the mailbox owner. The mailbox owner’s greeting should contain wording such as:

“This is [name]. I’m sorry I’m not available right now, but if you leave a message at the tone, I will be paged immediately and return the call.”

The VP system records the caller’s message as usual, but does not ask for the caller to enter his/her callback number. Instead, the account number collected during the call is used as the callback number, if an account number has been collected. If an account number was not collected, the mailbox owner’s box number is sent as the callback number.

- Select WAIT FOR DIGIT, if you want to force the caller to choose an option. The mailbox owner’s greeting should contain wording such as:

“This is [name]. I’m sorry I’m not available right now. Press 1 if you would like to leave me a message. If the call is urgent, please press 2. I will be paged right away and return the call.”

If the caller does not press any digit, no message is recorded and no page is sent.

You can also choose to offer any other valid option(s) to the caller in the greetings such as:

“...press 3 to return to the main menu, press 0 for the operator...” etc.

Additional Parameters for Digital Pagers

There are additional parameters available in the system configuration file VM.CFG you can use to configure the VP system to operate with the Digital paging service (see section 12 for details on programming). These apply only to pagers programmed in the PAGER NUMBER field, not to those set up in the MESSAGE DELIVERY section.

- **CALL-PROGRESS TONE DETECTION**

Normally, the VP system monitors the line for busy tone and ringing tone when calling a pager service. In most circumstances at least one cycle of ringing tone is heard before the paging service answers. When the VP system recognizes that ringing has stopped, it assumes the paging service has answered, and it sends the callback DTMF digits. There are some cases where the ringing tone is never heard, or is only heard sometimes. In this case, you may need to disable call progress tone detection and substitute a timer, using the parameter PAGE TIME in the configuration file.

- **PREFIXING THE CALLBACK NUMBER**

This parameter allows the VP system to automatically insert extra information before the callback number. Usually additional digits are not required. However, if the paging service answers with a short recording (such as, *“Please enter the telephone number”*), you may need to add extra pauses before the callback number to prevent the VP system

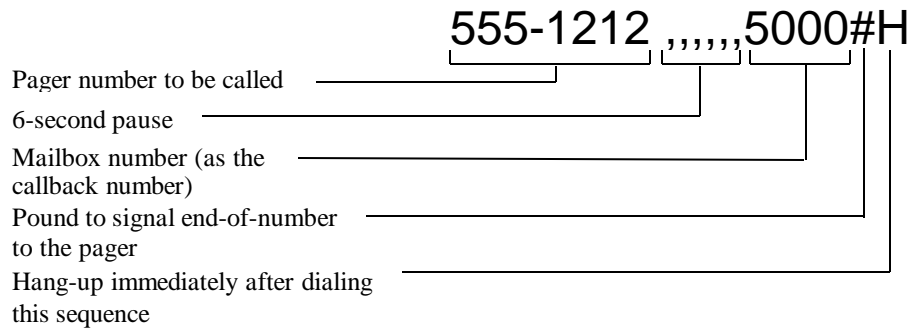
from sending the callback digits prematurely. Use the `PAGER PREFIX` parameter in the configuration file.

- **APPENDING TO THE CALLBACK NUMBER**

If you need to automatically insert any additional digits (such as #) or pauses at the end of the callback number and before disconnect, use the `PAGER APPEND` parameter in the configuration file.

Programming Digital Pagers in the MESSAGE DELIVERY Section

You use the MESSAGE DELIVERY fields of the MAILBOX screen to program Digital pagers in much the same way as you use them to program Tone pagers. The one item you must add is a callback number (usually the mailbox number), since with Tone pagers, no callback number is collected from the caller, only a voice message is. A typical callback number sequence might be:



Note: When using a dialing plan like that shown above, the VP system is not listening for call-progress tones (ringing or busy tones) during the long pause (L). Therefore, every call is considered a successful call, even if the pager service was busy or did not answer.

Keep in mind that a mailbox owner can change only the first of the `CALL` numbers remotely, and he/she cannot enter the H (hang up) character by calling in remotely.

For both the pager notification feature and the message delivery feature, if there are no free lines when the VP system tries to make the call to the paging service, the VP system keeps trying at 10-second intervals for about 10 minutes.

Again, remember that only paging programmed in the `PAGER NUMBER` field can detect a busy signal on the line after dialing the pager service. If the pager service is busy often during peak periods of the day, do not program paging in the MESSAGE DELIVERY section unless you program the page to repeat several times.

7.5.3 Setting Up Voice Pagers

Voice pagers cannot be programmed using the `PAGER NUMBER` field. They must be set up in the MESSAGE DELIVERY section. The programming for Voice pagers is discussed in section 7.6 .

7.5.4 Setting Up a Schedule for Paging

When using either the `PAGER NUMBER` field or the `MESSAGE DELIVERY` section's `CALL` fields to program a pager, you can set up a schedule identifying when the mailbox owner is to be paged. The options include:

Schedule	Result
ALWAYS	The mailbox owner is paged with calls to this mailbox at all times.
DAY SERVICE	The mailbox owner is paged only during Day Service, as defined in the <code>BUSINESS HOURS</code> screen.
NIGHT SERVICE	The mailbox owner is paged only during Night Service, as defined in the <code>BUSINESS HOURS</code> screen.
SCHEDULE A, B, C, or D	The mailbox owner is paged only during the schedule as defined on the <code>MAILBOX PAGE 3</code> screen (VP systems) / by pressing the <code>View Schedules</code> button (NTVP systems).

7.5.5 Troubleshooting Pager Functions

Use the general steps provided below as guidelines for troubleshooting pager functions.

Pager Not Being Activated

1. Verify that the enabling field in the `PAGER NUMBER` or `MESSAGE DELIVERY` section is set to `YES`.
2. Verify the `SEQUENCE OF DIGITS TO GET AN OUTSIDE LINE` field on the `GENERAL INFORMATION` screen (VP systems) / `PBX INFORMATION` screen (NTVP systems) is correct and that the `INTERNAL` parameter in the `VM.CFG` file is correct.
3. Verify that the `SCHEDULE` you have selected is correct.
4. Leave a new message in the mailbox (choose the option to page if required).

Monitor the `LINE INFORMATION` screen. The VP system should attempt to make the outgoing page call within a few seconds.

Monitor the line with a `DTMF` digit display unit or a test set. The VP system should dial the same sequence as would a live person. This is typically a 9 (to get an outside line), a short pause, then a seven-digit pager number. If you do not hear the proper dialing sequence, re-check the data entry.

5. If the pager is programmed in the `PAGER NUMBER` field, verify that at least one cycle of ringing tone is heard before the pager service answers. If not, you must configure the VP system to not listen to call-progress tones. Do this using the `PAGE TIME` parameter in the `VM.CFG` file (see section 12).

Pager is Activated, But Callback Number is Missing or Incorrect

1. If you programmed the pager in the `PAGER NUMBER` field *and* you are using call progress tone detection, the VP system may be sending the callback digits too soon after the pager service answers.

Use the `PAGER PREFIX` parameter in the `VM.CFG` file to insert the proper number of pauses before the callback number.

2. If you disabled call progress tone detection and are using only fixed timing parameters, verify that calls to the pager service use exactly the same time frame on every call. If so, you may need to adjust the entry for the `PAGE TIME` parameter.
3. If you are using a pager service that has required you to disable call progress tone detection and at some times it is possible that the pager service number is busy, then you must set the number of times to call to more than 1. (With call progress tone detection off, the VP system cannot detect busy and considers a call to a busy number as successful. By sending the page more than once, you increase the odds that the number is not busy.)

7.6 Setting Up Message Delivery

You can configure the VP system to call you when you have new messages in the mailbox. These calls can be placed to any telephone, to a telephone answering machine, or to a voice pager. The `MAILBOX` screen (see section 5.5) contains the fields you use to set up this feature.

To set up message delivery in a mailbox:

1. DOS-based VP systems : On the `MAILBOX PAGE 2` screen, in the field `CURRENTLY ENABLED`, choose `ALL MESSAGES` or `URGENT MESSAGES ONLY`.

NT-based VP systems : On the `MAILBOX` screen, `MESSAGE DELIVERY` tab, in the `DELIVER THESE MESSAGES` area, choose `ALL MESSAGES` or `URGENT MESSAGES ONLY`.
2. In the `CALL` field, enter the telephone number the VP system is to call to deliver messages. There are 5 `CALL` fields, so you can specify up to 5 different numbers that the VP system is to attempt to deliver messages.
3. Set up the `INTERVAL` field and `REPEAT` field (VP systems) / `TIMES` field (NTVP systems) as described in section 5.5.

Deciding When to Call

When a message is deposited into the mailbox, the VP system examines the information specified in the `MESSAGE DELIVERY` section to determine whether it should call out to deliver the message. Figure 7-3 shows how the VP system makes this determination.

<p>Note: The VP system can call 5 different telephone numbers, at different times (as specified on the <code>MAILBOX</code> screen). Each of these telephone numbers and time combinations is called a <i>rule</i>. When a message arrives in a mailbox, the VP system applies all 5 rules when determining which number to call.</p>
--

Making the Call

When the VP system makes the call to deliver a message, it listens for an answer. As soon as it detects that the call has been answered, it begins repeating:

“Message for [name]. Press 1 if you would like to hear the messages.”

Note: There are several places within the VP system where the caller is asked to press a certain key to confirm that a particular option is correct (for example, when a caller enters a call-back telephone number to be sent to a digital pager, the VP system repeats the number to the caller and asks him/her to press a particular digit to confirm that the number is correct). By default, the confirmation digit is 1, and any other digit means NO. You can change this to allow any other digit to mean YES or any one of a group of digits to mean 'Yes.' To do this, access the field DIGITS THAT MEAN YES WHEN ASKING FOR CONFIRMATION on the CALL TRANSFER SCREEN (VP systems) / GENERAL INFORMATION screen (NTVP systems). Enter all digits you want the system to accept as a YES response.

The VP system repeats this announcement 5 times, then hangs up. You can change the number of times the VP system is to repeat the announcement in the VM.CFG file (see section 12).

If the called party presses 1, the VP system asks for the mailbox password (to verify that it is the mailbox owner who answered the call). After the mailbox owner enters the password, the VP system voices a prompt such as:

“You have 2 new messages and 3 old messages.

To listen to the messages, press 1.

To send a message, press 2...”

The owner can now press 1 to listen to his/her new messages.

When setting up message delivery, if you include **M** (for answering machine) as the last character in the telephone number, the VP system plays the prompt, *“Message for...”* the specified number of times, then starts playing back each message in turn *without* requiring a password.

If you include **V** (for voice pager) as the last character in the telephone number, the VP system begins playing the message immediately upon detecting an answer.

Note: If the mailbox owner is using a voice pager, he/she should advise callers of the time limit allowed for voice pages in the mailbox's personal greeting. This limitation is typically 10 - 15 seconds.

7.7 Working with Service Modes

You can set up the VP system to handle calls differently after office hours and on weekends by setting up the BUSINESS HOURS screen.

On the screen enter the opening time, closing time, and lunch times of the business for each day of the week. Enter each time in 24-hour format (for example, enter 8:00 PM as 20:00).

If the business is open 24 hours on a particular day, enter 0:00 as the DAY SERVICE BEGINS time and 24:00 as the DAY SERVICE ENDS time.

If the business is closed all day on a particular day, enter 0:00 as both the DAY SERVICE BEGINS and DAY SERVICE ENDS time. The VP system stays in Night Service mode that entire day.

You can use the Lunch Service period as a true lunch hour (for example, noon to 1:00 PM) or as a different day part (for example, a second shift from 5:00 PM to 11:00 PM). This is described later in this section.

When the VP system answers an incoming call, it consults the LINE INFORMATION screen to determine which initial box to use. If the system is in Day Service mode, the VP system directs the call to the box specified in the INITIAL BOX - DAY SERVICE column for the particular line. During Lunch Service mode, the call is directed to the box specified in the INITIAL BOX - LUNCH SERVICE column for the particular line.

All times *not* defined on this screen as being part of the Day Service mode or Lunch Service mode are, by default, considered to be Night Service mode.

The time lines in Figure 7-4 show two typical uses of BUSINESS HOURS screen programming.

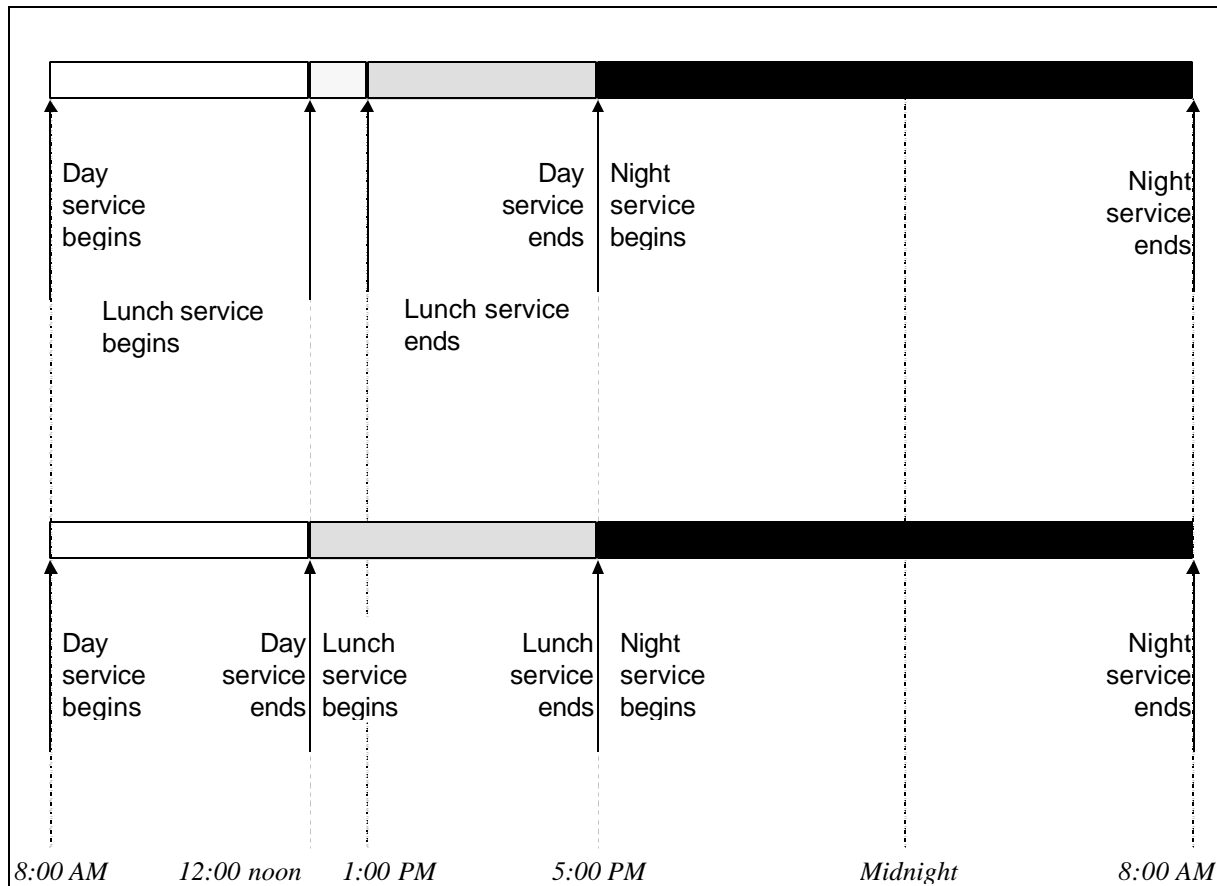


Figure 7-4 Two Uses for Lunch Service

The top time line illustrates a typical use of the BUSINESS HOURS screen for a business that opens at 8:00 AM, closes between Noon and 1:00 PM, then is open again from 1:00 PM to 5:00 PM. A caller hears the same initial greeting during the morning and afternoon open hours, a “closed for lunch greeting” during the noon hour, and a “closed for the day” greeting at night.

The bottom time line illustrates an alternate method of using the BUSINESS HOURS screen, setting up 3 separate time periods throughout the day. A caller receives one greeting from 8:00 AM until Noon, a second greeting from Noon to 5:00 PM, and a third greeting from 5:00 PM until 8:00 AM.

In either case, you define which greeting is to play by selecting an Initial box (usually a Routing box) for each line during each time period and recording the greeting in each of those boxes. Select the Initial box on the LINE INFORMATION screen.

Independent of this programming, you can set up the VP system to automatically insert an appropriate day period announcement before the greeting in the initial box is played (“ Good morning,” “Good afternoon,” or “Good evening”). These phases are system prompts 171, 172, and 173 and are *not* pre-recorded. If you want to use any or all of them, they should be recorded by the same person that you use to record the greeting in the Initial box. See section 15.

You can select a time when the VP system should switch from the “Good afternoon” prompt to the “Good evening” prompt (the “Good morning” prompt time is fixed to play between Midnight and Noon).

Supervisor Control of Day and Night Service

A system supervisor can override the regular Day Service, Lunch Service, or Night Service mode by forcing the VP system into another mode. The VP system switches to the new service mode and remains in that mode until it is time for the system to automatically switch out of that mode and into another. For example, assume that Day Service mode runs from 8:00 AM until 5:00 PM and Lunch Service mode runs from noon until 1:00 PM. If the supervisor calls in at 9:00 AM (the VP system is in Day Service mode) and forces the VP system into Night Service mode, the VP system remains in Night Service mode until noon. It then automatically switches to Lunch Service mode.

For information on how a supervisor can override the Day Service and Night Service modes, see section 7.11.

7.8 Announcing a Call Over the Public Address System

When a call is routed to a mailbox, the VP system attempts to transfer the call. If the called party does not answer, or is busy, the VP system plays the mailbox owner’s personal greeting (or the default greeting if none is recorded). An example of a personal greeting is:

“Hi this is John. Sorry I missed the call. Leave me a message after the tone, and I will get back to you as soon as possible.”

At this point, you can give the caller the option to have the call announced over the company’s public address (P.A.) system (also referred to by some as a *paging* system). A caller can elect to have the party paged by selecting option 5 while listening to the mailbox greeting. A mailbox owner who wants to provide callers with this option, should inform the caller of its availability in the mailbox’s personal greeting. For example:

“...If you would like to have me paged over our PA system, please press 5...”

The class of service assigned to the called party’s mailbox must allow access to the P.A. system for callers to be able to use this feature. If the caller presses 5 to have the mailbox owner paged over the P.A.

system (and the class of service assigned to the mailbox permits access to the P.A. system), the VP system:

1. Places the caller on hold.
2. Dials the P.A. system.
3. Announces the call.
4. Goes back to the caller, and ask him/her to wait a moment.
5. Transfers the call to the mailbox owner' s extension.

The called party can now pick the call up from his/her extension by going to the actual extension or, if available on the telephone system, performing a “directed call-pickup.”

To set up the P.A. feature on the VP system, you must enter the following information about the P.A. system:

- The sequence the VP system needs to dial to place the caller on hold, and call the P.A.
- If the P.A. is busy, the sequence dialed by the VP system to get back to the caller to inform him/her
- After the P.A. system has answered, and the call has been announced, the sequence the VP system dials to get back to the caller to inform him/her

You enter the dialing sequences to perform these functions in the `VM.CFG`, under the parameters `PA.INIT`, `PA.BUSY`, and `PA.CANCEL`, respectively. See section 12.

When the P.A. system answers, the VP system voices says:

“There is a call [name]. Please dial the pick-up code for your extension.”

This prompt repeats this announcement a pre-defined number of times, then transfers the call to the extension number. The number of times the VP system repeats the prompt is 3 by default. You can change this number by modifying the parameter `P.A. REPEATS` in the `VM.CFG` file.

The paged party can go to his/her telephone and wait for the VP system to re-transfer the call or he/she can wait a few moments *after* the page has completed (to give the VP system time to re-transfer the call), then dial the code for a directed call pick-up.

If the called party does not answer the page, the caller is re-directed to the called-party' s mailbox where the caller can leave a message, try another extension, etc.

Some telephone systems also offer a “call park” feature. With call parking, the paged party can dial the pick-up code to retrieve a parked call *before* the page has completed. If call parking is not available, the paged party must wait until the paging completes and the VP system has transferred the caller back to the paged party' s telephone.

A disadvantage of call parking, however, is that with most telephone systems, if the page is not answered, the calling party recalls to the main greeting, not the mailbox owner' s personal greeting.

If you use the call park feature, reserve the park location exclusively for the VP system. Also re-record prompt 152 to instruct the paged party how to answer the parked call. (Consult the telephone system documentation and see section 4.12.)

Call parking involves the following sequence of events:

1. The caller is placed in call park.
2. The VP system dials the P.A. system and announces the call the required number of times.
3. The VP system hangs up, completing the process.
4. The paged party either answers the page by dialing the call park retrieval code or does not answer. If the called party does not answer, the caller is returned to the main VP system greeting by the park recall timer.

You program steps 1 and 2 using the `VM.CFG` parameter `PA.INIT`. Step 3 is controlled by the parameter `P.A. CANCEL`. Since in most cases, this step involves simply hanging up, you simply specify the parameter as `PA. CANCEL = H` (H indicating hang-up).

Finally, specify an entry for the parameter `P.A. BUSY`. Your entry should indicate the sequence the VP system must dial to return to the caller in the event the call park location is busy.

Note: Before programming the paging parameters in `VM.CFG`, connect a single-line telephone set or a test set to one on the voice mail ports and test the sequences described above. Make notes on each step you must perform (what you dial to put the caller on hold, what do you dial to access the P.A. system, etc.). See section 12 for a list of the special characters available when you specify these sequences.

If you are not using the PA feature, it is recommended you disable the PA feature completely. To do so, enter the following line in the `VM.CFG` file:

```
MENU.MBOX.PA = X
```

Once the P.A. call announcing feature is disabled, if a caller presses 5 during the mailbox greeting, the VP system takes whatever action you specified in the field `IF CALLER CHOOSES OTHER OPTIONS` on the MAILBOX screen.

7.9 Setting Up Call Queuing

This section discusses call queuing as it relates to calls transferring to a mailbox with a busy extension. For information on how calls are queued for ACD groups, see section 7.4.

The call queuing feature is available to mailboxes using the `WAIT FOR ANSWER`, `WAIT FOR RING`, and `SCREEN` transfer types. It is not available to mailboxes using the transfer type `BLIND`.

When call queuing is set up for a mailbox, if the VP system tries to transfer a call to the mailbox's extension, and that extension is busy, the VP system offers the caller the option to hold (provided the number of lines already holding for the extension has not reached the limit specified in the class of service assigned to the mailbox). The caller hears a prompt such as:

"[Name] is busy. You are number [number] in line. If you would prefer to leave a message, press 1, or to try another extension, press 3."

If the caller selects the option to leave a message, the VP system plays the mailbox greeting and processes the call in the normal manner. If the caller chooses to try another extension, the VP system takes the action specified in the `IF CALLER CHOOSES OTHER OPTIONS` field of the mailbox's `MAILBOX` screen.

If the caller does not press a digit, the VP system assumes that he/she wants to remain on hold. The system plays a short recording, which is the system hold prompt 146. You may record up to 100 different hold prompts. At the end of each recording, the VP system checks to see if this caller is first in line for the called extension. If so, the VP system tries calling the extension again to see if it is still busy.

If the extension is now free, the VP system transfers the call in the normal manner. If the extension is still busy, the VP system keeps playing the hold prompts and re-trying the extension up to a pre-defined number of times. This number is defined in the class of service assigned to the mailbox in the field `TRY EXTENSION X TIMES BEFORE GOING BACK TO CALLER`. Once the VP system reaches the pre-defined number of times, it goes back to the caller and says:

“[Name] is still busy. You are number [number] in line. If you would prefer to leave a message, press 1, or to try another extension, press 3.”

If the caller selects to remain on hold, the VP system resumes playing the hold-prompts, and the cycle repeats. If multiple hold prompts are recorded on the system, the caller hears each prompt in turn until all prompts have all played, then the cycle begins again with the first hold prompt.

Note: While the caller is listening to any of the hold prompts, he/she can press a valid key at any time to leave a message, try another extension, speak to an operator, etc. See section 5.5 for the complete list of options. You also can limit the number of options available to the caller while he/she is in the hold queue by modifying the field `DIGITS ALLOWED WHILE HOLDING` in the class of service assigned to the mailbox.

When the VP system has gone back to the caller the sixth time, it asks the caller to press the digit 6 if he/she wishes to remain on hold:

“[Name] is still busy. You are number [number] in line. If you wish to remain on hold, press 6. If you would prefer to leave a message, press 1, or to try another extension, press 3.”

This time, if the caller does not press a digit, the VP system does *not* assume that he/she wants to hold. Instead, it removes the caller from the queue and plays the mailbox greeting. The system uses this call handling technique to guard against the possibility that the caller hung up while on hold, and the hang up was not detected. You can modify the point at which the VP system transfers the call to the mailbox greeting by adjusting the `ASSUME HOLD` parameter in the `VM.CFG` file (see section 12).

Note: You can disable the call queuing feature for a particular mailbox by indicating that zero lines are allowed to hold for the mailbox in its assigned class of service (see section 4.10).

Note: You can prevent the system from announcing a caller's position in the queue (for example, *“You are number 2 in line”*) by adjusting the field `ANNOUNCE QUEUE POSITION?` in the class of service assigned to the mailbox (see section 4.10).

For more information on call queuing, also refer to:

- The NUMBER OF LINES ALLOWED TO HOLD field and NUMBER OF RE-TRIES BEFORE RETURNING TO CALLER fields (VP systems) / TRY EXTENSION X TIMES field (NTVP systems) on the CLASS OF SERVICE screen.
- Section 15, for information on optional pre-recorded system prompts and the system hold prompts.
- Section 4.11 for information on customizing system prompts.

7.10 Viewing VP System Status Screens

7.10.1 Understanding the Line Status Screen (DOS-based VP Systems)

When the Line Status screen is displayed, you can perform several actions. These actions and their associated keys are summarized in Table 7-2 and described in more detail below.

Key	Function	Description
ESC	Exit	Exits the VP system program.
PgUp	Next mailboxes	Displays the next 50 mailbox / messages.
PgDn	Previous mailboxes	Displays the previous 50 mailbox / messages.
F1	Help	Displays Help information.
F2	Disconnect	Disconnects the specified line.
F3	Change display	Changes the display: Logo -> Messages -> Calls.
F4	Go offhook	Takes a line off-hook (for example, for testing).
F5	Previous 12 lines	Displays the status of the previous 12 lines.
F6	Next 12 lines	Displays the status of the next 12 lines.
F7	Reset counts	Resets the call counters to 0.
F8	<i>Not used</i>	
F9	<i>Not used</i>	
F10	Database	Access the VP system database.
Ctrl-F1	MW refresh	Refreshes all message waiting lamps.
Ctrl-F2	MW cancel	Cancels update of message waiting lamps.
Ctrl-F3	Reset	Resets a mailbox.
Ctrl-F4	<i>Not used</i>	
Ctrl-F5	Adjust clock	Moves the PC clock back 1 hour.
Ctrl-F6	Adjust clock	Moves the PC clock forward 1 hour.
Ctrl-F7	Adjust clock	Moves the PC clock backward 1 minute.

Key	Function	Description
Ctrl-F8	Adjust clock	Moves the PC clock forward 1 minute.
Ctrl-F9	<i>Not used</i>	
Ctrl-F10	Test	Generates a dummy error message, for testing.
Alt-F1	<i>Not used</i>	
Alt-F2	Trace to file	Sends diagnostic trace information to file TRACE.LOG.
Alt-F3	Trace to printer	Sends diagnostic trace information to a printer.
Alt-F4	Version info	Displays version information.
Alt-F5	Trace	Turns diagnostic trace on/off.
Alt-F6	Display memory	Shows the amount of free memory remaining.
Alt-F7 through Alt-F10	<i>Not used</i>	

Table 7-2 Keys Available on Line Status Screen

Exit to DOS <Esc>

Pressing the <Esc> key instructs the VP system that you want to exit the program. Before allowing you to exit, the VP system asks you for the database password. The default Technician password is **1234**. (Passwords are specified on the GENERAL INFORMATION screen).

The password can be entered in either upper or lower case. As you enter the password, the VP system displays an asterisk (*) for each letter you type. This prevents anyone from learning the password by watching the screen as you type. If you enter the password correctly, the VP system begins its clear-down sequence. The VP system does not answer subsequent incoming calls and waits for all existing calls to clear. When all calls have ended, the VP system exits to DOS. While waiting for the calls to clear, you can press <F10> to terminate the calls immediately.

Help <F1>

Pressing <F1> displays the Help screen. On some VP systems, you may notice that when the Help screen is displayed, the “beating heart” stops, and the on-screen clock is not updated. The system is still running normally, it is simply not updating the screen information. The clock and heart return to normal when you exit the Help screen.

Terminate the Call On One Specific Line <F2>

Pressing <F2> terminates the call on one specific line. When you press <F2>, the VP system asks you which line to disconnect. Enter the line number, then press <Enter> (or press <Esc> to cancel the request).

Change Display Mode <F3>

Pressing <F3> switches the display between the Logo screen, Message Status screen, and Incoming Call screen (also the Outbound Call Activity screen if you are using the optional Outbound Telemarketing module).

Taking a Line Off-Hook <F4>

Pressing the <F4> key takes a line off-hook (for testing, etc.). When you press <F4>, the VP system asks you which line to take off-hook. Enter the line number, then press <Enter> (or <Esc> to cancel the request). When the line goes off-hook, the greeting in the Initial box assigned to that line for the current time mode (Day Service, Night Service, Lunch Service) begins to play and proceeds just as if an incoming call was received on that line. You can terminate the call by pressing <F2> as discussed above.

Displaying Line Activity <F5> and <F6>

The VP system displays the activity for each line on the system, such as the box number being processed, the name of the box, and the current activity (for example, recording message, entering password, etc.). The VP system can display a maximum of 12 lines at one time. If you have more than 12 lines, you can view the next 12 by pressing <F6> or view the previous 12 by pressing <F5>.

Reset Call Counts <F7>

Pressing <F7> sets the call counters for all lines to zero.

Access the Database <F10>

Pressing <F10> informs the VP system you want to access the database (for viewing or programming). Before giving you access to the database, the VP system asks you for the database password. Note that there are two levels of password: The *Technician* password and the *Customer* password (VP systems) or *Administrator* password (NTVP systems). The Technician password provides access to all database screens and fields. By default, this password is **1234**. Passwords are specified on the GENERAL INFORMATION screen).

The password can be entered in either upper or lower-case. As you enter the password, the VP system displays an asterisk (*) for each letter you type. This prevents anyone from learning the password by watching the screen as you type. If you enter a valid password, the VP system displays the Main menu.

Manually Activate Message Waiting Lamp Refresh <Ctrl-F1>

If the status of the telephone system's message waiting lamps has been disrupted (due to a power failure, for example), you can request that the VP system refresh the status for each mailbox that has message waiting on and off codes programmed. Pressing <Ctrl-F1> starts the process. A system advisory message displays showing that the request is being processed.

The refresh operation terminates automatically once the message waiting status for all mailboxes has been sent to the telephone system. You can manually terminate the process by pressing <Ctrl-F2>. Be advised that because this process can generate a high volume of outgoing calls, you should limit the use of this function to times of low incoming call traffic.

The message waiting lamp refresh can also be set to execute daily at a pre-determined time. See section 4.9 for details.

Resetting a Mailbox <Ctrl-F3>

Pressing <F3> informs the VP system that you want to reset a mailbox. If you press <Ctrl-F3> the VP system asks you which mailbox you want to reset. Enter the mailbox number, then press <Enter> or press <Esc> to cancel the request.

When you reset a mailbox, the following things happen:

- All messages are deleted from the mailbox.
- The tutorial is enabled.
- All personal greetings are deleted.
- The password is reset to a default password (copied from the prototype mailbox).
- The mailbox is removed from the dial-by-name directory.

For more information on resetting the mailbox, see section 7.11.

Adjusting the PC Clock

Use the following keys to adjust the PC's clock:

- <Ctrl-F5>—rewinds the clock 1 hour.
- <Ctrl-F6>—advances the clock 1 hour.
- <Ctrl F7>—rewinds the clock 1 minute.
- <Ctrl-F8>—advances the clock 1 minute.

Display Software Versions <Alt-F4>

You can display certain information about the software currently running in the system by pressing <Alt-F4>. An Advisory displays on the screen in the area below the Line Status area of the screen. The display contains the following information about the system:

- The VP system software version number, displayed, for example: **V:9.0**
- The release level of the version, displayed, for example: **R:2**
- The software level of the voice board driver, displayed, for example: **H:5.38**
- The software level of the operating system, displayed, for example: **DOS:6.22**

7.10.2 Viewing Available Line Status Screen Displays (DOS-based VP Systems)

The fields discussed below are common to all the screen displays. When the VP system is displaying the Line Status screen (the main screen), you can press <F3> to select 1 of 3 different displays:

- The VP system logo
- The Mailbox Status screen
- The Incoming Call Summary screen

Message-Space Remaining

The VP system calculates how much free space is left on the hard disk. It then calculates how many minutes of speech will fit in this space. The result is displayed on the screen. This figure is re-calculated and re-displayed every 60 seconds. If the amount of storage space remaining falls below 5 minutes, the VP system displays a warning message and makes a beeping sound every 30 seconds. If the amount of space remaining falls below 2 minutes, the VP system stops taking messages and advises callers that the system is full.

Activity on Each Line

The VP system displays the activity for each line on the system. The number in parentheses is the number of incoming calls received on that line since the counters were last reset. (You can reset the call-counters to zero by pressing <F7>). The rest of the line displays information such as the box number being processed, the name of the box, and the current activity (recording message, entering password, etc.). If a line is disabled by a supervisor (see section 7.11), the status displays in bright flashing characters and a solid “block” symbol displays beside the line number.

7.10.3 Viewing the Message Status Display (DOS-based VP Systems)

This display lets you see at a glance which mailboxes have messages. If the system contains more than 50 mailboxes, you can scroll through the display using the <Pg-Up> and <Pg-Down> keys on the keyboard.

Each mailbox displays according to how many old and new messages it has:

Display Screen Appearance	Number of New Messages	Number of Old Messages
Normal	None	None
Bright	None	1 or more
Flashing	Less than 10	
Reverse-video	10 or more	

7.10.4 Viewing the Incoming Call Summary Display (DOS-based VP Systems)

The Incoming Call Summary display shows the number of incoming calls answered by the VP system yesterday and today. Each vertical bar on the graph represents the number of calls answered for that hour of the day.

Note: A flashing bar indicates that the number of calls received in that hour was greater than the maximum value on the vertical axis. This will never happen if you allow the VP system to automatically adjust the vertical axis (do this by entering 0 in the field MAX CALLS FOR ON-SCREEN GRAPH on the GENERAL INFORMATION screen).

7.10.5 Viewing the Outbound Telemarketing Status Display (DOS-based VP Systems)

If you are using the Outbound Telemarketing optional module, a fourth status screen is available, showing the real-time activity of the program. Each line in the VP system that is placing outbound telemarketing calls displays the current status of the call in progress. If there are more than 8 lines in the system, you can use the <Pg-Up> and <Pg-Down> keys to display the next and previous group of lines. The fields shown within each box are:

- **DIAL:** The telephone number dialed for the call
- **PROG:** The current state of the call (dialing, ringing, playing greeting, etc.)
- **BOX:** The outbound telemarketing box associated with this call
- **Totl:** The total calls placed on this line for the current job

See section 28 for more information.

7.10.6 Understanding the Voice Mail Viewer Application (NT-based VP Systems)

You can view line activity and inbound and outbound call counts on NT-based VP systems by accessing the Voice Mail Viewer application. To launch this program, click on the VOICE MAIL VIEWER icon from the Windows NT desktop. At the password entry prompt, enter **1234** to log in using the default Technician password. (Passwords are specified on the GENERAL INFORMATION screen of the Database Administrator application.) The main screen of the Voice Mail Viewer identifies the line activity and inbound and outbound call counts for each port on the system.

From the Tools menu on the VOICE MAIL VIEWER screen, you can:

- Activate the Trace feature (see section 9.5 for information)
- Manually disconnect a port (any active call is immediately terminated)
- Reset the inbound and outbound call counters for each port
- Reset a mailbox back to its defaults (specified in prototype mailbox 9994)
- Manually invoke a refresh of all message waiting indicator lamps on the system (ensures they are properly reflecting the status of each mailbox's new message queue)

From the History menu on the VOICE MAIL VIEWER screen, you can:

- View the error log file
- Clear the error log file

For more information on system errors, see section 18.

To close the Voice Mail Viewer application, click on Exit from the File pull-down menu on the main VOICE MAIL VIEWER screen.

7.10.7 Understanding the Message Status Viewer Application (NT-based VP Systems)

You can view the number of Old and New messages currently stored in each mailbox on NT-based VP systems by accessing the Message Status Viewer application. To launch this program, click on the MESSAGE STATUS VIEWER icon from the Windows NT desktop. At the password entry prompt, enter

1234 to log in using the default Technician password. (Passwords are specified on the GENERAL INFORMATION screen in the Database Administrator application.) The main screen of the Message Status Viewer identifies the current count of each message type in each mailbox on the system. Click on the NextSet and PreviousSet buttons at the bottom of the screen to refresh the view with additional mailboxes on the system.

To close the MESSAGE STATUS VIEWER, click on the close window icon at the top right of the dialog box.

7.10.8 Viewing VP System Reports (NT-based VP Systems)

NT-based VP systems include an extensive report generation package that allows system administrators to generate reports and view them on any PC installed with Microsoft Excel 97/98. (Note that Microsoft Excel 97/98 is not included with the VP system.)

Starting with version 9.1 of the NT-based VP system, the reports package software is automatically installed during the VP system software installation on the VP system PC. If Microsoft Excel 97/98 is also installed on the VP system PC, you can both generate reports and view reports on the VP system PC. Whether or not Excel 97/98 is installed on the VP system PC, you can also view reports on a networked client PC. To do so, however, you must install the reports package client software on the client PC.

<p>Note: To show reports effectively, client computers must be Pentium 166 PCs or better with at least 32 MB RAM. Set monitor resolution to a minimum of 800 x 600 for best viewing.</p>

To install the reports package client software on a client PC:

1. From the client PC desktop, open Windows Explorer and select the option MAP NETWORK DRIVE from the Tools menu. In the Drive field, assign a drive letter to designate a drive on the client PC that can be mapped. In the Path field, type \\[VP SYSTEM]\REPORTS (where [VP SYSTEM] is the name of the PC on which the VP system software is installed). To continue, click on OK.
2. At the prompt to enter a password, type kvtl0g. If you are prompted to enter a user name, type log. To continue, click on OK.
3. Insert the VP system installation CD into the CD ROM drive of the client PC. If the installation routine automatically starts, cancel out of the installation on the first available screen.
4. Select the Start button from the Windows 95/98 or Windows NT desktop, then select Run. The Run dialog box displays.
5. In the OPEN field, type D:\REPORTS\SETUP.EXE (where D: is the drive letter of the CD Rom drive.).
6. Follow the on-screen prompts to complete the installation.

Note that during installation, you are prompted to enter the Reports Location. Click on the Browse button to locate the mapped drive letter you indicated in step 1. Double-click to select it. The full name of the path to the reports database file DBREPORT.MDB displays in the Reports Location field. Click on the Set button to accept the path as displayed.

To verify you established a link to the DBREPORT.MDB file and the file can be read by the client PC, click on the Test button. If the file cannot be located or read, an error message displays. If you receive an error, confirm you properly completed steps 1-2.

Once the installation process is complete. The PC desktop is updated. From the Start button, you can now select Programs \ Voice Messaging \ View Reports option to view reports of data that is automatically tabulated on the VP system PC each night.

Generating Reports

Each night, the VP system automatically compiles system report data in a Microsoft Access database file named DBREPORT.MDB. This file stores data for each day, up to one year. In the first week of January each year, the DBREPORT.MDB file is renamed DBREPORT.[YEAR].MDB (where [year] is the four-digit year such as 1998), and the DBREPORT.MDB file is cleared to begin tabulation of current year data.

<p>Note: Verify the option GENERATE LOG DATA FOR REPORTS is selected on the Miscellaneous tab of the GENERAL INFORMATION screen. Reports cannot be generated if this option is not selected.</p>

Accessing Reports

You can select to view reports from client PCs on which you have installed both the reports package client software (as described in the previous procedure) and Microsoft Excel 97/98, or from the VP system PC if Microsoft Excel 97/98 is also installed on the PC. To view reports, you click on the Start button and select Programs \ Voice Messaging \ View Reports.

<p>Note: If you view reports from the VP system PC, call processing will be slowed as Microsoft Excel is loaded and populated with report data.</p> <p>Note: When Excel 97/98 opens the workbook, it prompts you to enable the macros within the file. Select the option to Enable Macros, otherwise data within the report cannot be tabulated.</p>
--

No matter how you select to view reports, you are prompted to enter the VP system Administrator password before you can view the system information. Enter the Administrator password that was valid the previous evening (the last time the report data was compiled).

Once you enter the password, the VP system reads the data in the Microsoft Access database file DBREPORT.MDB and opens a Microsoft Excel workbook file containing several worksheets. Each worksheet presents data for a specific report.

Setting up Report Defaults

On the first page of the workbook, you are prompted to enter the name of the company. This name will appear on all subsequent report worksheet pages on-screen and when reports are printed. The STARTED and LAST UPDATED fields on the first page identify the dates for which report data is available. You cannot change these fields.

Under the System Information heading on the first workbook page, the report identifies the number of ports on the system and the total length of messages in hours and minutes that are currently stored. This area also displays the amount of time free for additional voice and fax message storage. This figure helps you quickly identify if the VP system is low on available storage space.

Under the Options heading on the first workbook page, you can modify settings that determine the report time-frame information that will be included by default on report worksheets *the next time you select to view reports*. Note that although you modify the *default* view settings on this page, you can modify the view settings on a report-by-report basis as many times as you like as you view specific report worksheets. You make these report-specific modifications using fields in the upper-right portion on the worksheet screens. When you modify report time-frame settings on a particular screen, you must also select the Update button on the screen to re-draw it using the new settings you specified.

Viewing and Working with Reports

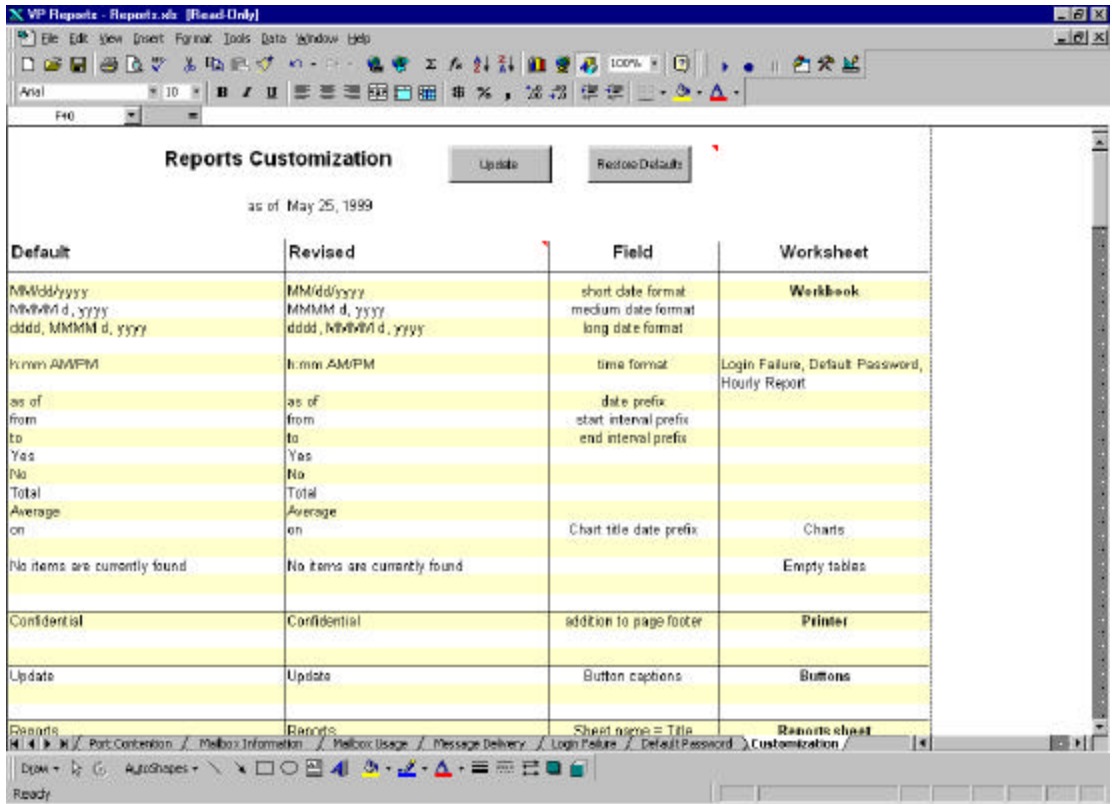
You can sort specific data on report worksheets and print the entire workbook or specific report worksheets using standard Excel commands. You can also use the Save As command on the file menu to save the file to a drive or diskette. (Refer to the Microsoft Excel documentation for additional information.)

Note that while you view and work with the report, the data in the workbook is being read from the Access database file DBREPORT.MDB on the VP system PC. If you use the Save As command to save the report under a different drive, directory, or filename, the workbook will no longer be reading the Access database file, so you cannot modify report time-frame dates and re-generate screens within the report.

When you select to close the Excel file, you are prompted to Save your changes. If you select the Yes option, the VP system saves the name you entered for the company and the default view settings you indicated on the first page of the workbook.

Customizing Reports

Once you access the report workbook, you can customize the presentation of data in each report by changing options on the Reports Customization worksheet. By changing information in the Revised column of this worksheet, you can adjust the presentation of dates and times in the report and the names assigned to fields on report worksheets. The Default column indicates the standard settings shipped with the Report Generation package. You can set any data changes you make in the Revised column back to the defaults by clicking on the Return Defaults button at the top of the Reports Customization worksheet screen.



To change a field name or date/time presentation on a particular worksheet, you must first locate the line on the Reports Customization worksheet on which you need to indicate the change in the Revised column. Do this by scrolling down the Worksheet column to locate the worksheet containing the field you want to change. Look in the Field column to locate a reference to the field. Indicate the change you want to make in the Revised column. Click on the Update button at the top of the screen to apply the change. Be sure to review the worksheet with your revised entry. In some instances, you may find you need to adjust the revision you make because the revised entry does not fit properly onto the worksheet.

To customize the format of date and time displays:

To display:	Use this format:
Months as 1-12	M
Months as 01-12	MM
Months as Jan-Dec	MMM
Months as January-December	MMMM
Days as 1-31	d
Days as 01-31	dd
Days as Sun-Sat	ddd
Days as Sunday-Saturday	dddd
Years as 00-99	yy
Years as 1900-1999	yyyy
Hours as 0-23	h
Hours as 00-23	hh

To display:	Use this format:
Minutes as 0-59	m
Minutes as 00-59	mm
Seconds as 0-59	s
Seconds as 00-59	ss

Understanding Available NT-based VP System Reports

Note: Samples of reports are provided in the *System Supervisor and Subscriber Guide*.

Two types of reports are available with NT-based VP systems:

- System reports—Provide detail and summary statistics on port usage and call activity
- Mailbox reports—Provide detail and summary statistics on individual mailbox usage

There are 6 system reports:

- Class of Service
- Hourly Statistics
- Port Activity
- Port Contention
- Port Contention Trend – Monthly
- Port Contention Trend – Weekly

There are 5 mailbox reports:

- Mailbox Information
- Mailbox Usage
- Message Delivery
- Login Failure
- Default Password

System Reports

Class of Service Report

Description: Displays the current setting for each feature included in each of the 8 available classes of service (numbered 0 through 7), including any outdialing restrictions as well as digits that can be dialed while holding.

Purpose: Use this report to review the contents of all classes of service on a single screen (or piece of paper).

Port Activity Report

Description: Provides call information for each VP system port. As you view the report, you can modify the range of dates to be included.

Purpose: Use this report to monitor overall system performance, such as:

- Are there enough ports to handle all outbound activities (such as wake-up calls, message waiting lamp calls, message delivery calls, etc.) .
- What is the typical average call length? If this number is exceptionally high or low, there may be a technical problem (such as a bad voice board) or a design issue (such as increased call length

resulting because callers are using a new question box or IVR application or because prompts in a Routing box are confusing and callers take a long time to navigate through them).

Hourly Statistics Report

Description: Provides the *average* VP system call activity by hour. You can optionally exclude weekends or Sundays from the report.

Purpose: Use this report to identify peak traffic periods (and potential bottlenecks).

Example:

A spike in the number of calls processed between a certain time period during the day may identify increased traffic resulting from callers experiencing longer than normal hold times, and thus tying up VP system ports for extended periods of time. If a review of the Port Contention report shows that during that same period 100% of the VP system ports are in use, it is likely that additional callers are receiving a busy signal instead of being processed by the system.

Possible solutions:

- Increase the number of people answering calls during that period.
- Adjust call routing or provide additional staff training so calls are handled more efficiently and ports are freed more quickly.
- Increase the ports on the system.

Port Contention Report

Description: Graphically displays the total amount of time the VP system experiences 50%, 75%, and 100% *port contention*, meaning all ports are busy or in use simultaneously. (If a range of days is specified, the information for the busiest day during that range is shown, and the date of that day is identified above the graphic.)

Purpose: Use this report to identify peak traffic time periods. Note that if port contention at any hour is nearing or at 100%, some callers to the company may be hearing a busy signal. This indicates that either additional ports need to be added or staffing, call routing, or other adjustments need to be made as discussed above under Hourly Statistics Report.

Port Contention Trend by Month Report

Description: Graphically displays by month the total amount of time the VP system experiences 50%, 75%, and 100% *port contention*, meaning all ports are busy or in use simultaneously. (This report displays to the right of the Port Contention report.)

Purpose: Use this report to identify *annual* traffic trends or patterns (such as seasonal peaks and valleys in call traffic, a gradual or dramatic growth pattern, etc.).

Port Contention Trend by Day of Week Report

Description: Graphically displays by day the total amount of time the VP system experiences 50%, 75%, and 100% *port contention*, meaning all ports are busy or in use simultaneously. (This report displays to the right of the Port Contention Trend by Month report.)

Purpose: Use this report to identify *daily* traffic trends or patterns (such as which days the business generally experiences peaks and valleys in call traffic).

Mailbox Reports

Mailbox Information Report

Description: Provides *general* information about all mailboxes on the system. (Using Excel 97/98 features, you can sort the report by name, box number, or number of messages.)

Purpose: Use this report to view a summary listing of all mailboxes in the VP system. The report can also serve as an administration and troubleshooting tool. You can:

- Compare at a glance the classes of service assigned to different users.
- Confirm that a group of mailboxes has been given access to VCM or see how many more VCM licenses remain to be assigned (for example, if the total VCM users shown on the report is 48 and 50 licenses have been purchased, two licenses/seats are available).
- Identify potential opportunities for freeing storage space on the hard drive (by identifying mailboxes with exceptionally large numbers of saved messages that may be able to be deleted).
- Identify old mailboxes that are no longer in use and can be deleted.

Mailbox Usage Report

Description: Provides *detailed* information on the use of system mailboxes for the current and previous month. (On-screen options allow you to sort the report by name or box number.)

Purpose: Use this report to track specific activity on how mailbox owners are using their mailboxes. You can also compare activity for the current and previous month. Data on the report may identify subscriber training requirements. The report identifies:

- How frequently the subscriber accesses the mailbox
- Total messages received and sent by the mailbox
- The number of faxes received and sent by the mailbox
- Who is using VCM and to what extent
- Who is using outcalling and to what extent
- How often calls reach voice mail and why (for example, the mailbox owner does not answer or is on the phone)

Message Delivery Report

Description: Provides a summary of all message delivery events by mailbox number.

Purpose: The report can be very useful in controlling costs and to help secure the VP system.

Example:

Consider an employee who leaves the company. As a field technician who was on the road much of the time, the employee had his mailbox set up to deliver all his messages to his current field location

(typically a long distance call). When he left the company, no one deleted his mailbox. The box still receives company-wide broadcast messages, Group box messages, etc., and the messages are still being delivered to his last long distance telephone number.

The report can also be used to help identify potential system security breaches that involve the message delivery feature.

Login Failure Report

Description: Provides a list of all unsuccessful login attempts to system mailboxes. An unsuccessful login attempt occurs when a caller enters a mailbox number but fails to enter the valid password.

Purpose: The report can be useful in identifying suspected security breaches of the VP system.

Default Password Report

Description: Provides information about mailboxes whose subscribers have not changed their password since the mailbox was originally created or reassigned.

Purpose: The report can be useful in identifying mailboxes that pose a security risk to the company, as outside callers may gain subscriber access to the system more easily.

7.11 Understanding Supervisor Features

A mailbox can be provided Supervisor privileges in its assigned class of service by setting the SUPERVISOR STATUS field to YES on the CLASS OF SERVICE screen (see section 4.10).

From any telephone, a Supervisor can call the VP system and:

- Add, delete, and modify mailboxes, Routing boxes, and Question boxes.
- Restore a mailbox that has been suspended.
- Disable a line, so that it will not answer incoming calls.
- Re-enable a line that has been disabled.
- Manually switch to Day Service, Night Service, or Lunch Service mode.
- Change the system broadcast message.
- Modify the system time and date.
- Use the teleparameter feature (see section 11 for details).
- Temporarily suspend a mailbox, so that the owner cannot open it to retrieve messages or use mailbox features.

You can gain access to the Supervisor functions by opening the mailbox, and pressing 6 in response to the Main menu prompt:

*“To listen to the messages, press 1,
to send a message, press 2...etc.”*

Press 6 for the Supervisor menu options:

*“For Mailbox administration, press 1.
For Routing box administration, press 2.
For Question box administration, press 3.
For port administration, press 4.*

To change the system broadcast message, press 5.
 To change the voice mail day / night service, press 6.
 To change the system time, press 7.
 To change the system date, press 8.
 To change system parameters, press 9.
 To run first time setup, press 0.
 Or, to exit, press #.”

Figure 7-5 shows the structure of the Supervisor menus. Each of the options is described below.

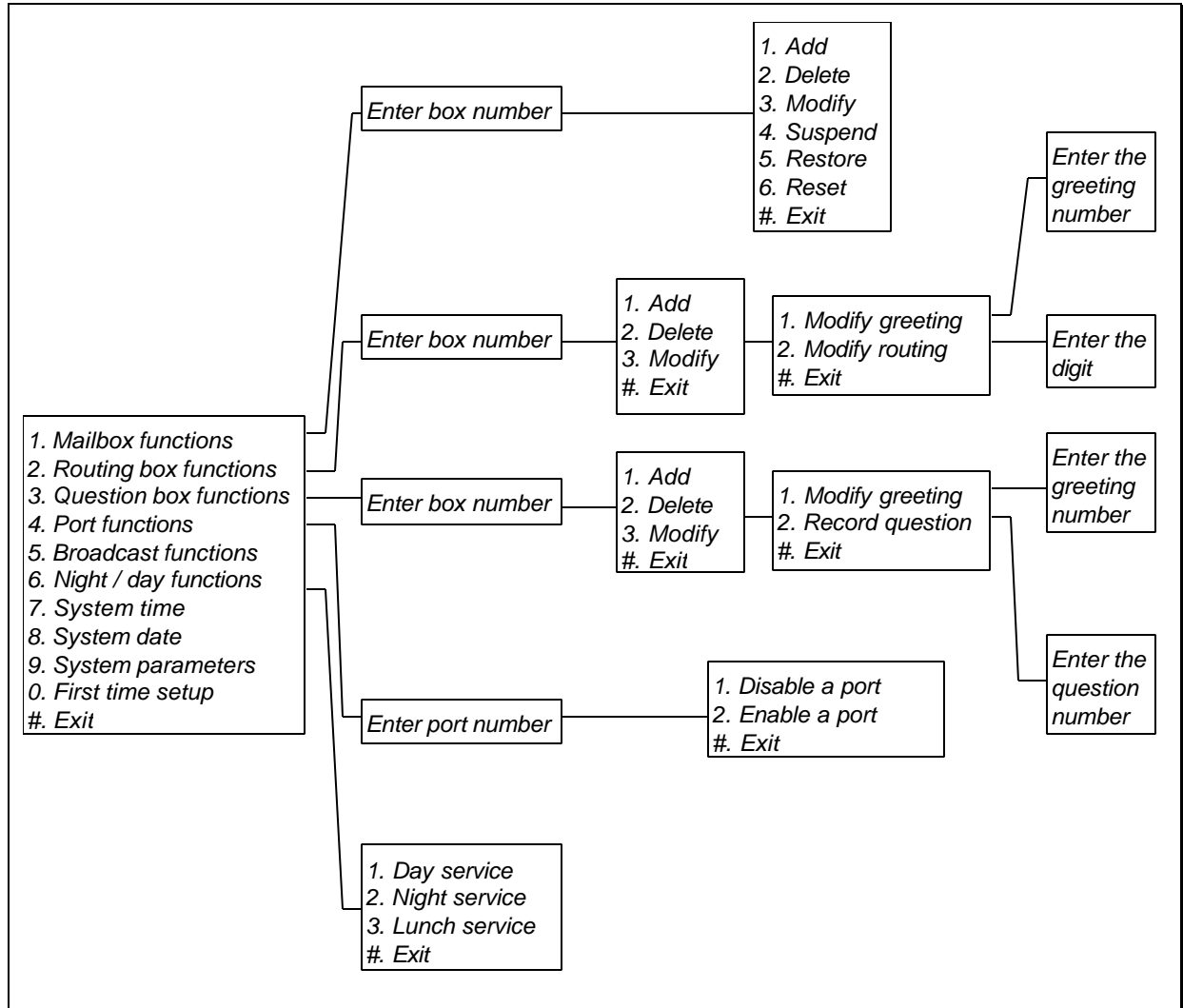


Figure 7-5 Structure of Supervisor Menus

7.11.1 Performing Mailbox Administration

Mailbox administration allows you to call into the system from any phone to:

- Add or delete a mailbox

- Change a mailbox greeting (the mailbox owner can also perform this function by logging into the mailbox)
- Change a mailbox password (the mailbox owner can also perform this function by logging into the mailbox)
- Change the call transfer, pager, and message notification numbers (the mailbox owner can also perform this function by logging into the mailbox)
- Suspend a mailbox (rendering it inaccessible to the mailbox owner) and restoring access to a suspended mailbox)

When you press 1 to select mailbox administration from the main Supervisor menu, the VP system prompts you for the number of the mailbox you want to administrate. Enter the mailbox number. The VP system repeats the number and asks you to confirm it. Press 1 to confirm. The VP system then plays the Mailbox Administration menu:

*“To add, press 1.
To delete, press 2.
To modify, press 3.
To suspend, press 4.
To restore, press 5.
To reset, press 6.
Or, to exit, press #.”*

Adding a Mailbox

If you press 1 to add a mailbox, the VP system determines if the specified box number already exists. If it does not already exist, the VP system creates the box and voices the Operation Completed prompt.

When the VP system creates a mailbox, it makes a copy of the prototype mailbox 9994. Default information set up in the prototype mailbox is copied to the newly created mailbox. (see section 5.5). Once the mailbox is created, you can customize it over the telephone by choosing option 3 from the Mailbox Administration menu, as described later in this section.

Deleting a Mailbox

If you press 2 to delete a mailbox, the VP system ensures the mailbox is not in use, and if not, deletes it. It then voices the Operation Completed confirmation prompt.

Modifying a Mailbox

If you press 3 to modify a mailbox, the VP system opens the mailbox and voices the Options menu:

*“To record the name, press 1.
To record the greeting, press 2.
To change the password, press 3.
To change the call transfer service, press 4.
To change the message notification service, press 5
To change the pager service, press 6.
Or, to return to the main menu, press #.”*

You can customize the mailbox by following the prompts to make necessary modifications.

Suspending a Mailbox

If you press 4 to suspend a mailbox, the VP system marks the mailbox as suspended, then voices the Operation Completed prompt.

A suspended mailbox can still take messages and perform call transfers. However, when the owner attempts to open the mailbox to retrieve his/her messages, he/she is told by the VP system :

“I’m sorry, this box has been taken out of service temporarily.”

Restoring a Mailbox

If you press 5 to restore a mailbox, you remove it from its suspended state. The owner can once again open the box to retrieve messages.

7.11.2 Performing Routing Box Administration

Routing box administration allows you to call into the system from any phone to:

- Add or delete a Routing box
- Change a Routing box greeting
- Change the routing within a Routing box

When you press 2 to select Routing box administration from the main Supervisor menu, the VP system asks for the number of the Routing box you want to administrate. Enter the Routing box number. The VP system repeats the number, and asks you to confirm it. Press 1 to confirm. The VP system then plays the Routing Box Administration menu:

*“To add, press 1.
To delete, press 2.
To modify, press 3.
Or, to exit, press #.”*

Adding a Routing Box

If you press 1 to add a Routing box, the VP system determines if the specified box number already exists. If it does not already exist, the VP system creates the box and voices the Operation Completed prompt.

Once the Routing box is created, you can customize it over the telephone by choosing option 3 from the Routing Box Administration menu, as described later in this section.

Deleting a Routing Box

If you press 2 to delete a Routing box, the VP system ensures the Routing box is not in use, and if not, deletes it. It then voices the Operation Completed prompt.

Modifying a Routing Box

If you press 3 to modify a Routing box, the VP system voices the Routing Box Options menu:

*“To change the greeting, press 1.
To change the routing, press 2.
Or, to exit, press #.”*

If you press 1 to change the greeting, the VP system plays the following menu:

*“To replay the greeting, press 1.
To re-record the greeting, press 2.
To delete the greeting, press 3.
To choose a new greeting, press 5.
Or, to exit, press #.”*

You can change the greeting by following the prompts to make the necessary modifications. Note that selecting option 5 has no effect unless the owner of the Routing box is assigned a class of service that allows multiple greetings.

If you press 2 to change the routing, the VP system plays the following menu:

*“For digit 0 through 9, enter the digit.
Or press * for special routing options.”*

Once you have selected a digit, the VP system identifies the current routing set up for that digit:

“The current destination is [box number]. If you would like to change this, press 1, otherwise press #.”

To change the call routing, enter a new box number to which the calls will be routed when the caller enters the specified digit.

7.11.3 Performing Question Box Administration

Question box administration allows you to call into the system from any phone to:

- Add or delete a Question box
- Change a Question box greeting
- Change the questions within a Question box

Adding a Question Box

If you press 1 to add a Question box, the VP system determines if the specified box number already exists. If it does not already exist, the VP system creates the box and voices the Operation Completed prompt.

Once the Question box is created, you can customize it over the telephone by choosing option 2 or 3 from the Question Box Administration menu, as described later in this section.

Deleting a Question Box

If you press 2 to delete a Question box, the VP system ensures the Question box is not in use, and if not, deletes it. It then voices the Operation Completed prompt.

Modifying a Question Box

If you press 3 to modify a Question box, the VP system voices the Question Box Options menu:

*“To change the greeting, press 1.
To record a question, press 2.
Or, to exit, press #.”*

If you press 1 to change the greeting, the VP system plays the following menu:

*“To replay the greeting, press 1.
To re-record the greeting, press 2.
To delete the greeting, press 3.
To choose a new greeting, press 5.
Or, to exit, press #.”*

You can change the greeting by following the prompts and making the necessary modifications. Note that option 5 has no effect unless the owner of the Question box is assigned a class of service that allows multiple greetings.

If you press 2 to record a question, the VP system prompts you for the question number. Enter the question number (1 - 9 or 0 for question 10). The VP system plays the current question as it is recorded and prompts you:

*“To replay, press 1.
To re-record, press 2.
To delete, press 3.
Or, to exit, press #.”*

You can change the question by following the prompts and making the necessary modifications.

7.11.4 Performing Port Administration

If you want to prevent the VP system from answering calls on one or more of its ports, you can disable the port(s) over the telephone. To disable a port, select option 4 from the Supervisor menu. The VP system asks for the port number. Enter the number of the port you want to disable. The VP system repeats the number you entered and asks you to confirm it. Press 1 if the number is correct. The VP system then prompts you to indicate what action you want to take with the port:

*“To disable, press 1.
To enable, press 2.
Or, to exit, press #.”*

If you press 1, the VP system marks the port as disabled and does not use the port to answer incoming calls or generate outgoing calls. Once the port is disabled, the VP system voices the Operation Completed prompt.

If you press 2 to enable a port, the VP system re-enables the previously disabled port.

7.11.5 Sending Broadcast Messages

A broadcast message is heard by all mailbox owners when they open their mailbox. The broadcast message can only be recorded by a mailbox owner with Supervisor privileges. This type of message is different from any other message in the VP system in the following ways:

- The broadcast message does not activate any mailbox notification services (message waiting lamps, pagers, etc.).
- The mailbox owner's New and Old message counts are not affected by a broadcast message.
- The broadcast message is sent to all mailboxes. It is not possible to select which mailboxes are to receive the broadcast message.

<p>Note: Due to the above characteristics of a broadcast message, users may find it more advantageous to use a Group box to send a message to multiple individuals (see section 5.8).</p>
--

Once a supervisor records a broadcast message, it is played to each mailbox owner the next time he/she opens his/her mailbox. The message is played only one time to each mailbox owner (the next time an owner logs in to his/her mailbox, the broadcast message is not repeated).

To access the Broadcast Message menu, press 5 from the main Supervisor menu. The VP system voices the following menu:

*“To hear the current broadcast message, press 1.
To re-record the broadcast message, press 2.
To delete the broadcast message, press 3.
Or, to exit, press #.”*

If you press 1, the current broadcast message is played. If there is no broadcast message recorded on the system, you hear the system prompt:

“There is currently nothing recorded.”

In either case, you return to the Broadcast Message menu.

If you press 2 to record a new broadcast message, you hear the prompt, *“Please speak after the tone.”* Record the message, then press # to end recording. You can review and re-record the message until you are satisfied with its contents. The new broadcast message replaces the old one (if one existed). Only one broadcast message can be recorded on the system at a time. The message is stored in the file BROADCAST.MS1, where 1 represents the language number.

If you press 3, you delete the currently recorded broadcast message.

7.11.6 Switching to Day Service or Night Service Mode

A system supervisor can override the regular Day Service, Lunch Service, or Night Service mode by forcing the VP system into another mode. The VP system switches to the new service mode and remains in that mode until it is time for the system to automatically switch out of that mode and into another. For example, assume that Day Service mode runs from 8:00 AM until 5:00 PM and Lunch Service mode runs from noon until 1:00 PM. If the supervisor calls in at 9:00 AM (the VP system is in Day Service mode) and forces the VP system into Night Service mode, the VP system remains in Night Service mode until noon. It then automatically switches to Lunch Service mode.

To force the VP system into Day Service, Lunch Service, or Night Service mode, press 6 from the main Supervisor menu. The VP system identifies the mode it is currently in, for example:

“The voice mail system is currently in Day Service mode.”

The VP system then provides the option to switch to another service mode:

*“To change the voice mail system to Day Service mode, press 1.
To change the voice mail system to Night Service mode, press 2.
To change the voice mail system to Lunch Service mode, press 3.
Or to exit without making any changes, press #.”*

You can force the VP system into any of the service modes as required.

<p>Note: The current service mode is displayed in the top-left corner of the Line Status display. If the VP system was forced into the current mode, the mode name is enclosed in brackets. For example, DAY SERVICE indicates the VP system is in Day Service mode in accordance with the time of day. [DAY SERVICE] indicates the VP system is in Day Service mode because the Supervisor forced it into that mode.</p>
--

7.12 Using the Multilingual Feature

7.12.1 Understanding the Multilingual Feature

The VP system can process calls in up to 9 different languages. For the VP system to fully support a language, you must ensure that:

- The system prompts have been recorded in that language
- Each box has a greeting recorded in that language
- The VM.CFG indicates the number of languages you are using with the parameter `LANGUAGES = n` (see section 12)
- You have modified prompts 65, 66, and 67 to include the multilingual options (see section 15 for information on selecting optional pre-recorded prompts)

7.12.2 Switching Between Languages

At the beginning of a call, you can allow the caller to select a language or you can have the VP system select a language automatically. During the call, you can offer the caller the option to change to another language at almost any time.

Selecting a Language at the Beginning of the Call

Note the following considerations regarding language selection at the start of the call:

- You can set up the VP system to allow the caller to choose the language. This is the default operation. When the VP system answers the call, it immediately voices the options recorded in prompt 135:

“Press 1 for English or 2 for Spanish.”

You can re-record prompt 135 if it does not match the languages you are using.

- You can set up the VP system to automatically choose a specific language for any or all of its lines. If you do this, the VP system does not ask the caller to choose a language. To have the VP system automatically select a language, modify the parameter `FIXED LANGUAGE` in the `VM.CFG` file (see section 12). For example, if you have a 4-line system, and you want the VP system to answer lines 1 and 2 in English (Language 1) and lines 3 and 4 in Spanish (Language 2), you add the following lines to the `VM.CFG` file:

```
FIXED LANGUAGE=1, 1
FIXED LANGUAGE=2, 1
FIXED LANGUAGE=3, 2
FIXED LANGUAGE=4, 2
```

Though the system answers with a specific language, the caller still has the option to change to another language, as described below.

Selecting a Language During the Call

Note the following considerations regarding language selection during the call:

- Callers can switch to another language in any Routing box. You simply define a digit that causes the VP system to change languages during the call. This is the TDD digit. To define a TDD digit, modify the `TDD DIGIT` parameter in the `VM.CFG` file (see section 12). For example, to define **9** as the digit that should invoke a different language, add the following line in the `VM.CFG` file:

```
TDD DIGIT=9
```

If the caller dials **9** while in a Routing box, the VP system looks to see if the digit **9** has a destination assigned to it (see section 5.7). If so, the routing takes precedence, and the VP system does not change languages. If the digit **9** does not have a destination assigned to it, the VP system uses the **9** as the TDD digit and switches to the next language.

Assume, for example, the VP system is using 3 languages, and the caller is currently listening to Language 1. If the caller presses **9** while in a Routing box, the VP system starts playing the Routing box greeting again in Language 2. If the caller presses **9** again, the VP system repeats

the greeting in Language 3. If the caller presses 9 one more time, the VP system repeats the greeting in Language 1... etc.

- A mailbox owner can switch languages when he/she has opened his/her mailbox. If the mailbox owner has opened his/her mailbox and is listening to the Main menu, he/she can choose option 5 to switch to a different language. Option 5 switches between languages the same way as the TDD digit does, as described above.

7.12.3 Recording Multilingual System Prompts

As an application example, assume you are setting up a system to process calls in English, French, and Spanish.

Use the prompt recording utility to record the system prompts (see section 15). When you start the program, it defaults to Language 1 (in our example, this is English). Anything you record is recorded as Language 1. To record the French set of prompts:

- On a DOS-based VP system, select `NEW LANGUAGE` from the menu displayed on the utility program screen. Language 2 becomes the default language (everything you record now is recorded as Language 2). When you want to record Spanish prompts, select `NEW LANGUAGE` again, to move on to Language 3.
- On an NT-based VP system, select Language **2** on the `RECORD SYSTEM PROMPTS` screen. Language 2 becomes the default language (everything you record now is recorded as Language 2). When you want to record Spanish prompts, select Language **3**, to move on to Language 3.

By default, the system prompts for Language 1 reside in the directory `\ VM\P` directory. The prompts for Language 2 reside in the subdirectory `\ VM\P\L2`. The prompts for Language 3 prompts reside in the subdirectory `\ VM\P\L3`, etc. See section 16 for more information on how the VP system organizes its files.

Recording Greetings for Individual Boxes

On the `MAILBOX` screen (see section 5.5), you can record greetings for a mailbox.

On DOS-based VP systems, when you move the cursor to the `GREETING RECORDED` field, a menu appears, offering the option to play or record the greeting. If you select `PLAY` or `RECORD` on a multilingual VP system, the VP system asks you which language you want to use (1-9). Enter a number between 1 and 9 to select the language.

On NT-based VP systems, you can record greetings by clicking on the `Record Greeting` button, then using the controls on the `Sound Recorder` dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the `Sound Recorder` dialog box.

<p>Note: On DOS-based VP systems, the YES / NO in the <code>GREETING RECORDED</code> field reflects only whether greeting 0 of Language 1 has been recorded. On NT-based VP systems, the light on <code>Greeting Recorded</code> button reflects only whether greeting 0 of Language 1 has been recorded.</p>
--

Since each mailbox can be allowed (by class of service) up to 10 greetings (0 - 9) and the VP system supports up to nine languages, a single mailbox could have up to 90 recorded greetings.

Recording Box Greetings Remotely

When you call into the VP system to re-record the greeting (see section 6.6), it records and plays the greeting (or the active greeting, if this box has multiple greetings) in the current language. The current language is the one you chose at the start of the call. You can change the current language by selecting option 5 from the Main menu once you open the mailbox. The VP system then records and/or plays the greeting in the new current language.

While the VP system is processing a call, it tries to use the language chosen by the caller. However, in some cases, it may not be able to. For example, if Mike Smith has recorded his mailbox greeting in English and French, but the caller is using Spanish, the VP system cannot play Mike's Spanish greeting. In this case, it plays the default Spanish greeting:

"[Mike Smith] is not available right now. If you would like to leave a message, press 1. To try another extension, press 3..." (Prompts 2 and 3 in Spanish)

Routing box greetings can be recorded using the techniques described above by the Routing box owner, or they can be recorded from the VP system computer (see section 15). If a Routing box has greetings only in English and French, but the caller is using Spanish, the VP system defaults to playing the Language 1 version of the greeting (in this case, English).

7.12.4 Modifying the VM.CFG Configuration File for Multilingual

Edit the VM.CFG configuration file to indicate the number of languages you are using on the system. Do this by adding the following line anywhere in the file:

```
LANGUAGES = n
```

(where n is the number of languages)

As discussed earlier, by default, every line into the VP system is answered with a prompt that requests the caller choose a language. If you want a particular line to not offer the language selection prompt and always answer in a particular language, enter the following in the VM.CFG file:

```
FIXED LANGUAGE = x, y
```

(where x is the line number and y is the new default language for that line)

7.12.5 Understanding D.I.D. Considerations

If you use D.I.D., the VP system receives the D.I.D. digits before it is able to prompt the caller which language it is to use. Since D.I.D. digits usually correspond to a mailbox number, the VP system has an option in each mailbox that allows you to specify which language the VP system should use when a call is routed to the mailbox via D.I.D. See section 5.5 for more information.

7.13 Setting Up the Digit Translation File (TRANS.TXT)

If the VP system is connected to a telephone system that uses voice mail integration (in-band DTMF signaling or out-of-band serial data), or you are connected to Direct Inward Dial (D.I.D.) central office lines, you may need to add digits to, delete digits from, or convert digits in the packet of digits sent by the telephone system to the VP system. You do this by specifying translation rules in a text file named TRANS.TXT.

Note: When run the PBX Setup utility and specify the phone system, the Setup program downloads a default TRANS.TXT file created specifically for the phone system you selected. This TRANS.TXT file functions adequately for most installations. Use the information in this section to make any adjustments you may find are necessary.

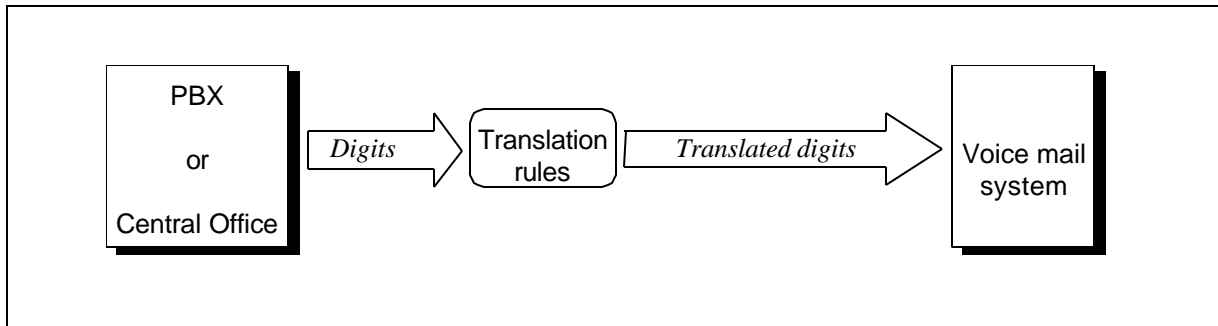


Figure 7-6 Translating Digits from the PBX or C.O.

Note: It is important to note that the translation rules discussed in this section and specified in the TRANS.TXT file apply only for the first few moments after the VP system answers an incoming call, before it plays the initial greeting. The time when translation rules apply is defined in the INITIAL PAUSE field on the OTHER CUSTOMIZATIONS screen (VP systems) / PBX INFORMATION screen (NTVP systems) (see section 4.11). The rules for digit translation do not apply during any other portion of the call.

When the VP system detects incoming digits during the INITIAL PAUSE, it collects and stores them. The VP system then consults the translation table stored in the file TRANS.TXT. If TRANS.TXT does not exist, the VP system processes the digits as usual.

Each line you specify in TRANS.TXT is called a *translation rule*. A translation rule describes how the VP system is to translate a pattern of incoming digits. The format of a translation rule is as follows:

RECEIVED DIGITS = NEW DIGITS

For example, if the telephone system sends the digits **123** and the VP system is to treat these as **9**, the translation rule reads:

123=9

7.13.1 Understanding Digit Translation

Integration digit signals are sent as part of 3 general categories:

- Station identifier digits
- Reason codes
- C.O. line (trunk) identifier digits

This section discusses when you need to use translation rules and how you do so.

Note: When the VP system is connected to a telephone system using voice mail integration, the mailbox number and the number specified in the TRANSFER TO field for each mailbox are in most cases the same.

The first and most frequent use of digit translation rules applies when the TRANSFER TYPE field in a mailbox is set to WAIT FOR RING or BLIND. In these cases, the telephone system must return busy and/or ring-no-answer calls to the VP system, and it must include, at minimum, the extension number of the station forwarded to voice mail. For example:

- The VP system answers a new incoming call, and the caller enters **146** as the called party's extension number.
- The VP system looks at mailbox 146 and blind transfers the caller to extension 146 (see section 7.3 for complete details on the call transfer process).
- Extension 146 rings, but no one is there to answer the call. The telephone system is programmed to call forward-no answer that extension to the VP system.
- The VP system answers the call, which has been forwarded no-answer from extension 146. The telephone system then sends DTMF digits **146**.

Consider what now happens if no digit translation rule is specified. The VP system has answered a ringing line and has received the digits 146. To the VP system, this looks the same as another new call. It has received a valid mailbox number, so the VP system attempts to transfer the call to mailbox 146.

However, this is not a new call. It is one that has already been transferred once and not answered. Therefore, you do not want the VP system to transfer the call again, you want the VP system to immediately play to the caller mailbox 146's personal greeting.

To specify this as the action the VP system is to take, you specify the following translation rule in the TRANS.TXT file:

$$146=146*$$

The left side of the equation represents digits received from the telephone system during the initial pause, and the right side of the equation identifies how the VP system is to translate these digits. In this example, the VP system is instructed that when the digits **146** are received during the initial pause, it is to repeat those digits and add * at the end. The * is the transfer bypass digit, which instructs the VP system to bypass any further attempt to transfer this call, and instead, to play the mailbox owner's personal greeting.

Note: When using the digit translation feature with a telephone system that sends voice mail integration digits, you must specify the placement of the transfer-bypass digit as LAST DIGIT on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems).

If you have used the transfer bypass feature manually, you know that at the conclusion of the process the VP system plays the prompt, “*You may transfer the call now,*” to let the person who is transferring the call know that he/she can hang up. When transfer bypass is specified in the TRANS.TXT file, however, there is no need for the system to play this prompt. To eliminate the prompt, add a short pause followed by a second *. Using the previous example, the translation rule in TRANS.TXT is now:

$$146=146* , *$$

7.13.2 Using Wildcard Characters in Translation Rules

So that you do not have to build a translation rule for each mailbox on the system, the VP system allows you to use certain “wildcard” characters: the letters **N** and **P** through **Z** (letter **O** is not allowed to avoid confusion with zero). Either upper or lower case letters can be used. There are two ways you can use wildcard characters:

- Each wildcard character (**X**, **Y**, **Z**, etc.) can represent any number of digits in a field. This is the default operation.
- Each wildcard character can represent a single digit in a field (you set this by specifying **512** as a custom code, see section 7.13.4).

A *field* is the part of a digit stream that is distinct in type. Each field is separated by a delimiting character. To understand the concept of *fields*, consider the following translation rule:

$$\#X\#Y\#=X, Y$$

On the left of the equal sign, there are two fields of incoming digits (X and Y) separated by the digit #, which is the delimiter (# separates the fields). On the right side of the equal sign, the delimiter is a comma, which is the only delimiter character the VP system recognizes.

Note: The \$ and the @ character can also be used as wildcard characters in translation tables. These characters differ from other wildcards, however, in that they cannot be set to represent either a single digit or any number of digits in a field. The \$ character always matches a single digit, and the @ character always matches any number of digits in a field, regardless of whether custom code 512 is specified (see section 7.13.4). You can use the \$ and @ wildcards in DOS-based VP system versions 8.2 revision 6A and higher, NT-based VP system versions 9.1D or higher, and unified messaging VP system versions 10.1 and higher.

Using Wildcards to Translate Extension Numbers Sent by the Phone System

If the telephone system sends *only* the extension numbers of the station when forwarding a call to voice mail, you can use the following translation rule to cover every extension on the system:

$$X=X* , *$$

By default, **X** represents “any number of digits.” Therefore, the mailbox numbers on the system can be of mixed length (for example, 3- and 4-digit mailboxes). This is the most often used translation rule and may be the only one required for the system, especially if Reason codes are not needed. (Reason codes are discussed below.)

7.13.3 Storing the Calling Party's Number

If the incoming digit sequence contains the calling party's telephone number, this can be extracted and stored as the account number for the call. The account number can then be used for various purposes. See section 7.23.

Use the word `CALLER` to tell the VP system which digits represent the calling party's number. Consider an example where the host telephone system sends the calling party's number, followed by a pound, followed by the called extension:

xxxxxxxx#yyyy

To inform the VP system that the first 7 digits represent the calling party's number, you include the following line in the `TRANS.TXT` file:

xxxxxxxx#yyyy=yyyy* , * :CALLER=x

The VP system stores the digits as the account number for the call.

7.13.4 Using Reason Codes

Some telephone systems send additional digits along with extension numbers when a call is forwarded to voice mail. These additional digits are called *Reason codes* because they explain why the call has been sent to the VP system. The terminology used by each telephone system varies, but the most common reasons for a call to be sent to voice mail are:

- Forwarded on no-answer
- Forwarded on busy
- Forwarded all calls
- Direct call
- Message retrieval (auto log-on)
- Recall

These Reason codes may be sent before or after the station extension number. Sometimes the codes and their placement are fixed by the telephone system, and sometimes you can make modifications. If you can make modifications, choose *only* those codes that the VP system needs and choose digits that will not conflict with mailbox numbers (such as *, #, A, B, C, D). These guidelines help to keep the translation rules simple. Below are examples of Reason codes sent first and for Reason codes sent last in the digit string.

Reason Codes Sent Last (As a Suffix to Extension Number)

Example using simple translation rules: Assume you working with a telephone system that provides Reason codes that are flexible (programmable), but are always sent *after* the extension number. The system sends Reason codes for Busy, Ring-no-answer, and Auto log-on only.

You want to treat both busy and ring-no-answer calls the same way, sending them to the mailbox owner's personal greeting. If for both of these call types, the DTMF digit **A** is specified as the Reason code, the translation rule is:

$$XA=X^*, *$$

This rule specifies that when any number of digits (**X**) followed by the digit **A** is received from the phone system, the VP system is to repeat those same digits (**X**), remove the **A**, and add ***, *** at the end.

Now consider the case when the Reason code is *not* programmable and the telephone system sends, for example, a **6** to indicate busy and a **7** to indicate ring-no-answer, then the extension number. The translation table format and content must be modified. Consider the consequence if you retained the format and simply modified the rule to read:

$$X6=X^*, *$$

This rule functions well as long as there is never a 6 in the extension number. Consider, however, if there is a 6 in the extension number. Because **X** indicates "any number of digits," if the call was forwarded from extension 164, the VP system interprets this as 1646. The VP system sees the 1 as the entry for **X** (any number of digit) then sees the first 6, which it interprets as indicating a busy condition. It ignores the last two digits 4 and 6. As a result, it mistakenly translates the string as:

$$1646=1^*, *$$

Which transfers the call to mailbox 1.

To accommodate Reason codes that can conflict with extension numbers and cannot be reprogrammed, you set up wildcard characters so each character represents only one digit (not any number of digits). To indicate you want to use wildcard characters this way, you must enter **512** in one of the CUSTOM fields on the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOM FLAGS screen (NTVP systems) (see section 4.11). Once you make this entry, each wildcard character you enter represents only one digit.

The translation code that accommodates Reason codes **6** (discussed in the example above), reads as:

$$XXX6=XXX^*, *$$

The rule indicates: "for any *three* digits followed by a **6**, repeat the three digits, remove the **6**, and add ***, ***."

To accommodate Reason code 7, you re-enter the rule using the same format and changing the **6** to a **7**:

$$XXX7=XXX^*, *$$

To further simplify these rules, you can combine them and use a second wildcard character **Y**:

$$XXXY=XXX^*, *$$

This rule now specifies, that no matter what Reason code the telephone system sends (represented by **Y**), the VP system is to remove the code, then add ***, ***. The call is transferred directly to the mailbox, and

the caller hears the mailbox owner's personal greeting. One situation that this rule does not accommodate, however, is when the phone system sends an Auto Log-in code.

The Auto Log-in code is sent when a mailbox owner uses a Message Waiting Retrieval button or dials a Message Retrieve code from his/her telephone. By pressing this button or using this code, the owner is attempting to access the voice mail gateway to log in to his/her mailbox. Using the previous example, assume that the telephone system sends a **9** as the Auto Log-in code. The translation rule needed is shown below:

XXX9=#,XXX

This rule translates as "for any three digits received followed by the digit **9**, remove the **9**, insert the digit **#** (since the DESTINATION FOR DIGIT **#** is set on ROUTING BOX screens to go to box 9992, which is the voice mail gateway. The VP system is to then redial the three digits received from the phone system, which indicates the extension number.

To create a TRANS.TXT file that accommodates the two rules created for the above example, you must be aware that the VP system reads the TRANS.TXT file from top to bottom, executing the first rule it finds that matches the incoming digit sequence. Therefore, you must list the most specific rule at the top of the file and the least specific rule at the bottom of the file.

Note: In the translation table TRANS.TXT, the most specific rules must display at the top of the file, descending to the least specific at the bottom of the file.

The TRANS.TXT file for the example discussed above must list the rule for the Auto Log-in code before the more generic rule for Reason codes 6 and 7:

XXX9=#,XXX
 XXXY=XXX*,*

The first statement is the most specific, since the Reason code is specified as a **9**. In the second statement, the Reason code **Y** represents any digit. Since the VP system reads this table from the top down, it matches the rule for the Auto Log-in digit **9**, first, if that is the digit sent by the telephone system. If that is not the digit sent, the second rule is applied (in this example, for digits 6 or 7). If these two statements were reversed in order, the system would never perform the Auto log-on call to box 9992, as the code **1649** when sent from the phone system, would be matched first with the XXXY rule, which would send the call to the mailbox personal greeting.

As a final point to this example, consider an example where Reason codes are sent as the last digit and the system includes variable length mailbox numbers. All of the rules for digit translation still apply. It need only be noted that the longest digit strings should be listed first in the table and the shorter digit strings last. In the example discussed above, if the system used both 3 and 4 digit mailboxes, the translation table would include four entries:

XXXX9=#,XXXX
 XXX9=#,XXX
 XXXXY=XXXX*,*
 XXXY=XXX*,*

The first two rules are similar to the last two, but the first two are more specific. Therefore, they are placed first in the TRANS.TXT file. Length is the second consideration. Considering the two rules that specify the digit 9, the rule with the longer character sequence must be placed first. The same logic applies when ordering the last two rules.

Reason Codes Sent First (As a Prefix to Extension Number)

If you have not already, review section 7.13. The scenario and examples discussed previously are used here, except this section considers how translation rules are affected when the Reason code is sent *before* the extension number. With this in mind, consider the scenario where the VP system transfers a caller to extension 164 and that extension is busy. If the Reason code is sent first by the telephone system, the telephone system forwards the call back to voice mail with the digits **6164**.

In almost every case where Reason codes are sent before extension numbers, you can use the default wildcard characters (where a character such as **X** equals any number of digits). This is possible since the Reason code match is made before an extension number match, and the two are never confused. The only exceptions to this standard involve cases where other types of integration signaling (such as C.O. identifier codes) or D.I.D. lines are in use on the system and therefore, there are dialing plan conflicts.

Consider first, the scenario where there are no other types of integration signaling. There are three general translation rules that both allow the system to recognize the three Reason codes discussed earlier and work for extension numbers of any length:

```
6X=X* , *
7X=X* , *
9X=# , X
```

These three rules work even if the system uses C.O. identifier codes and/or D.I.D. lines, as long as they do not begin with **6**, **7**, or **9**.

D.I.D Line Considerations

Consider the following scenario, which illustrates how you modify translation rules to accommodate systems on which D.I.D lines *do* conflict with digits **6**, **7**, or **9**.

Assume the telephone system has all three-digit mailboxes (and extensions). The system is also receiving D.I.D digits that begin with 6 (600 - 699). First, the translation table wildcard characters must be modified to represent single digits. As discussed earlier, you do this by entering **512** in any CUSTOM field on the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOMFLAGS screen (NTVP systems). This modification forces you to update the translation rules so they now read as follows:

```
6XXX=XXX* , *
7XXX=XXX* , *
9XXX=# , XXX
XXX=XXX
```

If the VP system receives a D.I.D. number during the initial pause, **656**, for example, it is matched to the fourth rule in the table and is not confused with a call that was forwarded from a busy extension. In this case a busy extension is represented by a total of 4 digits (6XXX). When a three-digit number is sent to the VP system, it is interpreted as simply an extension number, even though it begins with a 6. And since this is a new call (just received via a D.I.D. trunk) that includes no Reason code, the VP system passes the digits through the table without modification. The call is transferred to the mailbox owner's extension.

As noted earlier, you can use up to twelve wildcards in the translation table (**N** and **P** through **Z**), but all codes have the same digit representation characteristics. By default, each code can be used to represent *any number of digits*. If CUSTOM is set to **512** on the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOM FLAGS screen (NTVP systems), however, one code represents only a single digit.

C.O. Line Identifier Digits (Trunk I.D.) Considerations

If all of the central office lines are to be answered by the same initial greeting, you *do not* need C.O. line identifier digits.

Consider, however, a company that has two groups of C.O. lines, each with a unique telephone number, for example, 555-1212 for Sales, 555-3434 for Service. The Sales department has 6 lines, designated as C.O. lines 1 - 6 in the telephone system, and the Service department has 5 lines, designated as C.O. lines 7 - 11.

Assume the telephone system does not provide options for assigning I.D. digits. When they are used, they are automatically assigned an I.D. that is the same as the C.O. line number (starting at 01 for line 1, 02 for line 2, etc.). The Sales department's main greeting is in Routing box 500, and the Service department's main greeting is in Routing box 501.

To specify translation rules for these C.O. line identifier digits in the TRANS.TXT file, you make the following entries:

```
01=500
02=500
03=500
04=500
05=500
06=500
07=501
08=501
09=501
10=501
11=501
```

These rules are specified at the top of the TRANS.TXT file, since they are more specific than any rules that use wildcard characters.

Now assume the C.O. line identifier digits sent by the telephone system *are* programmable (they can be selected by the installer). In many cases where the lines are programmable, the programmer can choose any number that is either two-, three-, or four-digits (length may be dictated by the phone system) to assign as an I.D. for each trunk. When specifying translation rules in this case, you can keep the TRANS.TXT file as simple as possible by assigning a unique series of I.D. digits to each grouping of trunks.

For example, if the telephone system allows you to assign any three-digit number as a trunk I.D. (these I.D.s *cannot* conflict with the station extension numbers) you can assign trunks 1 - 6 (the Sales department) I.D. numbers 300 through 305, and trunks 7 - 11 (the Service department) I.D. numbers 400 through 404.

The TRANS.TXT file now reads as follows:

```
300=500
301=500
302=500
303=500
305=500
400=501
401=501
402=501
```

403=501
404=501

Since each group of trunks is using a unique series of numbers, you can simplify the file using wildcard characters:

3XX=500
4XX=501

Note that in this example, one of the `CUSTOM` fields on the `OTHER CUSTOMIZATIONS` screen (VP systems) / `CUSTOMFLAGS` screen (NTVP systems) needs to include the **512** entry discussed earlier, to stipulate that each wildcard character represents *one* digit, not *any number of digits*.

Note: The VP system defaults to begin accepting in-band (DTMF) digits 500 milliseconds after answering the call. Some telephone systems may begin sending digits before the 500 ms has passed, so the VP system may miss them. If you find that the VP system is missing digits at the beginning of a call, you can lower the 500 ms time to 300 ms, by entering the following line in the configuration file `VM.CFG`:

```
OFFHOOK DELAY = 300
```

If this does not correct the problem, refer to section 9 for information on using `TRACE` functions. `TRACE` can help you determine if the VP system is receiving all or part of the expected incoming digits.

Using `TRANS.TXT` and Reason Codes to Play Specific Greetings

Previous material in this section focuses on sending calls with Reason codes (except those with the Auto Log-in code) directly to the mailbox, where callers hear the mailbox's personal greeting. If the mailbox owner has recorded multiple greetings, however, you can further modify `TRANS.TXT` to specify which greeting the caller is to hear. The technique you use to set this up depends on the transfer type used by the mailbox:

- **WAIT FOR RING**

When the mailbox's `TRANSFER TYPE` field is set to `WAIT FOR RING`, if the extension is busy and the calling party decides to leave a message, he/she hears the currently active personal greeting of the mailbox. When the VP system plays the greeting, it has not yet released the call, but it has canceled the transfer process in response to a busy signal. Consider the following example with Mary who owns mailbox 128.

The VP system transfers callers to Mary anytime it can ring her extension (`WAIT FOR RING` transfer). It does not transfer a call if it detects Mary's extension is busy. If the call is not answered, the telephone system forwards the unanswered call back to the VP system and supplies Mary's extension number. In this case, the only time a call is returned to the VP system from a mailbox using `WAIT FOR RING` transfers is under the no-answer condition. (A Reason code is not needed to supply this information).

Mary can record a greeting that plays specifically under this circumstance. The greeting may be worded as follows:

"Hi, this is Mary. I'm either away from my desk or out of the office. Please leave a message and I will return the call as soon as I return."

If Mary records this greeting as, for example, greeting 2 in her mailbox, you can specify the following translation rule, which instructs the VP system to play greeting 2 when it receives a no-answer call from Mary's extension:

$$128=128*,*:G2$$

If the telephone system *does not* supply Reason codes, you can modify this rule for system-wide usage by simply substituting wildcard characters:

$$XXX=XXX* , * : G2$$

If the telephone system *does* supply Reason codes, simply add the ring-no-answer Reason code to the above rule. For example, assume the telephone system uses the prefix digit 7 as the no-answer Reason code. The translation rule is now specified as:

$$7XXX=XXX* , * : G2$$

Not all mailbox owners may care to have two separate greetings. If a greeting requested by a TRANS.TXT rule does not exist (has not been recorded), the VP system plays the currently active personal greeting for that mailbox.

- **BLIND**

To play specific greetings by reason when a mailbox uses a BLIND transfer, the telephone system must provide Reason codes. The VP system makes BLIND transfers unconditionally and does not listen for a busy signal. Therefore, the telephone system must supply some distinguishing information about the call when it returns it to the VP system in a busy or no-answer condition.

Building upon the example discussed above, assume that Mary's mailbox is using BLIND transfers, that she has recorded a "busy" greeting as greeting 0, and the telephone system uses the prefix digit 6 to indicate that a call has been forwarded in the busy condition. Two TRANS.TXT rules are now required for Mary's extension:

$$\begin{aligned} 7128 &= 128* , * : G2 \\ 6128 &= 128* , * : G0 \end{aligned}$$

As described earlier, you can use wildcard characters instead of specific rules for each extension:

$$\begin{aligned} 7XXX &= XXX* , * : G2 \\ 6XXX &= XXX* , * : G0 \end{aligned}$$

When these translation rules are included in the TRANS.TXT file, any mailbox owner can take advantage of this greeting feature as long as he/she records a "busy" greeting as greeting 0 and a "no-answer" greeting as greeting 2. If the greeting called for in the TRANS.TXT rule has not been recorded in a particular mailbox, the currently active personal greeting plays.

You can make a translation rule for each Reason code supplied by the telephone system. More than one rule can be directed to play the same greeting, or you can select a different greeting for each rule (up to 10, which is the maximum number of greetings possible for a mailbox).

7.13.5 Specifying Rules for Recording Calls

Some telephone systems have a record-call feature. To record a call, the telephone system calls the voice mail system, conferences it in to an existing call, and passes the voice mail system a packet of digits meaning “record this call.” For example, the telephone system may send ** followed by the called party’s extension number. To set up the VP system so this code’s translation invokes the VP system’s call record feature, you include the following line in the TRANS.TXT file:

```
**X=X, *, *, 1, 1
```

On a VP system, if you dial an extension number followed by * then *, then you press 1 then 1, the VP system plays the recording tone and immediately begins recording. This is the digit sequence specified on the right side of the equation in the rule shown above.

The recorded conversation is stored as a message for the mailbox represented by X.

Disabling the Recording Tone

If you want to prevent the VP system from playing the tone just before recording, add :N (for No Beep) to the end of the rule in the TRANS.TXT file:

```
**X=X, *, *, 1, 1:N
```

Note: The VP system also has a record-call feature (see section 7.24).

7.13.6 Specifying Digit Translation Based on Time of Day

If you want to use different translation rules based on the VP system service mode (Day Service, Night Service, Lunch Service, or Holiday Service), you place the translation rules in separate files as follows:

Filename	Usage
TRANS.DAY	The VP system uses this file while in Day Service mode.
TRANS.NIT	The VP system uses this file while in Night Service mode.
TRANS.LUN	The VP system uses this file while in Lunch Service mode.
TRANS.HOL	The VP system uses this file while in Holiday Service mode.

If the specific file does not exist (for example, if the VP system is in Lunch Service mode, and the file TRANS.LUN does not exist), then the VP system uses the rules specified in the TRANS.TXT file. If TRANS.TXT does not exist, then no digit translation takes place.

7.13.7 Specifying Digit Translation Based on Port Number

If you want to use different translation rules based on the VP system port number on which the call is received, place the translation rules in separate files, one per port. Name the translation files using the convention:

TRANSn . TXT

where *n* is the VP system port number

For example, to store a separate set of translation rules that are to be used for calls coming in on port 4, put the rules in the file TRANS4.TXT.

If a specific file does not exist (for example, if a call is received on port 3, and the file TRANS3.TXT does not exist), the VP system uses the rules specified in the TRANS.TXT file. If TRANS.TXT does not exist, then no digit translation takes place.

Note: You can use the digit translation based on port and the digit translation based on service mode feature together. For example, if you want to specify a special set of digit translation rules that are to be used only for ports 5 and 6 and only during Night Service mode, you place the rules in two files named TRANS5.NIT and TRANS6.NIT.

The VP system searches for the appropriate translation file in the following order:

1. Looks for TRANSn.xxx
where *n* is the port number and *xxx* is the service mode (DAY, NIT, LUN, HOL).
2. Looks for TRANS.xxx
where *xxx* is the service mode (DAY, NIT, LUN, HOL).
3. Looks for TRANSn.TXT
where *n* is the port number.
4. Looks for TRANS.TXT.

7.13.8 Specifying Rules for Automatic Logon

If the telephone system sends a unique digit sequence when an extension dials the VP system directly, this digit sequence can be used to automatically log the caller into a mailbox. For example, if the telephone system sends the digit sequence ****123** indicating, "This is extension 123 calling to listen to his/her messages," the VP system can translate this sequence to send the caller to the prompt for his/her password. The translation rule (using wildcard characters) for this is as follows:

**xxx=xxx* , #

The digit sequence shown on the right side of the equation represents the keypresses that a caller normally (by default) dials from the main greeting to access the mailbox's (shown as *xxx*) password prompt. With this translation rule, someone calling the VP system from extension 123 is prompted to enter the password for mailbox 123.

If you want subscriber's calling in from their extensions to be able to bypass the password entry prompt and go right to the main voice menu for their mailbox, you can modify the translation rule as shown below:

****xxx=xxx* , # , ??**

The two question marks represent a wildcard password, and they instruct the VP system to bypass the password *provided* the PASSWORD field in the mailbox *also* begins with two question marks (a password of 1234 is entered as ??1234 on the mailbox's MAILBOX screen).

Note: When including the password bypass characters in the translation rule, remember, that *anyone* calling from extension 123 can access the messages in mailbox 123, without having to enter a password. Also remember that the feature does not function properly unless you modify the PASSWORD field on the MAILBOX screen for each mailbox by including ?? before the entry in the field.

7.14 Setting Up the Dial-by-Name Directory

The Directory box (box 9998) provides callers access to the VP systems dial-by-name directory feature. To allow callers to use the dial-by-name directory box feature, you must provide access to Directory box 9998 via system Routing boxes. By default, this is done by setting the DESTINATION FOR DIGIT * on each ROUTING BOX screen to **9998**.

7.14.1 Using the Dial-by-Name Directory

A caller uses the dial-by-name directory by spelling the last name of the party using the letters on the telephone keypad (for Q and Z, callers are instructed to use the number 1). The VP system looks for a name that matches the letters, then says the name and asks for confirmation. For example:

“Mike Smith. If this is the person you want, press 1.”

If more than one name matches the letters entered by the caller, the VP system says each name in turn and asks for confirmation. As each person's name is played, the caller can press 1 to be transferred to that person, press 2 to skip to the next name (this also happens if the caller does not press any key), press 3 to try a different spelling, or press # to exit from the directory area. If the caller presses #, the VP system takes whatever action is specified on the DIRECTORY BOX screen in the field IF NAME NOT FOUND.

When the caller presses 1 to transfer to a person, the VP system (by default) voices the called party's mailbox number, then transfers the call. For example:

“The number is 4127. Please hold for Mike Smith.”

You can modify the configuration of the dial-by-name directory, so the mailbox number is not voiced. This is discussed below.

7.14.2 Keeping a Mailbox Out of the Dial-by-Name Directory

If you do not want a mailbox owner's name and mailbox number to be included in the dial-by-name directory, enter an @ symbol as the first letter of the name entered in the LAST NAME field of the MAILBOX screen. For example, to keep Mary Jones out of the dial-by-name directory, access the MAILBOX screen for her mailbox, and change the LAST NAME field from “Jones” to “@Jones.”

Also, be advised that if no name is recorded for a mailbox, the mailbox is not included in the directory.

7.14.3 Understanding Dial-by-Name Configuration Options

The following options are available to customize the operation of the dial-by-name directory.

Complete Directory Listing

You can configure the VP system so it provides callers the option of hearing a complete listing of all mailboxes on the system. The caller accesses this feature by pressing * during the Directory box greeting. You can enable or disable this feature on the DIRECTORY BOX screen (section 5.9).

Announce Mailbox Number

You can configure the VP system to announce the mailbox number of the party the caller selects from the dial-by-name directory. If you set up the system to announce the called party's mailbox number, the caller can note it for future reference. You can enable or disable this feature on the DIRECTORY BOX screen (see section 5.9).

Last Name / First Name Option

By default, the dial-by-name directory feature is set up to prompt callers to enter the first few letters of the called party's *last* name. You can, however, configure the system to search based on the letters of the called party's *first* name. Last or first name use is set on a system-wide basis. To use the first name in place of the last name, you must make the following changes to the VP system:

- For every person who is to be listed in the dial-by-name directory, reverse the entry of his/her names in the mailbox FIRST NAME and LAST NAME fields. The person's first name should be entered in the LAST NAME field and vice versa.
- Change the greeting in Directory box (box 9998) to request the caller enter letters of the called party's first name. This greeting is located in the \VM\M directory. The file has the filename GT009998.GRT (if you are using the multilingual features, see section 16 for the location of voice files in various languages). Pre-recorded optional greetings are listed below, or you can record a new Directory box greeting using the same keyboard access method available for all boxes.

Number of Letters to Request

By default, the VP system asks the caller to enter 3 letters of the called party's last name. You can configure the system to prompt the caller for fewer or more digits by changing the field MAXIMUM NUMBER OF DIGITS on the DIRECTORY BOX screen. Note that the entry specified here represents the maximum number of keypresses the system collects from a caller. The VP system still attempts to find a match if the caller enters fewer digits. The fastest search, however, occurs when the caller enters the exact number of digits requested.

Directory Box 9998 Greetings

The following 4 pre-recorded options are available for use as the dial-by-name directory greeting. All files are located in the VM\M directory. You can make one of the available options active in the system by copying it over the default greeting. For example, you can activate option 3 by accessing the \VM\M directory from a command prompt and typing:

```
COPY GT009998.OP3 GT009998.GRT
```

Option	Filename	Contents of greeting
Default	GT009998.GRT	<i>"Enter the first three letters of the last name of the party you wish to speak with. Use the one button for Q and Z, or press star for a complete directory."</i>
Option 1	GT009998.OP1	<i>"Enter the first three letters of the last name of the party you wish to speak with. Use the one button for Q and Z."</i>
Option 2	GT009998.OP2	<i>"Enter the first three letters of the first name of the party you wish to speak with. Use the one button for Q and Z, or press star for a complete directory."</i>
Option 3	GT009998.OP3	<i>"Enter the first three letters of the first name of the party you wish to speak with. Use the one button for Q and Z."</i>

Note: If you want to use first names in the dial-by-name directory instead of last names, follow these steps:

1. In each mailbox, insert the owner's last name in the FIRST NAME field, and the first name in the LAST NAME field.
2. Replace the Directory box greeting as described above.
3. Copy over prompt 228 with the optional version you selected above by accessing the \VM\M directory from a command prompt and typing the command:

```
COPY GT09998.GRT C:\VM\P\SPELNAME.VOI
```

7.15 Setting Up Database Lookups

The VP system has the ability to accept up to 20 digits from the caller, then match these digits to an entry in a specific database. Based on the contents of the database file, the VP system can then perform the following functions:

- Route the caller to a system box (mailbox, Routing box, Question box, etc.)
- Allow a caller to dial a particular digit sequence a pre-determined number of times, after which that sequence is no longer be valid (discussed below in the section detailing the explanation point (!) as a special character)
- Allow callers to rapidly access any location or feature within the VP system by assigning "speed dial" digit strings (discussed below in the section detailing the colon (:)) as a special characters)

All databases used with the VP system database lookup feature must be text (ASCII) files, containing one digit string and a box number on each line. Each line can also include special characters to expand the capabilities of the associated Routing box.

7.15.1 Using Database Lookup to Route Calls

To route incoming calls based on the contents of a database lookup file:

1. Construct a database file indicating the keypresses callers can enter and the resulting boxes to which the calls should route. Save the file using a conventional filename (1 to 8 character filename plus a 1 to 3 digit extension). See a DOS manual for information on files and filenames. (See below for information on constructing the database file.)
2. Create a Routing box.
3. For the name of the Routing box, enter the name of the associated database file.
4. Select DATABASE LOOKUP in the Routing box field ROUTE CALL BASED ON.
5. Send calls to this Routing box to access the database. This Routing box is accessed in the same manner as any system Routing box. It can be an Initial Box (as designated in the LINE INFORMATION screen), can be programmed as a DESTINATION FOR DIGIT in another Routing box, as the destination in a GO TO BOX field, etc.

When a Routing box uses a database lookup file to route calls, the DESTINATION FOR DIGIT fields are not used. Therefore, if you want callers to have access to an operator by dialing 0, for instance, then 0 must be included in the database lookup file.

7.15.2 Formatting Basic Database Lookup Files

The first line of a database lookup file must be entered using the following format:

```
default=XXXX, not found=YYYY, default digits=zzzzzzz
```

where:

XXXX is a box number (up to 4 digits)

YYYY is a box number (up to 4 digits)

ZZZZ is a sequence of up to 20 digits (or the word "ACCOUNT" indicating the account number stored for the call)

The rest of the lines in the file must be formatted as follow:

```
ddddddddd,bbbb
```

where:

dddddd is a string of digits (up to 20) that may be dialed by the caller

bbbb is a box number (up to 4 digits).

The ddddd digits can include wildcard characters, as described below.

You can leave out the comma and the box number (just enter the digits dddddd as described above). If you do, the VP system treats the digits as a *default* entry. Default entries are handled as described in step 2 below.

When the VP system has finished collecting digits from the caller, it opens the database file specified on the box setup screen and looks for a matching set of digits. One of 5 things can happen:

Outcome of Search	Action Taken by the VP System
The caller did not enter any digits	The VP system substitutes the DEFAULT DIGITS from the first line of the file, then performs the database lookup.
No match is found	The VP system routes the caller to the NOT FOUND box number listed on the first line of the file.
A match is found, but there is no comma and/or box number on that line	The VP system routes the caller to the DEFAULT box number from the first line of the file.
A match is found, and there is a comma and box number on the line	The VP system routes the call to the box number following the comma.
A match is found, there is a comma and box number on the line, plus a colon, followed by extra digits	The VP system routes the call to the box number following the comma, then it acts as if the extra digits were dialed by the caller, taking the appropriate action.

The following example shows a database lookup file using 5-digit Zip Codes (and no special optional characters) to route calls. Line explanations are shown to the right of the lines .

```

default=800, not found=805, default digits=34231
0,888           Callers dialing 0 are routed to box 888
33444,3000     Callers entering this Zip Code are routed to box 3000
34231,3001     Callers entering this Zip Code are routed to box 3001
33442          Callers entering this Zip Code are routed to default box 800
32222          Callers entering this Zip Code are routed to default box 800
    
```

Note: If you enter the word "ACCOUNT" for the default digits (DEFAULT DIGITS=ACCOUNT), the VP system uses the account number as the default digits if the caller does not enter any digits. See section 7.23. For example, if the caller's telephone number was collected automatically at the beginning of the call using SMDI, and it was stored as the account number, the VP system uses the caller's telephone number in a database lookup if DEFAULT DIGITS=ACCOUNT option.

7.15.3 Using Special Characters in a Database Lookup File

The Pound (#) Character

Since a caller may dial up to 20 digits in a database lookup Routing box, it is useful to inform the caller in the Routing box greeting that he/she can press # at the end of the dialing sequence. The VP system processes the digits immediately, instead of waiting for additional digits:

"Please enter the account number, followed by the pound sign."

By default, the VP system considers # to be an “end of dialing” signal. If you need to use the # as a normal DTMF digit, for example to send a caller to the voice mail gateway, you must enter the custom flag number **32768** in one of the CUSTOM fields of the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOM FLAGS screen (NTVP systems) (see section 4.11). By specifying custom flag number 32768, you can then enter # in the database lookup file as a digit, such as:

```
#,9992
```

You will need to enter this custom flag and the entry shown above if box owners are to have access to their mailboxes when their call into the system is Routed through a database lookup Routing box. You must include this entry in the database lookup file since the DESTINATION FOR DIGIT fields on the ROUTING BOX screen are not active in a database lookup Routing box.

If you specify custom flag 32768 on the OTHER CUSTOMIZATIONS screen (VP systems) / CUSTOM FLAGS screen (NTVP systems), # is no longer considered an “end of dialing” signal, so you should not instruct callers to press # at the end of dialing.

The Exclamation Point (!) Character

If you include ! as the final character of an entry in a database lookup file, the entry can be accessed only once by a caller, then is automatically deleted.

Assume, for example, you are using the VP system to allow readers of a newspaper’s Classified advertisements to call in and access a listed box number. This box is used to provide a description to the caller and/or allow the caller to leave a message. As the owner of the VP system, you have charged the mailbox owner an up-front fee good for 25 replies to his/her classified advertisement. You would then program 25 identical entries in the database lookup table for access to this mailbox:

```
5276,1002!  
5276,1002!  
5276,1002!  
5276,1002!  
5276,1002!  
etc.
```

Each time an outside caller reaches this database lookup Routing box and enters the code 5276, he/she is routed to mailbox 1002, then that entry in the database lookup file is deleted. When all 25 entries have been deleted, the box owner’s pre-paid service discontinues, and the caller is routed to the NOT FOUND box. In that box, you record a message such as:

“I’m sorry, that box is no longer in service.”

The Semi-Colon (;) Character

You can add comments to lines in the database lookup file and specify that they are to be ignored during lookup operations by placing them to the right of the ; character on a line. For example:

```
56423,217 ;Jones, Fred 316 Main St. Anytown, USA (813) 555-1212
```

The name, address, and phone number to the right of the ; character are comments in the file that are ignored during database lookup operations. In this example, these comments identify the individual who was assigned account number 56423 by the company using this feature.

The Colon (:) Character

You can add a **:** character to an entry in a database lookup file to create “speed dialing” digit strings (also referred to as macros) for various VP system functions.

Assume, for example, there is a mailbox owner who recorded six different personal greetings—one for each weekday and one for the weekend. This mailbox owner changes greetings each morning to activate the proper one for the day. These are the steps he/she takes to change the active greeting:

1. Press # to access the voice mail gateway (box 9992).
2. Enter the mailbox number.
3. Enter the password.
4. Press 3 for the Options menu.
5. Press 2 for the Change greeting menu.
6. Press 5 to select a new active greeting.
7. Enter the greeting number (0 through 9).
8. Press # to return to the Options menu.
9. Press # to return to the Main menu.
10. Press # to exit the open mailbox.

To automate this process for the mailbox owner, you can create a database lookup Routing box, then assign a single digit “speed dial” code to the box, which activates a macro dialing string specified in it. The procedure is described below.

Assume the mailbox owner’s mailbox is 101 and the password is 6377. First, you create the database lookup file. In the file, you assign a digit for each day of the week. For purposes of this example, assume this digit is the same as the greeting number for each day. If the mailbox owner recorded Monday’s greeting as greeting 0, for example, then 0 is the speed dialing digit for Monday.

The database lookup entry for Monday is as follows:

0,9992:101,6377,3,2,5,0,#,#,#

This entry stipulates that once the mailbox owner reaches this Routing box, he need only dial **0** to invoke a macro that changes the greeting to greeting 0, which is the Monday version . When the owner dials **0** from the database lookup Routing box , the call routes to the voice mail gateway 9992, and the VP system “speed dials” the rest of the digit string, which includes the mailbox number, password, and key sequence normally entered to invoke the Monday greeting then exit the box.

In the above case, the digit string consists of:

101	(the mailbox number)
6377	(the password)
3	(for the Options menu)
2	(for the Greeting options menu)
5	(to select a new active greeting)
0	(to select greeting zero, the Monday greeting)
#, #, #	(to exit the open mailbox)

To create speed dialing digits for the rest of the week, you make additional entries to the database file, modifying the first digit (the speed dialing code) and the greeting number selected for the day.

Now assume, you need to provide this mailbox owner an additional feature in this database lookup Routing box—an ability to alternate the number in the TRANSFER TO field on the mailbox’s MAILBOX screen between the mailbox owner’s inside extension number and home telephone number.

Digits 0 through 6 are now used as speed dialing codes to activate Monday through Friday and weekend greetings. Therefore, you can use digit 7 as a speed dial digit that activates call transfers to the internal extension and 8 as a speed dial digit that activates call transfers to the home telephone number (5551212). The two entries you add to the database lookup file are:

```
7,9992:101,6377,3,4,1,101,#,#,#
8,9992:101,6377,3,4,1,5551212,#,#,#
```

When setting up speed dial entries, keep in mind that the digits specified after the colon must correspond exactly to the keypresses the mailbox owner would make to manually execute the action once the owner accessed the voice mail gateway and heard the prompt, *"Please enter the mailbox number."*

Other programming considerations:

- You can specify speed dialing codes that are more than one digit in length. To invoke a greeting recorded for use on "snow" days by a school, for example, a school administrator can set up a speed dialing macro that is invoked when he/she presses the numbers corresponding to the letters 's-n-o-w' on the phone keypad. You can use speed dialing codes that are up to 20 digits (but longer codes tend to defeat the purpose of the speed dialing feature).
- Any number of mailbox owner's can be given access to a database lookup Routing box, but it is recommended that each mailbox owner be assigned his/her own database lookup Routing box. This way, the box and its database lookup file can be customized for an individual owner (with mailbox number and password) and it can be updated when necessary, without disrupting other mailbox owner's who would otherwise share the box.
- If the telephone system does not provide a positive means of disconnect, you can include a hang-up box at the end of each speed dial entry. This way, when a mailbox owner accesses a database lookup Routing box, presses a speed dial code to invoke a macro, then just hangs up, the call is routed to a box that hangs-up the call once the macro executes.
- If disconnect supervision is not an issue, you can choose not to include in each macro the # digit, which backs the call out through system menus. By ending the dialing string with the last command—for example, **2** to make greeting two the active greeting—you allow the VP system to play the confirmation prompt. In this example, the caller hears:

"Your current greeting is 2..."

Wildcard Characters in Digits

You can set up database lookup files that include wildcard characters. Wildcard characters serve as placeholders in the database lookup string, each character indicating "match any digit entered at this point." The wildcard characters you can specify are **S**, **T**, **U**, **V**, **W**, **X**, **Y**, and **Z**.

Assume, for example, a database lookup file includes the following line:

```
333xxx:200
```

If the caller enters **333000** or **333498**, the call goes to box 200.

Now assume you want to each caller's area code and phone number (a 10-digit number), but you want to route the call based only on the area code (the first three digits). You enter the following line in the database lookup file:

xxxxyyzzzz , 200 : xxx

In this example, all calls go to box 200. Once in box 200, the VP system re-dials the first three digits of the ten-digit number the caller entered previously. The call is routed from box 200 using these three digits.

7.16 Using Line Groups

There are several VP system features that require the system to place outgoing calls (for example, turning message waiting lamps on and off, calling a pager service, placing message delivery calls). To make these calls, you must allow the system to access one or more of the VP system lines.

Note: The actions the VP system takes to place an outgoing call differ from those taken when the system transfers a call, even if the number the call is transferred to is an external phone number.

You can specify which lines the VP system is to use to make outgoing calls by modifying entries on the LINE INFORMATION screen. To allow the system to use a particular line or lines when making any type of outgoing call, set the field OUTGOING CALLS ALLOWED ? to YES for the lines the system is to use.

To identify specific lines that the system is to use for certain outgoing calls, you place lines in *line groups*. The VP system has 4 available line groups: A, B, C, and D. Each line on a system can be placed in any line group or can be placed in several or no line groups.

To place a line in a line group, access the LINE INFORMATION screen. This screen displays information on the first 8 lines on the system (press <F6> to see the next set of 8 lines if the system has more than 8 lines or use the scroll bar on NT-based VP systems.). The right portion of the screen indicates which lines belong to which line groups. To place line 3 in line group B, for example, press <Enter> until the cursor is in column **B**, and in the third row, then set the field to YES (check the box on NT-based VP systems).

Note: Assigning a line to a line group (entering YES in the line group A, B, C, or D column) overrides a NO entry in the OUTGOING CALLS ALLOWED field.

You can use line groups in two general ways:

- Allow the VP system to place most outgoing calls using any of several lines (by entering YES in the OUTGOING CALLS ALLOWED ? field), and specify a certain line group(s) only to those calls that you want to restrict to certain lines. Use this technique if there are only a few types of calls you want to restrict to certain lines.
- Force all outgoing calls to use only certain lines (by entering NO for all lines in the OUTGOING CALLS ALLOWED ? field), and specify a certain line group(s) to be used for each type of outgoing call the system is to make. Everywhere in the system where you specify an outgoing call number the system is to dial, you indicate whether and which line group the system is to use by including the line group in a set of braces { } before the number (for example, {A}5551212).

Assume the VP system has 8 lines, and all outgoing calls are to use any of the 8 lines with the exception of pager calls, which are to use only lines 7 and 8. On the LINE INFORMATION screen, you select YES in the OUTGOING CALLS ALLOWED ? field for all 8 lines. This way, any outgoing call can use any line. Next, you assign lines 7 and 8 to line group A by entering YES in the line group A column across from lines 7

and 8. Finally, on the screens on which you enter pager numbers, you use the format {A }xxxxxxx. For example:

{A}5551212

Note: When pager numbers are changed remotely by mailbox owners, the VP system allows the pager number to be changed, but retains the line group setting.

For any other outgoing call types (message waiting lamps, etc.) there is no need to specify a line group in the number. These call types default to using any of the 8 lines.

If you prefer to designate specific lines for each type of outgoing call, set up the VP system so the largest group of outgoing calls uses the default line group setup. This way, the number of entries you must customize is minimized.

For example, assume again, the VP system has 8 lines. The system is to use lines 1 - 4 to make calls that turn on and off message waiting lights. On the LINE INFORMATION screen, you set the OUTGOING CALLS ALLOWED? to YES for lines 1 - 4 and to NO for lines 5 - 8. Now, you need only enter the message waiting codes on the MAILBOX screen for each mailbox. You do not have to specify a line group, since those calls will be made only on lines 1 - 4.

Now you can restrict other outgoing calls to certain line groups. To restrict pager notification to use only lines 5 and 6, for example, you can place line 5 and 6 in line group A, then include {A} before every pager number entered on the system. To restrict message delivery to use lines 7 and 8, you can place lines 7 and 8 in line group B, then include {B} before the telephone number in each message delivery CALL field.

Note: If on the LINE INFORMATION screen a line is included in a particular line group (A, B, C, or D), the NO entry in the OUTGOING CALLS ALLOWED? field is overridden when the system attempts to dial an outgoing call using the line group code shown in braces, for examples {A}5551212.

Note: If you set up the Outbound Telemarketing module to place outgoing calls, you should always assign the lines you want the system to use to a line group, then enter this line group letter in the TELEMARKEETING BOX screen. If you do not specify certain lines, the system may use all lines to place outbound calls, thus halting other call traffic.

7.17 Including Time and Date Announcements

You can configure the VP system to say the current time and/or date at almost any point in a call.

To configure the VP system to say the time, you simply create a Routing box and include the word TIME inside brackets [] at the beginning of the box name. The VP system plays the Routing box greeting then announces the current time.

Assume, for example, you create Routing box 2000 and specify the name as [TIME]Current time. You then record the greeting, “The time here at the XYZ Company is.” When a call routes to box 2000, the VP system plays the greeting, then plays the current time, for example:

“The time here at the XYZ Company is twelve twenty-six PM.”

You can use the same technique to configure the VP system to play the current date. Simply insert [DATE] in front of the box name.

Note that a Routing box plays the time or the date, but not both. If you want the system to voice both the time and the date, simply chain two Routing boxes together with the first announcing the time and the second announcing the date. To program this, set up the first Routing box to state the time, and make the following entries on that ROUTING BOX screen:

- Enter 0 in the NUMBER OF SECONDS TO WAIT FOR A DIGIT field.
- In the field IF NO DIGITS DIALED, select GO TO BOX, then enter the number of the Routing box you have configured to say the date.

7.18 Placing Outgoing Calls

If a mailbox owner's assigned class of service permits, the owner can log into his/her mailbox then have the VP system place a call to another number. This feature is similar to the DISA (Direct Inward System Access) feature offered by many telephone systems.

Note: Before permitting outgoing calls in any class of service, be aware that any long distance (toll) calls placed by mailbox owners using this feature are charged to the Central Office lines used by the VP system. To avoid unwanted charges, you can take one of two actions: 1) Block the feature entirely in a class of service by entering NO in the OUTGOING CALLS ALLOWED field on the CLASS OF SERVICE screen. This blocks only this service, not external call transfers (for example, if the mailbox is set to transfer calls to a cellular phone. 2) Use the class of service RESTRICTION fields to enter specific numbers that the system is to block (for example numbers that start with 1976, 911, and 1900).

See section 4.10 for details on class of service.

7.18.1 Understanding the Outgoing Call Feature

To place an outgoing call, the mailbox owner opens his/her mailbox, then selects option 0 from the Main menu. The VP system prompts the mailbox owner to enter the telephone number to which the call is to be made. The system then makes a conference call to that telephone number using the three-way calling capability of the telephone system. The VP system remains on the line for the duration of the call (see section 7.3).

Assume, for example, Mary Jones owns mailbox 7001. Mary is out of town, but she wants to place a call to a client in another state. She simply calls her VP system on its toll-free number and routes to the voice mail gateway. The VP system says, *"Please enter the mailbox number."*

Mary enters 7001. The VP system says, *"Please enter the password."* Mary enters the password. The VP system replies:

"Mary Jones, you have three new messages.

To listen to the messages, press 1.

To send a message, press 2..." and continues offering all the choices available on the Main menu.

Mary presses 0 to place an outgoing call. The VP system says:

“Please enter the telephone number to which you wish to be connected.”

If you have created an external dial rule table `DIALRULE.TXT` (see section 7.25), Mary simply enters the 7 or 10 digit telephone number. If you have not created external dial rules, Mary must first dial the digit 1 if she is making a long distance call.

The VP system checks the number Mary enters against the restricted numbers in Mary’s assigned class of service. If the number is not restricted, the VP system says, *“One moment please,”* and dials the sequence defined in the `SEQUENCE TO INITIATE A TRANSFER - EXTERNAL` field on the `CALL TRANSFER` screen (VP systems) / `PBX INFORMATION` screen (NTVP systems). Note this not an “outgoing call” as defined in the sense of calls made to pagers or to light message waiting lamps, but it is a transfer to an external number using the three-way conference feature.

The VP system then dials the telephone number Mary specified. The system conferences Mary in on the call by dialing the sequence defined in the `SEQUENCE TO COMPLETE A THREE-WAY CALL` on the `CALL TRANSFER` screen (VP systems) / `PBX INFORMATION` screen (NTVP systems).

The call terminates when any of the termination events are detected. Additionally, the VP system interrupts the call at regular intervals, and asks the caller to press 1 if he/she wants to continue the call. If the caller does not press 1, the VP system assumes that the call has ended, and disconnects the line.

7.18.2 Using the Monitor Feature with Outgoing Calls

The Monitor feature provides two functions you can use to track usage of the outgoing call feature. Monitor function 21 logs the mailbox number, the number dialed by mailbox owner, the VP system line number used, and the time and date the call is placed. Monitor function 3 logs the time and date the call ends.

Monitor data can be output to a printer or to a file named `VOICMAIL.MON`. You can use monitor output in conjunction with third-party software to compile reports or billing information. See section 7.1 and 7.2 for complete details on the Call Log and Monitor features.

7.19 Using Data Entry Question Boxes

VP system Question boxes can be set up as data entry devices. Once you define a Question box as a data entry box, all answers collected by the box must be in the form of digits (no voice answers). Digits entered by the caller are stored in a file that can be printed or used in conjunction with other programs to compile order-processing, statistics, or other data. If you use the Question box as a data entry box, the 200-message limit does not apply.

7.19.1 Setting Up a Question Box for Data Entry

To set up a Question box as a data entry box, add the @ character in front of the Question box name on the `QUESTION BOX` screen. For example the name “INTERVIEW QUESTIONS” becomes “@INTERVIEW QUESTIONS.” Also, in the `OWNER` field, enter the number of the Question box itself. If, for example, the

Question box is number 6500, enter **6500** as the owner of the Question box (except when using more than 10 questions as noted below).

7.19.2 Using More than 10 Questions

Each Question box is limited to 10 questions. If you are using the data entry feature, you can ask more than 10 questions by chaining several Question boxes together. When you chain Question boxes together, the first Question box the caller is routed to is known as the *head* of the chain. This box number is used in the filenames containing the data (see the information on filenames below).

Assume, for example, you want to ask 25 questions on each call. Question box 6500 asks questions 1-10, Question box 6505 asks questions 11-20, and Question box 6510 asks questions 21-25. During a call, the caller is routed to Question box 6500 first, so this will be the *head* of the chain. To set up the chain, you follow these steps:

1. Configure all 3 Question boxes as data entry boxes by adding @ as the first character in the BOX NAME field for each box.
2. Record an introductory greeting in box 6500 (if you need one). Do not record a greeting in box 6505 or box 6510.
3. In all 3 boxes, set the OWNER field to 6500 (since 6500 is the head of the chain).
4. In box 6500, instruct the VP system to route the call to box 6505 after asking questions by setting the GO TO BOX field to 6505.
5. In box 6505, instruct the VP system to route the call to box 6510 after asking questions by setting the GO TO BOX field to 6510.

Once the VP system finishes asking all the questions in box 6500, it moves on to box 6505, then to box 6510. When it has asked all the questions in all 3 boxes, it stores the answers in a file. The filenames and file formats are described below.

7.19.3 Specifying an Exit Digit

When you are using a data entry Question box, you cannot predict how many answers each caller will provide. For example, if the Question box is set up to collect orders from callers, you could allow a single caller to place an order with 100 items by creating a series of 200 Question box questions (*“Please enter the item number,” “Please enter the quantity,”* each asked 100 times).

If you specify an Exit digit(s) in each Question box, you can instruct callers in the Question box greeting that they can end the question and answer session and continue the call at any point by entering the digit(s) you specify. You assign Exit digits are assigned on the QUESTION BOX screen, see section 5.6. For example, the greeting may be worded as:

“You have reached the ACME Company automated order entry system. Use the telephone keypad to enter your account number, and the item number and quantity for each product you want to order. You may order up to 100 products. When you are finished, you may press star or simply hang up.”

You can specify any combination of DTMF digits from 1 to 5 digits in length as the Exit digits. In most cases, it is recommended you simply use *. Using digits 0 - 9 limits their use as entries for account

numbers, quantities, etc., and because the # digit is generally used as an “end of dialing” character to speed call processing, it is generally not a good digit to use as an Exit digit.

Once the caller dials the exit digit sequence, the call is immediately routed to the destination box shown next to the AFTER QUESTIONS field.

7.19.4 Providing Confirmation Numbers

You can configure the VP system to automatically issue a confirmation number to each caller who completes a Question box session. The VP system issues a 4-digit numbers between 1000 and 9999 to each caller (when 9999 is issued, the count resets, and the next caller receives confirmation number 1000):

“Your confirmation number is [number]. Press 1 to hear this number again.”

After the confirmation number is voiced, the VP system routes the call to the destination box shown next to the AFTER QUESTIONS field. The system also records the confirmation number as part of the record written to the data file and/or printer.

By default, the VP system does not issue confirmation numbers. To activate this feature, include the parameter QBOX USE CONFIRM NUMBERS in the VM.CFG configuration file.

Note that since the confirmation numbers repeat after number 9000 is issued, you may want to be sure you have the ability to search records for both the confirmation number and a date range. Only this way can you recall the record appropriate to a specific caller. Consider, for example, that a Question box that processes 1500 calls per week, repeats confirmation numbers approximately every 6 weeks.

7.19.5 Specifying Data Filenames

When a Question box is used for data entry, the data is stored in a file in the \DATA directory. The name of the file is DATAxxxx.QBX, where xxxx is the number of the Question box. (If Question boxes are chained together, the xxxx is the number of the head of the chain).

You can specify a different storage directory in the VM.CFG file using the parameter QBOX DATA PATH. To keep the data files on another drive and directory, for example, M:\STATS, you enter the following line in the VM.CFG file:

```
QBOX DATA PATH = M:\STATS
```

7.19.6 Selecting File Formats

Question box data collected from callers is stored in a text file format. You can select one of two formats for the output of the file:

- Vertical file format (default)
- Horizontal file format

Vertical File Format

In the default Vertical format, each answer is stored on a separate line with the time and date displaying above each set of answers. For example, assume there are 3 questions in Question box 6900. Question 1 asks for the caller's telephone number, Question 2 asks for the caller's age, and Question 3 asks for the caller's Social Security Number. After one call, the file DATA6900.QBX is created with the following entries:

```
(blank line)
+++ 8-15-93 11:06:43
(1000)
777
5551212
45
555389999
+++
```

The first line is blank, to provide spacing between each set of answers. The second line contains a marker (+++) and the date and time at which the call was processed. The third line shows in parentheses the confirmation number issued for this call (if this feature is in use). The fourth line contains the account number for the call, if it was collected (see section 7.23). The next three lines (lines 5, 6, and 7) contain the answers entered by the caller for questions 1, 2, and 3 respectively. The final line is a marker indicating the end of the set of answers.

After a second call has been processed, the contents of the file are updated:

```
(blank line)
+++ 8-15-93 11:06:43
(1000)
777
5551212
45
346389999
+++
(blank line)
+++ 8-15-93 11:09:55
(1001)
654
5553444
32
211448888
+++
```

Horizontal File Format

The Horizontal file format is most useful if you plan to use third-party software such as a spreadsheet program to sort and re-format the data. With the Horizontal file format, each field is enclosed in quotation marks and fields are separated by commas. The Horizontal file format displays the information in the previous example as follows:

```
"8-15-93","11:06:43","1000","7772","5551212","45","346389999"
"8-15-93","11:09:55","1001","654","5553434","32","211448888"
```

To set up the VP system to use the Horizontal file format, enter **2** in the first empty `DEBUG` field on the `OTHER CUSTOMIZATIONS` screen (VP systems) / `CUSTOMFLAGS` screen (NTVP systems) (see section 4.11).

7.19.7 Printing Question Box Data

If a printer is connected to the LPT1 port on the VP system PC, you can set up the VP system to print each set of Question box answers at the end of each call. The data is also still written to the file as described above.

By default, the VP system does not automatically print Question box answers. To activate this feature for use with continuous feed printers, add the following line to the `VM.CFG` configuration file:

```
QBOX DATA PRINT
```

To activate this feature for use with single sheet feed printers (such as a laser printer), add the following line to the `VM.CFG` file:

```
QBOX DATA PRINT EJECT
```

When this feature is used with single sheet feed printers, you can use pre-printed forms for the reports.

7.19.8 Archiving Collected Data

By default, the VP system adds data to the Question box data files until you delete them. Alternatively, you can indicate you want the data files to archive at the end of each day. To specify daily archive, add the following line to the `VM.CFG` file:

```
QBOX ARCHIVE
```

At midnight every night, the VP system moves that day's data files into the archive directory `DATA\ARCHIVE`. Each data file filename is changed to indicate the date of the data. The archive filename format is:

```
xxxxxmmdd.QBX
```

where:

- xxxx is the Question box number
- mm is the month
- dd is the day

For example, data archived for Question box 6900 on August 26 is stored in the file `DATA\ARCHIVE\69000826.QBX`.

7.19.9 Confirming Data Entry Digits

If you set up the Question box to play back digit answers for confirmation, the caller is asked to press 1 to indicate digits were entered correctly. If the caller presses **1**, the digits are stored. If the caller presses

some other digit, the VP system assumes the digits are incorrect, and prompts the caller to re-enter them. If the caller does not enter a digit, the VP system assumes the digits are correct, and they are stored.

If, however, you want to configure the VP system so if a callers does not enter a digit at the confirmation prompt, the system assumes the digits entered are *incorrect*, add the following line to the VM.CFG file:

QBOX POS CONFIRM

In this case, if the caller does not respond to a request to press 1, the VP system will not store the digits, and instead, move on to the next question.

7.19.10 Summarizing Available Options

VM.CFG Option	Description	Default
QBOX DATA PATH	Specifies the path where collected data is to be stored.	DATA
QBOX DATA PRINT	Tells the VP system to print a copy of the collected data at the end of each call to a continuous form printer (must be connected to LPT1).	Printing is off.
QBOX DATA PRINT EJECT	Tells the VP system to print a copy of the collected data at the end of each call to a single-sheet printer (must be connected to LPT1).	Printing is off.
QBOX POS CONFIRM	If the VP system asks the caller to confirm an answer, then does not detect a response, it discards the digits.	If no response, store the digits anyway.
QBOX ARCHIVE	Tells the VP system to take each day's collected data and move it to an archive directory.	Do not archive the data, just keep adding to the same file every day.
QBOX USE CONFIRM NUMBERS	Tells the VP system to issue confirmation numbers.	No confirmation numbers issued.

7.20 Setting Up TDD Device Support

The VP system can communicate with Telecommunications Devices for the Deaf (TDD). To set up this feature, simply think of the tones generated by the TDD as a different language, and use the VP system's multilingual capabilities (see section 7.12).

7.20.1 Setting Up TDD Support on DOS-based VP Systems

On DOS-based VP systems, to set up the TDD system prompts, run the DOS-based VP system prompt recording utility (see section 15), and choose Language 2. When you select to record the first prompt, the

VP system asks you to call in on line 1. Make the call from a TDD in the normal manner. Once the call has been accepted by the VP system, you can start recording the prompts:

To record TDD prompts on DOS-based VP systems:

1. When you hear the tone to record, type the contents of the prompt from the TDD.
2. Press <Enter> on the *computer* keyboard when you have finished typing.
3. Repeat this procedure for each prompt you want to record.

You can record Routing box greetings, mailbox greetings, and other system prompts using this technique.

To make necessary TDD adjustments to the VM.CFG configuration file:

1. Indicate to the VP system that you are using more than one language, by including the following line in the VM.CFG file (see section 12):

```
LANGUAGES=2
```

2. For each telephone line connected to the VP system, add a line in the VM.CFG file telling the VP system not to ask the caller to choose a language:

```
FIXED LANGUAGE = <line number>, 1
```

3. Add a line to tell the VP system that it is providing TDD support:

```
TDD AUTO
```

This entry forces the VP system to play a TDD prompt after the initial greeting saying, “*Press 8 for TDD service.*” (This prompt is not voice—it is TDD tones). The VP system also assigns **8** as the TDD digit. When the VP system is in a Routing box, it responds to this digit by changing languages to the next language (the TDD language). The process flow is as follows:

While the VP system is playing a Routing box greeting, it is monitoring the line for digits from the caller. If the caller presses 8, the VP system looks at the field `DESTINATION FOR DIGIT 8` in the Routing box. If this field contains a box number, the VP system routes to that box (routing takes precedence over TDD operation). However, if the `DESTINATION FOR DIGIT 8` field does not contain a box number, the VP system processes the 8 digit as a TDD digit. It stops playing the greeting in the current language and begins playing it in the next language. If the caller was listening to Language 1, the VP system begins playing Language 2. Note that if the caller repeatedly presses 8, the VP system remains in the same box, cycling through each language set up on the system has recorded.

See section 12 options for more information on these VM.CFG file options.

7.20.2 Setting Up TDD Support on NT-based VP Systems

On NT-based VP systems, you must use an additional hardware component to set up TDD prompts. This piece of hardware allows you to connect the TDD device to the microphone port on the VP system PC, thus allowing you to use the NTPROMPT recording utility to record TDD system prompts as you do other system prompts. For information on obtaining the required hardware and using it with the TDD device to record TDD system prompts, contact technical support.

Once you enter TDD prompts on the VP system, you must also make adjustments to the VM.CFG configuration file. Do so as described in the preceding procedure.

7.21 Using the VP System as a Fax Switch

If you have a fax machine connected to an extension of the telephone system, the VP system can automatically transfer incoming fax transmissions to that extension. The VP system recognizes fax tone during the initial greeting and performs the immediate blind transfer to the fax extension.

The incoming caller must be informed that he/she should start the fax transmission as soon as the VP system answers:

“Thank you for calling the ACME Company. If you are sending a fax, please press Start now. Otherwise, you may enter the party’s extension, or press star for a directory.”

Use the following instructions to make necessary system modifications for fax tone transfers.

7.21.1 Configuring Systems Using Rhetorex Boards

If the VP system is a DOS-based system using Rhetorex voice boards, note the following considerations and complete the steps to add the fax tone to the ACCUCALL tone file.

The VP system must detect at least 3 cycles of incoming fax tone before initiating the transfer. At the most, this takes about 13 seconds. You should make sure that the initial Routing box greeting is at least that long to allow the VP system to detect an adequate sampling of the fax tone. If you use a greeting similar to that shown above to prompt callers to press the Start button on their fax machines, be sure to include additional verbiage in the greeting that extends its length at least 13 seconds after the “press Start” instruction. Note that the VP system must detect all 3 cycles of fax tone during one single greeting, therefore you cannot reach the 13 second rule by chaining two Routing box (and hence, Routing box greetings) together.

To add the fax tone to the ACCUCALL tone file:

1. Exit the VP system program. At the \VM prompt, type ACCUCALL then press <Enter>.
2. From the MAIN MENU screen, press <F7> (for Files) then enter the name of the file where the current tone tables are recorded. If you do not know the name of the file, temporarily exit ACCUCALL and start the CONFIGUR program. From CONFIGUR, you can view the filename. Exit CONFIGUR, restart ACCUCALL, and indicate the filename.
3. Press <F7> again to load the file into the program. When the file has loaded, you see the existing tones displayed on the MAIN MENU screen.
4. Press <F8> to go to the EDIT TONES screen. Enter the following data:

NAME	Fax Tone
TYPE	Ring1
TERMINATING	Yes
CADENCE	No
FREQUENCY1	1080

FREQUENCY2	None	
PCPMCODE	16	
ON TIME	528 ms	
ON MAX VAR	592 ms	12%
ON MIN VAR	464 ms	12%
OFF TIME	2992 ms	
OFF MAX VAR	3376 ms	13%
OFF MIN VAR	2608 ms	13%

- Once you add these values, press <F8> then <F8> to add the tone.
- After the tone has been added, press <F10> to return to the MAIN MENU screen, then press <F3> to access the FILTERS screen.
- On the Filters screen, add the frequency **1080** to the Filters table, and change the INBAND RATIO parameter to **-3db**. When these changes have been made, press <F10> to return to the MAIN MENU screen.
- Save the information to the tone file by pressing <F7> to see the original filename, then pressing <F8> to save the current data to that filename.
- Exit the ACCUCALL program by pressing <F10>.

7.21.2 Modifying the Configuration File

To configure the VP system so it can function as a fax switch, you must make the following adjustment to the VM.CFG configuration file (whether the system is using Dialogic or Rhetorex voice boards):

TONE = 16 , x (where x is the mailbox number being used to transfer calls to the fax machine)

See section 12 for VM.CFG information. Setup considerations for this mailbox are detailed in the next section.

Note: After saving the modifications to the VM.CFG file, you must re-boot the computer for the changes to take effect.

7.21.3 Creating a Fax Switch Mailbox

You must create a new mailbox (using the number just entered into the VM.CFG file) that transfers incoming fax calls to the fax machine. When you set up the fax switch mailbox, make the following two entries on the MAILBOX screen:

- In the FIRST NAME field, enter the **&** symbol as the first character (for example, “&Fax”). This prevents the system prompt, “Please hold while I transfer the call...” from playing.
- In the TRANSFER TYPE field, select BLIND.

7.22 Setting Up Multiple Operator Mailboxes

7.22.1 Providing Callers Access to the Operator Mailbox

Whenever callers are in certain Routing boxes or in mailboxes, you can provide them the option of speaking with an operator. It is strongly recommended you provide operator access from every possible Routing box and mailbox. By doing so, you make callers more comfortable with the VP system by ensuring them they can exit to a “live” attendant at virtually any time.

- Routing Box Operator Access**—In every Routing box that routes calls based on either Digits Dialed or Database Lookup, you can give callers the option to press **0** to reach an operator. For Routing boxes using Digits Dialed routing, specify the mailbox to which the VP system is to send “operator” calls in the field DESTINATION FOR DIGIT 0. Be sure to inform callers of the operator access option in the greeting voiced by the Routing box. You can specify the same operator mailbox in several Routing boxes or you can specify a unique mailbox on each ROUTING BOX screen. For information on setting up Routing boxes based on Database Lookup (and providing access to an operator in Routing boxes set up this way), see section 7.15.
- Mailbox Operator Access**—When callers are listening to a mailbox owner’s personal greeting (or the system default greetings if no personal greeting is recorded), you can give them the option to press **0** to reach an operator (see section 5.5 for a list of all options available to callers while listening to a mailbox greeting). The destination mailbox for the operator access option is determined by the mailbox’s assigned class of service. Each class of service can designate an Operator box for both Day Service and Night Service mode (as specified on the BUSINESS HOURS screen). Since there are 8 available classes of service, you can specify up to 16 different operator mailboxes (eight in for the Day Service mode and 8 for the Night Service mode). Or you can specify the same operator mailbox in multiple classes of service. See section 4.10 for more information on setting up classes of service.

7.22.2 Selecting Operator Box Greetings

A default operator mailbox is included with the VP system database as mailbox 888. You can use this box as the operator mailbox throughout the system, or you can create another or additional operator boxes. If you set up other operator mailboxes, you can copy the default greeting used in box 888 to these other boxes. The file you copy, GT000888.GRT, and two other files containing prompts relating to the operator feature are shown below.

Type	Filename	Contents
Operator Name	NM000888.NAM	“The Operator”
Default Operator Greeting	GT000888.GRT	“The Operator is unavailable right now. To try another extension, press 3, or stay on the line to leave a message.”
Operator Greeting Option 1	GT000888.OP1	“The Operator is unavailable right now. To try another extension, press 3, or press 1 if you would like to leave a message.”

These voice files are located in the \ VM\M directory. To copy the default operator box greeting in mailbox 888 to a new mailbox, for example, mailbox 100, access the \VM\M prompt and type:

```
COPY GT000888.GRT GT000100.GRT <Enter>
```

To use the Option 1 greeting in either the default operator mailbox 888 or another box you create, access the \VM\M prompt and copy the file GT000888.OPT. For example, to copy the Option 1 greeting over the default greeting for box 888, type:

```
COPY GT000888.OPT GT000888.GRT <Enter>
```

See section 16 for complete information on how the VP system names and stores the system's voice files.

Note: In the sample database shipped with the VP system, the operator mailbox 888 is set up to record a message immediately after playing the greeting (see above). If you do not want the system to record a message automatically, use the Option 1 prompt for the greeting in the mailbox, and set the Operator mailbox AFTER PLAYING GREETING field to WAIT FOR DIGIT. The VP system takes a message only if the caller presses 1 in response to the greeting.

7.23 Using Account Numbers

Each call can have an *account number* associated with it. The account number can be the caller's telephone number, the caller's account number, etc. At the beginning of the call, the account number is blank. Once an account number has been collected, it is stored for the duration of the call.

7.23.1 Collecting Account Numbers

There are several ways to collect the account number for the call:

- If the telephone system supplies the identity of the caller via DTMF, the VP system can store this as the account number.
- If the telephone system supplies the identity of the caller via a serial-link (for example, Centrex SMDI), the VP system can store this as the account number.
- You can configure the VP system to ask the caller to dial his/her account number (using an Account Number box, as described in section 5.11).

Collecting the Account Number as DTMF

If the calling party's telephone number is supplied as part of a sequence of DTMF digits at the beginning of the call, you can use the digit translation file TRANS.TXT to tell the VP system to use the telephone number as the account number.

For example, assume the telephone system sends the following digit sequence at the beginning of the call:

```
*5551234#2545# where 5551234 is the calling party's number and 2545 is the called extension
```

You add the following line to the TRANS.TXT file to tell the VP system that the first number is to be stored as the account number:

xxxxxxxx#yyyy#=yyy , * :CALLER=x

See section 7.13 for more information on digit translation and the TRANS.TXT file.

Collecting the Account Number from the Serial Link

When the VP system analyzes start-of-call data packets on the serial link, it converts each packet to DTMF digits, which are then used by the TRANS.TXT file. An example TRANS.TXT file set up to translate serial link packets is as follows:

```
A#X#=X* , *
B#X#=X* , *
C#X#=X* , *
AY#X#=X* , *
BY#X#=X* , *
CY#X#=X* , *
DXD=X , * , #
```

If you want to use the calling party's telephone number as the account number, you modify the file as follows:

```
A#X#=X* , *
B#X#=X* , *
C#X#=X* , *
AY#X#=X* , * :CALLER=Y
BY#X#=X* , * :CALLER=Y
CY#X#=X* , * :CALLER=Y
DXD=X , * , # :CALLER=X
```

See section 7.13 for more information on digit translation and the TRANS.TXT file.

7.23.2 Using Account Numbers in System Operations

A call's account number can be used in several places by the VP system:

- If the caller leaves a message during the call, the account number is stored with the message. The mailbox owner hears the account number. If this is a telephone number, the owner can choose to have the VP system transfer to that number.
- The account number can be used as input for the Routing box database lookup feature. Add the words DEFAULT DIGITS=ACCOUNT at the end of the first line in the data file. See section 7.15 for more information on the database lookup feature.
- The account number is stored as part of Question box data entry information.
- The account number is stored in the log file.
- The account number is displayed with the call in VCM.
- The account number can be used as input in IVR applications.
- The account number is included on Talking Classifieds reports.

- On an outbound telemarketing call, the called number is stored as the account number in the log file.

7.24 Recording Calls

You can use the VP system to record calls. Recordings are stored as messages in the mailbox owner's mailbox. You can set up the VP system to record every call, or you can select which calls you want the system to record.

7.24.1 Setting Up Call Recording

<p>Note: The call recording feature functions only on telephone systems that are capable of performing three-way conferences.</p>
--

To set up the call recording feature in a mailbox, access the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems), and verify the field SEQUENCE TO TRANSFER A THREE-WAY CALL is completed accurately.

Access the MAILBOX screen for the mailbox in which you are activating the call record feature. If you want the mailbox to record every call, set the field RECORD CONVERSATION to YES. If you want the mailbox owner to choose which calls are to be recorded, and also change the field TRANSFER TYPE to SCREEN.

7.24.2 Specifying Calls to be Recorded

The VP system can record only calls that were transferred to the extension by the VP system.

If you set up the mailbox to record every call, the mailbox owner takes no action to record calls transferred to his/her extension. All calls are recorded and stored as messages in the mailbox.

If you set up the mailbox to provide the caller the option of recording a call, when the mailbox owner receives a call, the VP system places the caller on hold and plays the call screening prompt to the mailbox owner:

*“I have a call for you.
Press 1 to take the call.
Press 2 if you would like me to take a message.
Press 3...”*

At this prompt, the mailbox owner can press 6 to initiate the call record feature. If the mailbox owner does not want to record the call, he/she presses 1 to take the call without recording it.

When the VP system is to record a call, it transfers the call then looks in the field SEQUENCE TO TRANSFER A THREE-WAY CALL on the CALL TRANSFER screen (VP systems) / PBX INFORMATION screen (NTVP systems). It dials this sequence and remains on the line. The calling party, called party, and VP system are conferenced together. The VP system records the conversation and stores it as a message in the mailbox.

7.24.3 Troubleshooting Call Recording

If you encounter problems with the call record feature, verify the telephone system can conference the 3 parties together at the appropriate point in the call. For example, if the mailbox is using the transfer type WAIT FOR RING, the VP system performs these steps:

1. Hook-flash to place the caller on hold.
2. Dial the called extension, and listen for a call-progress tone.
3. If the called extension is not busy, attempt to conference the ringing extension with the calling party (by dialing the sequence in the field SEQUENCE TO TRANSFER A THREE-WAY CALL).

Try these steps yourself from a single-line telephone to confirm the telephone system allows the call to be conferenced. If it does not, you may not be able to use the recording feature. For additional information, contact customer support.

7.25 Specifying Dial Rules

When the VP system is making an outgoing call, it often does not know if the number it is dialing is complete. This may occur when the system is making:

- An outgoing call for a mailbox owner as described in section 7.18 and the VP system asked the caller to enter the telephone number.
- A telemarketing call (as part of the optional Outbound Telemarketing module) and the VP system gets the telephone number from an external file.
- A fax distribution call (as part of the optional Fax Distribution module) and the VP system asks the caller to enter the number of his/her fax machine.

In these cases, the VP system needs to determine if:

- The number contains an area code
- The area code is necessary for the call to be placed from the location the VP system is dialing
- A prefix set of digits must be added to the number.

You can inform the VP system when to insert digits and remove digits from a number it is to dial by creating the file DIALRULE.TXT. Each time the VP system is about to make one of the call types listed above, it looks for a file with this name. If the file exists, the VP system scans the file for information on whether digits are to be inserted into or removed from the number.

The file should be a standard text file, containing the rules for dialing as specified below. There are 3 types of rules: Insert rule, Delete rule, and Append rule. The DIALRULE.TXT file can contain several rules of each type.

7.25.1 Using the Insert Rule

The Insert rule tells the VP system to insert certain digits when it sees a number beginning with the specified digit sequence. The Insert rule format is as follows:

```
+abc
digits
digits
digits
.
```

where:

`abc` are the digits to be inserted (up to 20 digits)
`digits` are the digits users might dial that require the insertion of the `abc` digits
 (the letter X in this field represents “any digit”)

Note that the rule ends with a line containing a single period.

7.25.2 Using the Delete Rule

The Delete rule tells the VP system to delete a certain number of digits when it sees a number beginning with the specified digit sequence. The Delete rule format is as follows:

```
-n
digits
digits
digits
.
```

where:

`-n` is the number of digits to be deleted from the beginning of the dialed number
`digits` are the digits users might dial that require leading digits to be deleted
 (the letter X in this field represents “any digit”)

Note that the rule ends with a line containing a single period.

7.25.3 Using the Append Rule

The Append rule tells the VP system to append certain digits to the end of a number when it sees a number beginning with the specified digit sequence. The Append rule format is as follows:

```
:abc
digits
digits
digits
.
```

where:

`abc` are the digits to be appended (up to 20 digits)
`digits` are the digits users might dial that require the `abc` digits to be appended
 (the letter X in this field represents “any digit”)

Note that the rule ends with a line containing a single period.

7.25.4 Understanding a Dial Rules Example

Assume the VP system is located in an area where the following dialing rules apply:

- The local area code is 919.
- Calls to numbers outside the 919 area code must be prefixed with a 1.
- Calls to most locations within the 919 area code require that 919 digits are not included (exceptions are listed below).
- Calls to numbers that are within the 919 area code, but that begin with 555, are toll calls and must be prefixed with a 1.
- Calls to numbers that are within the 919 area code, but that begin with 432, must include the 919 digits.

To convey this information to the VP system, you create the file `DIALRULE.TXT` and include the following information:

+1	Denotes the beginning of Insert rule.
xxx-xxx-xxx	Tells the VP system to insert a 1 for all 10-digit numbers.
555-xxxx	Tells the VP system to insert a 1 for all 10-digit numbers beginning with 555.
.	Denotes the end of the rule.
-4	Denotes the beginning of the Delete rule.
1 919 xxx xxxxx	Tells the VP system to delete the leading 4 digits from 10-digit numbers beginning with 1919.
.	Denotes end of rule.
+1919	Denotes the beginning of the Insert rule.
432-xxxx	Tells the VP system to insert digits 1-919 for all 7-digit numbers beginning with 432.
.	Denotes end of rule.

Note that the *order* of these rules is important, since the VP system processes each rule in turn, modifying the original telephone number as it goes.

Using this example, assume the caller enters the number 919-222-1234 as the number of his/her fax machine. The VP system examines the first rule in the file, and sees that all 10-digit numbers should be prefixed by a 1. It changes the number to 1-919-222-1234. Now the VP system examines the second rule, which states that 10-digit telephone numbers beginning with 1919 should be stripped of their first 4 digits. The VP system deletes the first 4 digits, and the new number is 222-1234. The VP system examines the last rule, which states that 7-digit numbers beginning with 432 should be prefixed by the digits 1919. Since the number is 222-1234, the rule is not applied.

7.26 Setting up Network Messaging and External Call Transfers Between VP System Sites

VP systems can perform network messaging and external call transfers between VP systems across locations. Using these features, you can set up VP systems at multiple sites so subscribers at each location can:

- Send messages from their boxes directly to mailboxes at other sites
- Forward messages to mailboxes across sites
- Include mailboxes across sites in group distribution lists
- Transfer calls made to one location into mailboxes (or to extensions) at other sites (provided the phone system allows external call transfers)

To set up network message delivery and/or external call transfers between sites, you configure all sites to use the same mailbox structure, assigning unique mailbox numbers to each subscriber across all sites to be networked. You then indicate special entries in the MESSAGE DELIVERY and/or TRANSFER TO fields in the mailboxes at each site that are assigned to owners at other sites. The following scenario illustrates the general setup steps.

Assume you are networking together 4 sites, each of which has 100 subscribers who need mailboxes (totaling 400 subscribers). Assume also, that the extension number used by each subscriber is the same as the subscriber's mailbox number.

To set up network messaging and external call transfers across sites:

1. At each site, create 400 mailboxes (the total number of subscribers to be "networked").
2. At each site, assign each mailbox to a subscriber within the four sites. Assign the same mailbox number to the same subscriber at each site. For example, Mary Jones, who works at site A, is assigned mailbox 105 on the VP system installed at each of the four sites, even though she only works at site A.
3. At each site, set up the mailboxes that belong to subscribers who work on-premises at the site to transfer calls directly to the extension number belonging to the subscriber (you can do this by entering **X** in the Transfer To field). Set up any other mailbox features as required by the subscriber.
4. At each site, set up the mailboxes that belong to subscribers who work off-premises at the other 3 sites as follows:

In the first Message Delivery field of each external subscriber's MAILBOX screen, specify digits and characters so when a message is received in the mailbox the VP system:

- 1) Dials the phone number of the voice mail gateway at the off-premise site where the subscriber (assigned the mailbox) works
- 2) Pauses to allow the VP system at that site to answer the phone (the pause is signified by entering a series of commas in the field)
- 3) Dials the number of the corresponding mailbox at the site, then dials the transfer bypass digits (usually **), then dials **11** to bypass the mailbox's personal greeting. This sequence transfers the call directly into the mailbox at the site where the subscriber works
- 4) Dials the special character **V**, to deliver the message from the mailbox placing the message delivery call into the mailbox that was just accessed

Now, when a subscriber at one site sends a message to a mailbox that is assigned to a subscriber who works at another site, the mailbox dials the message delivery number, placing a call to the recipient subscriber's VP system and delivering the message to the recipient subscriber's mailbox on that system.

In the Transfer To field of each external subscriber' s MAILBOX screen, specify digits and characters so when a call is routed to the mailbox, the VP system:

- 1) Places an external call, dialing the phone number for the off-premise site' s voice mail gateway.
- 2) Pauses to allow the VP system at that site to answer the phone
- 3) Dials the number of the corresponding mailbox at that site

This way, a call received at one site for an off-site worker is transferred to the VP system at the worker' true site—then onto the recipient' s mailbox and extension number at that site.

Note: Entering this information in the TRANSFER TO field does not ensure external call transfers will be performed. The external call transfer feature must also be supported by the telephone system. Consult the phone system documentation for information.

With this configuration, all sites essentially communicate as one VP system. Subscribers can call and message other subscribers using the same program features and functions, regardless of whether all parties are on the same site or across multiple sites.

See section 5.5 for information on entering information in the MESSAGE DELIVERY and TRANSFER TO fields on MAILBOX screens.

Configuration Considerations

Be advised of the following points when setting up applications that use network messaging and external call transfers between sites:

- The number of commas you include in MESSAGE DELIVERY and TRANSFER TO fields to indicate pauses in dialing varies between systems and setups. Test applications you set up thoroughly to ensure you include the appropriate number of pause characters in the dialing sequences.
- Whenever an external call transfer is placed, the caller experiences a lengthy pause as the system dials the number for the other VP system, pauses for the system to answer, then transfers to the mailbox then the extension. Some callers may be find the lengthy pause excessive and subsequently hang up.

8. Using Hotel Integration Features

8.1 Specifying Guest Boxes

Each guest room typically has its own mailbox. However, you normally do not want to offer the same full range of VP system options to hotel guests as you do to the staff. For example, you probably do not want guests to be able to change their call transfer number or message notification number.

To restrict the options available to a mailbox, set the field `HOTEL GUEST PRIVILEGES ONLY` to `YES` on the mailbox's `MAILBOX` screen.

When a guest opens his/her mailbox, he/she hears:

*“To listen to your messages, press 9.
For saved messages, press 8.
Or to schedule a wake-up call, press *.”*

This limited menu makes it easy for hotel guests to use the core messaging features of the VP system. If you want to further restrict these options, you can prohibit guests from saving and replaying messages. To do so, use the procedure below.

To limit guest features to new messages and wake-up calls:

1. Add the following line to the `VM.CFG` configuration file (see section 12 for more information):

```
MENU.MAIN.QUICK OLD = X
```

2. Use the prompt recording utility to re-record prompt 264 so that it says:

*“To listen to your new messages, press 9.
Or to schedule a wake-up call, press *.”*

8.2 Using the Wake-up Call Feature

8.2.1 Scheduling Wake-up Calls

A guest can set up the VP system to phone his/her room at a specific time. This feature is typically used to schedule wake-up calls. A guest schedules a wake-up call using the procedure identified below.

To schedule a wake-up call:

1. Log into the mailbox in the normal manner. The VP system plays the main guest menu:

*“To listen to your messages, press 9.
For saved messages, press 8.
Or to schedule a wake-up call, press *.”*

2. Press * for the wake-up option. The VP system says, *“There is currently no wake-up call scheduled,”* or, *“We will call you tomorrow at [time previously indicated]. If you would like to change the time, press 1.”*
3. Press 1 to change the wake-up time. The VP system says, *“Please enter the hour at which we should call you.”*
4. Enter the hour you want to be called or press * to cancel the wake-up call. The VP system says, *“Please enter the minutes.”*
5. Enter the minute you want to be called. The VP system says *“Press 1 for AM or 2 for PM.”*

Note: You can set up the system so guests must enter the hour in 24-hour format (for example, 8:00 PM is entered as 20:00). Do this using the parameter 24-HOUR CLOCK DISPLAY in the VM.CFG configuration file. If you set up the system to use 24-hour format, the system does not prompt guests to indicate whether the hour they indicated in step 4 is in the AM or PM. See section 12 for information on using this parameter.

6. Press **1** for AM or **2** for PM. The VP system confirms that the wake-up call has been scheduled: *“We will call you tomorrow at [time scheduled]. If you would like to change the time, press 1.”*
7. If you are satisfied with the wake-up as it is now scheduled, simply hang up.

8.2.2 Making Wake-up Calls

Once the scheduled wake-up time arrives, the VP system calls the guest’s room. It rings the telephone 10 times, waiting for an answer. If the guest does not answer, the system tries again two more times.

When the guest answers, the VP system plays the greeting, *“Hello. This is your wake-up call. If you would like us to call you tomorrow at the same time, press 1.”* If the guest presses 1, a new wake-up call is automatically scheduled for the same time the next day. The system confirms this call with the prompt, *“We will call you tomorrow at [time scheduled].”*

If the caller does not press 1, the system says, *“There is currently no wake-up call scheduled.”*

8.2.3 Administrating Wake-up Calls

If you want to keep track of wake-up calls, there are two logs available.

Logging Each Time a Guest Schedules a Wake-Up Call

The monitor file (see section 7.2 for details) can keep track of each time a guest schedules a wake-up call. To enable this feature, add the following lines to the VM.CFG configuration file:

```
MONITOR = 23
MONITOR = 24
```

These parameters include the following two entries in the monitor file : changes in the wake-up state and changes to the wake-up time. Think of a change to the wake-up *time* as changing the alarm time on an

alarm clock. Think of changing the wake-up *state* as turning the alarm on the clock on or off. The wake-up states are:

- **DISABLED**—The “alarm” is turned off.
- **WAITING FOR TIME**—The “alarm” is turned on, but it is not time to make the call yet.
- **DONE FOR TODAY**—The “alarm” is turned on. The VP system has made the call for the current day and will again make the call tomorrow.

Logging Each Time the VP System Makes a Wake-Up Call To a Guest

The call log file (see section 7.2 for details) tracks each time the VP system makes a wake-up call to a guest. In the log record, the call-type field for a wake-up call is set to **Z**, and the first box in the list of boxes shows the mailbox number called.

8.2.4 Resetting the Guest Mailbox During Room Check-in

The VP system can prepare a mailbox when a new guest checks into the room. This preparation consists of:

- Resetting the mailbox password. (The VP system copies the default password from the prototype mailbox. If the **PASSWORD** field in the prototype mailbox is blank, the VP system sets the password to the mailbox number).
- Deleting any previously-recorded personal greeting.
- Enabling the tutorial (if required).
- Deleting any stored messages.
- Canceling any previously-set wake-up call.
- Resetting the default language.

To automatically reset a mailbox during guest check-in, the VP system must be connected to a Property Management System (PMS) or a PBX that can pass PMS information. Typically, the information is passed over a serial link between the PMS/PBX and the VP system, as described in the following section.

8.3 Integrating with the PMS System

There are several types of PMS systems on the market. The VP system currently integrates with several of these and with certain PBXs that provide PMS-type features. Contact your supplier for information on whether the VP system works with a particular PMS system.

One method of connecting the VP system to the PMS and PBX is shown in Figure 8-1. This method requires the PMS to send check-in information out over two different paths, one to the PBX and one to the VP system. If the PMS requires that the VP system send message waiting indications over the link, the PMS system must be capable of passing this information on to the PBX, to operate the message lamps

on the room telephones. If the PMS does not require message waiting information, the VP system can operate the lamps in the normal manner (by going off-hook and dialing the message-waiting code).

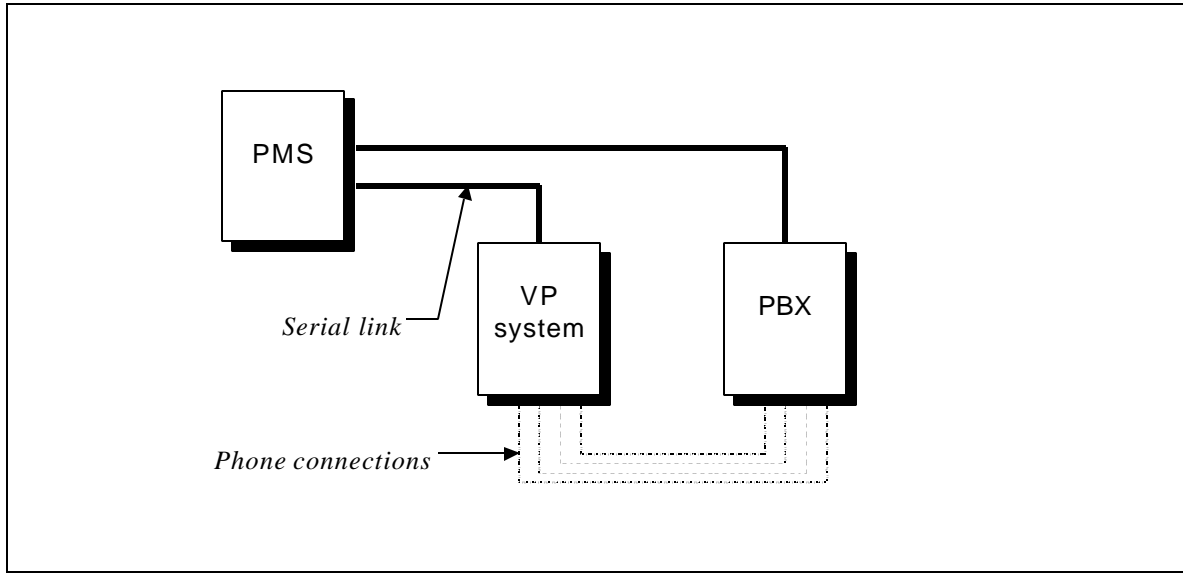


Figure 8-1 Connecting the VP System to a PMS System - Method 1

Another method of connecting the VP system to the PMS and PBX is shown in Figure 8-2. In this configuration, the PBX accepts information from the PMS and passes it on to the VP system. The PMS does not need to know that the VP system even exists.

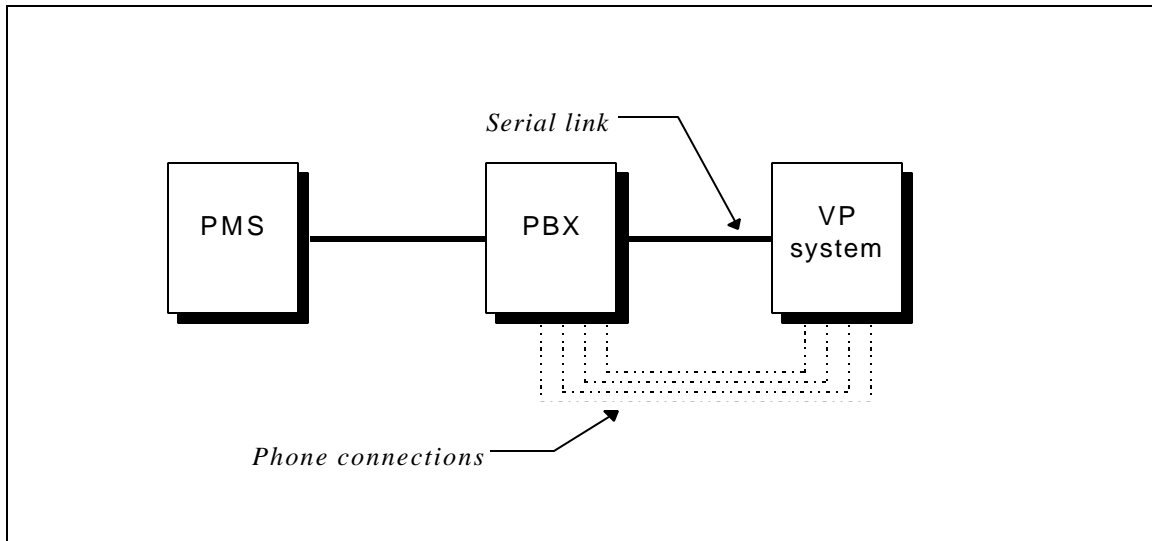


Figure 8-2 Connecting the VP System to PMS System - Method 2

The final configuration (shown in Figure 8-3) connects the VP system directly to the PMS. The PMS does not communicate with the PBX at all. Instead, the PMS sends a check-in message to the VP system each time a new guest checks in. The VP system then prepares the mailbox as described above. When a message arrives for a guest, the VP system turns on the message waiting lamp on the room telephone by going off-hook and dialing the appropriate message-waiting code.

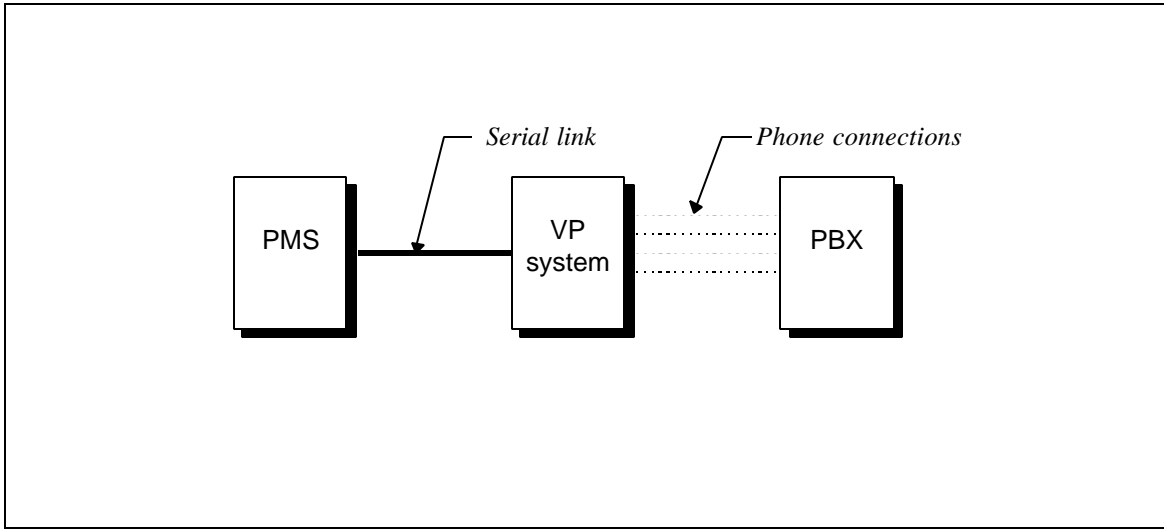


Figure 8-3 Connecting the VP System to PMS System - Method 3

9. Troubleshooting the System

9.1 Using Test Equipment

Available Tools

To troubleshoot most VP system operational issues, you need a Lineman's Test Set or a standard 2500-type telephone set. You connect one of these tools to the telephone lines serving the VP system ports. If you do not have one of these tools or if the VP system is not located near the telephone system's Main Distribution Frame (MDF), you must access the lines using a modular adapter or by wiring additional modular jacks in parallel.

Troubleshooting efforts can also be eased by using a line monitoring / digital DTMF display device. Although the VP system includes a Trace function that can display incoming DTMF digits to the screen (see below), it does not display outgoing digits sent during call transfers or outgoing calls.

Available Software

Since the VP system operates on a personal computer device, it is helpful to have diagnostic and maintenance software at your disposal.

If the VP system is running DOS 6.0 or above, several useful programs are included:

- MSD (Microsoft Diagnostics)—Examines the system and reports the status of hardware components (disk drives, I/O ports, etc.) and the configuration (IRQ settings, memory, etc.)
- DEFRAG—Defragments the hard drive. Fragmenting is caused when files are continuously created and deleted. Because a new file is created each time a message is left in a VP system mailbox, then deleted either automatically or by request of the box owner, the VP system disk drive fragments over time. You can run DEFRAG manually, or set up the VP system to run it automatically (as described below).

If the VP system is running MS-DOS 5, use third-party maintenance software such as Norton Utilities or PC TOOLS to perform diagnostic and defragmenting functions.

If the VP system is running Windows NT version 4.0 or higher, use third-party maintenance software such as Diskeeper to perform diagnostic and defragmenting functions.

9.2 Performing Basic Troubleshooting

Problem	Possible Solutions
PC will not start.	<ul style="list-style-type: none"> • Verify the AC outlet is working properly. • Verify the AC outlet is not connected to a switch leg. • Verify all the power cords are plugged into the correct places in the computer. • If the only sign of activity is the LED on the front of the computer: <ol style="list-style-type: none"> 1. Power down the system and remove the cover. 2. Inside the PC, toward the back, remove the screws that hold down each of the cards. 3. Remove each of the cards and re-seat them. This re-establishes the connection between the cards and the motherboard. 4. Power up the PC and wait for the VP system to reload.
Hard drive failure.	<ul style="list-style-type: none"> • Power down the system and remove the cover. • Re-seat all cards as described above. • Press the connectors on the ribbon cables leading from the hard drive to the controller card. This ensures a secure fit. • Check the internal power cable from the PC power supply to the hard drive. • Use the <i>Hard disk Auto-detect</i> feature in the BIOS setup.
Error message 6309 - Board not configured for this program.	<p>(DOS-based VP systems using Rhetorex boards only)</p> <ol style="list-style-type: none"> 1. Isolate the problem board using the following procedure: 2. Make a backup of the CONFIG file by typing <code>COPY CONFIG CONFIG.BAK</code> 3. Edit the CONFIG file, and remove all lines beginning with <code>RDSP=</code>. 4. Insert the line <code>RDSP=300</code> 5. Power the system down and remove the cover. 6. Remove all Rhetorex boards. 7. For each board, perform the following steps: <ol style="list-style-type: none"> 1. Set the jumpers as shown below: <div data-bbox="496 1367 915 1478" data-label="Diagram"> <p>The diagram shows a horizontal row of 10 jumpers. Each jumper consists of two small white squares (pins) connected by a vertical black bar. The first 7 jumpers have their black bars positioned at the top, while the last 3 jumpers have their black bars positioned at the bottom.</p> </div> 2. Insert the board in the PC. 3. Power up the PC and wait for the VP system to reload.

Problem	Possible Solutions
<p>Error message when PC starts: ROM or RAM detected in Page Frame</p>	<p>(DOS-based VP systems only)</p> <p>This problem sometimes occurs on systems sold as kits (just board and software are sold, the customer or dealer supplies the PC). The error indicates that something else in the computer is using memory in the E0000-EFFFF area, which the VP system normally uses as the EMS page frame. Follow these steps:</p> <ol style="list-style-type: none"> 1. Use a text editor to edit the CONFIG.SYS file (for example, type <code>EDIT CONFIG.SYS</code>). 2. Find the line that begins with <code>DEVICE=C:\DOS\EMM386...</code> 3. Remove the line, and add the following line: <code>DEVICE=C:\DOS\EMM386.EXE RAM 1024 X=D000-D7FF</code> 4. Save the file, and exit from the editor. 5. Re-boot the PC, and watch to see if the error message displays. <p>If the error message displays again:</p> <ol style="list-style-type: none"> 6. Use the text editor to edit the CONFIG.SYS file. 7. Find the line that begins with <code>DEVICE=C:\DOS\EMM386...</code> 8. Remove the line, and add the following line: <code>DEVICE=C:\DOS\EMM386.EXE RAM 1024 X=A000-AFFF</code> 9. Save the file, and exit from the text editor. 10. Go to the \VM directory, by typing <code>CD \VM</code>. 11. Edit the file CONFIG. 12. Find the line that begins with <code>DUALPORT=</code>. 13. Remove the line, and insert a line that reads: <code>DUALPORT=A0</code> 14. Save the file, and exit from the text editor. 15. Re-boot the PC, and watch to see if the error message displays. <p>If the error displays, contact Technical Support.</p>
<p>Error message - Not enough EMS memory</p>	<p>(DOS-based VP systems only)</p> <p>Reset the system by pressing the reset button and watch how the memory is counted on initial startup. The count should reach at least 3700. If the system counts to less than 3700:</p> <ol style="list-style-type: none"> 1. Power down the PC. 2. Re-seat the SIMMs on the motherboard.

Problem	Possible Solutions
<p>The VP system starts in <i>Screen demomode</i></p>	<p>(DOS-based VP systems only)</p> <p>If the system loads, but shows <i>Screen Demo</i> in the upper-left corner of the VP system screen, follow these steps:</p> <ol style="list-style-type: none"> Restart the system and select "2 for DOS" before the VP system loads. Load the voice driver manually as follows: Rhetoex boards: At the \VM prompt, type RHETDRV then press <Enter>. Dialogic boards: At the \VM prompt, type GENLOAD then press <Enter>. A message appears indicating that software is being downloaded to the board. When downloading finishes, type D40DRV -i62 -e256 -y then press <Enter>. Verify the system displays the proper address, correct number of ports, and correct amount of EMS memory. If the driver fails to load manually: <ol style="list-style-type: none"> Power down the PC. Remove the cover of the PC and re-seat the voice board(s). All the boards should be seated evenly into the motherboard, not tilted to one side in the slot. The screw holding the board in should be tight, but not forced. The board should not be bent, cracked, or forced into the slot. Check the jumpers on the board against the picture in section 20.
<p>The VP system starts in <i>Single-line demomode</i></p>	<p>If the system loads, but shows <i>Single-line Demo</i> in the upper-left corner of the VP system screen:</p> <ol style="list-style-type: none"> Confirm the key is plugged into a parallel printer port. If a printer has been plugged into the key, turn the printer on. Reset the PC. <p>DOS-based VP systems using Rhetoex boards only:</p> <ol style="list-style-type: none"> If the VP system still starts in <i>Single-line Demo</i> mode, exit to DOS, and type RENEW. If RENEW displays an error message, then either the key is faulty or the parallel port is faulty. Copy the RENEW program onto another PC, and try the key in that PC.
<p>The VP system does not answer calls</p>	<ol style="list-style-type: none"> Remove the RJ11/RJ14 connector from the back of the VP system PC. Connect that connector to an analog telephone. Dial the extension number for the VP system. <p>If the telephone does not ring, the problem is in the extension wiring or in the PBX programming.</p> <p>If the telephone <i>does</i> ring:</p> <ol style="list-style-type: none"> Run the VP system. Go to the LINE STATUS screen. Set the RINGS TO ANSWER fields to 1 for all ports for Day Service, Night Service and Lunch Service modes. Exit the screen by pressing <F10>. Dial the extension number for the VP system. <p>If the VP system does not answer, there may be an IRQ conflict. The VP system uses IRQ 5. Confirm no other equipment in the PC is using this interrupt (modems, network cards, fax cards, video cards etc.).</p> <p>Run the diagnostic program RDSPTTEST.</p>

Problem	Possible Solutions
The VP system does not transfer calls	See section 7.3.10.
Pagers are not working	See section 7.5.5.

9.3 Troubleshooting Display Problems (DOS-based VP systems)

Checking for Display Problems

Depending on the type of video monitor used by the VP system, you may need to modify the VP system configuration file `VM.CFG` so all of the screens are properly displayed. The general guidelines are:

- If the system has a true monochrome or a color VGA monitor, no modifications are necessary.
- If the system has a mono or paper white VGA monitor, you may need to make one or more file modification. To determine if modifications are necessary, you must start the VP system and make observations of the screen displays.

The best screen to use to determine if modifications are necessary is the `LINE STATUS` screen. Perform the following tests:

1. From the `LINE STATUS` screen, press `<F3>` until the Message Status display appears on the upper-half of the screen.
2. The mailboxes of the demonstration database should display (boxes 10-12, 100-102, etc.) in solid black characters.
3. Leave a message in one of the mailboxes. When the New message count changes from 0 to 1, the display for that box should begin flashing, and may change to a gray half-tone.
4. Log into the test mailbox and listen to the message, but do not delete it. When the New message count changes from 1 to 0 and the Old message count changes from 0 to 1, the mailbox display should stop blinking and remain the same shade of type.
5. Next, leave 10 new messages in the test mailbox. When the New message count reaches 10, the display should change to reverse video and remain flashing.

Fixing Display Problems

If at any time during the above tests, all or part of the test mailbox display disappears from the screen, or if any of the column headers (Box, New, Old) do not display, you should make *one* of following modifications, trying Option 1 first:

Option 1 - Mode MONO

1. Exit the VP system program. At the `\VM` prompt, change to the root directory by typing `CD\` then pressing `<Enter>`.

2. Edit the AUTOEXEC.BAT file by typing `EDIT AUTOEXEC.BAT` then pressing <Enter>. Enter the command `MODE MONO` above the command line `CD\VM`.
3. Press <Alt-F> then <X> to save your changes.
4. Re-boot the computer.
5. Perform the screen display test again and check that all modes of the display are visible. If then problem has not been corrected, go to the next procedure.

Option 2 - Mode W80

1. Exit the VP system program. At the \VM prompt, change to the root directory by typing `CD\` the pressing <Enter>.
2. Edit the AUTOEXEC.BAT file by typing `EDIT AUTOEXEC.BAT` then pressing <Enter>. Enter the command `MODE BW80` above the command line `CD\VM`.
3. Press <Alt-F> then <X> to save your changes.
4. Change to the \VM directory by entering `CD\VM` then pressing <Enter>.
5. Edit the file VM.CFG by typing `EDIT VM.CFG` then pressing <Enter>. When the file is loaded, use the ↓ key to place the cursor on a blank line.
6. Enter the following lines of text. Press <Enter> after each line.

```
color.panel.bg = 0
color.label.bg = 0
color.menu.bg = 0
color.help.bg = 0
color.panel.fg = 7
color.label.fg = 7
color.menu.fg = 7
color.help.fg = 7
```
7. Press <Alt-F> then <X> to save your changes.
8. Re-boot the computer.

If the screen displays are still not correct, contact Technical Support for assistance.

9.4 Calling Technical Support

Before calling technical support, follow these steps:

1. Test call processing on the VP system lines (originating calls, receiving calls, transferring calls, etc.) by disconnecting the lines from the voice processing boards and connecting a test-set or a 2500-type telephone. Remember, the VP system cannot perform any function that cannot be performed manually from a single-line telephone set.

2. Be ready to take the VP system out of service. Technical Support personnel may ask you to check or modify the contents of one or more files. If the VP system is being used as an auto-attendant, make alternate arrangements to have incoming calls answered during system testing.
3. Have test telephone numbers available so you can re-create the problem(s) you are having. The telephone you use to contact Technical Support should *not* be the test telephone extension.

9.5 Using the Trace Feature

The VP system has the ability to display incoming DTMF digits received by the voice processing board. For this feature to function on DOS-based VP systems, enter the letter **D** in a TRACE field on the OTHER CUSTOMIZATIONS screen. On NT-based VP systems, complete the TRACE SETUP screen.

On DOS-based VP systems, you turn ON the digit trace by pressing <Alt-F5>. On NT-based VP systems, you turn ON the digit trace by checking the ACTIVATE TRACE box on the TRACE SETUP screen.

Once you activate the digit trace, as incoming digits are received, each digit generates a line of text on the VP system screen.

As each new digit is received, the display will scroll from bottom to top of this area of the screen. If digits are being received on more than one line at a time, the display information from each of the lines will be interleaved. Therefore, it is best to limit incoming calls during the testing period to eliminate confusion.

Other Trace Functions

There are several other trace functions you can activate by making entries in TRACE fields. These functions have little or no practical application in every day use, but they may be used by Technical Support personnel to resolve particular issues.

On DOS-based VP systems, you indicate the trace functions you want to activate by entering trace flag letters from the table below in the TRACE fields on the OTHER CUSTOMIZATION screen. Described briefly, these functions trace the following events:

Trace Flag	Description
A	Automatically starts tracing all functions when the VP system starts (see note below).
B	Traces box events.
C	Traces commands sent to the voice processing board.
D	Traces incoming digits (as described above).
E	Traces events received from the voice processing board.
G	Traces messages left and retrieved.
H	Traces hold queue events.
L	Traces COM port events and data (use LZ for full COM port data trace).
M	Traces miscellaneous system events.
P	Traces call progress and shows results of call progress analysis (for example, when performing call transfers).

Trace Flag	Description
Q	Traces message waiting, pager notification, and message delivery queues.
S	Traces voice mail states (on-hook, off-hook, dialing, recording, etc.).
T	Traces digit translation information.
V	Traces which voice file (prompts, messages, greetings, etc.) is being played.

On NT-based VP systems, you can set these trace flags in the `TRACE FLAGS` field on the `TRACE SETUP` screen. Or you can simply check the boxes next to specific trace functions you want to activate on the `TRACE SETUP` screen.

Recording Trace Functions

When any of the trace functions are `ON`, they can be displayed on screen and sent to a log file.

- On DOS-based VP systems, to send the trace to a log file, start the trace by pressing `<Alt-F2>` instead of `<Alt-F5>`. The file created is named `TRACE.LOG`, and it is placed in the `\VM` directory. You can also elect to send the trace directly to the printer port. To do so, start the trace by pressing `<Alt-F3>` instead of `<Alt-F5>`. Be advised that the VP system may slow dramatically when printing trace statistics to the printer port. For this reason, it is strongly recommended you send the trace to a log file, then print the log file at a later time, if necessary.
- On NT-based VP systems, the trace is automatically sent to the file `TRACE.LOG` in the `\VM` directory. You can print the `TRACE.LOG` file at any time, if necessary, using a standard windows editor program with printing capabilities.

Note: Use the **A** trace function with caution, since the continuous writing of trace functions to a file can use a large amount of disk space.

10. Using Serial Administration Features on DOS-based VP Systems

DOS-based VP systems include features you can use to control the VP system PC from a second PC connected to it via a null modem cable. These features make it possible for technicians to use a laptop, for example, to work easily with VP systems that do not include a monitor and/or keyboard.

To use serial administration features on DOS-based VP systems, certain VP system program software must be installed on both the VP system (referred to as the *host* PC) and attached PC (referred to as the *remote* PC). The software that must be installed on the VP system PC is called KeyLink Communication software. On turnkey VP systems, this software is pre-installed with all other VP system software. On kit VP systems, KeyLink Communication Software must be installed after other VP system software is installed. The procedure for installing KeyLink on the VP system (*host*) PC is provided below.

Information on installing necessary software on the remote PC is also provided in this section. It is important to note that the software you install on the remote PC and the procedure you use to access and manipulate the VP system depends on whether the remote PC will be running VP system serial administration features in a DOS environment or in a Microsoft Windows 95, 98, 2000, or NT environment. (In most cases, technicians use a laptop running Microsoft Windows software as the remote PC.) Follow the information that is appropriate for the remote PC environment in which you will be working—DOS-based or Windows-based.

10.1 Installing KeyLink on a Kit System Host PC

Use the procedures below to install KeyLink Communication host PC software on a kit VP system PC. Install KeyLink after you install the VP system program software on the PC.

<p>Note: KeyLink host software is pre-installed on all VP system PCs shipped as turnkey systems. If you attempt to install KeyLink host software on a PC that has the program pre-installed, the KeyLink program detects those pre-installed KeyLink files, and it displays a message indicating so.</p>

To install KeyLink host software on the VP system PC:

1. Insert the KeyLink installation diskette into the diskette drive on the PC.
2. At the prompt for the PC' s hard drive (typically C:), type A : INSTALL then press <Enter>.
3. Follow the prompt to install the host software and enter the requested information. When you are prompted to indicate the directory in which you want to install KeyLink files, accept the default directory C:\VM. Accept program default setup selections whenever possible.

Note: On the host (VP system) PC, the VP system software must be already installed on the system, and KeyLink must be installed in the same directory that houses the VP system files. If the KeyLink program is not installed in the directory housing the VP system, the installation program displays an error message indicating so.

When all the necessary files have been copied, a message displays indicating that the installation is complete.

10.2 Installing Necessary Software on a Remote PC

Use the procedures below to install the software necessary for serial administration features on a remote PC. Note that the procedure you follow is based on whether the remote PC will be running VP system serial administration features in a DOS environment or in a Microsoft Windows 95, 98, 2000, or NT environment.

To install serial administration software on a remote PC running a DOS environment:

1. Insert the KeyLink installation diskette into the diskette drive on the PC.
2. At the prompt for the laptop's hard drive (typically C: or D:), type `A : INSTALL` then press `<Enter>`.
3. Follow the prompts to install the remote software and enter the requested information. When prompted to indicate the directory in which you want to install KeyLink files, accept the default directory `\REMOTE`. Accept program default setup selections whenever possible.

When all the necessary files have been copied, a message displays indicating the installation is complete.

To install serial administration software on a remote PC running a Windows 95, 98, 2000, or NT environment:

1. Insert the first Serial Administration installation diskette (#1) into the diskette drive on the PC.
2. From the Start button, choose Programs, then Windows Explorer.
3. On the All Folders side of the Exploring screen, select the diskette drive (typically A:).
4. Double-click on `SETUP.EXE` from the right side of the Exploring screen.
5. Follow the prompts to install the remote software. When prompted to indicate the directory in which you want to install Serial Administration files, accept the default directory. Accept program default setup selections whenever possible.
6. When prompted, remove installation diskette #1 and insert diskette #2. Press OK.
7. When the Setup Complete screen appears, press Finish. A Serial Administration icon displays on the desktop.

10.3 Connecting the Remote PC to the Host PC

You connect the remote PC to the host (VP system) PC by attaching a null modem cable directly between the host and remote computer serial ports.

Connecting a DOS-based Remote PC to the Host PC

For DOS-based PCs, the communication parameters used by KeyLink are controlled by two files : HOST.INI on the host computer and REMOTE.INI on the remote computer. During the KeyLink installation procedure on the host and remote PCs, you specified parameter settings used in the HOST.INI and REMOTE.INI files, including the COM port that the host PC and remote PC are to use. You can modify parameters in the HOST.INI and REMOTE.INI files at any time. HOST.INI is located in the C:\VM directory of the host computer, and REMOTE.INI is located by default in the C:\REMOTE directory of the remote computer.

To establish a communication link between a DOS environment remote PC and host (VP System) PC:

From the remote PC, change to the \REMOTE directory, then type REMOTE and press <Enter>. A screen displays while the program loads and initializes communications. KeyLink then detects the baud rate set on the host PC and establishes a compatible connection. This detection takes several moments.

Once KeyLink establishes a connection between the two systems, the screen refreshes with a display that shows the host PC. The keyboard and monitor of the remote computer now effectively control the host (VP system) PC. The screens you view show the setup and functionality of the VP system host PC, and the keystrokes you make affect the functionality of that PC.

<p>Note: If a connection cannot be established between the host (VP system) PC and the remote PC, verify that you specified the appropriate COM port settings during KeyLink installation. Also verify that you are using a true Null Modem cable. Because visually distinguishing null modem cables from other serial cables is difficult, some users mistakenly use the wrong cable type.</p>

To break the connection between the remote PC and the host (VP system) PC, press <Ctrl-Break> on the remote PC' s keyboard. The KeyLink program ends its communication with the host (VP system) PC, and the remote PC' s screen refreshes.

Connecting a Windows-based Remote PC to the Host PC

For Windows-based remote PCs, you specify the communication parameters used by the Serial Administrator on the remote PC after installation of the serial administration program using the procedure described below. These parameters can be modified at any time. During KeyLink installation on the host PC, you specified the communication parameters used by the host PC. These parameters are located in the HOST.INI file, and you can modify them at any time. HOST.INI is located in the C:\VM directory of the host computer.

You must add the following line to the host computer's VM.CFG file to tell the host computer to communicate with the serial administration program:

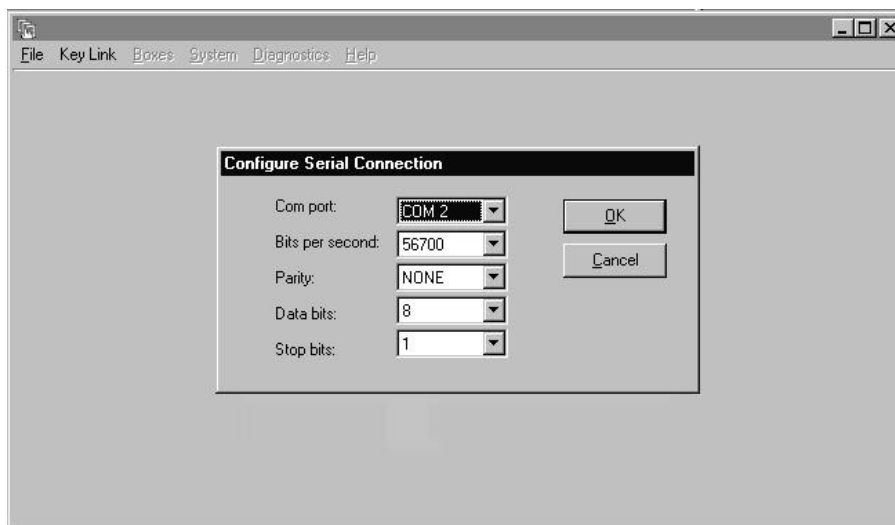
```
use remote dba = comx,y
```

where *x* is the COM port number and *y* is the baud rate.

To establish a communication link between a Windows environment remote PC and host (VP System) PC:

From the remote PC Windows desktop, click on the Serial Administration icon. The VP system serial administration program loads and the SERIAL ADMINISTRATOR screen displays.

From the File pull-down menu, select the CONFIGURE PORTS option. The CONFIGURE SERIAL CONNECTION screen displays.

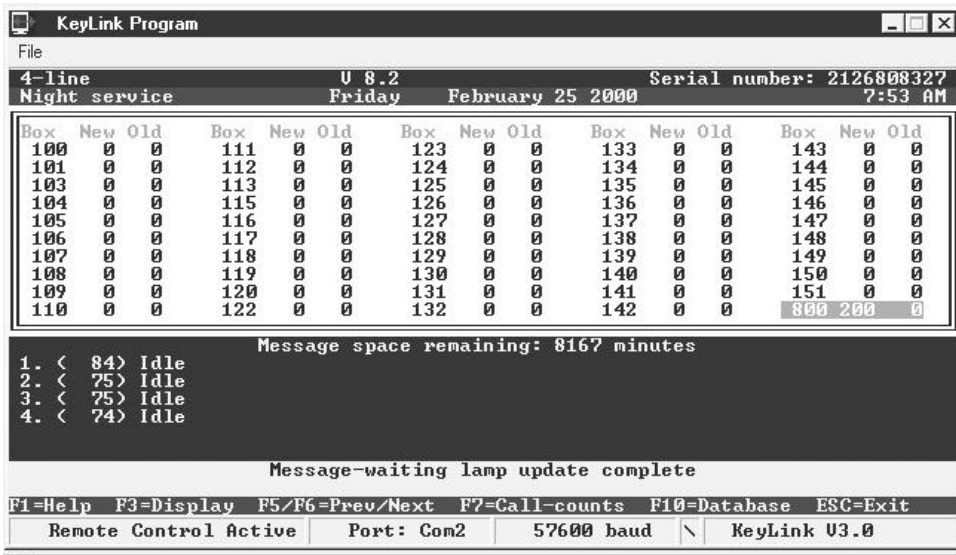


Verify that the COM PORT field indicates the port to which the null modem cable is attached on the remote PC. Also confirm that other Com port information is specified correctly and corresponds with the information in the USE REMOTE DBA line in the host VM.CFG file. Select the OK button. You return to the SERIAL ADMINISTRATOR screen.

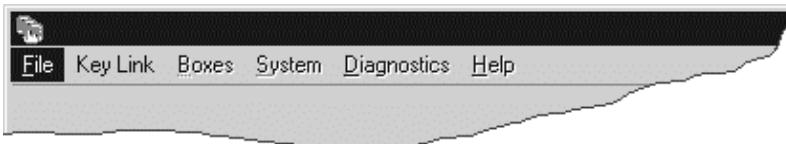
From the SERIAL ADMINISTRATOR screen you can work with the VP system host PC two ways:

- Use KeyLink to view and work with the VP system's DOS screen interface.
- Through a Windows interface to the DOS-based VP system. The windows interface will allow you to control much but not all of the VP system functionality. You will need to use KeyLink to select options or program components that are not available through the Windows interface.

To use KeyLink to view and work with the VP system's DOS screen interface, from the KeyLink pull-down menu, select the REMOTE CONTROL option. Once KeyLink establishes a connection between the two systems, the screen refreshes with a display that shows the host PC. The keyboard and monitor of the remote computer now effectively control the host (VP system) PC. The screens you view show the setup and functionality of the VP system host PC, and the keystrokes you make affect the functionality of that PC.



To use a Windows interface to the DOS-based system, from the File menu, select the CONNECT option. Once a connection is established between the systems, the Boxes, System, Diagnostics, and Help pull-down menus are activated on the SERIAL ADMINISTRATOR screen. Using options available on these Windows-based menus, you can modify the system and box setup structure on the VP system PC. For information on using specific options, select options from the Help pull-down menu.



Note: If a connection cannot be established between the host (VP system) PC and the remote PC, verify that you specified the appropriate COM port settings during KeyLink installation. Also verify that you are using a true **Null Modem** cable. Because visually distinguishing null modem cables from other serial cables is difficult, some users mistakenly use the wrong cable type.

It is important to note that the Windows interface to the VP system is based on an NT-based version of VP system software. These NT-based VP systems contain an interface very similar to that provided through the Boxes, System, and Diagnostics pull-down menus on the Serial Administrator screen. For this reason, the Windows interface Help menu contains the information provided with NT-based VP systems.

To use the online help to find information on a specific VP system field in the Windows interface, use the Search capabilities in the Help file. When viewing field descriptions in the online help, you will notice that each field description identifies both an “NTVP:” field name and a “VP:” field name. The NTVP field name is the name of the field as you see it on screens through the Windows interface to the VP system. The VP field name is the name of the field as you see it on standard DOS-based (KeyLink) interface screens.

To break the connection between the remote PC and the host (VP system) PC, select the Exit option from the File pull-down menu.

10.4 Transferring Files Between the Remote and Host PC

You can copy files from the remote PC to the host (VP system) PC or from the host PC to the remote PC. **Be advised that you can copy only one file at a time. When specifying file names, you must type each name literally; you cannot type wildcard characters in file names.**

The procedure you follow to transfer files between the remote PC and host PC depends on whether the remote PC is running serial administration features in a DOS environment or a Windows PC environment.

To copy files between a DOS environment remote PC and the host PC:

1. Establish a communication link between the remote PC and the host PC using the procedure provided earlier in this section.
2. If the VP system is currently running on the host PC, press <Esc> and follow the prompts to exit the program.
3. Access a DOS prompt.
4. Access the \VM directory by typing `CD\VM` then pressing <Enter>. (If the VP system program files are installed in a directory other than \ VM, access the directory in which the program files are installed.)
5. To transfer files, type:

```
keycopy to remote [to_filename] [from_filename] <Enter>
or
keycopy from remote [from_filename] [to_filename] <Enter>
```

6. In place of [FROM_FILENAME], type the name of the file you want to copy. In place of [TO_FILENAME], type the name of the file you want to create or copy over (if it already exists) on the other machine.

For example, to copy the file `SAMPLE.TXT` from the host PC to the remote PC, type:

```
keycopy to remote SAMPLE.TXT SAMPLE.TXT <Enter>
```

To copy `SAMPLE.TXT` from the host PC to the remote PC and name the file `SAMPLE2.TXT` on the remote PC, type:

```
keycopy to remote SAMPLE2.TXT SAMPLE.TXT <Enter>
```

To copy `SAMPLE.TXT` from the remote PC to the host PC and name the file `SAMPLE3.TXT` on the host PC, type:

```
keycopy from remote SAMPLE.TXT SAMPLE3.TXT <Enter>
```

To transfer files between a Windows environment remote PC and the host PC:

1. Establish a communication link between the remote PC and the host PC using the procedure provided earlier in this section.

2. From the SERIAL ADMINISTRATOR screen, select the KeyLink pull-down menu.
3. Select the REMOTE CONTROL option. Once KeyLink establishes a connection between the two systems, the screen refreshes with a display that shows the host PC.
4. If the VP system is currently running on the host PC, press <Esc> and follow the prompts to exit the program.
5. From the KEYLINK PROGRAM screen, select the File pull-down menu.
6. Select the FILE TRANSFER option. The File Transfer screen displays. Complete the screen indicating the direction of the file transfer (host PC to remote PC, or remote PC to host PC) and directory path of the current and future file locations. To initiate the transfer, select the Execute button. When you finish transferring files, select the Done button.

11. Using the Teleparameter Feature

This section provides information on using the teleparameter feature to set up a new system at a customer site or to make modifications to the system. Using the teleparameter feature, you can change the parameter values that affect system-wide setup information, box setups, and VM.CFG file data by calling into the system. (On DOS-based VP systems, you can also run the System Setup utility.) To use the feature, you simply log into the supervisor mailbox over the telephone, select the option to modify system parameters, then as prompted, specify setup information or enter codes that identify each parameter you want to change and the new value to which you want to set the parameter. The parameter value table provided in this section indicates the parameters and their associated codes.

Technicians who have experience setting up VP systems may prefer to use the teleparameter feature to quickly make modifications and get the system up and running at the customer's site. Be advised, however, that since this technique involves inputting codes that represent system parameters and corresponding values to which parameters are to be set, it is a bit more difficult to use effectively if you are unfamiliar with setting up VP systems. For this reason, we recommend that technicians unfamiliar with VP systems use the instructions provided in the previous sections to complete all necessary system setup steps.

11.1 Using the Teleparameter Feature to Run PBX Setup (DOS-based VP Systems)

To run the PBX Setup utility by calling into the system over the telephone:

1. From a telephone, call into voice mail and log into a supervisor mailbox. The system voices the Main menu:

“To listen to your messages press 1. To send a message press 2. To change your options press 3.”

2. To access the Supervisor menu, press 6 (this option is not voiced). The system voices the Supervisor menu options:

Supervisor Menu	
For Mailbox Administration	Press 1
For Routing box Administration	Press 2
For Question box Administration	Press 3
For Port Administration	Press 4
To change the System Broadcast Message	Press 5
To change the voice mail Day / Night Service	Press 6
To change the System Time	Press 7
To change the System Date	Press 8
To modify System Parameters	Press 9
To perform First-Time Setup	Press 0
To Exit	Press #

3. From the Supervisors menu, press 0 to perform first time setup. The system prompts you to enter the Technician password. Enter the password (by default, this is **1234**).
4. Follow the prompts and enter the requested information. When you are prompted to indicate the type of phone system with which you are working, enter the number from the following list that corresponds to the phone system:

Number	Phone System
56	Atlas 50
29	Atlas 200
08	Comdial DigiTech / Impact / DSU
11	Comdial DXP / DXP Plus
74	Comdial FX / FXS / FXT
22	Comdial Executech 2000
44	Comdial Unisyn
79	Cortelco Aries
45	Encore CX - ECX 1832 / 3672 / 36112
77	Ericsson MD-110
75	Fujitsu 9600 with Serial Integration
96	Fujitsu Allegra 26
78	Fujitsu Series 3 / Starlog
41	Fujitsu Starlog
80	Harris 20/20
09	Hicom 150
07	Intellicom 500
06	Intellicom 2000
55	Isoetec IDS 108 / 228
49	Isoetec System 96
30	ITT / Cortelco System 3100
28	Iwatsu ADIX
20	Iwatsu ZT-D
94	Lucent Definity G3 – Calista Box – Vectoring – Bridged Mode
92	Lucent Definity G3 – VoiceBridge
93	Lucent Definity G3 – VoiceBridge – Vectoring – Bridged Mode
13	Lucent Merlin II
34	Lucent Merlin Legend
97	Lucent Partner ACS
50	Lucent Partner II
38	Lucent Partner Plus
37	Lucent System 25

Number	Phone System
63	Lucent System 75
91	Lucent System 85 and Definity Generic 2 – VoiceBridge
31	Mitel COV with D/42D-SX Voice Boards
39	Mitel SX100 Digital PABX with ONS Integration
84	Mitel SX200 Light with COV Integration
89	Mitel SX200 Light with DNIC Integration
85	Mitel SX200 Light with ONS Integration
86	Mitel SX2000 and SX2000 Light with COV Integration
88	Mitel SX2000 and SX2000 Light with DNIC Integration
81	Mitel SX50 with COV Integration
90	Mitel SX50 with DNIC Integration
17	NEC Electra Professional Level I
54	NEC Electra Professional Level II
21	NEC Mark II
51	NEC NEAX-1400 IMS
73	NEC NEAX-2000
35	NEC NEAX-2400 Serial Integration
33	Nitsuko DSO-1 / ONYX / 124i / 384i
72	Northern Telecom Norstar D42NS
27	Northern Telecom Norstar - With VMI Adapters
53	Northern Telecom SL-1 and Meridian-1/SL-1, (with D42-SL)
18	Panasonic 1232 - Analog
24	Panasonic DBS
36	Panasonic KXT-336
23	Panasonic KX-TD 1232 Digital
66	Panther II 820 / 1032 / 2064 Release IV
52	Philips SOPHO-S
32	Premier ESP / Intertel GMX
47	Redwood 3.2
70	Rolm 9200 BCS / Siemens HCM 200
10	Samsung Prostar 56EX / 120MX / 1224
42	Samsung Prostar DCS – Digital
12	Siemens Saturn I, II, III
15	SMDI Installation Guide / Centrex
40	Southwestern Bell Landmark DKS 308 / 616
19	Sprint Protégé / Macrotel MT360 / 824 KSU

Number	Phone System
59	Tadiran Coral I, II, & III
68	Telrad 2464
64	Telrad Digital Key BX, 200 Digital
46	Toshiba DK-16 / 24 / 56 / 96
16	Toshiba DK-280
26	Toshiba Perception E
95	Toshiba Perception EX
57	Toshiba Perception I & II
87	Vodavi DHS
43	Vodavi Infinite DVX1, DVX2, & DVX3
48	Vodavi Starplus 2448EX / 4896EX
58	Vodavi Starplus 96EX
14	Vodavi Starplus Digital
62	Win 100D

- Once you enter all necessary information, press 1 as prompted to reboot the PC. You must allow the system to reboot so it can reset several parameters based on the information you entered. When the system reboots, your call into it is disconnected.

11.2 Using the Teleparameter Feature to Adjust System Info, Box Setups, and VM.CFG Data

Use the following procedure to modify parameters that affect system-wide setup information, box setups, and entries in the VM.CFG file:

- From a telephone, call into voice mail and log into a supervisor mailbox. The system voices the Main menu:

“To listen to your messages press 1. To send a message press 2. To change your options press 3.”
- To access the Supervisor menu, press 6 (this option is not voiced). The system voices the Supervisor menu options:

Supervisor Menu	
For Mailbox Administration	Press 1
For Routing box Administration	Press 2
For Question box Administration	Press 3
For Port Administration	Press 4
To change the System Broadcast Message	Press 5
To change the voice mail Day / Night Service	Press 6

Supervisor Menu	
To change the System Time	Press 7
To change the System Date	Press 8
To modify System Parameters	Press 9
To perform First-Time Setup	Press 0
To Exit	Press #

3. From the Supervisors menu, press 9 to modify system parameters. The system prompts you to enter the Technician Password. Enter the password (by default, this is **1234**).
4. At the prompt, enter the number of the parameter you want to change, then, as prompted, the value to which you want to change the parameter. Parameter information is provided in a comprehensive table in this section.
5. When you complete all modifications, press # to return to the Supervisor's menu.

Teleparameter Value Tables

The following table identifies all parameters you can adjust using the teleparameter feature and the entries you can make to indicate specific values for each parameter. Refer to information after this table for additional entries you can make in some fields.

Be advised certain tasks in this table involve setting up parameters whose associated screens have names that differ between the NT-based and DOS-based VP systems. In this section, tasks that relate to setting up screens in DOS-based VP systems are prefaced by **(VP)**. Those that relate to setting up screens in NT-based VP systems are prefaced by **(NTVP)**.

Task	Param. Number	Description	Acceptable Values	Notes:
Account Number Box Setup	2700	Minimum number of digits required for valid entry determination	1 - 9	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2701	Maximum number of digits required for valid entry determination	1 - 30	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2702	Number of seconds to wait before determining all digits are entered	0 - 9	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2703	Action to take after maximum retry attempts if invalid account number is entered	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2704	Box associated with parameter 2703	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2705	Retry attempts to allow if invalid account number entered	0 - 9	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Account Number Box Setup	2706	Number of mailbox that owns the Account Number box	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2707	Action to take if account number was previously collected during call	0 = Use the existing account number 1 = Ask for a new account number	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2708	Repeat number entered for confirmation?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2001	Action to take if valid account number is entered	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Account Number Box Setup	2002	Box associated with parameter number 2001	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2520	Number of mailbox that owns the ACD Box / Customer Service Box	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2521	Action to take when trying extension	1 = Blind 2 = Wait for answer 3 = Screen 4 = Wait for ring	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2522	Criteria by which hunt is started	0 = Start hunting from first agent in group 1 = Start hunting from previous agent	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2523	Number of announcements after which caller is offered other options	0 - 99	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2524	Rings permitted before no answer determination	0 - 99	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2525	Box default operator during day service	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2526	Box default operator during night service	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2527	Action to take if all extensions are busy	0 = Queue the call 1 = Go to another box	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2528	Box associated with parameter 2527	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
ACD Box / Customer Service Box Setup	2529	Action to take if caller elects not to remain in queue	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2530	Box associated with parameter 2529	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2531	If call is queued, state position in line?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
ACD Box / Customer Service Box Setup	2501 to 2512	ACD rotation box members	(Valid mailbox numbers)	A prompt for the Item number refers to the box number. Enter the box number.
Business Hours Setup	5042	Hour day service begins	00-24	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5043	(With parameter 5042) Minute day service begins	00 - 59	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5044	Hour day service ends	00 - 24	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5045	(With parameter 5044) Minute day service ends	00 - 59	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5046	Hour lunch service begins	00 - 24	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5047	(With parameter 5046) Minute lunch service begins	00 - 59	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5048	Hour lunch service ends	00 - 24	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5049	(With parameter 5048) Minute lunch service ends	00 - 59	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5067	Hour at which greeting is to change to good evening	00 - 24	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).
Business Hours Setup	5068	(With parameter 5067) Minute at which greeting is to change to good evening	00 - 59	A prompt for the Item number refers to the day of the week. Enter 0 (Sunday) through 6 (Saturday).

Task	Param. Number	Description	Acceptable Values	Notes:
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5000	Sequence to initiate an internal transfer	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5001	Sequence to initiate an external transfer	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5002	Sequence to complete an internal transfer	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5003	Sequence to complete an external transfer	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5004	Sequence to return from no answer on an internal call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5005	Sequence to return from no answer on an external call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5006	Sequence to return from busy on an internal call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5007	Sequence to return from busy on an external call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5008	Sequence to return from call screening on an internal call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5009	Sequence to return from call screening on an external call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5010	Sequence to transfer an internal 3-way call	(Refer to technical bulletin and phone documentation)	

Task	Param. Number	Description	Acceptable Values	Notes:
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5011	Sequence to transfer an external 3-way call	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5014	Should VP system detect dial tone?	1 = Yes 0 = No	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5023	Confirmation digits meaning 'Yes'	(Refer to technical bulletin and phone documentation)	
(VP) Call Transfer Setup / (NTVP) PBX Information Setup	5054	Should VP system use transfer bypass digit?	0 = None 1 = First 2 = Last	
(VP) Call Transfer Setup / (NTVP) General Information Setup	5055	Maximum time for 3-way call (minutes)	0 - 30	
Class of Service Setup	7000	Number of days after which Old messages are auto-deleted	0 - 99	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7001	Number of days after which New messages are auto-deleted	0 - 99	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7002	Maximum message length (seconds) for a message	0 - 999	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7003	Maximum number of messages allowed in mailbox	0 - 200	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7004	Maximum greeting length (seconds)	0 - 999	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7005	Maximum number of personal greetings allowed	0 - 10	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7006	Play menu after greeting to callers?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7007	Maximum lines allowed to hold for mailbox	0 - 32	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7008	Number of times to try extension before returning to queued caller	0 - 99	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7009	Say position in line to calls in queue?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.

Task	Param. Number	Description	Acceptable Values	Notes:
Class of Service Setup	7010	Access to Group boxes allowed?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7011	Supervisor status allowed?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7012	Caller access to P.A. system allowed?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7013	Dial-out allowed?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7014	Faxmail receipt allowed?	1 = Yes 0 = No	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7015	Default operator box during day service hours	(Valid mailbox number)	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7016	Default operator box during night service hours	(Valid mailbox number)	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7017	When exiting open mailbox, go to box #	(Valid box number)	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7018	Digits callers can press while holding	1 - 9, #	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Class of Service Setup	7020 to 7029	Restricted outcalling numbers	(Any digits)	A prompt for the Item number refers to the Class of Service number. Enter 0 - 7.
Directory Box Setup	2001	Action to take if no digits are dialed	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2002	Box associated with parameter 2001	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2600	Number of time to play greeting	1 - 3	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2601	Box associated with parameter 2602	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2602	Action to take if requested name is not found	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2603	Say box number before transferring call?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Directory Box Setup	2604	Allow callers to hear complete directory listing?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Directory Box Setup	2605	Maximum number of digits to collect from callers	1 - 9	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2001	Action to take of caller orders additional fax documents	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2002	Box associated with parameter 2001	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2900	Type of fax document	0 = Text 1 = Wide text 2 = Graphics 3 = IVR response	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2901	Number of mailbox that owns the Fax box	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2902	Action to take if caller has ordered the maximum number of documents allowed	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2903	Box associated with parameter 2902	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	2904	Document security code	(Security code you specify)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5028	The number of the line to which fax board 1 is connected	(Line number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5029	The number of the line to which fax board 2 is connected	(Line number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5030	The number of the line to which fax board 3 is connected	(Line number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5031	The number of the line to which fax board 4 is connected	(Line number)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5032	Resolution at which faxes are sent	0 = Fine 1 = Standard	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5033	(With parameter 5034) Interval (in minutes) at which retry calls are made when fax back call is unsuccessful	1 - 30	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5034	Number of retry calls made when fax back call is unsuccessful	0 - 10	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5035	Maximum faxes the caller can request in one call	1 - 10	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Fax Distribution Setup	5036	(With parameter 5041) The type of restriction to be placed on the call-back numbers specified	0 = Block only these 1 = Allow only these	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5037	Fax cover page preference	0 = Default 1 = Custom 2 = No Cover	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5038	Method used to transmit faxes	0 = Offer option 1 = Call back always 2 = Same call always	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5039	Prefix a '1' for long distance numbers?	0 = No 1 = Yes	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5040	Digits to strip from call-back number	(Refer to technical bulletin and phone documentation)	A prompt for the Item number refers to the box number. Enter the box number.
Fax Distribution Setup	5041	(With parameter 5036) Restricted call-back numbers	(Restricted digits)	A prompt for the Item number refers to 1 sequence of restricted digits. You can specify up to 20 restricted digit sequences. At the Item number prompt, enter 1 - 20, then enter the restricted digit sequence as prompted.
General Information Setup	5017	Fast-forwarded / rewind seconds	0 - 10	
General Information Setup	5024	Technician password	Up to 10 digits	
General Information Setup	5025	Customer password	Up to 10 digits	
General Information Setup	5027	Digits needed to get line for external call	(Refer to technical bulletin and phone documentation)	
General Information Setup	5053	Store call log to:	0 = None 1 = File 2 = Printer (non-NT systems only)	
General Information Setup	5056	(With parameter 5057) Maximum number of minutes call can last before being rerouted	0 - 30	
General Information Setup	5057	(With parameter 5056) Box to which calls are re-routed	(Valid box number)	
General Information Setup	5065	Exit to DOS hour	00-23	
General Information Setup	5066	Exit to DOS minutes	00-59	

Task	Param. Number	Description	Acceptable Values	Notes:
Group Box Setup	2800	Maximum length of a message (seconds) that can be sent to this box	10 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Group Box Setup	2801 to 2850	Group box members	(Valid box numbers)	A prompt for the Item number refers to the box number. Enter the box number.
Holiday Schedule Setup	5050	(With parameter 5051) Holiday month	00-12	A prompt for the Item number refers to the holiday number. Enter 1 through 20.
Holiday Schedule Setup	5051	(With parameter 5050) Holiday date	01-31	A prompt for the Item number refers to the holiday number. Enter 1 through 20.
Holiday Schedule Setup	5052	Box to which calls are routed during holiday	(Valid box number)	A prompt for the Item number refers to the holiday number. Enter 1 through 20.
Line Information Setup	1000	Box to which calls on this line are routed during day service hours	(Valid box number)	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1001	Box to which calls on this line are routed during night service hours	(Valid box number)	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1002	Box to which calls on this line are routed during lunch service hours	(Valid box number)	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1003	Rings before call is answered during day service hours	1 - 99	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1004	Rings before call is answered during night service hours	1 - 99	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1005	Rings before call is answered during lunch service hours	1 - 99	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1006	Outgoing calls allowed on this line?	1 = Yes 0 = No	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1007	Line belongs to Line Group A?	1 = Yes 0 = No	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1008	Line belongs to Line Group B?	1 = Yes 0 = No	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1009	Line belongs to Line Group C?	1 = Yes 0 = No	A prompt for the Item number refers to the line number. Enter the line number.
Line Information Setup	1010	Line belongs to Line Group D?	1 = Yes 0 = No	A prompt for the Item number refers to the line number. Enter the line number.
Mailbox Setup	2000	Mailbox owner's last name	(Digits that will allow the Dial-by-Name directory feature access this mailbox)	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Mailbox Setup	2001	Action to be taken after caller leaves message	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2002	Box associated with parameter 2001	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2100	Mailbox password	(Up to maximum digits specified during setup)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2101	Sequence to turn on message waiting lamp	(See technical bulletin or phone documentation)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2102	Sequence to turn off message waiting lamp	(See technical bulletin or phone documentation)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2110	Box associated with parameter 2111	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2111	Action to be taken if caller chooses "other options"	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2112	Mailbox has access to only Hotel guest privileges?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one personal distribution list for the mailbox using the Teleparameter feature
Mailbox Setup	2113	Class of service assigned to mailbox	0 - 7	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2114	Mailbox to which this mailbox is a client, if this is a restricted mailbox	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup (NTVP only)	2145	VCM User?	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2115	Language in which greeting is to play if call is via D.I.D	0 - 9	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2120	Type of transfer	0 = None 1 = Blind 2 = Wait for answer 3 = Screen 4 = Wait for ring	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2121	3-way calling used	0 = Always 1 = Day only 2 = Night only 3 = Schedule A 4 = Schedule B 5 = Schedule C 6 = Schedule D	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Mailbox Setup	2122	Number of rings within which called party must answer before system determines a no answer condition	Number of rings	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2123	Call transfer schedule	0 = Always 1 = Day only 2 = Night only 3 = Schedule A 4 = Schedule B 5 = Schedule C 6 = Schedule D	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2124	Caller's name voiced upon pickup?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2125	Record conversation?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2126	Transfer destination	Extension number	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2130	(With parameter 2134) Type of pager	0 = None 1 = Tone-only pager (no display) 2 = Display pager	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2131	(With parameter 2134) Minutes between calls to pager	00 - 20	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2132	(With parameter 2134) Number of times to call pager	00 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2133	(With parameter 2134) Schedule during which calls should be sent to pager	0 = Always 1 = Day only 2 = Night only 3 = Schedule A 4 = Schedule B 5 = Schedule C 6 = Schedule D	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2134	Mailbox owner's pager number	(Pager number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2135	(Accessible only when the a Comdial phone system was selected during PBX Setup, see section 3) Mailbox owner allowed to record calls?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2136	(Accessible only when the a Comdial phone system was selected during PBX Setup, see section 3) (With parameter 2135) Maximum minutes of call recording permitted	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Mailbox Setup	2137	(Accessible only when the a Comdial phone system was selected during PBX Setup, see section 3) (With parameter 2135) Minimum seconds a recording must last to be retained	1 - 99	A prompt for the Item number refers to the box number. Enter the box number
Mailbox Setup	2138	(Accessible only when the a Comdial phone system was selected during PBX Setup, see section 3) (With parameter 2135) The interval at which an audible beep is sounded during calls being recorded	1 - 99 99 = no beep	A prompt for the Item number refers to the box number. Enter the box number
Mailbox Setup	2139	(Accessible only when the a Comdial phone system was selected during PBX Setup, see section 3) Play a ringburst when the caller begins to leave a message?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2141	Action to be taken after personal greeting is played	0 = Wait for a digit 1 = Begin recording a message 2 = Page the mailbox owner 3 = Record a message, then page the mailbox owner	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2142	Hours after which messages are to be auto-forwarded	0 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2143	(With parameter 2142) Box to which new messages are to be auto-forwarded	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2144	(With parameters 2142 and 2143) Schedule during which auto-forwarding is to be active	0 = Always 1 = Day only 2 = Night only 3 = Schedule A 4 = Schedule B 5 = Schedule C 6 = Schedule D	A prompt for the Item number refers to the box number. Enter the box number.
Mailbox Setup	2151	(With parameter 2155) Number of times to run the message delivery cycle.	0 - 99	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one message delivery set up for the mailbox using the Teleparameter feature.

Task	Param. Number	Description	Acceptable Values	Notes:
Mailbox Setup	2152	(With parameter 2155) Number of times number is to be called	0 - 99	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one message delivery set up for the mailbox using the Teleparameter feature.
Mailbox Setup	2153	(With parameter 2155) Minutes in between calls to number	2 - 99	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one message delivery set up for the mailbox using the Teleparameter feature.
Mailbox Setup	2154	(With parameter 2155) Schedule during which message delivery is active	0 = Always 1 = Day only 2 = Night only 3 = Schedule A 4 = Schedule B 5 = Schedule C 6 = Schedule D	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one message delivery set up for the mailbox using the Teleparameter feature.
Mailbox Setup	2155	Number to call for message delivery	(Phone or beeper number)	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one message delivery set up for the mailbox using the Teleparameter feature.
Mailbox Setup	2159	Personal distribution list 1 enabled for mailbox?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one personal distribution list for the mailbox using the Teleparameter feature.
Mailbox Setup	2160 to 2179	Personal distribution list 1 members	(Valid mailbox numbers)	A prompt for the Item number refers to the box number. Enter the box number. You can modify only one personal distribution list for the mailbox using the Teleparameter feature.
(VP) Other Customizations Setup / (NTVP) General Information Setup	5018	Maximum box length caller can dial	2 - 4	
(VP) Other Customizations Setup / (NTVP) PBX Information Setup	5019	Seconds of initial pause before main greeting is played	0 - 10	

Task	Param. Number	Description	Acceptable Values	Notes:
(VP) Other Customizations Setup / (NTVP) General Information Setup	5020	When VP system should play time and date	0 = When caller asks 1 = Before each message 2 = After each message	
(VP) Other Customizations Setup / (NTVP) General Information Setup	5021	Play called party's name when call is answered?	1 = Yes 0 = No	
(VP) Other Customizations Setup / (NTVP) General Information Setup	5022	Announce call when call is answered?	1 = Yes 0 = No	
(VP) Other Customizations Setup / (NTVP) Custom Flags Setup	5076 to 5079	Custom field (use under direction of technical support)	---	
(VP) Other Customizations Setup / (NTVP) Custom Flags Setup	5086 to 5089	Debug field (use under direction of technical support)	---	
Question Box Setup	2001	Action to take after questions are answered	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2002	Box associated with parameter 2404	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2400	Number of mailbox that owns the Question box	(Valid mailbox number)	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2401	Replay digit answers for verification?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2402	Voice answers? (versus digit)	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2403	Trigger owner mailbox notification of answers in this box?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2404	Digits caller can press to exit this box	0 - 9, *, #	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2410	Answer type for Question 10	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2411	Answer type for Question 1	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Question Box Setup	2412	Answer type for Question 2	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2413	Answer type for Question 3	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2414	Answer type for Question 4	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2415	Answer type for Question 5	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2416	Answer type for Question 6	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2417	Answer type for Question 7	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2418	Answer type for Question 8	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2419	Answer type for Question 9	0 = Voice 1 = Digits	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2420	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 10.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2421	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 1.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2422	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 2.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2423	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 3.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2424	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 4.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2425	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 5.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2426	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 6.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Question Box Setup	2427	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 7.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2428	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 8.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2429	If the answer type is digits, minimum number of digits that must be entered for valid answer to question 9.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2430	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 10.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2431	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 1.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2432	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 2.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2433	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 3.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2434	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 4.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2435	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 5.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2436	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 6.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2437	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 7.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2438	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 8.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2439	If the answer type is digits, maximum number of digits that can be entered for valid answer to question 9.	1 - 999	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Question Box Setup	2440	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 10.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2441	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 1.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2442	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 2.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2443	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 3.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2444	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 4.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2445	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 5.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2446	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 6.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2447	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 7.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Question Box Setup	2448	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 8.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.

Task	Param. Number	Description	Acceptable Values	Notes:
Question Box Setup	2449	Number of seconds of silence before VP system determines caller has finished entering digits or speaking the answer for question 9.	1 - 99	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2001	Action to take if no digits dialed	0 = Return 1 = Say 'Goodbye' 2 = Go to another box 3 = Hang up	
Routing Box Setup	2002	Box associated with parameter 2001	(Valid box number)	
Routing Box Setup	2300	Single-digit dialing destination for digit 0	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2301	Single-digit dialing destination for digit 1	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2302	Single-digit dialing destination for digit 2	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2303	Single-digit dialing destination for digit 3	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2304	Single-digit dialing destination for digit 4	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2305	Single-digit dialing destination for digit 5	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2306	Single-digit dialing destination for digit 6	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2307	Single-digit dialing destination for digit 7	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2308	Single-digit dialing destination for digit 8	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2309	Single-digit dialing destination for digit 9	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2310	Single-digit dialing destination for *	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2311	Single-digit dialing destination for #	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2312	Single-digit dialing destination for non-DTMF digit (voice)	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2313	Number of mailbox that owns the Routing box	(Valid box number)	

Task	Param. Number	Description	Acceptable Values	Notes:
Routing Box Setup	2314	Box to which calls are transferred if invalid digits dialed	(Valid box number)	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2315	Number of times to play greeting	1 - 3	
Routing Box Setup	2316	Seconds to wait for a digit	0 - 9	
Routing Box Setup	2317	Basis used to route call	0 = Digits dialed 1 = Day of week 2 = Sequence number 3 = Database lookup 4 = Day or Night service	A prompt for the Item number refers to the box number. Enter the box number.
Routing Box Setup	2318	When digits received, wait for more digits?	1 = Yes 0 = No	A prompt for the Item number refers to the box number. Enter the box number.
(VP)Technical Information Setup / (NTVP) PBX Information Setup	5012	Hookflash length (milliseconds)	100 - 5000	
(VP)Technical Information Setup / (NTVP) PBX Information Setup	5013	Pause length (milliseconds)	10 - 5000	
(VP)Technical Information Setup / (NTVP) General Information Setup	5015	Seconds of silence before VP system ends recording	0 - 99	
(VP)Technical Information Setup / (NTVP) General Information Setup	5016	Seconds of non-silence before VP system ends recording	0 - 99	
(VP)Technical Information Setup / (NTVP) PBX Information Setup	5026	Disconnect digit sequence	(Refer to technical bulletin and phone documentation)	
(VP)Technical Information Setup / (NTVP) General Information Setup	5063	Hour at which system automatically updates MWI	00 - 23	
(VP)Technical Information Setup / (NTVP) General Information Setup	5064	(With parameter 5063) Minute at which system automatically updates MWI	00 - 59	

Task	Param. Number	Description	Acceptable Values	Notes:
VM.CFG Setup	9001	transbypass=	See section 12.	
VM.CFG Setup	9003	dtmfon=	See section 12.	
VM.CFG Setup	9004	ignorenonsilence	See section 12.	
VM.CFG Setup	9007	internal=	See section 12.	
VM.CFG Setup	9011	pagetime=	See section 12.	
VM.CFG Setup	9012	pagerretry=	See section 12.	
VM.CFG Setup	9014	maxpasswordlength=	See section 12.	
VM.CFG Setup	9015	greetstil=	See section 12.	
VM.CFG Setup	9017	notifyreps=	See section 12.	
VM.CFG Setup	9019	interdigit=	See section 12.	
VM.CFG Setup	9023	detectpulse	See section 12.	
VM.CFG Setup	9025	auditdatabase	See section 12.	
VM.CFG Setup	9026	responsetime=	See section 12.	
VM.CFG Setup	9099	pa.init=	See section 12.	
VM.CFG Setup	9100	pa.cancel=	See section 12.	
VM.CFG Setup	9101	tutorialreps=	See section 12.	
VM.CFG Setup	9102	pa.repeats=	See section 12.	
VM.CFG Setup	9103	novideomemory	See section 12.	
VM.CFG Setup	9104	offhookdelay=	See section 12.	
VM.CFG Setup	9105	hardwareint=	See section 12.	
VM.CFG Setup	9106	ringon=	See section 12.	
VM.CFG Setup	9107	minimummessage=	See section 12.	
VM.CFG Setup	9108	maxinactive=	See section 12.	
VM.CFG Setup	9109	maxlockup=	See section 12.	
VM.CFG Setup	9118	languages=	See section 12.	
VM.CFG Setup	9120	dtmfson=	See section 12.	
VM.CFG Setup	9121	dtmfsonoff=	See section 12.	
VM.CFG Setup	9122	pa.busy=	See section 12.	
VM.CFG Setup	9123	lunchoperatorisday	See section 12.	
VM.CFG Setup	9124	samplingrate=	See section 12.	
VM.CFG Setup	9125	databeline=	See section 12.	
VM.CFG Setup	9126	ignoredisconnects	See section 12.	
VM.CFG Setup	9127	nonamettransfer	See section 12.	
VM.CFG Setup	9135	norecordbeep	See section 12.	
VM.CFG Setup	9144	repeatmw=	See section 12.	
VM.CFG Setup	9146	deleteafterfwd	See section 12.	
VM.CFG Setup	9150	remotepause=	See section 12.	
VM.CFG Setup	9160	ringreset=	See section 12.	
VM.CFG Setup	9161	notifyrings=	See section 12.	

Task	Param. Number	Description	Acceptable Values	Notes:
VM.CFG Setup	9162	assumepageconfirm	See section 12.	
VM.CFG Setup	9163	assumehold=	See section 12.	
VM.CFG Setup	9165	externalfax	See section 12.	
VM.CFG Setup	9166	faxtimeout=	See section 12.	
VM.CFG Setup	9167	nopcbeep	See section 12.	
VM.CFG Setup	9174	cdspeed=	See section 12.	
VM.CFG Setup	9182	ignoreinitialdisconnect	See section 12.	
VM.CFG Setup	9190	lineaccessontransfer	See section 12.	
VM.CFG Setup	9192	24hourclockdisplay	See section 12.	
VM.CFG Setup	9203	linesconnected=	See section 12.	
VM.CFG Setup	9206	qboxposconfirm	See section 12.	
VM.CFG Setup	9207	qboxdataprint	See section 12.	
VM.CFG Setup	9208	qboxarchive	See section 12.	
VM.CFG Setup	9209	pagerprefix=	See section 12.	
VM.CFG Setup	9210	pagerappend=	See section 12.	
VM.CFG Setup	9214	omitgroupsender	See section 12.	
VM.CFG Setup	9216	pagertrail=	See section 12.	
VM.CFG Setup	9218	longhookflash=	See section 12.	
VM.CFG Setup	9219	cp.dialtone=	See section 12.	
VM.CFG Setup	9220	cp.busy=	See section 12.	
VM.CFG Setup	9221	cp.invalid=	See section 12.	
VM.CFG Setup	9222	cp.dnd=	See section 12.	
VM.CFG Setup	9223	cp.ans=	See section 12.	
VM.CFG Setup	9224	cp.intring=	See section 12.	
VM.CFG Setup	9225	cp.interring=	See section 12.	
VM.CFG Setup	9226	cp.noans=	See section 12.	
VM.CFG Setup	9227	onhookdtmf	See section 12.	
VM.CFG Setup	9229	answerack=	See section 12.	
VM.CFG Setup	9232	senddisconnect=	See section 12.	
VM.CFG Setup	9256	playbackdelay=	See section 12.	
VM.CFG Setup	9273	cp.disconnect=	See section 12.	
VM.CFG Setup	9282	qboxdataprinteject	See section 12.	
VM.CFG Setup	9283	qboxuseconfirmnumbers	See section 12.	
VM.CFG Setup	9289	qboxhideacctnumbers	See section 12.	
VM.CFG Setup	9291	keepmessagesnew	See section 12.	
VM.CFG Setup	9295	pooledring=	See section 12.	
VM.CFG Setup	9296	mboxdefaultdigit=	See section 12.	
VM.CFG Setup	9301	greeting.noanswer=	See section 12.	
VM.CFG Setup	9302	greeting.busy=	See section 12.	

Task	Param. Number	Description	Acceptable Values	Notes:
VM.CFG Setup	9303	greeting.dnd=	See section 12.	
VM.CFG Setup	9337	noaccountinlog	See section 12.	
VM.CFG Setup	9339	greeting.night=	See section 12.	
VM.CFG Setup	9340	faxpause=	See section 12.	
VM.CFG Setup	9342	samecallfaxok	See section 12.	
VM.CFG Setup	9343	mwonreps=	See section 12.	
VM.CFG Setup	9344	mwoffreps=	See section 12.	
VM.CFG Setup	9346	faxprefix=	See section 12.	
VM.CFG Setup	9349	faxgeneraldelivery=	See section 12.	
VM.CFG Setup	9351	initialpauseidp=	See section 12.	
VM.CFG Setup	9352	directoryidp=	See section 12.	
VM.CFG Setup	9353	messagepausetime=	See section 12.	
VM.CFG Setup	9354	sharefaxports	See section 12.	
VM.CFG Setup	9359	flowcontrol=	See section 12.	
VM.CFG Setup	9360	fastacdtransfer	See section 12.	
VM.CFG Setup	9361	pmsviatextfiles	See section 12.	
VM.CFG Setup	9364	serviceobservecode=	See section 12.	
VM.CFG Setup	9365	acdpause=	See section 12.	
VM.CFG Setup	9383	wakeuprings=	See section 12.	
VM.CFG Setup	9384	ivrpromptlanguage=	See section 12.	
VM.CFG Setup	9388	volume=	See section 12.	
VM.CFG Setup	9389	noserialmwrefresh	See section 12.	
VM.CFG Setup	9390	basiccptones	See section 12.	
VM.CFG Setup	9392	extrarotarytime=	See section 12.	
VM.CFG Setup	9393	transferring=	See section 12.	
VM.CFG Setup	9394	dialtonefrequency=	See section 12.	
VM.CFG Setup	9395	dialtone2frequency=	See section 12.	
Serial Number	4000	Voices the VP system serial number.	—	
NUMLINES.TXT	4001	Adjusts the code number authorizing the number of ports allowed.	(Code supplied by Technical Support or Sales)	
SWITCHES.TXT	4002	Adjusts the code number authorizing system optional features.	(Code supplied by Technical Support or Sales)	
LOGINS.TXT	4003	Adjusts the code number that controls the number of VCM logins allowed.	(Code supplied by Technical Support or Sales)	
PBXLINK.TXT	4004	Adjusts the code number authorizing certain phone system-related features.	(Code supplied by Technical Support or Sales)	

The following table identifies values you can specify to indicate special information in some fields:

Values	Indicate
***1	A
***2	B
***3	C
***4	D
***5	E
***6	F
***7	Pause
***8	Hookflash
***0	Clears the field entry

12. Configuration File Options

There are configuration parameters available in the VP system that you cannot access or change from VP system screens. Because these parameters do not need to be adjusted during most installations, they are grouped and housed in one configuration file, `VM.CFG`. Throughout this manual, you are provided information on how you can adjust various `VM.CFG` parameters so they can best suit non-standard applications of the VP system. `VM.CFG` parameters and their available options are listed in this section.

You configure a `VM.CFG` parameter by adding it on one line to others in the `VM.CFG` file, which is located by default in the `\VM` directory. With some `VM.CFG` parameters, you must indicate a value to which the parameter is to be set. With other parameters, you simply add the parameter name to the file `VM.CFG` to invoke its functionality. The information in this section details any implementation considerations that affect each parameter.

You modify the contents of the `VM.CFG` file using an editor. To invoke the DOS editor, for example, from a command prompt, type `EDIT VM.CFG` then press <Enter>.

Note: On DOS-based VP systems, you must shut down the VP system before editing the `VM.CFG` file. On NT-based VP systems, you do not need to shut down the VP system to edit the `VM.CFG` file. You do, however, need to restart the VP system before any change you make will take effect. See section 2.5 for information on stopping and starting both DOS-based and NT-based VP systems.

You can add spaces between lines in the `VM.CFG` file to keep the configuration file readable. You can also include comments in the file. The VP system considers any line beginning with an asterisk (*) to be a comment and ignores it.

Note: The default setting shown for each parameter is active when *either*:

- (a) The file entry is omitted from the `VM.CFG` file
- (b) The file entry is included in the `VM.CFG` file but is preceded by a *.

If a default value meets the needs, it is not necessary to make a new entry in the file. It may be necessary, however to *remove* an entry if you want to make the default parameter value active.

The following table is an alphabetical listing of all the options available in the configuration file. Each is described in detail in this section.

Available Parameters

Available Parameters

- 24-hour clock display
- Accept external msgs
- Account is box
- ACD pause
- Add line feed
- Ans machine parms
- Answer ack
- Assume hold
- Assume page confirm
- Audit database
- Audit msgcount
- Auto exit to DOS
- Auto forward priority
- Auto start
- Basic CPTones
- CD speed
- Check box alias
- Cleardown delay
- Color.x.y
- CP.x
- Custom
- Database line
- Database timeout
- Date format
- Delete after fwd
- Delete queue burst size
- Delete queue frequency
- Detect pulse
- Dial
- Dialtone frequency
- Dialtone on
- Directory IDP
- Disable tutorial
- DTMF on
- DTMF send on
- DTMF send off
- Export path
- External fax
- External msg path
- Fast ACD transfer
- Fast fax
- Fast notification
- Fax general delivery
- Fax link
- Fax order path
- Fax pause
- Fax prefix
- Fax timeout
- Fax trace file
- FF digit
- Fixed language
- Flow Control
- Greeting.busy / noanswer / DND
- Greeting.night
- Greet sil
- Group box distribution priority
- Hardware int
- Host
- Ignore disconnects
- Ignore DTMF
- Ignore initial disconnect
- Ignore nonsilence
- Initial pause IDP
- Inter digit
- Internal
- IVR prompt language
- IVR voice file path
- Keep messages new
- Languages
- LH TTS voice ID
- Lines connected (Dialogic D42-SX, -NS, -SL boards only)
- Link format
- Local spkr
- Long hook-flash
- Lunch operator is day
- Max inactive
- Max internal
- Max lockup
- Max password length
- Max TTS streams
- Mbox default digit
- Menu options
- Message pause time
- Minimum message
- Monitor
- MW off reps
- MW on reps
- MW priority
- MW Q size
- No account in log
- No name transfer
- No PC beep
- No record beep
- No serial MW refresh
- No video memory
- Notify priority
- Notify reps
- Notify rings
- Offhook delay
- Omit group sender
- Onhook DTMF
- Outbound delay
- PA.busy
- PA.cancel
- PA.init
- PA.repeats
- Pager append
- Pager prefix
- Pager retry
- Pager trail
- Page time
- Playback delay
- PMS via text files
- Pooled ring
- Pulse calibration
- Pulse speed
- Qbox archive
- Qbox data path
- Qbox data print
- Qbox data print eject
- Qbox hide acct numbers
- Qbox pos confirm
- Qbox use confirm numbers
- Remain offhook
- Remote pause
- Repeat MW
- Response time
- REW digit
- Ring on
- Ring reset
- Same call fax OK
- Sampling rate
- Save trace
- Screen saver
- Send disconnect
- Serial disconnect delay
- Service observe code
- Share fax ports
- SMDI answer first
- Special ans digit
- T1 port
- TC name
- TDD digit
- Tone
- Trans bypass
- Transfer ring
- TTS buffer size
- Tutorial reps
- UM Name=TCP, <port>, <IP address>
- Use L&H TTS
- Use LCD menus
- Use printer
- Use wave
- Unitized
- VCM answer delay
- VCM channel timeout
- VCM line group
- VCMname=TCPIP
- Volume
- Wakeup rings
- Xfer name time

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
24 HOUR CLOCK DISPLAY (Enter this as one line of text in the VM.CFG file.)	This parameter causes the clock display in the LINE STATUS screen (DOS-based VP systems) / LINE ACTIVITY screen (NT-based VP systems) to display in 24-hour format instead of the standard AM - PM format and causes the VP system to announce verbal message time-stamps in 24-hour format (for example, "Wednesday, July 3 at 13:24").		12-hour AM - PM format.
ACCOUNT IS BOX	If an account number has been collected for a call, the VP system stores the account number with any message that is recorded during that call. This account number is treated as a sequence of digits. However, you can tell the VP system to interpret an account number as a box number (for example, so the auto-reply feature works). Use this option to tell the VP system which account numbers (based on the number of digits) should be regarded as box numbers. For example, to tell the VP system that account numbers consisting of 3 or fewer digits should be interpreted as box numbers, enter the following line: ACCOUNT IS BOX=3	0 to 9	Account numbers that contain 4 or fewer digits are interpreted as box numbers.
ACD PAUSE	After the VP system tries an ACD extension and determines it is busy, it pauses for a second, then tries the next extension listed in the ACD box. The pause allows it time to detect a disconnect tone, an error tone, etc. If you find that the system is not detecting disconnects while processing ACD calls, try increasing the length of this pause. For example, if you decide to allow the VP system 4 seconds to detect disconnect tones between calls, include the following line in the VM.CFG file: ACD PAUSE = 4	1 to 10	One second.
ADD LINE FEED	If you send log files or reports to the printer and the output is garbled, it is probably because the printer does not automatically add a line-feed after every carriage-return character. Use this parameter to force a line-feed. Most laser-printers require this option.		Do not inject a carriage-return when sending data to the printer.
ANS MACHINE PARMS (Enter this as one line of text in the VM.CFG file.)	This option is used in the optional Outbound Telemarketing module. It tells the VP system how to determine whether a call has been answered by a real person or an answering machine.		See section 28.
ANSWER ACK	This parameter was designed for those telephone systems (typically in a Service Bureau environment) that require an acknowledgment signal from the VP system when it answers a call. The acknowledgment is in the form of from 1 to 32 DTMF digits (0 - 9, *, #, A, B, C, or D), for example: ANSWER ACK = AAA		No answer acknowledgment digits are sent.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
ASSUME HOLD	<p>When the VP system attempts to transfer a call to an extension but finds it busy, it offers the caller some options, including the option to hold. If the caller does not make a selection, then the VP system assumes that he/she wants to remain on hold. Periodically, the VP system goes back to the caller, telling him/her that the called party is still busy and asking if he/she still wants to remain on hold. The sixth time that the VP system asks this question, it does not make this assumption, but tells the caller that he/she must press 6 if he/she wants to remain on hold. If the caller does not make a selection, the VP system plays the mailbox owner's personal greeting, offering to take a message, etc. If you want the VP system to <i>always</i> assume that the caller wants to remain on hold, enter the following line in the VM.CFG file:</p> <p>ASSUME HOLD = 99</p>	1 to 1000	<p>If no key is pressed in response to the offer to hold, the VP system places the call on hold the first 5 times. If no key is pressed the sixth time the caller is asked, the VP system plays the mailbox owner's personal greeting and continues as normal.</p> <p>Note: In Version 8.0, the default was 0 (the VP system required that the caller always press a key to remain on hold).</p>
<p>ASSUME PAGE CONFIRM</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>When a caller reaches a mailbox whose owner has a digital pager, the caller is prompted to enter his/her own telephone number. The VP system then plays the number back and asks for confirmation (<i>"The number is 555-2345. If this is correct, press 1"</i>). If the caller presses any other key or no key at all, then the VP system does <u>not</u> page the called party. Use this parameter if you want the VP system to page the called party even if no digit is pressed.</p>		<p>If 1 is not pressed, the VP system does <i>not</i> page the called party.</p>
AUDIT DATABASE	<p>If you include this option (recommended), then the VP system performs an audit of its database every time you start it up. This involves checking that all the necessary voice files exist on the disk. As shipped, the VP system has this entry included in the VM.CFG file.</p>		<p>Audit not enabled.</p>
AUDIT MSG COUNT	<p>To ensure ongoing synchronization of the message count between each subscriber's desktop telephone and Inbox window, the VP system periodically audits the subscriber's voice mail and e-mail message counts and makes necessary updates to message waiting lamps, LCD displays, and the Inbox window. This option identifies, in minutes, how often this audit is run. Note that by increasing the audit rate, you slow other call processing tasks on the system. For this reason, it is recommended you not change this parameter unless directed to do so by Technical Support.</p>	0 (no audit performed) to 2040	60

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>AUTO EXIT DISCONNECT</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>On DOS-based VP systems only: This parameter specifies the time (in seconds) that calls are given to clear when the system is automatically exiting to DOS to perform maintenance functions. The parameter is entered as:</p> <p>AUTO DISCONNECT = <i>N</i></p> <p>where <i>n</i> is the number of seconds calls are given to clear.</p>	0 to 240	30
<p>AUTO FORWARD PRIORITY</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>While the VP system is not busy handling calls, it performs several low-priority tasks, such as self-checks, display updates, etc. One of these tasks is to scan the mailboxes to see if one has a message that is ready to be auto-forwarded. Since this is a low-priority task, you may see some delay between the time when a message is due to be auto-forwarded and the time when the message actually appears in the new mailbox. If you want to minimize these delays, you can boost the priority of this task. The priority value can vary from 1 through 9, with 9 being the highest priority.</p> <p>Do not adjust this value unless you are sure that it is causing a problem. By allocating a higher priority to this task, you are taking processing time away from other tasks.</p>	1 to 9	1.
<p>AUTO START</p>	<p>On DOS-based VP systems only: If no database password has been assigned, the VP system goes to the main database menu on startup. If you prefer to have it go immediately to the LINE STATUS screen, either assign a database password, or include this option in the VM.CFG file.</p>		Go to database main menu if no database password assigned.
<p>BASIC CPTONES</p>	<p>Include this option in the VM.CFG file if you do not want the VP system to use Dialogic Perfect Call call-progress tone detection. The system will instead use an older method of detecting call-progress tones. This option should only be invoked if advised by Technical Support.</p>	Not applicable	Uses Dialogic PerfectCall
<p>CD SPEED</p>	<p>This parameter controls the playback of messages voiced through the telephone when the subscriber presses 9 to fast-forward the message. The parameter is entered as:</p> <p>CD SPEED = <i>N</i></p> <p>where <i>n</i> is 1, 2, or 3. CD SPEED=1: The 9 key jumps message playback ahead 5 seconds. CD SPEED=2: The 9 key toggles message playback from normal to accelerated fast forward to normal. CD SPEED=3: The 9 key toggles message playback from normal to accelerated fast forward to slow fast forward to normal.</p>	1 to 3	2

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup																
CHECK BOX ALIAS	<p>This parameter works in conjunction with a text file ALIAS.TXT in the \VM subdirectory. It allows users to map an "alias" number to a mailbox. If a caller specifies the alias number (at the prompt to enter an extension, for example) the call is sent to the mapped mailbox and transferred according to the rules set up in that mailbox. The text file ALIAS.TXT in the \VM subdirectory must be formatted as:</p> <p><i>xxxx=yyyy</i></p> <p>where <i>xxxx</i> is the alias number and <i>yyyy</i> is the mailbox to which the alias number is mapped.</p>																		
CLEARDOWN DELAY	<p>When the VP system is placing outgoing calls (for pager notification, message delivery, Outbound Telemarketing, etc.), this is the time (<i>n</i>, in seconds) after completing a call before another outgoing call is attempted. The parameter is entered as:</p> <p>CLEARDOWN DELAY = <i>N</i></p> <p>Priority is always given to incoming calls. If no lines are available to place an outgoing call at the expiration of this timer, the VP system automatically re-checks for a free line every few seconds.</p>	1 to 10	6 seconds.																
COLOR.X.Y	<p>On DOS-based VP systems only: You can re-define which colors the VP system should use when displaying screens, menus, etc. The available colors are:</p> <table border="0" data-bbox="558 1100 769 1318"> <tr><td>Black</td><td>0</td></tr> <tr><td>Blue</td><td>1</td></tr> <tr><td>Green</td><td>2</td></tr> <tr><td>Cyan</td><td>3</td></tr> <tr><td>Red</td><td>4</td></tr> <tr><td>Magenta</td><td>5</td></tr> <tr><td>Brown</td><td>6</td></tr> <tr><td>White</td><td>7</td></tr> </table> <p>These can be assigned to menus, panels (input screens), help screens, and the LINE STATUS screens as follows:</p> <p><i>color.menu.fg = 0 sets menu foreground to black</i> <i>color.menu.bg = 1 sets menu background to blue</i> <i>color.panel.fg = 7 sets panel foreground to white</i> <i>color.panel.bg = 4 sets panel background to red</i> <i>color.help.fg = 0 sets help foreground to black</i> <i>color.help.bg = 2 sets help background to green</i> <i>color.label.fg = 7 sets Line Status foreground to white</i> <i>color.label.bg = 0 sets Line Status background to black</i></p>	Black	0	Blue	1	Green	2	Cyan	3	Red	4	Magenta	5	Brown	6	White	7		As displayed.
Black	0																		
Blue	1																		
Green	2																		
Cyan	3																		
Red	4																		
Magenta	5																		
Brown	6																		
White	7																		

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>CP.x</p>	<p>Some telephone system have the capability to replace standard call-progress tones (ringback tone, busy tone, dial tone, etc.) with DTMF tones. This tends to make integration with the VP system faster and more reliable. These parameters must be defined in the VM.CFG file. Note that not all telephone systems with this capability have all the tones listed below.</p> <p style="text-align: center;"> CP.ANS CP.BUSY CP.DND CP.NOANS CP.INITRING CP.INTERRING CP.INVALID CP.DISCONNECT CP.DIAL TONE </p> <p>Before entering any of these parameters in the vm.cfg file, see the appropriate Technical Bulletin for the telephone system.</p> <p>Additional Conditions: Use of the CP.x parameters also requires entry of the HOST=IB parameter in the VM.CFG file.</p>		<p>Not enabled (the VP system expects standard call-progress tones).</p>
<p>CUSTOM</p>	<p>You may use this parameter to customize the VP system for a particular telephone system or special application. The parameter is entered as:</p> <p style="text-align: center;">CUSTOM = N</p> <p>where <i>n</i> is a number representing the particular customized operating parameter. These parameters and their descriptions are described in the appropriate sections of this Installation Guide and in the VP system Technical Bulletins. Do not use a CUSTOM parameter unless you are instructed to do so by this manual, a Technical Bulletin, or Technical Support personnel.</p> <p>Note: You can enter up to 4 CUSTOM parameters on the OTHER CUSTOMIZATIONS screen (VP systems) or 8 on the CUSTOM FLAGS screen (NTVP systems). Additional parameters, if required, can be entered in the VM.CFG file.</p>		
<p>DATABASE LINE</p>	<p>On DOS-based VP systems only: This parameter indicates to the VP system which line is to be used when the system records names, greetings, etc., from the BOX INFORMATION screens and when recording system prompts on DOS-based VP systems using the prompt recording utility. For example, if you want to use line 2 as the one on which you make the recordings, enter the following line in the VM.CFG file:</p> <p style="text-align: center;">DATABASE LINE = 2</p> <p>This parameter affects both dial-up connections and direct connections using optional audio coupling devices.</p>		<p>Line 1.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
DATABASE TIMEOUT	<p>The VP system customer database is password protected to prevent access by unauthorized personnel. Once you log on to the system, the VP system monitors keyboard activity. If no entries are made for <i>n</i> minutes, you are automatically logged out of the system. The range of the timer is 1 - 120 minutes. You can adjust it by entering:</p> <p>DATABASE TIMEOUT = N</p>	1 to 120	5 minutes.
DATE FORMAT	<p>This parameter can be used to alter the format of the date in files and reports recorded on disk or sent to a printer. The parameters are M(onth), D(ay) and Y(ear). To print the date in the format Day-Month-Year, the entry would be:</p> <p>DATE FORMAT = DMY</p> <p>Three options are available: MDY, DMY or YMD</p>		MDY (U. S. standard).
DELETE AFTER FWD	<p>After listening to a message in the mailbox, one of the options is to forward the message to another mailbox. Using this parameter automatically deletes messages from the mailbox after they have been manually forwarded to another mailbox.</p> <p>Note that this parameter does not affect the mailbox feature AUTOMATICALLY FORWARD NEW MESSAGES TO BOX X AFTER Y HOURS. Messages that are forwarded with this feature are <i>always</i> deleted from the original mailbox.</p>		The VP system leaves a copy of the original message in the mailbox.
DELETE QUEUE FREQUENCY (Enter this as one line of text in the VM.CFG file.)	<p>On NT-based systems only: This parameter specifies the rate in seconds at which the VP system checks the delete queue for entries to delete. To indicate the queue is to be checked every 5 seconds, make the following entry in the VM.CFG file:</p> <p>DELETE QUEUE FREQUENCY = 5</p> <p>Note that by assigning higher values to this parameter, you slow other call processing functions as the VP system must monitor the delete queue more frequently.</p>	1 to 20	10
DELETE QUEUE BURST SIZE (Enter this as one line of text in the VM.CFG file.)	<p>On NT-based systems only: This parameter specifies the number of deleted items the VP system is to purge every time the delete queue is checked. For example, to purge 4 items, make the following entry in the VM.CFG file:</p> <p>DELETE QUEUE BURST SIZE = 4</p> <p>Note that by assigning higher values to this parameter, you slow other call processing functions.</p>	1 to 20	1
DETECT PULSE	<p>This parameter tells the VP system to listen for the pulse "ticks" generated by a dial-pulse (rotary) telephone. Note that this is audio detection <i>only</i>, not breaks in loop current, and it requires the use of special Rhetorex or Dialogic voice boards developed for this purpose. See also PULSE SPEED in this section.</p>		Dial pulse detection not enabled.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
DIAL	<p>For the VP system's dial-by-name directory feature to function, the relationship between the digits on the keypad and the letters of the alphabet must be defined. This parameter can re-define that relationship if required by the application. The North American standard assigns a digit to all letters of the alphabet except Q and Z, which the VP system defaults to the digit 1. The format of this parameter is <code>xyyy</code> where <code>x</code> is the dial pad key (0 - 9, * and #) and <code>yyy</code> represents one or more letters to be associated with that digit. For example, to re-map the letters Q and Z to correspond with the number zero, you would enter:</p> <p><code>DIAL = 0QZ</code></p>		North American Standard keypad, plus 1QZ.
<p>DIALTONE FREQUENCY (Enter this as one line of text in the VM.CFG file.)</p>	<p>When included in the VM.CFG file, this option instructs the VP system to listen for specific dialtone frequency(ies) instead of only non-silence to determine when a call has ended. Enter as:</p> <p><code>DIAL TONE FREQUENCY=xxx</code></p> <p>or</p> <p><code>DIAL TONE FREQUENCY=XXX,YYY</code></p> <p>Where <code>xxx</code> is the frequency of the dialtone, and <code>yyy</code> (optional) is the second frequency of the same dialtone.</p>		The VP system listens for non-silence only.
DIALTONE ON	<p>Note: This parameter is effective only if the DIALTONE FREQUENCY parameter (see above) is being used.</p> <p>Include this option in the VM.CFG file to define the number of seconds of dialtone the VP system must detect before it is recognized. For example, to specify 2 seconds must be detected, enter:</p> <p><code>DIAL TONE ON = 2</code></p>	1 to 5	3
DIRECTORY IDP	<p>When the caller is using the telephone keypad to spell out the name of the person he/she is trying to reach, the VP system keeps accepting digits until there is a pause. By default, the VP system assumes the caller has finished dialing when there is a 2-second pause between digits. However, since the caller is trying to find the letters on the keypad, he/she might dial more slowly than normal, so you might want to allow more time between digits. For example, if you insert the following line in the VM.CFG file:</p> <p><code>DIRECTORY IDP = 4</code></p> <p>The VP system keeps accepting digits until there is a pause of 4 seconds. Do not make this value too large, or the caller notices a delay when he/she has finished dialing.</p>	1 to 9	Same as INTER DIGIT (see below).

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
DISABLE TUTORIAL	This option disables the tutorial feature for all mailboxes.		The tutorial is played for every new mailbox each time the mailbox owner opens his/her mailbox. The mailbox owner must disable it by pressing *.
DTMF ON	<p>This is the minimum duration of received DTMF tone that the VP system considers as a valid digit. Tones of a shorter duration are ignored. Some telephone systems may generate a shorter duration tone (when using 'speed dial'). It is best to re-configure the telephone system to send longer duration tones. If this is not possible, this parameter may be used to reduce the time the VP system considers as a valid DTMF digit.</p> <p>Enter the command line followed by the new digit time in milliseconds that you want the VP system to consider a valid tone. For 30 milliseconds, the entry would be:</p> <p>DTMF ON = 30</p> <p>Note: Setting the DTMF ON time too low may cause speech to be falsely detected as a DTMF tone. This is usually evidenced during recording of a message, since the receipt of any DTMF tone during recording causes the recording process to end.</p>	1 to 1000	The VP system ignores any DTMF tones shorter than 50 milliseconds.
DTMF SEND ON	This specifies the length of a DTMF tone when the VP system is dialing out.	1 to 1000	100 ms.
DTMF SEND OFF	This parameter specifies the pause between DTMF tones when the VP system is dialing out.	1 to 1000	100 ms.
EXPORT PATH	<p>This parameter defines a directory where the VP system stores the following types files:</p> <ol style="list-style-type: none"> 1. The directory file BOX.DIR used by VCM 2. The message-count file MESSAGE.TXT containing the number of messages for each box in the system (for third-party applications) 		The \VM subdirectory.
EXTERNAL FAX	This parameter requires the installation of the FAX option. It is used to designate that the fax board(s) do not share telephone lines with voice processing boards, but have dedicated telephone lines.		All fax boards share lines with voice board ports.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>EXTERNAL MSG PATH</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>This parameter is used in conjunction with the ACCEPT EXTERNAL MSGS parameter. Use this parameter to tell the VP system where to look for messages generated by third-party applications. For example, if the other application created messages and placed them in a directory on the M drive called NEW, then you would include the following line in the VM.CFG file:</p> <pre>EXTERNAL MSG PATH = M:\NEW</pre>		<p>If this parameter is not specified, the VP system uses the path specified by the EXPORT PATH parameter. If no EXPORT PATH is specified, it uses the current path (the directory in which the VP system is installed).</p>
<p>FAST ACD TRANSFER</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Include this option on VP systems with Comdial integrations only. The option instructs the VP system to hook-flash only once when trying ACD extensions. If it encounters a busy extension, it does not have to hook-flash back to the caller then hook-flash again for dial tone. This makes ACD hunting faster.</p>		<p>Use normal hook-flashing techniques.</p>
<p>FAST FAX</p>	<p>This parameter requires the installation of both the Fax and Outbound Telemarketing optional module.</p>		<p>Fax broadcasting not allowed.</p>
<p>FAST NOTIFICATION</p>	<p>When a mailbox gets a new message, and the message delivery feature is active for the mailbox, the VP system calls the message delivery numbers. When the mailbox owner answers, he/she is prompted to enter the mailbox password. Once the password is entered, the VP system plays the new message.</p> <p>If the FAST NOTIFICATION option is included in the VM.CFG file, the VP system also prints a log entry to the default printer indicating that the mailbox owner heard the message.</p> <p>Note: The USE PRINTER option must also be included in the VM.CFG file.</p> <p>If the owner is not contacted by the time the VP system has completed the message delivery cycle the number of times specified in the mailbox, the VP system makes no log entry to the printer. The system does changes the status of the message to Saved, however, so if another message is generated the next day, the mailbox owner will hear that message first.</p>		<p>Successful message delivery attempts are not printed as a log entry to the default printer.</p>
<p>FAX GENERAL DELIVERY</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>This option is available only if the FaxMail optional module is enabled. If the VP system detects fax tone while it is playing a Routing box greeting (for example, while it is playing the main company greeting in the initial Routing box), it accepts the fax documents and stores them in the FAX GENERAL DELIVERY mailbox. For example, if you inserted the following line in the VM.CFG file:</p> <pre>FAX GENERAL DELIVERY = 4100</pre> <p>The VP system stores the incoming fax in mailbox 4100. (Of course, if the caller enters a mailbox number before sending the fax, the document is stored in the mailbox specified by the caller.)</p>		<p>Anonymous incoming faxes are stored in mailbox 888.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
FAX LINK	This parameter is only for use with the optional Fax modules. This option tells the VP system which CAS multiplex number to use when communicating with the fax board(s). Do not change this unless you are familiar with the fax drivers. Typical values are CB, CC, and CD.		CB.
FAX ORDER PATH	<p>This parameter is only for use with the optional Fax modules using a third-party fax server. If you want to rename the directory with the default name FAXORDER, enter:</p> <p>FAX ORDER PATH = <NEW DIRECTORY></p> <p>If you have located the fax documents on a disk drive other than the default (C:), enter:</p> <p>FAX ORDER PATH = <DRIVE> \ <DIRECTORY></p>		Directory name FAXORDER is located on drive C.
FAX PAUSE	<p>This parameter is only for use with the optional Fax modules. When the VP system hands control of a call over to the fax board, it remains on the line long enough to ensure that the fax hardware has initialized and gone offhook. For example, if you include the following line in the VM.CFG file:</p> <p>FAX PAUSE = 10</p> <p>The VP system remains on the line for 10 seconds after handing control to the fax board. During this time, the VP system does not interfere with the fax transmission.</p>	1 to 60	25 seconds.
FAX PREFIX	<p>This parameter is only for use with the optional Fax modules. It allows you to specify a string of digits that the VP system should insert in front of the fax telephone number when it is about to make a call to deliver a fax. For example, if you include the following line in the VM.CFG file:</p> <p>FAX PREFIX = 01144</p> <p>and a caller enters 5551212 as the telephone number for his/her fax machine, then the VP system dials 011445551212 when delivering the fax.</p>		No digits
FAX TIMEOUT	<p>This parameter is only for use with the optional Fax modules. It sets the maximum amount of time (<i>n</i>, in minutes) allowed when sending a fax document into the VP system. Enter as:</p> <p>FAX TIMEOUT = <i>N</i></p>	1 to 200	15 minutes.
FAX TRACE FILE	<p>By default, fax diagnostics are written to the trace file TRACE.LOG. This option instructs the VP system to write the fax diagnostics to a different file. Enter as:</p> <p>FAX TRACE FILE = [<i>FILENAME</i>]</p>		None.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
FF DIGIT	<p>While the VP system is playing a Routing box greeting, the caller can skip forward 5 seconds or backward 5 seconds by using the FF DIGIT (fast-forward) or REW DIGIT (rewind). To use the FF digit, the following conditions must be met:</p> <ol style="list-style-type: none"> 1. The FF digit must be defined in the VM.CFG file. 2. The DESTINATION FOR DIGIT field in that particular Routing box must be blank. 		No FF digit defined.
FIXED LANGUAGE	<p>This parameter is only used when the system has the multi-lingual option. Normally, each line answers with the prompt, "Press 1 for English, 2 for Spanish, or 3 for French," (or something similar). If you want certain lines to default to answering in a particular language always, then use this statement to indicate which lines should answer in which language. For example:</p> <p>FIXED LANGUAGE = X, Y</p> <p>where x is the line number and y is the language number.</p>		Every line asks the caller to choose a language.
FLOW CONTROL	<p>When using the serial link for certain PBX integrations, this parameter identifies whether or not the VP system should use hardware flow-control (i.e. CTS/RTS) on the link. The options are:</p> <p>0 Do not use hardware flow control for sending or receiving</p> <p>1 Use flow control in one direction only (receiving data)</p> <p>2 Use flow control in both directions</p> <p>For example:</p> <p>FLOW CONTROL = 1</p> <p>This means that the VP system should use flow control when receiving, but should not use it when sending data (it should signal when it is ready to receive data, but should assume that the distant end is always ready to receive).</p> <p>Note: Comdial serial integrations require this option be set to 1 in the VM.CFG file.</p>	0 to 2	2 (flow control in both directions).

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
GREETING.x	<p>Use this option to tell the VP system which mailbox greeting it should play if a call transfer fails because of a busy, no-answer or do-not-disturb condition. For example, if you want the VP system to play greeting 0 (the default) if an extension does not answer, and greeting 1 if the extension is busy or in do-not-disturb mode, enter the following lines:</p> <pre>GREETING.NO ANSWER = 0 GREETING.BUSY = 1 GREETING.DND = 1</pre> <p>If the mailbox does not have the appropriate greeting recorded, the VP system plays the currently active greeting for that mailbox.</p> <p>Note: If you specify a no-answer/ DND/ Busy greeting this way, it will take precedence over any Night / Lunch greeting you specify.</p>		Plays the currently active greeting in all 3 cases.
GREETING.NIGHT	<p>Use this option to tell the VP system which mailbox personal greeting it should play if a call transfer fails for any reason (for example, busy, no-answer or transfer feature disabled) while the system is in Night Service mode. For example, if you want the VP system to play greeting 5 at night, enter the following line:</p> <pre>GREETING.NIGHT = 5</pre> <p>If the mailbox does not have the appropriate greeting recorded, the VP system plays the currently active greeting for that mailbox.</p> <p>Note: If you specify busy/no-answer/DND greetings as described above, they take precedence over the night greeting.</p>	1 to 9	Plays the currently active greeting.
GREET SIL	<p>When mailbox owners record their personal greetings, they are prompted to press # when finished. This is preferable, so there is no silence at the end of the greeting. If the owner does not press #, the recording stops using to the NUMBER OF SECONDS OF SILENCE TO END RECORDING field on the TECHNICAL INFORMATION screen (VP systems) / GENERAL INFORMATION screen (NTVP systems). This time is also the amount of silence to end the recording of messages by <i>callers</i> to a mailbox. Using this parameter creates a separate timer for the number of seconds of silence to end the recording of a personal greeting. To make this time 3 seconds, enter:</p> <pre>GREET SIL = 3</pre>	1 to 10	Uses the same timer (SECONDS OF SILENCE) for both owners recording greetings and callers recording messages.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>GROUP BOX DISTRIBUTION PRIORITY</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>The VP system performs several tasks such as lighting message waiting lamps, message delivery, pager notification, etc. by executing each task in accordance to the priority it is assigned. Use this parameter to increase the priority the VP system assigns to delivering Group box messages. For example, to assign a priority of 3, include the following line in the VM.CFG file:</p> <pre>GROUP BOX DISTRIBUTION PRIORITY = 3</pre> <p>A priority of 9 is the highest. Note that by assigning a higher priority to the delivery of Group box messages, you shift more system resources to this function, which slows the completion of other system tasks during Group box message delivery. If Group box distribution is not urgent in an organization, assign a priority of 3 or less.</p>	<p>1 to 9</p>	<p>Distribution priority is 1.</p>
<p>HARDWARE INT</p>	<p>The VP system uses hardware interrupt 5. If the PC is already using this interrupt for something else, use this parameter to choose a different interrupt. For example, to cause the VP system to use interrupt 3, include the following line in the VM.CFG file:</p> <pre>HARDWARE INT = 3</pre> <p>As shipped, the VP system is configured to use interrupt 5, a setting that is compatible with most computers.</p>	<p>1 to 7</p>	<p>Interrupt 4. However, the VM.CFG file shipped with the VP system sets the hardware interrupt to 5.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>HOST</p>	<p>Some integrations require a VM.CFG file HOST entry to inform the VP system of the method employed by the particular telephone system. These include out-of-band serial data port integrations (such as SMDI), some in-band integrations where normal call-progress tones are replaced by DTMF tones, and installations using special hardware to interface to proprietary (non-industry standard) telephone lines (such as Mitel COV ports). The format of the entry is:</p> <p>HOST = AA</p> <p>where aa represents a series of letters designating the special integration in use. Current valid entries and a brief description of each follow:</p> <p>IB In-band DTMF tones replace standard call-progress tones</p> <p>NS Connecting to Northern Telecom NORSTAR ports via Dialogic D42D-NS</p> <p>SL Connecting to Northern Telecom SL-1 ports via Dialogic D42D-SL</p> <p>SM Out-of-band (serial port) integration</p> <p>SX Connecting to Mitel COV ports via Dialogic D42D-SX</p> <p>31 ITT / Cortelco System 3100</p> <p>Additional Conditions: HOST statements require software key code files to activate.</p>		<p>Special integrations are not enabled.</p>
<p>IGNORE DISCONNECTS</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Normally, the VP system drops a call immediately if it detects a disconnect signal on the line (usually a short period of no line current). If the host telephone system sends these signals for any other reason (for example, metering or answer supervision), then you may need to tell the VP system to ignore these line signals. This parameter causes the VP system to ignore <i>all</i> disconnect signals. Use it with caution. A more common application is for the VP system to ignore only the <i>initial</i> disconnect signal, see the following entry in this section.</p>		<p>The VP system detects and acts upon line supervision signals.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>IGNORE DTMF</p>	<p>You can tell the VP system to ignore DTMF digits dialed by the caller while in specific boxes. For example, you might want to play the greeting in a Routing box to completion, without allowing the caller to skip over it by pressing a digit. You can use this option to specify one range of boxes. While the VP system is processing a box in that range, it ignores DTMF digits. For example, if you want to ignore DTMF digits while the VP system is in boxes 6000 through 6100, you enter the following line:</p> <pre>IGNORE DTMF = 6000,6100</pre> <p>Use this option with caution. If a caller cannot enter digits, he/she may interpret it as a fault in within the voice mail.</p>		<p>Interpret every DTMF digit immediately.</p>
<p>IGNORE INITIAL DISCONNECT</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Some C.O. lines (typically Centrex) send a loop-break signal when the called party answers. The VP system always interprets these loop-breaks as an indication that the party at the distant end has disconnected, and it immediately terminates the call. By using the IGNORE INITIAL DISCONNECT option, you can indicate to the VP system that it should ignore loop-break signals while it is playing the greeting in the initial box, and also when it is about to transfer a call (while it is playing the prompt, <i>"Please hold while I transfer the call"</i>).</p>		<p>Interpret every loop-break signal as a disconnect indication.</p>
<p>IGNORE NONSILENCE</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>While the VP system is recording and playing messages and prompts, it is continually monitoring the line, watching for an indication that the caller has disconnected. One such indication is the presence of dial tone on the line. Any continuous sound lasting more than a pre-defined period is considered to be <i>non-silence</i>. If you have recorded a prompt or greeting that contains long periods of continuous sound (for example, violin music for a background to the prompts), the VP system may interpret this as dial tone and disconnect calls prematurely. If you include the IGNORENONSILENCE option in the VM.CFG file, then the VP system ignores these continuous sounds during play operations. Remember, however, that the VP system now also ignores dial tone while it is playing messages, prompts etc. (Dial tone detection during record operations is not affected).</p>		<p>Detect dial tone during play operations and disconnect the call.</p>
<p>INITIAL PAUSE IDP</p>	<p>If a digit is received during the initial pause (see section 7), the VP system stores it and watches for further digits. It accepts all digits until there is a pause of one second. The one second pause is how the VP system can tell that the PBX has finished sending digits. If the digits from the PBX are too slow (more than one second apart), then you need to tell the VP system to allow more time between digits. For example, if you insert the following line in the VM.CFG file:</p> <pre>INITIAL PAUSE IDP = 2</pre> <p>The VP system keeps accepting digits until there is a pause of 2 seconds. Keep this value as low as possible, as it can introduce a delay at the beginning of each call.</p>	<p>1 to 9</p>	<p>1 second.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
INTER DIGIT	<p>The time (<i>n</i>, in seconds) a caller is allowed after dialing a digit to dial another digit before the VP system continues with call processing.</p> <p>INTER DIGIT = <i>N</i></p> <p>Note: Whether or not the VP system waits for a second digit in a Routing box is set by the field WHEN DIGIT RECEIVED, WAIT FOR MORE DIGITS on the ROUTING BOX screen. The INTER DIGIT timer applies at every other point in the system, until the maximum allowable number of digits for the particular call processing function has been entered.</p>	1 to 9	2 seconds.
INTERNAL	<p>Defines the maximum length (<i>n</i>) of extension numbers in the system's internal dialing plan, entered as INTERNAL = <i>n</i>. Numbers of greater length are assumed to be <i>external</i> numbers and are treated as defined in:</p> <ul style="list-style-type: none"> • CALL TRANSFER screen (DOS-based VP systems) / PBX INFORMATION screen (NTVP-based VP systems)—External call transfers • GENERAL INFORMATION screen—Digits to get a line on an external call 		4 digits.
IVR PROMPT LANGUAGE (Enter this as one line of text in the VM.CFG file.)	<p>If you are using the optional IVR module, you can record your own voice prompts (see section 26 for information). By default, the VP system expects you to have recorded these files using language 9. However, if you used a different language number to record these prompts, use this option to tell the VP which language number you used.</p>	1 to 10	Language 9.
IVR VOICE FILE PATH (Enter this as one line of text in the VM.CFG file.)	<p>If you are using the optional IVR module, you can create voice files and include them in the database. Use this option to tell the VP system where the voice files are stored. For example, to indicate the files are stored in the C:\VM\P subdirectory, enter the statement:</p> <p>IVR VOICE FILE PATH=C:\VM\P</p>		The directory where the greetings are stored.
KEEP MESSAGES NEW (Enter this as one line of text in the VM.CFG file.)	<p>When a mailbox owner has listened to a message, the VP system automatically changes its status from a NEW message to an OLD message. If you use this option, the VP system keeps the message as a NEW message, until the caller specifies that the message should be saved as OLD, by selecting option 2 from the message options menu.</p>		Automatically mark the message as OLD.
LANGUAGES	<p>If you are using the multi-lingual option, this statement is used to tell the VP system how many languages you intend to use. If you add another language, simply change this number. For example, if the system supports English, French, and Spanish, enter the statement:</p> <p>LANGUAGES=3</p>		One language.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
LH TTS VOICE ID	<p>This parameter is used to change the default text-to-speech voice. Each numeric value represents a different TTS voice. For example, if you want to change the TTS voice:</p> <p>LH TTS VOICE ID=3</p>	0 to 12	1 (Peter)
LINES CONNECTED (Dialogic D42-SX, -NS and -SL boards only)	<p>When the VP system is equipped with one of the special application Dialogic voice boards listed above, each port is tested for proper communication with the host switch upon loading. The VP system tests each port in turn starting with port 1 until the number of ports shown here has been tested. Use this parameter to define the number (<i>n</i>) of VP system ports equipped:</p> <p>LINES CONNECTED = <i>N</i></p> <p>This parameter has no effect unless the associated HOST parameter for the type of Dialogic board installed has been entered into the VM.CFG file.</p>	1 to Max Lines Connected	None connected.
LINK FORMAT	<p>The VP system has been designed to accommodate a wide variety of telephone systems that integrate to voice mail using a serial data link. The format of the serial data integration packets is defined in an ASCII text file with the extension .LNK. For example, Bell standard SMDI packets are defined by the file SMDI.LNK. Each VP system serial integration has an accompanying Technical Bulletin that describes the necessary filename (xxxx.LNK) for this parameter. For systems based on a format other than SMDI, the entry is:</p> <p>LINK FORMAT = XXXX.LNK</p> <p>This parameter also requires the optional Serial Integration Module and entry of the appropriate HOST statement in the VM.CFG file.</p>		SMDI.LNK.
LOCAL SPKR	<p>DOS-based VP systems only: When you use the screen menus in the VP system or in the prompt recording utility to play back prompts and greetings, you are asked to call into the system, and the recordings are played over the phone line. However, if you connect a local loudspeaker to the board, use this parameter to tell the VP system that it can play the recordings through the speaker, not requiring a dial-up connection.</p>		Local speaker not connected, dial-up connection required.
LONG HOOK-FLASH	<p>The \$ character may be used in the PA.INIT and PA.CANCEL sequences if an on-hook condition is required when using the "park and page" method. This parameter determines the length of the long hook-flash, where <i>n</i> is number of milliseconds for the on-hook condition:</p> <p>LONG HOOK-FLASH = <i>N</i></p>	100 to 600	4000 ms (4 seconds).

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>LUNCH OPERATOR IS DAY</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>At various times during a call, the caller has the option to dial 0 for an operator. If the VP system is in Day Service mode, the call is routed to the day operator (as defined in the mailbox class of service). If the VP system is in Night Service mode, the call is routed to the night operator. While the VP system is in Lunch-service, operator calls are normally routed to the night operator. If you want to route operator calls to the day operator during Lunch Service mode, add the following line to the VM.CFG file:</p> <p>LUNCH OPERATOR IS DAY</p>		<p>Operator calls are routed to the night operator during Lunch Service mode.</p>
<p>MAX INACTIVE</p>	<p>The VP system has been designed to be fault-tolerant. If a hardware or software fault occurs on the system, there is a danger that one or more of the lines could be out of service for an extended period. To prevent a transient problem from locking up the lines, the VP system continually monitors each line. If a line becomes inactive for more than 10 minutes, but is not idle, the VP system makes every effort to release the line, and it reports an error. Use this option if you need to adjust the 10-minute timer.</p>		<p>10 minutes.</p>
<p>MAX INTERNAL</p>	<p>When a call sent to a mailbox is transferred to the number in the TRANSFER TO field, the VP system consults this parameter to determine whether the call is to be treated as an internal or external transfer. If the number in the TRANSFER TO field is equal or less than the number specified here, the call is treated as an internal transfer.</p>		<p>6 digits.</p>
<p>MAX LOCKUP</p>	<p>The VP system has been designed to be fault-tolerant. If a hardware or software fault occurs on the system, there is a danger that the PC could lock up. To prevent a transient problem from locking up the lines, the VP system continually monitors its own operations. In the unlikely event that the PC locks up for more than 25 minutes, the VP system makes every effort to reboot the computer and restart itself. Use this option if you need to adjust the 25-minute timer.</p>		<p>25 minutes.</p>
<p>MAX PASSWORD LENGTH</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Enter MAX PASSWORD LENGTH = <i>n</i>, where <i>n</i> is the maximum number of digits allowed for an owner's mailbox password.</p>	<p>1 to 10</p>	<p>10 digits.</p>
<p>MAX TTS STREAMS</p>	<p>The VP system key allows a maximum number of concurrent TTS sessions. The default number depends on the number of unified messaging seats the user has purchased. This parameter allows the user to reduce the maximum number of TTS sessions temporarily for troubleshooting purposes. Enter MAX TTS STREAMS = <i>n</i>, where <i>n</i> is the maximum number of TTS sessions.</p>	<p>0 to 30</p>	

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>MBOX DEFAULT DIGIT</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>When the VP system plays a mailbox greeting to a caller, and the field AFTER PLAYING GREETING is set to WAIT FOR DIGIT, the VP system plays the complete greeting, then waits 5 seconds for the caller to enter a digit. If the caller does not enter a digit, the VP system normally takes whatever action is specified in the field AFTER LEAVING MESSAGE. If you include MBOX DEFAULT DIGIT in the VM.CFG file, the VP system processes the call as if the caller pressed that digit. For example, if the VM.CFG file includes the line:</p> <pre>MBOX DEFAULT DIGIT = 0</pre> <p>and the caller does not enter a digit, the VP system assumes the caller pressed 0 and tries to route the call to the operator.</p>		<p>10 digits.</p>
<p>MENU.<menu id>.<menu option></p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Every voice menu in the VP system can be configured so that any digit can correspond to any option. To change from the default digit that corresponds to menu item, enter:</p> <pre>MENU.<MENU ID>.<MENU OPTION> = N</pre> <p>where <i>n</i> is the new digit you want to correspond to that option.</p> <p>To disable a menu option, enter X as the digit corresponding to the option.</p>		
<p>MESSAGE PAUSE TIME</p>	<p>While a mailbox owner is listening to his/her messages, he/she can press 0 to temporarily pause the playback. The VP system pauses for 30 seconds, then automatically continues playing the message. Use this option if you want to change the pause time. For example, if you want the VP system to automatically continue after 60 seconds, enter the following line in the VM.CFG file:</p> <pre>MESSAGE PAUSE TIME = 60</pre>		<p>30 seconds.</p>
<p>MINIMUM MESSAGE</p>	<p>If you find that the VP system is recording short (1 or 2 second) messages if a caller hangs up without speaking, then you can specify that messages shorter than a particular length can be ignored. For example, entering <code>MINIMUM MESSAGE = 2</code> in the VM.CFG file tells the VP system to throw away any messages shorter than 2 seconds.</p>	<p>1 to 900</p>	<p>The VP system keeps <i>all</i> messages, irrespective of length.</p>
<p>MONITOR</p>	<p>If you need more detailed information than that supplied in the log file, then you can turn on the Monitor feature. You can also specify which events should be monitored and which should not. The additional information is interspersed among the usual log records. Remember that this extra information makes log files much larger.</p>		<p>Monitor not enabled.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
MW OFF REPS	<p>If the host telephone system does not reliably control the message-waiting lamps on the extensions, you can use this option to force the VP system to try more than one time to turn off an extension's message-waiting lamp. For example, if you want the VP system to try 3 times to turn off a message-waiting lamp, insert the following line in the VM.CFG file:</p> <pre>MW OFF REPS = 3</pre>	1 to 5	Try one time.
MW ON REPS	<p>If the host telephone system does not reliably control the message-waiting lamps on the extensions, you can use this option to force the VP system to try more than one time to turn on an extension's message-waiting lamp. For example, if you want the VP system to try 3 times to turn on a message-waiting lamp, insert the following line in the VM.CFG file:</p> <pre>MW ON REPS = 3</pre>	1 to 5	Try one time.
MW PRIORITY	<p>Include this option in the VM.CFG file to indicate the priority assigned to message waiting lamp operation. To set the priority to a medium level, for example, enter the following line in the VM.CFG file:</p> <pre>MW PRIORITY = 5</pre> <p>A priority of 9 is the highest. Note that by assigning a higher priority to the message waiting lamp priority, you shift more system resources to this function, which slows the completion of other system tasks. For this reason, it is recommended you assign this function a priority of 3 or less.</p>	1 to 9	1
MW Q SIZE	<p>Include this option in the VM.CFG file to indicate the number of events that can be held in queue waiting for an idle port. Events include commands for the system to turn on or off message waiting lamps. Note that as the queue grows, system response to call processing tasks slows. To allow, for example, 100 events to queue, enter the following line in the VM.CFG file:</p> <pre>MW Q SIZE = 100</pre>	20 - 1000	50
NO ACCOUNT IN LOG (Enter this as one line of text in the VM.CFG file.)	<p>Version 8.1 of the VP system introduced <i>account numbers</i>. These account numbers are stored in the log file. However, if you have software that processes the log files, and you do not want the format of the log files to change, then you enter the following line in the VM.CFG file:</p> <pre>NO ACCOUNT IN LOG</pre>		The VP system includes the account number in the log file.
NO NAME TRANSFER (Enter this as one line of text in the VM.CFG file.)	<p>On a call transfer, the VP system normally says the called party's name just before it places the caller on hold to transfer the call:</p> <p><i>"Please hold while I transfer the call to [name]."</i></p> <p>Use this option if you do not want the VP system to play the called party's name. The VP system says:</p> <p><i>"Please hold while I transfer the call."</i></p> <p>You must re-record prompt number 96 to say the above phrase, or substitute the optional pre-recorded version of the above phrase.</p>		The VP system plays the called party's name (or the prompt, <i>"that extension"</i> if no name is recorded or the mailbox owner's first name is prefixed with @) before beginning the call transfer.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
NO PC BEEP	This option prevents the VP system from making a beep sound (for example, when reporting an error or when you reach the end of an input field).		The beep is enabled.
NO RECORD BEEP	When the VP system is about to record a message, greeting, etc., it says, <i>"Please speak after the tone,"</i> then plays a short tone. Include this option if you want to disable this tone. The tone is disabled for every recording the VP system makes. If you want to disable the tone in response to an in-band packet received from the telephone system, include the sequence <i>":N"</i> at the end of the rule in the TRANS.TXT file.		6 times.
NO SERIAL MW REFRESH (Enter this as one line of text in the VM.CFG file.)	When the VP system starts up, it refreshes all message waiting lamps via serial link. Add this option to the VM.CFG file to disable this functionality. If there is no serial integration, this option will have no effect.		All message waiting lamps are updated every time the serial link is re-started.
NO VIDEO MEMORY	Include this parameter in the VM.CFG file on VP systems that do not include computer video memory. (Also see UNITIZED.) This affects DOS-based systems only.		VP system assumes that the PC has video memory.
NOTIFY PRIORITY	While the VP system is not busy handling calls, it performs several low-priority tasks, such as self-checks, display updates, etc. One of these tasks is to scan the mailboxes to see if it is time to notify one (call out to deliver new messages). Since this is a low-priority task, you may see some delay between the time when a mailbox owner is due to be notified and the time when the call is actually made. If you want to minimize these delays, you can boost the priority of this task. The priority value can vary from 1 through 9, with 9 being the highest priority. Do not adjust this value unless you are sure that it is causing a problem. By allocating a higher priority to this task, you are taking processing time away from other tasks.	1 to 9	1.
NOTIFY REPS	When the VP system calls to deliver the messages, it plays a prompt: <i>"Message for [name]. Press 1 if you would like to hear the messages ...[pause]."</i> The VP system repeats this prompt until you press 1, or until it has played the prompt a specific number of times. This option allows you to specify how many times the prompt should be repeated.	1 to 9	6 times.
NOTIFY RINGS	When the VP system calls a mailbox owner to deliver new messages, it lets the called telephone ring <i>n</i> times before abandoning the call. You can use this parameter to adjust the number of rings. NOTIFY RINGS = <i>N</i>	1 to 20	The VP system lets the telephone ring 6 times.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>OFFHOOK DELAY</p>	<p>The VP system defaults to begin accepting digits 500 milliseconds after answering the call. Some telephone systems may begin sending digits before the 500 ms has expired, so the VP system may miss them. If you find that the VP system is missing digits at the beginning of a call, you can lower the 500 ms time to 300 ms, by entering the following line in the VM.CFG file:</p> <pre>OFFHOOK DELAY = 300</pre>	<p>10 to 1000</p>	<p>500 milliseconds (0.5 seconds).</p> <p>Note: The most common causes of the VP system missing digits upon call answer are a mis-set INITIAL PAUSE and a missing or incorrect TRANS.TXT file. Do not adjust this timer until you have eliminated these possibilities as a source of the problem.</p>
<p>OMIT GROUP SENDER</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Normally when a mailbox owner sends a message to a Group box and he/she is also a member of that Group box, a copy of the message is sent to his/her box. Use this parameter if you do not want for the sender of a Group box message to receive a copy.</p>		<p>Sender of Group box message receives a copy if a member of that group.</p>
<p>ONHOOK DTMF</p>	<p>This parameter tells the VP system that it should listen for DTMF digits even while it is on-hook. Some telephone systems implement in-band integration by sending DTMF digits at the beginning of the call, before they ring the VP system port. This option requires the use of special hardware (for example, Rhetoex 464 and Dialogic D41E boards). Contact Technical Support if you need further information.</p>		<p>The VP system does not detect DTMF digits until the port is off-hook.</p>
<p>OUTBOUND DELAY</p>	<p>This parameter is for use with the optional Outbound Telemarketing module. When the VP system has finished with an Outbound Telemarketing call, it waits for a few seconds to allow the line time to release (see CLEAR DOWN DELAY). It then pauses for another few seconds before seizing the line to make another telemarketing call. Use the OUTBOUND DELAY parameter to define how long this second pause should be. For example, if you want the VP system to pause for 15 seconds between outbound calls on a specific line, you enter:</p> <pre>OUTBOUND DELAY = 15</pre>	<p>1 to 10,000</p>	<p>0 seconds.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>PA.BUSY</p>	<p>This parameter specifies the sequence that the VP system is to dial to get back to the caller on hold, if the PA system is busy. The sequence can consist of the digits 0-9, A-D, and the following special characters:</p> <p>, Short pause (duration can be changed in TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems) - default is 1 second).</p> <p>% Medium pause (equal in length to 4 commas).</p> <p>L Long pause (equal in length to 8 commas).</p> <p>! Hook-flash (duration can be changed in TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems) - default is 1 second).</p> <p>\$ A 4 second on-hook, then proceeds to next step in sequence (duration can be changed using the LONG HOOK-FLASH parameter).</p> <p>X Substitute the box number of the Mailbox currently handling the call.</p> <p>H Hang up immediately after dialing the sequence.</p> <p>F Substitute the number in the TRANSFER TO field of the Mailbox currently handling the call.</p> <p>Any other character Can be used for punctuation and are ignored.</p> <p>For example, if the telephone system requires a hook-flash, followed by the code 47 to get back from a busy PA system to the caller, you enter the following line in the VM.CFG file:</p> <p>PA.BUSY = !,47</p>		<p>None.</p>
<p>PA.CANCEL</p>	<p>This parameter specifies the sequence the VP system is to dial to get back to the caller on hold, after the VP system has announced the call over the P.A. system. The sequence can consist of the digits 0-9, A-D, and the special characters listed above, entered as:</p> <p>PA.CANCEL =</p>		<p>None.</p>
<p>PA.INIT</p>	<p>This parameter specifies the sequence the VP system is to dial to place the caller on hold and call the PA system on the phone system. The sequence can consist of the digits 0-9, A-D, and the special characters listed above, entered as:</p> <p>PA.INIT =</p>		<p>None.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
PA.REPEATS	<p>When the VP system calls the PA system, it announces the call. You can control how many times the VP system should repeat the announcement. For example, if you would like the announcement to be repeated 4 times, enter the following line in the VM.CFG file:</p> <p>PA.REPEATS = 4</p> <p>The PA announcements can be re-recorded using the prompt recording utility.</p>	1 to 10	Announcement repeats 3 times.
PAGER APPEND	<p>This option affects digital pagers only. If the pager service requires any digits to be added to the end of callback numbers (such as #), you can enter:</p> <p>PAGER APPEND = <i>NNNN</i></p> <p>where <i>n</i> are the digits added.</p>		Nothing appended to callback number.
PAGER PREFIX	<p>This option affects digital pagers only. If the pager service requires any digits to be added to the beginning of callback numbers, or if you require a pause between the time that the pager service answers and when it is ready to accept digits, you may use this parameter. You may enter any DTMF digit, or , (short pause), % (medium pause equal to 4 commas) or L (long pause equal to 8 commas), entered as:</p> <p>PAGER PREFIX = <i>NNNN</i></p>		No digits are prefixed to callback number. It is sent immediately upon answer by paging service.
PAGER RETRY	<p>The VP system keeps trying to call the pager until it makes the call successfully. If, for instance, the paging service was out-of-order and returning a busy signal or ring-no-answer to the VP system, the call attempts could continue forever. This parameter sets the maximum attempts (<i>n</i>) to call a pager before abandoning the process, entered as:</p> <p>PAGER RETRY = <i>N</i></p>		20 attempts.
PAGER TRAIL	<p>This option affects digital pagers only. If the pager service requires a delay after the end of the callback digits, before going onhook, use this option to enter the length of the required delay in seconds:</p> <p>PAGER TRAIL = <i>N</i></p> <p>where <i>n</i> is the length of time the VP system should wait before going on-hook.</p>	1 to 30	1 second.
PAGE TIME	<p>This parameter disables call-progress tone detection on pager calls and uses a timer (<i>n</i> - in seconds) to control the call. For tone pagers, the VP system dials the pager number, waits <i>n</i> seconds, then disconnects. For digital pagers, the VP system dials the pager number, waits <i>n</i> seconds, dials the callback number, then disconnects. Enter:</p> <p>PAGE TIME = <i>N</i></p> <p>Note: Since call progression tones are not monitored, the VP system does not detect a busy.</p> <p>This option is effective system-wide. If you want to disable call-progress detection for specific pagers only, use the N character as the last character in the PAGER NUMBER field.</p>	1 to 30	The VP system uses call-progress tones to determine when a paging service has answered.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
PLAYBACK DELAY	<p>Some telephone systems, as well as some cellular telephones, have a short period following the pressing of a DTMF digit in which incoming audio transmission is blocked. This can cause the calling party to miss the first few words of a prompt, greeting or message playback. This parameter allows a delay to be introduced following the receipt of a DTMF digit before playback of the audio begins. The entry is:</p> <p>PLAYBACK DELAY = <i>N</i></p> <p>where <i>n</i> is the number of seconds of delay desired.</p>	1 to 10	No added delay.
PMS VIA TEXT FILES	<p>This option allows the VP system to communicate with the PMS via text files (normally, a serial link is used). Each time a guest checks in or changes rooms, the PMS creates a text file, which is read by the VP system. The VP system processes the information in the text file, then deletes the file. To implement, include the following line in the VM.CFG file:</p> <p>PMS VIA TEXT FILES</p> <p>The filename should be in the form CKINnnnn.DAT, where nnnn is a 4-digit sequence number between 0001 and 9999. The file is in ASCII (text) format, with one record per line:</p> <p>line 1: box number (<i>required</i>) line 2: password (<i>leave blank if not required</i>) line 3: class of service (<i>leave blank if not required</i>) line 4: language (<i>leave blank if not required</i>) line 5: previous room number (<i>leave blank if not required</i>) line 6: guest last name (<i>leave blank if not required</i>)</p> <p>For example, if a guest named Smith has just checked in to room 104 and chosen a password of 5432, the file would look like this:</p> <p style="text-align: center;">104 5432</p> <p style="text-align: center;">Smith</p> <p>The 3 blank lines are for class of service, language, and previous room number.</p>		Use serial link for PMS integration.
POOLED RING	<p>On some telephone systems, there is no hunting feature. When an incoming call is detected, the telephone system rings all the VP systems ports simultaneously. This causes the VP system to answer all its ports, even though there is only one call. If you want to tell the VP system that this is happening, set the RINGS TO ANSWER field on the LINE INFORMATION screen to 99 for all ports. This tells the VP system to answer on one port, then pause to see if the other ports stop ringing. If they do not, the VP system answers on another port (as there must have been two calls ringing in) and pauses again, etc. If you have problems with this feature, try adjusting the pooled ring time.</p>	1 to 2000	500 ms.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>PULSE CALIBRATION</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>If you are using the rotary detection capabilities of the Rhetorex 464 or Vantage boards, you need to ask the caller to dial a known digit at the beginning of each call, so that the VP system can calibrate itself to match that specific rotary dial. It is best to use the digit 0 or 9 for calibration. For example, to use the digit 0, you would enter the line:</p> <p>PULSE CALIBRATION = 0</p> <p>then record the following phrase at the end of the initial greeting:</p> <p><i>“or if you are calling from a rotary telephone, please dial 0 now.”</i></p> <p>If you are using Dialogic boards, no digit is required.</p>		None.
<p>PULSE SPEED</p>	<p>If you are using the rotary detection capabilities of the Rhetorex 464 or Vantage boards, use this option to tell the VP system whether callers are calling from telephones with 10pps dials, or 20pps dials (North America and Europe almost exclusively use 10pps dials, Japan uses 20pps dials). The options are:</p> <p>PULSE SPEED = 10 <i>or</i> PULSE SPEED = 20 <i>or</i> PULSE SPEED = BOTH</p>		10pps.
<p>QBOX ARCHIVE</p>	<p>If you want the VP system to create a new data file each day for the data-entry Question boxes, then include this option in the VM.CFG file. At midnight each night, the VP system moves the current data files into an archive directory called DATA\ARCHIVE. Each file is named to reflect the date and the Question box(es) with which it is associated.</p>		Do not archive. Keep adding to the same data files every day.
<p>QBOX DATA PATH</p>	<p>This option lets you choose the directory where you want the VP system to store its data files. This could be on a shared drive (for example, a network server), allowing another program to access the data collected by the VP system. Enter as:</p> <p>QBOX DATA PATH = <DRIVE> \ <DIRECTORY></p>		Data files are stored in a DATA directory under the current directory.
<p>QBOX DATA PRINT</p>	<p>This option is used in conjunction with the Question box data entry feature. Using this option, you can instruct the VP system to print the data collected at the end of each call. The data is sent to a printer connected to LPT1.</p>		Do not print the data.
<p>QBOX DATA PRINT EJECT</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>This option is used in conjunction with the Question box data entry feature. If you are printing the collected data to a single-sheet feed printer (such as a laser printer), you may configure the VP system to use one page for each record by entering the parameter as:</p> <p>QBOX DATA PRINT EJECT</p>		Do not send a page-feed to the printer.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>QBOX HIDE ACCT NUMBERS (Enter this as one line of text in the VM.CFG file.)</p>	<p>If you are using a Question box as a data entry device, the VP system stores the account number in the data file. However, if you have software that processes the data files, and you do not want the format of the data files to change, then you should enter the following line in the VM.CFG file:</p> <p>QBOX HIDE ACCT NUMBERS</p>		<p>The VP system includes the account number in the data file.</p>
<p>QBOX POS CONFIRM</p>	<p>This option is used in conjunction with the Question box data entry feature. If you set up a Question box to repeat entered digits back to the caller and request confirmation, this option lets the VP system know what to do if the caller does <i>not</i> respond when the VP system says, “<i>If this is correct, press 1.</i>” If you do not include this option, the VP system accepts the digits anyway. If you include the option, the VP system <i>discards</i> the digits and moves on to the next question if the caller does not respond by pressing 1.</p>		<p>Accept data even if caller does not respond when asked for confirmation.</p>
<p>QBOX USE CONFIRM NUMBERS (Enter this as one line of text in the VM.CFG file.)</p>	<p>This option is used in conjunction with the Question box data entry feature. If you include this option in the VM.CFG file, the VP system issues a 4-digit confirmation number to each caller who uses the Question box. The confirmation number is stored as part of the data file.</p>		<p>Do not issue confirmation numbers.</p>
<p>REMAIN OFFHOOK</p>	<p>This parameter is for use only with those D.I.D. conversion units that operate in the “pass-through” mode. Units using the “digit store and forward” method, which converts D.I.D. signaling to loop signaling, do <i>not</i> require this parameter. The command is entered as:</p> <p>REMAIN OFFHOOK = X, Y</p> <p>where x is the VP system port number and y is the number of seconds that port is to remain on-hook at the termination of a call. At the expiration of the time y the An entry such as the one shown above is required for <u>each</u> VP system port connected to a D.I.D. line. Other ports (if equipped) operate normally.</p> <p>For example, if you had a 2-line system and the VP system had to remain on-hook for 3 seconds at the end of a call, you would enter:</p> <p>REMAIN OFFHOOK = 1,3 REMAIN OFFHOOK = 2,3port again goes off-hook, ready to accept digits from the next call.</p>		<p>Do not remain off-hook.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
REMOTE PAUSE	<p>When remotely changing the pager/notification/transfer number, you can insert a pause in the number to be dialed by entering three stars (***) . The default is for the VP system to replace these three stars with a single comma (defined by PAUSE LENGTH on the TECHNICAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems)). However, you can use the REMOTE PAUSE option to specify that a remotely programmed pause should be of greater length. For example, if you enter the line:</p> <p>REMOTE PAUSE = 4</p> <p>then the VP system replaces the 3 stars with 4 commas.</p>	1 to 10	The VP system replaces the 3 stars with 1 comma.
REPEAT MW	<p>The VP system normally only attempts to turn on message waiting lamps when the number of new messages in a mailbox goes from zero to one (when subsequent new messages arrive, the VP system assumes that the lamp is already on). When a mailbox owner exits from his/her mailbox after listening to messages, the VP system only attempts to turn off the message waiting lamp if there was at least one new message in the box when it was opened. You can use the REPEATMW statement to indicate to the VP system that it should attempt to turn on the lamp every time a new message arrives and should attempt to turn off the lamp every time an owner exits from a mailbox, leaving no new messages.</p> <p>Use this parameter <i>only</i> if absolutely necessary for the telephone system, as its use may greatly increase the VP system processing time and line usage.</p>	0 to 2	The VP system turns on message waiting lamps only when the number of new messages goes from zero to one. The VP system turns off the message waiting lamps only when a mailbox owner exits from his/her box and the number of new messages goes from non-zero to zero.
RESPONSE TIME	<p>The time (in seconds) a caller is given to respond to a system prompt (for example, <i>"If this is correct, press 1"</i>).</p> <p>RESPONSE TIME = N</p>	1 to 9	5 seconds.
REW DIGIT	<p>While the VP system is playing a Routing box greeting, the caller can skip forwards 5 seconds, or backwards 5 seconds by using the FF DIGIT (fast-forward) or REW DIGIT (rewind). To use the REW digit, the following conditions must be met:</p> <ol style="list-style-type: none"> 1. The REW digit must be defined in the VM.CFG file. 2. The DESTINATION FOR DIGIT field in that particular Routing box must be blank. 		No REW digit defined.
RING ON	<p>The VP system recognizes an incoming call by the ring voltage presented at the voice board port. If the telephone system has a non-standard ring cycle consisting of short bursts of ring voltage, the voice board may not recognize the call, or may not answer on the proper number of rings as programmed on the LINE INFORMATION screen. If necessary, use this parameter to adjust the ring cycle ON time to match that of the telephone system. Enter the time (n, in milliseconds) of the ON portion of the ring cycle:</p> <p>RING ON = N</p>	1 to 5000	300 ms (3/10 of a second).

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup																																						
RING RESET	<p>This parameter should <i>only</i> be used if the field RINGS TO ANSWER on the LINE INFORMATION screen is greater than 1. When the VP system is counting rings, it measures the time separating each ring. If this time exceeds a certain threshold, then the VP system assumes that a call has been abandoned and a new one has started ringing. You can use this parameter to change the value of the threshold. The time should be entered in milliseconds. For example, if you want the VP system to reset its ring-counter after a 5-second gap between rings, enter:</p> <p>RING RESET = 5000</p>	1 to 15000	8000 (8 seconds).																																						
SAME CALL FAX OK	<p>This parameter is used only if the fax option is installed. It tells the VP system how to perform same-call faxing. If you are using the Puredata Satisfaxion driver, or if you are unsure which driver you are using, then do <i>not</i> include this option in the VM.CFG file. If you are using the Instantcom driver, then you <i>should</i> insert this option in the VM.CFG file.</p>		This option is not included.																																						
SAMPLING RATE	<p>Indicates to the VP system which sampling rate it should use when recording and playing speech files. Note that files recorded at a particular sampling rate must be played back at the same rate. This means that if you have existing messages and prompts, you have to discard them if you change the sampling rate. Also note the disk space storage requirements for each sampling rate. As you increase the rate, the amount of disk space required to store the voice files increases.</p> <p>Refer to the table that following tables:</p> <p>Sampling Rate Values for Rhetorex Voice Boards:</p> <table border="1" data-bbox="464 1255 1045 1444"> <thead> <tr> <th>Rate Index in VM.CFG</th> <th>Rate (kbit/s)</th> <th>Disk Space Req. (Mbytes/hr)</th> </tr> </thead> <tbody> <tr><td>0</td><td>32</td><td>15</td></tr> <tr><td>1</td><td>32</td><td>15</td></tr> <tr><td>2</td><td>24</td><td>11</td></tr> <tr><td>3</td><td>64</td><td>30</td></tr> <tr><td>4</td><td>128</td><td>60</td></tr> </tbody> </table> <p>Default: 32 kbit/s (index = 0 in above table).</p> <p>Sampling Rate Values for Dialogic Voice Boards</p> <p>Sampling Rate Values for Rhetorex Voice Boards:</p> <table border="1" data-bbox="464 1623 1045 1791"> <thead> <tr> <th>Rate Index in VM.CFG</th> <th>Rate (KHz)</th> <th>Bits / Sample</th> <th>Disk Space Req. (Mbytes/hr)</th> </tr> </thead> <tbody> <tr><td>0</td><td>6</td><td>4</td><td>11</td></tr> <tr><td>1</td><td>8</td><td>4</td><td>15</td></tr> <tr><td>2</td><td>6</td><td>8</td><td>22</td></tr> <tr><td>3</td><td>8</td><td>8</td><td>30</td></tr> </tbody> </table> <p>Default: 6 KHz at 4 bits per sample (index=0 in table above).</p>	Rate Index in VM.CFG	Rate (kbit/s)	Disk Space Req. (Mbytes/hr)	0	32	15	1	32	15	2	24	11	3	64	30	4	128	60	Rate Index in VM.CFG	Rate (KHz)	Bits / Sample	Disk Space Req. (Mbytes/hr)	0	6	4	11	1	8	4	15	2	6	8	22	3	8	8	30		See description at left.
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Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
SAVE TRACE	<p>NT-based VP systems only: By default, when the diagnostic trace utility is running, the TRACE.LOG file is kept open, and trace entries are written to it. The trace file is closed only when the diagnostic trace utility is turned off. When the trace file runs continuously, it may not close properly if the system locks up or experiences power loss unexpectedly, and therefore, all trace information may be lost. The Save Trace parameter instructs the VP system to keep the TRACE.LOG file closed while running the diagnostic trace utility and to open the file only long enough to write entries to it. Running the trace utility this way is less efficient and can slow the system slightly, but it is a more secure way of logging trace data</p>		None.
SCREEN SAVER	<p>DOS-based VP systems only: After a pre-defined period of keyboard inactivity, the VP system automatically blanks the monitor screen of the computer to prevent image burn-in. Pressing any key on the keyboard causes the display to reappear. The parameter is entered as:</p> <p>SCREEN SAVER = <i>N</i></p> <p>where <i>n</i> is the number of minutes of inactivity before blanking occurs. Permitted values are:</p> <p>0 - Screen saver disabled 1 - 120 minutes</p>	1 to 120	10 minutes.
SEND DISCONNECT	<p>A call to the VP system can be terminated by either the calling party (by hanging up), or by the VP system (if the caller does not enter any digits and a Routing box is set to <i>Say goodbye</i> if no digits are dialed). In the case where the VP system terminates a call, supervision is returned to the host telephone system in the form of an on-hook condition. Some telephone systems, usually in a service bureau environment, require DTMF digits be sent to indicate that the VP system is about to terminate a call. This parameter is used to assign these digits. The command is entered as:</p> <p>SEND DISCONNECT = <i>NNNN</i></p> <p>where <i>nnnn</i> is from 1 to 32 DTMF digits (0-9, *, #, A-D). The VP system sends the digits just prior to going on-hook.</p>		None.
SERIAL DISCONNECT DELAY (Enter this as one line of text in the VM.CFG file.)	<p>Include this parameter in the VM.CFG file to define the serial disconnect delay. Enter as:</p> <p>SERIAL DISCONNECT DELAY = <i>X</i></p> <p>Where <i>x</i> is the delay in seconds.</p> <p>Some PBXs send a message over the serial link when the caller has disconnected, so the VP system can free its port. This parameter tells the VP system to wait for a specified time after it receives the disconnect notification, before disconnecting a call. Do not change this parameter unless instructed to do so by Technical Support.</p>	1 to 10	1

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>SERVICE OBSERVE CODE</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>Include this option on VP systems with Comdial integrations to activate the record conversation feature for a certain port on a Comdial phone system. Enter as:</p> <p>SERVICE OBSERVE CODE = #03X</p> <p>Where #03X is the code the VP system needs to dial to initiate the Service Observing feature on the extension who requested that his/her call is to be recorded.</p>	<p>Digits 0-9 plus * and #.</p>	<p>No digits</p>
<p>SHARE FAX PORTS</p>	<p>If a caller requests a fax to be sent during the current call, but there is no fax attached to the line being used, the VP system can automatically transfer the call over to a line that is connected to a fax. To enable this feature, you must enter the following line in the VM.CFG file:</p> <p>SHARE FAX PORTS</p> <p>This tells the VP system to use the call-transfer feature on the telephone system to transfer the call to a port that has a fax board connected. The VP system supervises the transfer, to make sure the fax-enabled port answers.</p> <p>If the phone system does not allow supervised transfers from one voice mail port to another, you can use the option:</p> <p>SHARE FAX PORTS = BLIND</p> <p>Note: If possible, always use the SUPERVISED option. Use the BLIND option <i>only</i> if the SUPERVISED option does not work on the telephone system.</p>		<p>None.</p>
<p>SMDI ANSWER FIRST</p>	<p>This option is used in conjunction with the serial link integration feature. If the host telephone system requires that the VP system answers before it sends the data packet (typically older software on Ericsson switches), include this option in the VM.CFG file.</p> <p>Note: If you include this option, it must come after the HOST option (see the HOST parameter).</p>		<p>The VP system does not answer until it has received a packet from the host telephone system.</p>
<p>SPECIAL ANS DIGIT</p>	<p>While the VP system is monitoring for call progress tones, this option identifies additional digits that the PBX may send and that the VP system should interpret as an answer. For example, to specify digit 2 as a special answer digit, include this option in the VM.CFG file:</p> <p>SPECIAL ANS DIGIT = 2</p>	<p>0 to 9, *, #, A, B, C, D</p>	<p>None.</p>
<p>T1 PORT</p>	<p>This option is for use with Rhetorex boards only. It tells the VP system that the specified port is connected via a T1 interface. For example, if the system has 12 ports, all connected to Rhetorex T1 hardware, you enter the following lines in the VM.CFG file:</p> <p>T1 PORT = 1 T1 PORT = 2 T1 PORT = 3 ... T1 PORT = 12</p>		<p>The VP system assumes that all ports are <i>not</i> T1 ports.</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
TCNAME	This parameter requires the optional Talking Classifieds software. Enter this parameter to request the name of a caller to the Talking Classifieds Gateway box.	0 to 1	Caller's name is not requested.
TDD AUTO	This option tells the VP system that it needs to provide TDD support. It assigns the value 8 to the TDD DIGIT (see below) and causes a TDD prompt to be played immediately after the initial greeting.		No TDD support.
TDD DIGIT	This digit causes the VP system to switch to another language in the middle of a call. It is typically used to allow the caller to switch from voice prompts to TDD tone prompts. If a caller presses this digit while the VP system is playing a Routing box greeting, the VP system switches to the next language and begins playing the greeting again. You may use any DTMF digit. Enter as: TDD DIGIT = N You do not need to use this option if you use TDD AUTO (see above).		No TDD digit assigned.
TONE	You can configure the VP system to automatically transfer incoming data calls to an extension connected to a fax machine or modem, provided that the calling device is capable of initiating the modem tone first. Enter: TONE = X, Y Where x is the PCPM code of the tone and y is the box number of the receiving device.	16 to 31	None.
TRANS BYPASS	The default digit used with the transfer-bypass feature is star (*). If you need to use a different digit, enter: TRANS BYPASS = N Where n is any digit 0 - 9, star (*) or pound (#). Note that changing this from the default may cause conflicts in the system dialing plan.		The * key.
TRANSFER RING	When listening to the ring back tone during a call transfer, Dialogic boards us a timer rather than counting the rings. By default, the boards interpret 1 ring cycle as 4 seconds. Modify this default using the TRANSFER RING option. For example, to set the system so 1 ring cycle is interpreted as 3 seconds, add the following line to the VM.CFG file: TRANSFER RING = 3	1 to 9	By default, the VP system interprets 1 ring cycle as 4 seconds.
TTS BUFFER SIZE	On NT-based VP systems only: This option alters the number of characters read by the e-mail reader when voicing a message. Enter as TTSBUFFERSIZE = N Where n is any digit 512 to 4096. Note: Adjust this parameter only under the direction of Technical Support.	512 to 4096	1024

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
TUTORIAL REPS	<p>By default, the first time a user logs in to a mailbox, the VP system plays a tutorial. The VP system plays the tutorial every subsequent time the subscriber logs into the mailbox, until he/she cancels the tutorial by pressing the * key or until the maximum specified by this parameter is reached.</p> <p>This option identifies the number of times the VP system plays the tutorial upon login. For example, to indicate the VP system is to play the tutorial upon the first 3 mailbox logins, add the following line to the VM.CFG file:</p> <p>TUTORIAL REPS=3</p>	0 to 255	255 (meaning the VP system will <i>always</i> play the tutorial, until the user cancels it).
UM NAME=TCP, <Network Port><VP System PC IP Address> , (Enter this as one line of text in the VM.CFG file.)	<p>On NT-based systems only: This parameter enables the unified messaging feature. Do not modify this parameter unless instructed to do so by technical support.</p>		
UNITIZED	<p>Include this parameter in the VM.CFG file on VP systems that do not include computer video memory. (Also see NO VIDEO MEMORY.)</p> <p>Note: This parameter affects DOS systems only.</p>		Not unitized.
USE L&H TTS	<p>Must be included on net new VP systems version 10.2 and higher and on upgrades of VP systems that did not previously have TTS capabilities. Should not be specified on upgrades for VP systems that already have TTS capabilities.</p>		
USE LCD MENUS	<p>Include this option on VP systems with Comdial integrations to allow serial integration to send messages to Comdial telephone LCD displays.</p>		Disabled (the VP system does not display menu options on LCD of telephone).
USE PRINTER	<p>On NT-based systems only: This option tells NT-based VP systems to print data collected by Question boxes to a printer according to the current printer driver configuration set up on the VP system PC. When this option is used in conjunction with FAST NOTIFICATION, the VP system writes message delivery notification information to the printer.</p>		Printer not used.
USE WAVE	<p>On NT-based systems only: This option instructs the VP system to use the WAVE file format when recording and playing voice files. The VP system supports 8kHz and 11kHz sampling rates, at 8 bits per sample.</p>		The system uses WAVE file format when recording and playing voice files.

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
<p>VCM ANSWER DELAY</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>On NT-based systems only: This option is used in conjunction with the VCM feature. If the VP system needs to use a line to play messages to a VCM user, it calls the VCM user's extension number and waits for it to answer. Once the VP system detects the VCM user has answered, it begins playing the message. If you do not want the VP system to monitor for an answer, you can tell it to dial the extension number, then assume that it has been answered after a short delay. For example, if you enter the following line in the VM.CFG file:</p> <p>VCM ANSWER DELAY = 3</p> <p>The VP system dials the extension number, waits 3 seconds, then begins playing the message, as if the telephone had been answered.</p>	<p>1 to 10</p>	<p>Monitor the line to determine when the extension has answered.</p>
<p>VCM CHANNEL TIMEOUT</p> <p>(Enter this as one line of text in the VM.CFG file.)</p>	<p>On NT-based systems only: This option is used in conjunction with the VCM feature. If the VP system is using a line to play messages to a VCM user, it continually monitors the line. If there has been no activity on the line for <i>n</i> minutes, the VP system releases the line. Use this option to specify how long the VP system should wait before releasing the line. For example, to tell the VP system to release the line after 3 minutes, you would enter:</p> <p>VCM CHANNEL TIMEOUT = 3</p>	<p>0 to 9999</p>	<p>5 minutes.</p>
<p>VCM LINE GROUP</p>	<p>On NT-based systems only: This option is used in conjunction with the VCM feature. If the VP system needs to use a line to play messages to a VCM user, it hunts for any free line. If you want to restrict the VP system to using only certain lines, place these lines in a line group and use this option to specify the line group. For example, to tell the VP system to only use lines in line group C, you enter:</p> <p>VCM LINE GROUP = C</p>		<p>The VP system chooses any free line.</p> <p>The VP system does not attempt to connect itself to the Local Area Network.</p>
<p>VCMName=TCPIP</p>	<p>On NT-based systems only: This parameter enables the VCM feature. Do not modify this parameter unless instructed to do so by technical support.</p> <p>Note: This parameter must be present for the unified messaging feature to function.</p>		
<p>WAKEUP RINGS</p>	<p>When the VP system makes a wake-up call, it lets the telephone ring 10 times before disconnecting. You can use this option to tell the system to disconnect after fewer or more rings.</p> <p>For example, if you want the VP system to disconnect after 6 rings, add the following line to the VM.CFG file:</p> <p>WAKEUP RINGS = 6</p>	<p>1 to 20</p>	<p>The VP system gives up after 10 rings.</p>
<p>VOLUME</p>	<p>This parameter controls the volume used by the VP system to voice prompts through the telephone handset. The higher the number specified, the louder the volume. For example, specify a volume of -2 as as:</p> <p>VOLUME = -2</p>	<p>-4 to 8</p>	<p>-1</p>

Configuration File Entry	Description	Minimum Value to Maximum Value	Default Setup
XFER NAME TIME	If you have configured the VP system to ask the caller for his/her name before performing a transfer, the VP system says, <i>"Please speak your name so I may announce who is calling"</i> and allows the caller 4 seconds to record his/her name. Use the XFER NAME TIME statement if you want to change the amount of time allowed to record the name.	1 to 999	4 seconds.

13. Detecting Call-progress Tones

When the VP system is performing a call transfer or placing an outgoing call, it must listen to the line to determine whether the line is busy, is ringing, or has been answered. There are also times when the VP system must detect tones that indicate a caller has disconnected. On many occasions the default tone detection files provided with the VP system sufficiently allow the system to detect these call-progress tones, especially if the telephone system uses industry standard (Bell) tones. If the key system or PBX uses non-standard tones, however, you must train the VP system to recognize the tones provided by the telephone system.

You train the VP system to recognize the tones by running a call analysis program. The program you run depends on whether the VP system is using Dialogic or Rhetorex voice boards.

13.1 Using Accucall for Rhetorex Boards in DOS-based VP Systems

The Accucall program teaches the Rhetorex voice board the unique ringing and busy tones of the telephone system. Before running the Accucall program verify:

- Rhetorex voice boards are connected to standard, 2500-type telephone lines, and they “hear” only what you hear when monitoring the line or performing the same function manually. Make a list of all of the call-progress tones generated by the telephone system and note under what circumstances each tone is received.
- The cadence of the actual ringing of a telephone set is *not* to be the same cadence as the ring-back tone that is heard by the calling party (in this case the Rhetorex board).
- You understand any unique tones provided by the telephone system. The three most used tones are ring-back, busy, and re-order (fast busy), but the system may have other unique tones such as do-not-disturb tones. It is important to know the available tones, since you do not want to set up the system so, for example, a caller is queued for an extension set to the do-not-disturb state.

13.1.1 Running the Accucall Utility

To use Accucall you must complete the following phases:

- Starting Accucall.
- Completing the SETUP screen.
- Completing the AUTO RUN screen.
- Completing Accucall tests.
- Completing the EDIT TONES screen.
- Completing the FILTERS screen.
- Completing the RUN screen.
- Saving the Accucall tones to a file.
- Adjusting the Rhetorex Configure file.

13.1.2 Starting Accucall

1. If the VP system has not been loaded or is not currently running, from the \ VM directory, type RHETDRV then press <Enter>. This command loads the software into the Rhetorex voice board driver. If the driver software has previously been installed, you get the message:

RDSP DRIVER PREVIOUSLY LOADED AT INTERRUPT - xx

If the VP system is currently running, exit to DOS by pressing <Esc> from the LINE STATUS screen (you do not need to load RHETDRV).

2. Type Accucall then press <Enter>. The Accucall program loads and the MAIN MENU screen displays.
3. From the MAIN MENU screen, press <F5> to go to the SETUP screen.

13.1.3 Completing the Setup Screen

Most of the default settings on the SETUP screen are sufficient for a majority of VP system installations. Do not make any changes to the screen unless you are instructed to by technical support. If you are to change a parameter, use the up arrow and down arrow keys to highlight the parameter, then make the necessary change. Use the spacebar to toggle entries that do not require keyboard input.

Information provided below identifies the fields listed in the RUN / AUTO RUN PARAMETERS area, which is the area in which you are most likely to make changes. To save any changes you make and exit this screen, press <F7>, then press <F6> to move to the AUTO RUN screen.

Setup Screen Field Descriptions

Hardware Interrupt

This field indicates the path through which the voice board and the computer communicate. Normally, VP system voice boards are installed at IRQ 5. If another interrupt is being used for the boards, you must indicate the change in the VM.CFG file using the parameter HARDWARE INT. When the Rhetorex board driver loads, the IRQ is read from the VM.CFG file and the interrupt appears in this field (see section 12 for information on the VM.CFG file).

Outdial Channel Number

This field indicates the port number that is to be used to place test calls. The default is port 1. You should have a 2500-type line from the telephone system connected to this port.

Auto Run Verification Count

The most common approach used to sample the telephone system's call-progress tones is the AUTO RUN sequence, which is explained below. This field indicates the number of test runs Accucall is to execute during AUTO RUN. You may leave the default of 1 on this screen. If necessary, you can modify it on the AUTO RUN screen.

Auto Run Minimum Cycles

This field indicates the minimum number of cycles of the tone being sampled that should be detected during the test run. This parameter works in conjunction with the `AUTO RUN VERIFICATION COUNT` field explained above. For example, if you choose the default 10 for this parameter and you choose 2 for the Auto Run Verification Count, the complete test sample of a tone will consist of two test runs with ten cycles of the tone in each run.

You may leave this parameter at the default of 10. If necessary, you can modify it on the `AUTO RUN` screen.

Auto Run Align Frequencies

By retaining the default setting of this field, `YES`, frequencies detected during the `AUTO RUN` test are automatically placed in the `UNDEFINED TONE FREQUENCIES` fields in the `FILTERS` screen. This screen is discussed later in this section.

Auto Run Quick Frequency Scan

In most cases, leave this field at the default, `NO`. Some telephone systems, however, do not allow you to sample 10 complete cycles of a particular tone before the tone stops or changes to another tone. If this is the case with the system with which you are working, manually count the number of cycles of the tone you hear and adjust the `MINIMUM CYCLES` count in the `AUTO RUN` screen before adjusting this field. If you are still unable to capture a sufficient sample of the tone, set this field to `YES`.

Log Results To Disk

To save Accucall test data to a log file on the hard disk drive for future reference, set this field to `YES`.

Use Internal Speaker

A `YES` entry in this field causes the computer's speaker to "beep" in time with the cadence of the tone being tested. The default is `YES`.

Phone Number

This field indicates the telephone number to be dialed for test calls. Do not enter the number in this field, as you will enter it on the `AUTO RUN` screen. Leave this field blank.

13.1.4 Completing the Auto Run Screen

Once you set up the `AUTO RUN` screen, you use it to make test calls that sample each call-progress tone issued by the phone system.

On the `AUTO RUN` screen, the only fields you may need to adjust are those in the `PARAMETERS` area. Information in the `CADENCE DETECTED` and the `FREQUENCIES DETECTED` areas is automatically entered as a result of the test run(s).

Auto Run Screen Field Descriptions

Phone Number

This field indicates the telephone number to be dialed to receive the tone being tested (for example, the number of a telephone known to be in the “busy” state). Enter the phone number, run the test as discussed below, then adjust either the phone number in this field or the state of the phone, before conducting the next tone test.

Verification Count

This field indicates the number of times the test is to be run. Usually 1 is sufficient.

Minimum Cycles

This field indicates the minimum number of cycles of tone being sampled that should be detected during the test run. This parameter works in conjunction with the `AUTO RUN VERIFICATION COUNT` field explained above. For example, if you choose the default of 10 for this parameter and you choose 2 for the Auto Run Verification Count, the complete test sample of a tone consists of 2 test runs with 10 cycles of the tone in each run.

Normally, you leave this field at the default of 10, unless the telephone system does not allow a particular tone to repeat 10 cycles before changing or stopping. It is best to manually check all of the tones you will be sampling with Accucall and note any that repeat less than 10 cycles. If required, reduce the number of cycles in this field or set the `AUTO RUN QUICK FREQUENCY SCAN` field to `YES` on the `SETUP` screen.

Frequency Range

This field's default value `FULL` detects frequencies within a range of 300 Hz to 1700 Hz. If a tone has an extremely short cycle, you need to change this entry to `HIGH`, which limits the frequencies detected to a higher range (800 to 1700 Hz), and therefore requires less time to capture.

13.1.5 Conducting Accucall Tests

To start the Accucall test, press `<F9>` from the `AUTO RUN` screen. The order in which you test the various tones (ringing, busy etc.) does not matter. For explanation purposes, assume you are testing busy tone and you have entered a phone number that the Rhetorex board can dial to receive this tone.

When the Rhetorex board dials the number and the busy tone begins, you see a vertical bar chart generated from the bottom of the `CADENCE DETECTED` area of the `AUTO RUN` screen. The light and dark areas of the chart represent the `ON` and `OFF` portions of the cycles. Note that the time elements of the cycles are being measured in milliseconds ($1/1000^{\text{th}}$ of a second), so it is normal to have slight variations between cycles.

Best performance characteristics are achieved when these variations are small (± 50 ms). Accucall automatically calculates an average time period for the `ON` and `OFF` portions of the cycle, but if the variations between cycles are too large, this average may not function in practical application. Make notes of the `ON` and `OFF` times that appear in the `CADENCE DETECTED` section of the screen at the end of

the test (usually the last 5 or 6 cycles remain in view) to compare the values with the average that Accucall calculates. These averages appear on the next screen.

If you note wide variations in the test sampling of a particular tone and unreliable VP system operation when the tone is involved in call progress, you may need to replace the tone generating circuit board in the telephone system.

You may repeat each test as many times as you like until you are satisfied with the results. Each time you repeat the test, the results overwrite any previous results.

When you are satisfied with the results of the test sampling of the current tone, press the <F8> to add the tone to the tone table and proceed to the next screen, EDIT TONES.

13.1.6 Completing the Edit Tones Screen

The EDIT TONES screen allows you to name the tone you have just sampled in the previous step, plus customize components of the tone. Fields on the screen is discussed below. When you have completed the EDIT TONES screen for the tone being tested, press <F8>. If this is the first time you have edited this tone, the message TONE DOES NOT EXIST. PRESS <F8> TO ADD. displays. Press <F8> again, and the tone is saved.

If you have previously edited this same tone, the message TONE EXISTS - PRESS F7 TO REPLACE displays. Press <F7> to overwrite the previous entry with the new data.

Repeat the AUTO RUN and EDIT TONES sequence for each tone in the system that you are testing. When you finish, press the <F10> then <F10> to return to the MAIN MENU screen.

Edit Tones Screen Field Descriptions

Name

This field indicates a name for this tone. Enter a name that is descriptive, and include the name of the telephone equipment (for example ACME busy tone). You may use up to 27 characters, including spaces.

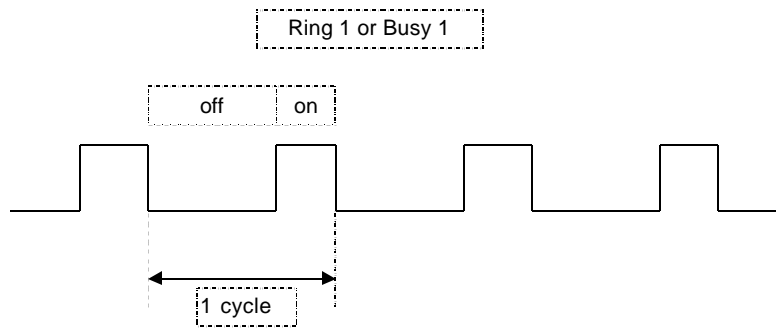
Type

These fields indicate the category of the tone under test. The choices are:

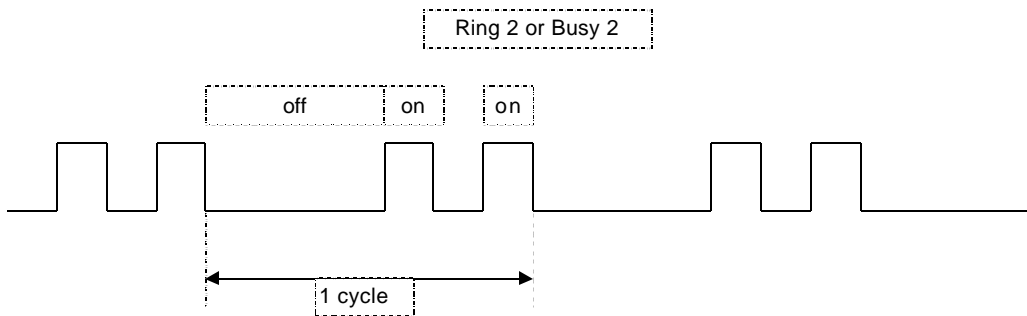
- RING1
- RING2
- BUSY1
- BUSY2
- OTHER

These are only categories, not names as explained above. Accucall can learn up to 12 tones, but you can have multiple tones that fall into the above categories (for example, you can have 3 tones that are all Ring1 types).

The Ring1 and Busy1 tones are typical North American-type tones with a single ON and OFF period per cycle as shown below:



The Ring2 and Busy2 tones are European-type tones, which have two ON times per cycle with 1 short and 1 long OFF time per cycle, as shown below:



Accucall usually chooses the correct TYPE, but you should verify its choice and make a change if necessary. Highlight the TYPE field and use the spacebar to toggle the choices.

Terminating

When you describe a tone as TERMINATING (by entering YES in this field), each time this tone is detected by the Rhetorex board during a record or play cycle, an event code (31) is sent to the VP system, which then terminates the call. However, this code is not sent during call transfers or when the system is originating an outgoing call. For instance, if a busy tone is detected during call transfer, the VP system takes whatever action you selected for the call transfer process for the particular mailbox (for example, cancel the transfer and offer the caller the opportunity to hold, etc.). Even though you designate busy tone as TERMINATING, the VP system does not disconnect either party, it simply cancels the transfer.

There are occasions when the VP system acts upon terminating information and disconnects the line. This occurs when the VP system is playing a system prompt or recording a message in a mailbox. If any tone you have marked as TERMINATING is detected during this part of a call, the line is disconnected immediately.

Note: In most cases, you should mark all tones that might be heard when a caller has disconnected as TERMINATING. This is usually busy and fast busy tones from the telephone system and sometimes re-order tone from the public telephone network.

The *frequency* of TERMINATING tones and the placement of their associated filters in the FILTERS screen table is important. Call-progress tones have two components: CADENCE and FREQUENCY. Cadence is the timing component of a tone, and is usually expressed as Impulses Per Minute (IPM). For example, on the public network (Bell-standard) tones are 60 IPM for busy tone and 120 IPM for re-order tone.

The FREQUENCY component(s) of a tone is the number of cycles per second of sound produced by the tone during any ON period. Most call-progress tones have one or two frequency components, expressed as Hertz (Hz). Public network busy tones have frequency components 480 Hz and 620 Hz.

Cadence

When this field is set to the default value of NO, the Rhetorex board examines both the FREQUENCY and CADENCE of the tone to identify the tone. By changing the value in this field to YES, the Rhetorex board examines the tone only for cadence and ignores the frequency component of the tone.

As explained in more detail below, the Rhetorex board has some limitations in detecting frequencies that are separated by less than 40 Hz. There may be occasions when you need to use YES for the CADENCE parameter to ignore the frequency. However, for any tone that you have designated as TERMINATING, you must set this parameter to NO.

Frequency

During the AUTO RUN sequence, the Rhetorex board examines the tone being sampled for its frequency component(s), and it displays the frequency or frequencies detected in the EDIT TONES screen. If the Rhetorex board is unable to determine a tone's frequency components, the word NONE appears in this field and you must select YES for CADENCE as explained in the above step.

Below you are prompted to enter all of the frequencies detected during all of the test sequences in a FILTER TABLE. You can enter a maximum of 12 frequencies in the table, and there must be at least a 40 Hz difference between entries.

To accommodate these limitations, it will probably be necessary to do some "rounding off" of the frequency values detected during AUTO RUN. In the following example, the tones of the public network (Bell Standard) as shown:

Tone	Frequencies	Cadence
Station Busy	480 Hz and 620 Hz	500 ms ON / 500 ms OFF (60 IPM)
Trunk Busy (re-order)	480 Hz and 620 Hz	250 ms ON / 250 ms OFF (120 IPM)
Ring-back (ringing)	440 Hz and 480 Hz	2 sec ON / 4 sec OFF (30 IPM)

Note: The same frequencies are used in more than one tone type. It is not necessary to enter a frequency more than once in the Filters table. Therefore, even though 480 Hz is used in each of the above three tones, it is entered only once in the Filters table.

Assume you have performed the AUTO RUN sequence for each of these 3 tones, and you have discovered that the actual measurements of the frequencies vary slightly from the standard:

BUSY TONE

FREQUENCY 1 476 Hz
 FREQUENCY 2 621 Hz

RE-ORDER TONE

FREQUENCY 1 482 Hz
 FREQUENCY 2 624 Hz

RINGING TONE

FREQUENCY 1 443 Hz
 FREQUENCY 2 479 Hz

Before these tones can be entered into the FILTERS table, you must edit them in the EDIT TONES screen. The purpose of the editing is two-fold: Round off values so frequencies that should be the same are the same, and insure that all frequencies are at least 40 Hz apart. In the example shown above, you would need to change the values 476 Hz, 482 Hz and 479 Hz to all be 480 Hz, and change 621 Hz and 624 Hz to both be 620 Hz, etc.

In this example, the standard values were known, which makes the necessary adjustments easier to determine. If you do not know the standard values of frequencies you are editing, adjust each component one-half of the difference rather than changing the value of just one component frequency. For example, assume that AUTO RUN detected the following frequencies in the system's busy signal:

BUSY TONE

FREQUENCY 1 502 Hz
 FREQUENCY 2 534 Hz

The difference between these two frequencies is only 32 Hz, so you must edit them to be 40 Hz apart. This is an 8 Hz difference, so modify 502 Hz to 498 Hz, and 534 Hz to 538 Hz (538 - 498 = 40).

PCPM Code

This field identifies the numeric identifier for the tone (the Programmed Call Progress Monitor). The Rhetorex board is the system component that is "listening" to call-progress tones, and only these numeric identifier codes are sent to the VP system software (along with event code 31 for tones marked as TERMINATING). The codes generally used by the VP system include:

Code 1	Dial tone
Code 7	Busy
Code 8	Ringing
Code 9	No tone
Code 10	Voice (call is answered)
Code 11	Re-order (fast busy) tone
Code 250	Disconnect immediately
Code 252	Do not disturb
Code 253	PA busy
Code 254	Initial ring tone
Code 255	Intermediate ring tone

All ringing tones should be assigned a PCPM code of 8.

The PCPM code assigned to busy tones depends on in the circumstances the tone is heard. Normally, only the busy tone heard when calling a station that is in a busy state (someone is talking on the station) should be assigned a PCPM code of 7.

Note: Any other types of busy tones (fast busy, re-order, do-not-disturb tone, etc.) should be assigned a PCPM code of 11.

This is especially important if the system is using the Call Queuing feature. For example, if the telephone system returns a fast busy when a called station is in the do-not-disturb state and you have assigned this tone a PCPM code of 7, the VP system offers the caller the option to queue.

Quick count

Not used.

On Time

This field identifies the average length of the ON times that Accucall detected during AUTO RUN. You should verify that this is truly an average. For example, with some telephone systems the first ON time of a busy signal is twice as long as the rest of the ON times. In these instances, discard this value and re-calculate the average based upon the remaining ON times in the test sample.

On Max Variance

This field identifies the longest ON time detected during the AUTO RUN sequence, and it is expressed both as time (in milliseconds) and as a percentage above the average calculated for ON TIME. There is usually only a 12% to 15% variance, and if this is the case, you probably do not need to re-calculate the average arrived at by Accucall in the ON TIME field. If the percentage is between 20% and 40%, repeat the AUTO RUN test several times to see if the performance improves. If it does not, you need to do a manual average calculation as explained above. Accucall can still work well with variances in this range as long as tones in the system have a wide enough difference in cadences (for example, re-order tone is twice the IPM of busy tone).

On Min Variance

This field identifies the shortest ON time detected during the AUTO RUN sequence. The values should be treated as discussed above.

On 2 Time

This field only appears for Ring2 or Busy2 type tones, and it represents the average length of the second ON period of the tone as calculated by Accucall. This parameter should be given the same consideration as ON TIME, which represents the first ON time of a double-type tone.

Off Time, Off Max Variance, Off Min Variance, Off 2 Time

These fields are the similar to those described above, only they identify the OFF period(s) of a tone cycle.

13.1.7 Completing the Filters Screen

From the MAIN MENU screen, press <F3> to go to the FILTERS screen.

The FILTER CHARACTERISTICS area values should be left at their default.

All of the frequencies detected during the AUTO RUN sequences performed are now shown in the UNDEFINED TONE FREQUENCIES area of the screen. If you have not already rounded off the values of the various frequencies on the EDIT TONES screen, or you can do it now.

To edit any of the values, press <F10> to return to the MAIN MENU screen. Note that all of the tones you defined previously now appear on the left side of the screen. Use the up and down arrow keys to highlight the tone to be edited, then press <F8> to access the EDIT TONES screen. Be certain you save the edited tones before exiting the screen.

When you finish editing tones, return to the FILTERS screen. All of the frequencies in the UNDEFINED TONE FREQUENCIES area should now adhere to the guidelines discussed earlier in this section.

You must now enter the frequencies listed in the UNDEFINED TONE FREQUENCIES area into this FILTERS table.

Note: Tone defined as TERMINATING must be placed within the first 4 table entries.

When you have completed the FILTERS table, press <F2> to access the RUN screen.

13.1.8 Completing the Run Screen

Using the RUN screen, you can test the tones defined in Accucall. The screen is described in detail below. When you finish working with the RUN screen, press <F10> to return to the MAIN MENU screen.

In the PCPM ANALYSIS area, make any necessary adjustments to the fields discussed below for the tone being tested.

Run Screen Field Descriptions

Phone No.

This field identifies the number to be dialed that produces the tone to be tested (for example, a busy station).

Verification Count

This field identifies the number of times the test is to repeat. Usually 1 or 2 times is sufficient.

Adjust Filter Characteristics

When starting the test for a particular tone, leave this field set to NO, the default. If the test result is not GOOD (see FILTER DETECTION later in this section), change this parameter to YES (highlight and press the spacebar to toggle), then repeat the RUN test until the results are satisfactory.

Recording File Name

You can make an actual recording of the tone being tested by entering a DOS file name in this field (or by using the default filename ACCUCALL.LIN), then pressing <F7> to start the test. Normally, the test is started by pressing <F9>, and no recording is made.

Function

This field displays the action currently being taken for the test call (on-hook, off-hook, dialing, etc.).

Status

As each of the above functions run, this field displays the current status (on-hook completed, etc.).

PCPM Code

This field indicates the PCPM code you assigned to this tone on the EDIT TONES screen. If no code is assigned, you must repeat the previous steps since this test has shown the Rhetorex board cannot successfully identify the tone.

(You can also answer one of the test calls and speak into the handset. A PCPM code of 10 appears showing that the Rhetorex board has identified voice on the line.)

Last Tone

This field identifies the NAME you entered in the EDIT TONES screen when the test was completed.

Filter Detection

In the FILTER DETECTION area of the screen, a graphical display of the relative success of the test displays. If the results are anything other than GOOD (graph bar is all white), highlight ADJUST FILTER CHARACTERISTICS and use the spacebar to change this field to YES. Press <F9> to start the test again. With each succeeding cycle, the filter detection quality improves.

When the AUTO ADJUST cycle is completed, the ADJUST FILTER CHARACTERISTICS field automatically changes back to NO. Press <F9> to run the test once again. The resulting graph bar should now indicate only GOOD. If the test results are still not satisfactory, repeat the Accucall procedures for this tone.

13.1.9 Saving Accucall Tones to a File

The final step is to write all of the test results (PCPM Codes, Filters, etc.) to a DOS file.

Note: If you fail to save this file, all of your work is lost when you exit Accucall.
--

On the MAIN MENU screen, all of the tones tested appear on the left side of the screen. These are the tones that will be saved to the file. Press <F7>. A pop-up window appears prompting you to enter a filename. Enter a name in DOS file format (up to 8 characters followed by a 3 character extension) that is descriptive of the phone system. For example PANASON.TON.

Once you type the filename, press <Enter> then press <F8> to save the file.

You can copy this file to a diskette for future use. If you install another VP system on the same type of telephone system, you can (usually) copy this file to the \ VM directory on the VP system PC, instead of re-running Accucall.

13.1.10 Modifying a Previously Saved File

If you need to add new tones or modify existing tones in a file saved from a prior Accucall session, you must first load the file into the program. From the MAIN MENU screen, press <F7>. A pop-up window appears with the prompt ENTER FILE NAME. Enter the name of the file you want to change, press <Enter>, then <F7> again to load the file into memory.

You can now perform all of the Accucall functions previously described. Save modifications using the technique described above.

13.1.11 Adjusting the Rhetorex Configure File

Once you run Accucall or you copy files from a previous installation onto the VP system hard drive, you must enter the name of the Accucall file you created into the Rhetorex configuration file.

To adjust the Rhetorex Configure file:

1. To access the Rhetorex configuration file, from the \VM prompt, type CONFIGUR then press <Enter>. The MAIN MENU screen displays.
2. Press <F4>. A pop-up window PCPM FILE NAME SPECIFICATION displays with the prompt:

THE DEFAULT PCPM TONE AND FILTER TABLES WILL BE REPLACED BY:

3. Enter the DOS filename that was saved in the Accucall program, then press <F10>. The file name appears in both fields of the FILE box.
4. Press <F10> again to exit the CONFIGURE program. Press <Y> when prompted to save the changes just made to file.
5. Re-boot the PC to run the VP system.

13.2 Using Train for Dialogic Boards in DOS-based VP Systems

The Train utility teaches the Dialogic voice board the unique ringing and busy tones of the telephone system. Before running the Train utility verify:

- Dialogic voice boards are connected to standard, 2500-type telephone lines, and they “hear” only what you hear when monitoring the line or performing the same function manually.
- The cadence of the actual ringing of a telephone set is *not* to be the same cadence as the ring-back tone that is heard by the calling party (in this case the Dialogic board).
- You understand any unique tones provided by the telephone system. The three most used tones are ring-back, busy, and re-order (fast busy), but the system may have other unique.

13.2.1 Connecting Lines for Training to the Board

The Train program requires that two telephone lines are connected to the Dialogic board: one for making calls, and one for receiving calls. Connect telephone lines as shown below.

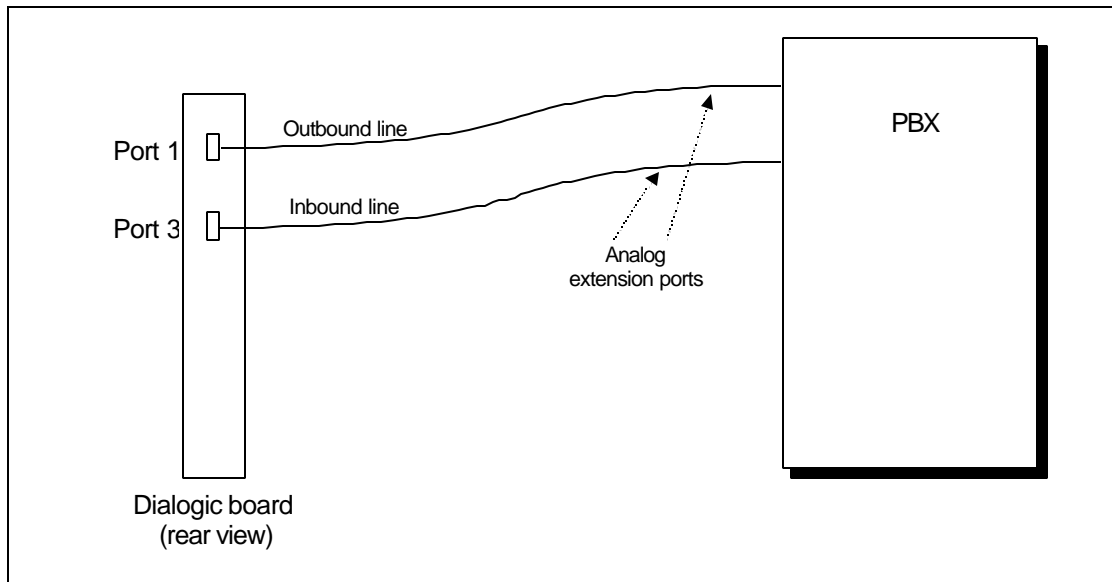


Figure 13-1 Connecting Telephone Lines for Training

13.2.2 Running the Train Utility

Train uses the Dialogic program *PBXpert* to perform the actual “training.” The training process consists of the following phases:

- Starting the *PBXpert* program with the proper settings.
- Configuring the *PBXpert* program.
- Creating a new tone definitions file (.TSF file).

- Consolidating the tones.
- Testing the new tones.

13.2.3 Starting the PBXpert Program

To start PBXpert:

1. Re-boot the PC.
2. When the menu appears offering the option to run the voice mail program or exit to DOS, select option 2 (Exit to DOS).
3. At the DOS prompt, type TRAIN then press <Enter>.
4. The Dialogic drivers load. Once they load, a message displays, indicating that the boards are installed. If the message reads, SERVER ALREADY RESIDENT begin again from step 1 above.
5. Press any key to continue. The PBXpert program starts.

13.2.4 Configuring the PBXpert Program

To configure the PBXpert program:

1. From the PBXpert MAIN screen, press <Alt-C> to access the Config menu.
2. From this menu, select SETUP then press <Enter>.
3. In the field DIALING PREFIX/EXTENSION, enter the extension number associated with the in-bound line in Figure 13-1 above.
4. Leave the PHONE NUMBER field blank.
5. Set the OUTBOUND CHANNEL field to 1.
6. If you are using a 2-port board (D/21D or ProLine/2V), set the INBOUND CHANNEL field to 2. Otherwise, set the INBOUND CHANNEL field to 3.
7. In the REORDER TONE DIAL STRING field, enter a sequence of digits that will generate a reorder tone by the telephone system (for example, a non-existent extension).
8. Set the IRQ SETTING field to 5 (this is the default, if the board is set up to use a different IRQ, indicate that number here).
9. Set the CONTINUOUS TONE DEBOUNCE field to 4000.
10. Verify the ADVANCED VIEW field is not checked. (If it is, press the spacebar to clear the field).
11. Set the field DIAL TONE DEFINITION TO OVERWRITE to LOCAL.
12. Set the field INCLUDE DEFAULT TONE DEFINITIONS to YES.

13. Press <ALT-O> for OK. The MAIN screen displays.

13.2.5 Creating a New PBXpert Tone Definitions File (TSF File)

To create a new PBXpert tone definitions file:

1. From the PBXpert MAIN screen, press <Alt-F> to access the File menu.
2. Select NEW then press <Enter>. The MAIN screen re-displays, with no tone definition files listed.
3. Press <Alt-L> to access the Learn menu.
4. Select LEARN NEW then press <Enter>. You are prompted to enter the PBX make and model.
5. Enter the PBX make and model, then press <Alt-O> for OK.
6. A warning displays, indicating that you must run the driver with certain options to learn tones. Press <Enter> to continue. The LEARN screen displays.
7. Press <Alt-S> to begin the learning process.
8. PBXpert begins making calls and learning what each tone sounds like. This process takes several minutes. As PBXpert learns each tone, the tone definitions are added to the screen.
9. When PBXpert finishes, a message displays, indicating that learning is complete. To continue, press <Enter>. (If the program experiences a failure, check that the lines are properly connected as shown above).
10. To access a screen that allows you to save the tones, press <Alt-V>. The MAIN screen displays, and the new PBX name is listed.
11. Press <Alt-F> to access the File menu.
12. Select SAVE AS, then press <Enter>. You are prompted to enter the filename
13. Press the <Tab> key to move from the DIRECTORY field to the FILE field.
14. In the FILE field, enter the filename CPTONES.TSF then press <Enter>.
15. Move the cursor to the OK button by pressing the <Pg-Dn> key, then press <Enter>. The tones are saved, and the MAIN screen displays.

13.2.6 Consolidating PBXpert Tones

You must merge (consolidate) the tones PBXpert learned with the default tones (North American network tones).

To consolidate PBXpert tones:

1. On the MAIN screen, verify the PBX name is selected in the TONE SETS list.

2. Press <Enter>. The PBX name should now also appear on the CONSOLIDATE SETS list.
3. Press <Alt-T> to access the TONE SETS menu.
4. Select CONSOLIDATE then press <Enter>.
5. In the window that displays, verify the field DIAL TONE DEFINITION TO OVERWRITE is set to LOCAL (use the <Tab> key to move between fields).
6. Verify the field USE DEFAULT TONE DEFINITIONS IN CONSOLIDATE is set to YES.
7. Press <Alt-O> for OK. A message displays indicating that the consolidation is complete. Press <Enter> to continue.
8. Press <Alt-F>. The FILE menu displays.
9. Select SAVE, then press <Enter>. The new (consolidated) tones are now saved in the file CPTONES.TSF.

13.2.7 Testing the New PBXpert Tones

To test the new PBXpert tones:

1. From the PBXpert MAIN screen, press <Alt-T> to access the TONE SET menu.
2. Select TEST then press <Enter>. The TEST screen displays.
3. Press <Alt-S> to start the tests. PBXpert makes several calls, testing each tone in turn.
4. When testing is complete, a window displays indicating that the program has finished. Press <Enter> to continue. The TEST screen displays.
5. To return to the MAIN screen, press <Esc>.
6. Press <ALT-F> to access the FILE menu.
7. To close the PBXpert program, select EXIT then press <Enter>. The PBXpert program closes, and a DOS prompt displays.
8. Learning is complete. Re-boot the PC to run the VP system.

13.3 Using PBXpert for Dialogic Boards in NT-based VP Systems

The PBXpert/32 program teaches the Dialogic voice board the unique ringing and busy tones of the telephone system. Before running the Train utility verify:

- Dialogic voice boards are connected to standard, 2500-type telephone lines, and they “hear” only what you hear when monitoring the line or performing the same function manually.

- The cadence of the actual ringing of a telephone set is *not* be the same cadence as the ring-back tone that is heard by the calling party (in this case the Dialogic board).
- You understand any unique tones provided by the telephone system. The three most used tones are ring-back, busy, and re-order (fast busy), but the system may have other unique.

13.3.1 Connecting Lines for PBXpert/32 Training to the Board

The PBXpert/32 program requires that two telephone lines are connected to the Dialogic board: one for making calls, and one for receiving calls. Connect telephone lines as shown in Figure 13-1.

13.3.2 Running the PBXpert/32 Program on NT-based VP Systems

When run in the Windows NT environment, PBXpert/32 uses a wizard utility that allows you to easily proceed through all program setup and tone detection steps.

To run the PBXpert/32 wizard program:

1. Shut down the VP system if it is running (see section 2.4 for procedures).
2. From the Windows NT desktop, select the Start button, then choose Programs / Dialogic System Software / PBXpert. From the WELCOME screen that displays, select the Next button.
3. Indicate the MANUFACTURER and MODEL of the phone system to which the VP system is attached in the appropriate fields. The FILE NAME field updates automatically. Once you complete the fields, select the Next button.
4. On the TAPI INFORMATION screen, select the Next button.
5. On the SELECT BOARD screen, the board type installed in the system automatically displays. To continue, select the Next button.
6. On the SELECT CALLING RESOURCE screen, set the CHANNEL field to 1 and indicate the extension number of the voice mail port for channel 1 in the PHONE NUMBER field. To continue, select the Next button. Note that if the switch you are working with does not have a voice mail port that produces dial tone, you must use a non-voice mail port.
7. Repeat step 6, setting the CHANNEL field to 2 and indicating the extension number of the port for channel 2 in the PHONE NUMBER field. To continue, select the Next button. The program performs a channel verification.
8. When the SETTINGS CONFIRMATION screen displays, select the Next button to continue. The program runs, learning the busy, ring, and disconnect tones generated by the phone system. When the process is complete, a screen displays defining all the frequencies that were defined.
9. On the left portion of the screen, double-click on the phone system name that displays to activate the button in front of the name. The button turns green when activated.
10. Once you activate the phone system button, access the Tones menu, and select the Consolidate option.

11. Access the File menu, and select Save. You are prompted to indicate a filename. Assign a name that is descriptive of the phone system type. The file extension .TSF is automatically assigned.
12. Access the Tones menu again, and select the Activate option.
13. To confirm the tone file is now appropriately defined and loaded, from the Windows NT desktop, select the Start button, then choose Programs / Dialogic System Software / Advanced Tone Features. The path to the tone file should read \DLGCDEV\DIALOGIC\DATA\[FILENAME].TSF, where [FILENAME] is the name you assigned to the tone file generated by the wizard program.
14. To exit the screen, select OK.
15. Restart the VP system PC to invoke the changes.

14. Making Backups

If the VP system has a hard drive or other system failure, the site can lose some or all of the system data. Without a current backup, you may need to re-install the VP system and re-enter all of the system programming. It is strongly recommended that the VP system installer and on-site VP system supervisor work closely to ensure system backups are frequently made.

Note: See section 16 for information on where VP system files are stored.

14.1 Backing up DOS-based Systems to Diskette

To create a comprehensive back up of a DOS-based VP system, you must back up the following information:

- AUTOEXEC.BAT and CONFIG.SYS files
- Database and setup files
- Voice files such as greetings, names, and messages

Note: The backup described in this section is not a full backup. To fully recover from a complete hard drive failure, you should regularly back up the entire system to tape.

To complete the backup procedure, you need several blank high-density diskettes. Label each diskette with a number, beginning with Backup Disk 1.

Note: Procedures in this section assume that the diskette drive on the VP system PC is drive A and the system's hard drive is drive C. Also, these procedures assume that the VP system is installed in the VM directory on drive C. If this is not the case, substitute the correct letters in the procedure instructions.

14.1.1 Copying the AUTOEXEC.BAT and CONFIG.SYS Files

To create a backup copy of the AUTOEXEC.BAT and CONFIG.SYS files:

1. Insert Backup Disk 1 in drive A.
2. At the DOS prompt, go to the top-level directory by typing `CD \` then pressing <Enter>.
3. Copy the AUTOEXEC.BAT file by typing `COPY AUTOEXEC.BAT A:\` then pressing <Enter>.
4. Copy the CONFIG.SYS file by typing `COPY CONFIG.SYS A:\` then pressing <Enter>.
5. Remove the diskette from drive A.

14.1.2 Copying the Database and Setup Files

To create a backup copy of the database and setup files:

1. Insert Backup Disk 2 in drive A.
2. At the DOS prompt, go to the VP system directory by typing `CD \VM` then pressing <Enter>.
3. Copy the database files by typing `COPY *.DVM A:\` then pressing <Enter>.
4. Copy the other configuration files by typing:
 - `COPY *.CFG A:\` then pressing <Enter>
 - `COPY TRANS*. * A:\` then pressing <Enter>
 - `COPY NUMLINES.TXT A:\` then pressing <Enter>
 - `COPY SWITCHES.TXT A:\` then pressing <Enter>
 - `COPY PBXLINK.TXT A:\` then pressing <Enter>
 - `COPY LOGINS.TXT A:\` then pressing <Enter>
5. If you have Rhetorex voice boards, copy the Rhetorex driver configuration file by typing `COPY CONFIG A:\` then pressing <Enter>.
6. If you have Dialogic voice boards, copy the Dialogic driver configuration file by typing `COPY DIALOGIC.CFG A:\` then pressing <Enter>.
7. If you have an SMDI integration, copy the *.LNK files by typing `COPY *.LNK A:\` then pressing <Enter>.
8. Copy any custom tone files by typing `COPY *.TON A:\` then pressing <Enter> and typing `COPY *.TSF A:\` then pressing <Enter>.
9. Remove the diskette from drive A.

14.1.3 Copying Greetings, Names, and Messages

Note: When using the XCOPY command in the following procedures, you may see the DOS message "Insufficient Disk Space." Insert a new diskette in the drive A and re-type the same XCOPY command. Because of the way the XCOPY command has been input, DOS monitors which files have been copied and re-starts the copy on the new diskette where it left off on the previous one. Be advised that because each system varies, the diskette numbering in this procedure may not match your application. This procedure assumes that only one disk is needed for each copy process.

To create a back up copy of greetings, names, and messages:

1. Insert Backup Disk 3 in drive A.
2. At the DOS prompt, go to the messages directory by typing `CD \VM\M` then pressing <Enter>.
3. Copy the message files by typing `XCOPY GT*. * A:\ /M /E /S` then pressing <Enter>.

4. Remove Backup Disk 3, and insert Backup Disk 4.
5. Copy the recorded names by typing `XCOPY NM*.* A:\ /M /E /S` then pressing <Enter>.
6. Remove Backup Disk 4, and insert Backup Disk 5.
7. Copy the recorded messages by typing `XCOPY MG*.* A:\ /M /E /S` then pressing <Enter>.

Note: If you have a problem copying the files using XCOPY with switches, you can reset the switches and start over by typing `ATTRIB +A *.* /S` then pressing <Enter> at the C:\VMM directory prompt.

14.1.4 Automating the Backup Process on DOS-based VP Systems

You can set up DOS-based VP systems to automatically perform system backups by including backup commands in the DISKM.BAT file, which is run each night when the VP system exits to DOS. (The exit time is specified on the GENERAL INFORMATION screen.) See section 21.6 for additional information on editing the DISKM.BAT file.

14.2 Restoring Files on DOS-based Systems

Note: The restore procedure described in this section does not include all the programming files needed to run the VP system. If you are starting with a new hard drive or a completely re-formatted hard drive, install a new version of DOS and re-install the same version of the VP system. Copy these files over the new copy of the VP system files that may be installed on the hard drive.

If you need to restore only certain files from the back up, you can simply copy those files to the system. Be sure to copy the files back to the correct directory and sub-directory.

14.2.1 Restoring the AUTOEXEC.BAT and CONFIG.SYS Files

To restore the AUTOEXEC.BAT and CONFIG.SYS backup:

1. Insert Backup Disk 1 in drive A.
2. At the DOS prompt, go to the top-level directory by typing `CD \` then pressing <Enter>.
3. Restore the AUTOEXEC.BAT file by typing `COPY A:\AUTOEXEC.BAT C:\` then pressing <Enter>.
4. Restore the CONFIG.SYS file by typing `COPY A:\CONFIG.SYS C:\` then pressing <Enter>.
5. Remove the diskette from drive A.

14.2.2 Restoring the Database and Setup Files

To restore the database and setup files backup:

1. Insert Backup Disk 2 in drive A.
2. At the DOS prompt, go to the VP system directory by typing `CD \VM` then pressing <Enter>.
3. Restore the database files by typing `COPY A:*.DVM C:\VM` then pressing <Enter>.
4. Restore the other configuration files by typing:
`COPY A:*.CFG C:\VM` then pressing <Enter>
`COPY A:\TRANS*. * C:\VM` then pressing <Enter>
`COPY A:\NUMLINES.TXT C:\VM` then pressing <Enter>
`COPY A:\SWITCHES.TXT C:\VM` then pressing <Enter>
`COPY A:\PBXLINK.TXT C:\VM` then pressing <Enter>
`COPY A:\LOGINS.TXT C:\VM` then pressing <Enter>
5. If you have Rhetorex voice boards, restore the Rhetorex driver configuration file by typing `COPY A:\CONFIG C:\VM` then pressing <Enter>.

If you have Dialogic voice boards, restore the Dialogic driver configuration file by typing `COPY A:\DIALOGIC.CFG C:\VM` then pressing <Enter>.
6. If you have an SMDI integration, copy the *.LNK files by typing `COPY A:*.LNK C:\VM` then pressing <Enter>.
7. Copy any custom tone files by typing `COPY A:*.TON C:\VM` then pressing <Enter> and typing `COPY A:*.TSF C:\VM` then pressing <Enter>.
8. Remove the diskette from drive A.

14.2.3 Restoring Names Greetings, Names, and Messages

To restore the greetings, names, and messages backup:

1. Insert Backup Disk 3 in drive A.
2. At the DOS prompt, go to the messages directory by typing `CD \VM\M` then pressing <Enter>.
3. Restore the message files by typing `COPY A:*.* C:\VM\M` then pressing <Enter>.
4. Remove the diskette from drive A, and insert the next one in sequence.
5. Repeat steps 3 and 4 until all disks have been copied to the hard drive.

14.3 Backing up NT-based Systems

All NT-based VP systems shipped as turnkey systems include a tape backup drive that facilitates the system backup process. NT-based VP systems also include several batch files that are automatically copied to the \WINNT directory during program installation. Using these batch files and the tape backup drive, you can quickly make complete system backups. Use the procedure detailed below. (This procedure assumes the VP system software is installed on drive C of the PC. If the software is installed on a different drive, make the appropriate drive letter substitution below.)

Note that to back up the VP system, you must shut it down. System shut down terminates all calls that are currently being handled by the VP system. Do not shut down the system unless all ports are free.

Note: Before completing this procedure, verify the tape cartridge is formatted and functioning properly by inserting it into the tape drive then selecting the Start button / Programs / Administrative Tools / Backup. Address any errors you receive before continuing.

1. Label a blank, formatted tape cartridge appropriately then insert it in the drive.
2. Select the Start button from the bottom of the Windows NT desktop, then select Run. In the Run dialog box, type `C:\VM\BACKUPVM.BAT` (where C is the drive on which the VP system is installed) then click on the OK button.

This batch file stops the VP system and backs up the entire system including VP system program files, greetings, prompts, and messages. Once it completes the backup, the batch file restarts the VP system automatically.

14.3.1 Automating the Backup Process on NT-based VP Systems

You can set up NT-based VP systems to automatically perform system backups by following the procedure below.

1. Insert a blank, formatted tape cartridge in the drive.
2. If you have not done so in the previous procedure, start the Schedule service : Select the Start button at the bottom of the Windows NT desktop, then choose Settings / Control Panel / Services. From the SERVICES screen that displays, highlight SCHEDULE then select the Startup button.

On the screen that displays, select the AUTOMATIC option then click on the OK button.

On the SERVICES screen, select the Start button. To exit the Services screen, select the Close button.

3. Select the Start button from the bottom of the Windows NT desktop, then select Run. In the Run dialog box, type `C:\VM\ATVM.BAT` (where C is the drive on which the VP system is installed) then click on the OK button.

Each night at 3:00 AM, an automatic backup is now made of the entire VP system. To modify this command so it runs on only certain days or at a time other than 3:00 AM, contact Technical Support for instructions on modifying the ATVM.BAT file.

14.4 Restoring Files on NT-based Systems

To restore information from a tape backup on the NT-based VP system:

1. From the Start button at the bottom of the Windows NT desktop, select Programs / Administrative Tools / Backup. The Windows NT backup utility program loads.
2. From the Windows NT Backup utility screen, select the Restore button.
3. Follow the prompts to restore files from the tape backup cartridge.

15. System Prompts

Listed below are all the *standard* system prompts used in the VP system . (The prompts used with each optional module are shown in the section of this manual discussing the module.) Some of the prompts are similar, and notes are provided to explain the differences.

Note: Do not confuse the *pager notification* feature with the *P.A. announcing* feature. The P.A. announcing feature involves the use of the company's public address system. Pager notification involves the use of Tone, Voice, and Digital pocket pagers.

Prompt	File Name	Wording
--	GT00000800.GRT on NT-based systems or GT000800.GRT	If you know the extension of the party you would like to speak with, enter it now. For a directory, press *. For the operator, press 0.
--	GT00000801.GRT on NT-based systems or GT000801.GRT	If you know the extension of the party you would like to speak with, enter it now. For a directory, press *.
--	GT00000821.GRT on NT-based systems or GT000821.GRT	If you know the extension of the party you would like to speak with, enter it now. For a directory, press *.
--	GT00000888.GRT on NT-based systems or GT000888.GRT	The operator is not available right now. If you would like to leave a message, press 1. If you would like to try another extension, press 3.
--	NM00000800.NAM on NT-based systems or NM000888.NAM	The operator...
--	GT000009998.GRT on NT-based systems or GT009998.GRT	"Enter the first 3 letters of the last name of the party you would like to speak with. Use the 1 button for Q and Z, or press * for a complete directory listing."
--	GT000009998.OP1 on NT-based systems or GT009998.OP1	"Enter the first 3 letters of the last name of the party you would like to speak with. Use the 1 button for Q and Z."
--	GT000009998.OP2 on NT-based systems or GT009998.OP2	"Enter the first 3 letters of the first name of the party you would like to speak with. Use the 1 button for Q and Z, or press * for a complete directory listing."
--	GT000009998.OP3 on NT-based systems or GT009998.OP3	"Enter the first 3 letters of the first name of the party you would like to speak with. Use the 1 button for Q and Z."
--	ONESILNC.VOI	(One second of silence.)
1	THATBOX.VOI	"That extension"
2	ISNTAVAL.VOI	"is not available right now."

Prompt	File Name	Wording
3	MBOXMENU.VOI	"If you would like to leave a message, press 1. If you would like to try another extension, press 3. Or, to speak to an operator, press 0." "To have the call announced over our P.A. system, press 5." <i>(see also prompt 260)</i>
4	RECCONF.VOI	"Your message has been recorded."
5	DONTUNDE.VOI	"I'm sorry, that was not a valid entry." <i>(Prompt played when a mailbox owner dials an invalid digit while in an open mailbox.)</i>
6	BAD_ID.VOI	"I'm sorry, that was not a valid entry." <i>(Prompt played when a caller dials an invalid digit.)</i>
7	BYE.VOI	"Thank you, good-bye."
8	DIGIT0.VOI	"Zero"
9	DIGIT1.VOI	"One"
10	DIGIT2.VOI	"Two"
11	DIGIT3.VOI	"Three"
12	DIGIT4.VOI	"Four"
13	DIGIT5.VOI	"Five"
14	DIGIT6.VOI	"Six"
15	DIGIT7.VOI	"Seven"
16	DIGIT8.VOI	"Eight"
17	DIGIT9.VOI	"Nine"
18	DIGITSTR.VOI	"Star"
19	DIGITPND.VOI	"Pound"
20	MORENINE.VOI	"More than fifty"
21	AM.VOI	"AM"
22	PM.VOI	"PM"
23	NUM10.VOI	"Ten"
24	NUM11.VOI	"Eleven"
25	NUM12.VOI	"Twelve"
26	NUM13.VOI	"Thirteen"
27	NUM14.VOI	"Fourteen"
28	NUM15.VOI	"Fifteen"
29	NUM16.VOI	"Sixteen"
30	NUM17.VOI	"Seventeen"
31	NUM18.VOI	"Eighteen"

Prompt	File Name	Wording
32	NUM 19.VOI	"Nineteen"
33	NUM 20.VOI	"Twenty"
34	N21.VOI	"Twenty-one"
35	N22.VOI	"Twenty-two"
36	N23.VOI	"Twenty-three"
37	N24.VOI	"Twenty-four"
38	N25.VOI	"Twenty-five"
39	N26.VOI	"Twenty-six"
40	N27.VOI	"Twenty-seven"
41	N28.VOI	"Twenty-eight"
42	N29.VOI	"Twenty-nine"
43	NUM 30.VOI	"Thirty"
44	N31.VOI	"Thirty-one"
45	NUM 40.VOI	"Forty"
46	NUM 50.VOI	"Fifty"
47	JAN.VOI	"January"
48	FEB.VOI	"February"
49	MAR.VOI	"March"
50	APR.VOI	"April"
51	MAY.VOI	"May"
52	JUN.VOI	"June"
53	JUL.VOI	"July"
54	AUG.VOI	"August"
55	SEP.VOI	"September"
56	OCT.VOI	"October"
57	NOV.VOI	"November"
58	DEC.VOI	"December"
59	WHICHBOX.VOI	"Please enter your mailbox number "
60	ENTERPAS.VOI	"Please enter your password "
61	YOUHAVE.VOI	"You have"
62	NEWMESG 1.VOI	"new message"
63	NEWMESGS.VOI	"new messages"
64	TOWHOM.VOI	"Please enter the box number "

Prompt	File Name	Wording
<p><i>Prompts 65, 66, and 67 are similar. Prompt 65 is used for a regular mailbox. Prompt 66 is used for a mailbox that is restricted. Prompt 67 is used for a mailbox that owns at least one Question box.</i></p>		
65	MAINMENU.VOI	<p>"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. Or to exit, press #."</p> <p>"To change languages, press 5. For supervisor functions, press 6. To place an outgoing call, press 0."</p>
66	CMAINMNU.VOI	<p>"Main menu. To listen to your messages, press 1. To send a message, press 2. Or to exit, press #."</p> <p>"To change languages, press 5."</p>
67	MAINMENX.VOI	<p>"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. Or to exit, press #."</p> <p>"To change languages, press 5. For supervisor options, press 6. To place an outgoing call, press 0."</p>
68	LSTNMENU.VOI	<p>"Message menu. To listen to new messages, press 1. To listen to saved messages, press 2. Or to return to the main menu, press #."</p>
69	OPTNMENU.VOI	<p>"Options menu. To record your name, press 1. To record your greeting, press 2. To change your password, press 3. To change your call-transfer feature, press 4. To change your message-notification feature, press 5. To change your pager feature, press 6. To review messages scheduled for future delivery, press 7. To change your Personal Distribution Lists, press 8. To retrieve a message that you have already sent to another mailbox, press *. Or, to return to the main menu, press #."</p>
70	LOLDSUBM.VOI	<p>"To replay the message, press 1. To save and hear the next message, press 2. To save the message as new, press 3. To delete the message, press 4. To adjust the volume, press 5. Or, to return to the main menu, press #."</p>
71	LNEWSUBM.VOI	<p>"To replay the message, press 1. To save and hear the next message, press 2. To save the message as new, press 3. To delete the message, press 4. To adjust the volume, press 5. For other options, press 6. Or, to return to the main menu, press #."</p>

Prompt	File Name	Wording
72	NOMORNEW.VOI	"You have no more new messages."
73	NONEWMSG.VOI	"You have no new messages."
74	NOMOROLD.VOI	"You have no more saved messages."
75	NOOLDMSG.VOI	"You have no saved messages."
76	SAVASNEW.VOI	"Message saved as new."
77	BOXALOPN.VOI	"That box is currently in use, please try again later."
78	NONONONO.VOI	"No"
79	SPKAFTRT.VOI	"Please speak after the tone. When you are finished recording, you may press pound for further options, or simply hang up."
80	NOROOM.VOI	"The voice mail system is full, and cannot take messages right now."
81	MSGDELTD.VOI	"Message deleted."
82	LQMENU.VOI	"For new questionnaire answers, press 1. For old questionnaire answers, press 2. Or, to return to the main menu, press #. "
83	NEWQMSG.VOI	"new questionnaire answer."
84	NEWQMSG.S.VOI	"new questionnaire answers."
85	ANDAND.VOI	"and"
86	NOGTREC.VOI	"There is currently no greeting recorded."
87	CURGREET.VOI	"Your current greeting is"
88	CURRNAME.VOI	"The current recording is"
89	NONAMREC.VOI	"There is currently nothing recorded."
90	ENTERPSW.VOI	"Please enter your new password."
91	PSWCHG.VOI	"Your password has been changed, and will be in effect the next time you call."
92	PSNOTCHG.VOI	"Your password has NOT been changed."
93	GRTOPT.VOI	"To replay the greeting, press 1. To re-record the greeting, press 2. To delete the greeting, press 3. To choose a new greeting, press 5. Or, to exit, press #."
94	NAMEOPT.VOI	"To replay, press 1. To re-record, press 2. To delete, press 3. Or to exit, press #. "
95	XWHOCALL.VOI	"Please speak your name so I may announce who is calling."
96	XPLSHOLD.VOI	"Please hold while I transfer your call to"
97	XCALFRYU.VOI	"I have a call for you."
98	XCALLFRM.VOI	"Call from"

Prompt	File Name	Wording
99	XSTRACCP.VOI	"Press 1 to take the call. Press 2 if you would like me to take a message. Press 3 to transfer this call to your alternate extension. Press 4 plus the greeting number to play a special greeting. Press 5 plus the extension number to transfer this call to any station. Press 6 to accept the call, and record it."
100	QBOXWRAP.VOI	"Thank-you for answering our questions. We will get back to you as soon as possible."
101	ENTRPCBK.VOI	"Please dial your own number now "
102	PAGECONF.VOI	"That party will be paged right away."
103	PAGEFAIL.VOI	"I am not able to page that party right now."
104	GRTTOCHG.VOI	"Enter the number of the box whose greeting you wish to change."
105	DONTOWN.VOI	"I'm sorry, you do not own that box."
106	MSGFOR.VOI	"Message for"
107	YOU.VOI	"you"
108	PRESS1.VOI	"Press 1 if you would like to hear your messages "
109	CONT3WAY.VOI	"Press 1 if you wish to continue your call."
110	FWD.VOI	"Your message has been forwarded."
111	NOFWD.VOI	"I'm sorry, I am not able to forward your message at this time."
112	CONFSEND.VOI	"If this is correct, press 1. If not, press pound."
113	MSGFROM.VOI	"from"
114	REENTPSW.VOI	"Please enter your new password again."
115	WRDPAUSE.VOI	"Pause"
116	WRDFLASH.VOI	"Flash"
117	OFFOFF.VOI	"Off"
118	VM.VOI	"Voice mail"
119	ENTFEATN.VOI	"Please enter the new number."
120	NFEATIS.VOI	"Your message-notification feature is"
121	PFEATIS.VOI	"Your pager service is"
122	XFEATIS.VOI	"Your calls are currently being transferred to"
123	FEATOPT.VOI	"Press 1 if you would like to change the number, press star to turn this feature on or off, or press pound if you are satisfied."
124	COMMOPT.VOI	"To add a comment at the beginning of the message, press 1. To add a comment at the end of the message, press 2. To forward the message with no comment, press 3. To return to the main menu without forwarding the message, press #."

Prompt	File Name	Wording
125	MSGOPTN.VOI	"To send this message, press 1. To review the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. To add to your message press 8." <i>(External caller hears this prompt.)</i>
126	RECCANCL.VOI	"Message canceled."
127	LOCMUSIC.VOI	Music <i>This is a short piece of music (about 15 seconds). It is played to the caller when a Local Transfer is in progress. This is not the music heard during call queuing.</i>
128	WORDAT.VOI	"At"
129	WORDFOR.VOI	"For"
130	ENDOFMSG.VOI	"End of message."
131	DIRPRES1.VOI	"If this is the person you want, press 1, or press 2 for the next name." "If you would like to try a different spelling, press 3, or to exit from the directory, press #."
132	DIRNUMIS.VOI	"The number is"
133	NODIRMAT.VOI	"There are no names that match those letters."
134	NOMORDIR.VOI	"There are no more names that match those letters."
135	ASKL.VOI	"Press 1 for English or 2 for Spanish." <i>Up to nine languages can be supported. This prompt should be repeated in all the offered languages. The Language 1 version of this prompt is the <u>only</u> one that is played when the VP system answers a call.</i>
136	ISBUSY.VOI	"is busy."
137	ISTLBUSY.VOI	"is still busy."
138	INLINE.VOI	"in line."
139	HLDOPTN.VOI	"If you would prefer to leave a message, press 1, or to try another extension, press 3." "To speak to an operator, press 0." <i>If a caller presses 3, he/she receives the treatment as defined on the MAILBOX screen in the field labeled IF CALLER CHOOSES OTHER OPTIONS.</i> <i>If the caller presses 1 to leave a message, he/she does not receive the mailbox owner's personal greeting. If you want callers to hear the personal greeting, substitute one of the optional prompts that omits the "press 1" option.</i>
140	WILBEDEL.VOI	"You have asked for this message to be deleted."
141	WASFWDED.VOI	"This message was automatically forwarded from"

Prompt	File Name	Wording
142	SUPVMENU.VOI	"Supervisor's menu. For mailbox administration, press 1. For Routing box administration, press 2. For Question box administration, press 3. For port administration, press 4. To change the system broadcast message, press 5. To change the Voice mail day/night service, press 6. To change the system time, press 7. To change the system date, press 8. To modify system parameters, press 9. To perform first time setup, press 0. Or to exit, press #." <i>The first time setup option is not available on NT-based VP systems.</i>
143	SUPFOK.VOI	"Operation completed successfully."
144	SUPFFAIL.VOI	"I'm sorry, I was not able to perform that operation."
145	SUPEXIST.VOI	"I'm sorry, that box already exists."
146	HOLD0.VOI	First hold-prompt. (Pre-Recorded music, by default.) <i>This is the first recording callers hear when they are placed on hold for a mailbox. This would typically be a short piece of music or a promotional message.</i>
149	QBADDIGI.VOI	"That was an incorrect number of digits."
150	PAINTRO.VOI	"Please hold while I announce your call."
151	PAANN 1.VOI	"There is a call for"
152	PAANN 2.VOI	"Please dial the pick-up code for your extension." <i>You may give more specific instructions (for example, tell the called party what to dial to pick up the call).</i>
153	PABUSY.VOI	"I'm sorry, the P.A. system is busy right now."
154	PANORESP.VOI	"Your call has been announced, please hold a moment."
155	GOXFER.VOI	"You may transfer the call now."
156	SNDRNOTF.VOI	"The sender will be notified that you received this message."
157	DLVRCNF1.VOI	"This is to notify you that the message you sent to"
158	DLVRCNF2.VOI	"was received by"
159	TODAY.VOI	"Today"
160	YESTERDA.VOI	"Yesterday"
161	OLDMSG 1.VOI	"Saved message"
162	OLDMSGS.VOI	"Saved messages"
163	NEXTBOX.VOI	"Please enter the number of the next mailbox, or press pound if you are finished."
164	WHICHPRT.VOI	"Please enter the line number."

Prompt	File Name	Wording
165	MSGOPCNF.VOI	"To send this message, press 1. To replay the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. If you would like to be notified when your party has received this message, press 5. To send this message to several mailboxes, press 6. To resume recording from the point where you stopped, press 8. To play back the last few seconds of your message, press 9. To schedule this message to be sent at a future time and date, press *." <i>(Internal callers hear this prompt.)</i>
166	INTERANS.VOI	<i>Tone played between each Question box answer.</i>
167	BOXSUSP.VOI	"I'm sorry, that box is temporarily out of service."
168	NUMBLOCK.VOI	"I'm sorry, that number is not acceptable."
169	GTNUMCHG.VOI	"Please enter the greeting number, or press * for the current active greeting."
170	THATGRET.VOI	"That greeting is currently recorded as"
171	GOODMORN.VOI	"Good morning" <i>When prompts 171, 172, and 173 are recorded, they are inserted automatically before the main greeting according to the time of day.</i>
172	GOODAFTE.VOI	"Good afternoon" <i>When prompts 171, 172, and 173 are recorded, they will be inserted automatically before the main greeting according to the time of day.</i>
173	GOODEVEN.VOI	"Good evening" <i>When prompts 171, 172, and 173 are recorded, they will be inserted automatically before the main greeting according to the time of day.</i>
174	ASKRPLAY.VOI	"If you would like to review your answer, press 1. Or press 2 to move on to the next question."
175	ANSWERIS.VOI	"Your answer is currently recorded as"
176	ENTEROUT.VOI	"Please enter the telephone number to which you wish to be transferred."
177	ONEMOMNT.VOI	"One moment please."
178	LOPTSUBM.VOI	"To delete the message, press 4. To hear the message time and date, press 5. Or to exit, press #."
179	SCHASKHR.VOI	"Please enter the hour that you wish for this message to be sent."
180	SCHASKMI.VOI	"Please enter the minutes."
181	SCHASKMO.VOI	"Please enter the month."
182	SCHASKDA.VOI	"Please enter the day."
183	SCHASKAM.VOI	"Press 1 for AM, press 2 for PM."
184	SCHASKOK.VOI	"You have asked for this message to be delivered."
185	SCHMSGOK.VOI	"Your message will be sent as requested."
186	SCHMSGNO.VOI	"I'm sorry, I am unable to schedule your message for future delivery."

Prompt	File Name	Wording
187	SCHNOMSG.VOI	"You have no messages scheduled for future delivery."
188	SCHNOMOR.VOI	"You have no more messages scheduled for future delivery."
189	SCHRVIEW.VOI	"To listen to the message, press 1. To hear the next message, press 2. To cancel the message, press 4. Or, to exit, press #."
190	SUPBRCST.VOI	"To hear the current broadcast message, press 1. To re-record the broadcast message, press 2. To delete the broadcast message, press 3. Or, to exit, press #."
191	NUM 60.VOI	"Sixty"
192	NUM 70.VOI	"Seventy"
193	NUM 80.VOI	"Eighty"
194	NUM 90.VOI	"Ninety"
195	NUM 100.VOI	"Hundred"
196	NUM 1000.VOI	"Thousand"
197	QBXNOTIF.VOI	"This is to notify you that there are new answers in your Question box."
198	TUTINTRO.VOI	"Welcome to your new mailbox. In order to familiarize you with your new mailbox, I would like to briefly describe some of its features. You may exit from this tutorial at any time by pressing the # key."
199	TUTGRT.VOI	"If you are not able to answer your phone, I will play your personal greeting to the caller. Your greeting should sound something like this: 'Hello, this is Mary. I'm sorry I cannot take your call right now. If you would like to leave me a message, press 1, or press 3 if you would like to speak to someone else.' Once you have recorded your greeting, you can change it at any time. Press 1 if you would like to record your personal greeting now. Otherwise, press 2."
200	TUTGRTIS.VOI	"Thank you. Your callers will hear the following greeting..."
201	TUTNAME.VOI	"There are times when I need to say your name. For example, when the system is about to transfer a call to your extension, the caller will hear: 'Please hold while I transfer your call to Mary Jones.' I need you to record your name. Press 1 if you would like to record your name now. Otherwise, press 2."
202	TUTNAMIS.VOI	"Thank you. Your name is now recorded as..."
203	TUTPSW.VOI	"To protect your privacy, you will be asked to enter your password each time you open your mailbox. This prevents unauthorized callers from gaining access to your messages. You should change your password frequently. If you would like to change it now, press 1. Otherwise, press 2."
204	TUTPSWIS.VOI	"Your password is..."
205	TUTEND.VOI	"This ends the tutorial. The Main menu follows."
206	TUTISOK.VOI	"If this is acceptable, press 1. If you would like to change it, press 2."
207	TUTCANCL.VOI	"Thank you. This tutorial will not be repeated."

Prompt	File Name	Wording
208	TUTWRAP.VOI	"Thank you for taking part in the tutorial. The tutorial will be played each time you open your mailbox. If you would like to cancel it, press the * key now."
209	TUTENABL.VOI	"The tutorial will be played the next time you open your mailbox."
210	SPKAFTR2.VOI	"Please speak after the tone. When you are finished recording press #."
211	QBCONFIS.VOI	"Your confirmation number is"
212	P1REPEAT.VOI	"To hear this number again, press 1."
213	DOLLARS.VOI	"Dollars"
214	CENTS.VOI	"Cents"
215	TOMORROW.VOI	"Tomorrow"
216	NUM1MILL.VOI	"Million"
217	ACDBUSY.VOI	"All agents are busy."
218	ACDSTBSY.VOI	"All agents are still busy."
219	ACDQOPTS.VOI	"If you would like to try a different extension, press 1, or press 0 if you would like to speak to the operator."
220	OH.VOI	"oh"
221	URGNTMSG.VOI	"This message is marked urgent."
222	ISURGENT.VOI	"of these is marked urgent."
223	ARURGENT.VOI	"of these are marked urgent."
224	MANFWDED.VOI	"This message was forwarded to you from..."
225	PRIVMSG.VOI	"This message is marked private."
226	PRVNOFWD.VOI	"This message is private, and cannot be forwarded."
227	ASKLGOFF.VOI	"This mailbox is currently logged on with VCM. To disconnect VCM and open your mailbox, press 1."
228	SPELNAME.VOI	"Please spell out the first 3 letters of the last name."
229	SNDSPCL1.VOI	"For normal delivery, Press 1. For urgent delivery press 2."
230	SNDSPCL2.VOI	"For normal delivery, press 1. To mark this Urgent, press 2. To mark this Private press 3. If you would like to be notified when your party has received this message, press 5."
231	TUTDIR.VOI	"There may be times when callers will know your name but not your extension number. I can transfer calls using the letters of your name. If you would like to be included in the "dial by name directory, press 1."
232	TUTGETDR.VOI	"Using your telephone keypad, please spell the first 3 letters of your last name."
233	TUTDIRIS.VOI	"The digits which will spell your name are"
234	TOWHODIR.VOI	"Please enter the box number, if you do not know the box number, press *."
235	OPTNMEN2.VOI	"To add or remove customer service extensions, press 0."

Prompt	File Name	Wording
236	ACDADMIN.VOI	"To add an extension to this customer service group, press 1. To remove an extension, press 2. To exit press #."
237	ACDMEMYS.VOI	"Is a member of customer service group"
238	ACDMEMNO.VOI	"Is not a member of customer service group"
239	ASKEXTN.VOI	"Please enter the extension number."
240	ACDADDED.VOI	"Has been added to customer service group"
241	ACDREMOV.VOI	"Has been removed from customer service group"
242	SUPVMBOX.VOI	"To add, press 1. To delete, press 2. To modify, press 3. To suspend, press 4. To restore, press 5. To reset, press 6. Or to exit, press #."
243	SUPVTBOX.VOI	"To add, press 1. To delete, press 2. To modify, press 3. Or to exit, press #."
244	SUPVPORT.VOI	"To disable, press 1. To enable, press 2. Or to exit, press #."
245	SUPVTBX2.VOI	"To change the greeting, press 1. To change the routing, press 2. Or to exit, press #."
246	CHGYESNO.VOI	"If you would like to change this, press 1, otherwise press #."
247	ENTERDGT.VOI	"For digits 0 through 9, please enter the digit, or press * for special routing options."
248	SPCLROUT.VOI	"To change the destination for the star digit, press *. To change the destination for the pound digit, press #. To change the 'no digits' destination, press 1. To change the 'invalid digit' destination, press 2. Or to change the 'voice detected' destination, press 3."
249	DGTRROUTE.VOI	"The current destination is"
250	ENTRDEST.VOI	"Please enter the new destination"
251	ENTRQUES.VOI	"Please enter the question number"
252	SUPVQBX2.VOI	"To change the greeting, press 1. To record a question, press 2. Or to exit, press #."
253	MODEIS.VOI	"The voice mail system is currently in"
254	SUPVMODE.VOI	"To change the voice mail system to Day service mode, press 1. To change the voice mail system to Night service mode, press 2. To change the voice mail system to Lunch service mode, press 3. Or to exit without making any changes, press #."
255	MODEDAY.VOI	"Day service mode"
256	MODENITE.VOI	"Night service mode"
257	MODELNCH.VOI	"Lunch-time service mode"

Prompt	File Name	Wording
258	MODEHOLI.VOI	"Holiday service mode"
259	DGTTTOHLD.VOI	"If you wish to remain on hold, please press"
260	MBOXMEN2.VOI	"If you would like to record a message, press 1. To page this party, press 2. If you wish to speak to the operator press 0. Or for other options, press 3." "To have the call announced over our P. A. system, press 5." <i>(Prompt played when mailbox has a pager number assigned. See also prompt 3).</i>
261	YOUARNUM.VOI	"You are number"
262	POINT.VOI	"Point"
263	TDDGREET.VOI	<i>This prompt is recorded as TDD tones. It will display on a TDD device as "Press 8 on your telephone for TDD service."</i>
264	MAINHOTL.VOI	"Guest menu. To hear your new messages, press 9. To hear saved messages, press 8. To set a wake-up call, press *."
265	LSUBHOTL.VOI	"To replay this message, press 1. To save and hear the next message, press 2. To delete this message, press 4."
266	PDL_MENU.VOI	"To add a member to the list, press 1. To remove a member, press 2. To hear all members on the list, press 3. To record a name for the list, press 4. Or to exit, press #."
267	PDLNMENU.VOI	"To play the name, press 1. To record the name, press 2. Or to exit, press #."
268	PDLASKNM.VOI	"Please enter the list number."
269	PDLMEMYS.VOI	"is a member of personal distribution list"
270	PDLMEMNO.VOI	"is not a member of personal distribution list"
271	PDLADDED.VOI	"has been added to personal distribution list"
272	PDLREMOV.VOI	"has been removed from personal distribution list"
273	NEGATIVE.VOI	"negative"
274	PAGEDISP.VOI	"The number which will be sent to your party's pager is"
275	ASKRECVR.VOI	"Enter the number of the mailbox you sent the message to."
276	EDITMENU.VOI	"To play the message, press 1. For the next message, press 2. To delete the message, press 4. Or to exit, press #."
277	EDTNOMSG.VOI	"You have no retrievable messages in that mailbox."
278	EDTNOMOR.VOI	"You have no more retrievable messages in that mailbox."
279	MSGDATED.VOI	"There is a message dated"

Prompt	File Name	Wording
280	WAKEASKH.VOI	"Please enter the hour at which we should call you."
281	WAKENONE.VOI	"There is currently no wake-up call scheduled."
282	WAKECHNG.VOI	"Press 1 if you would like to change the time."
283	WAKEWILL.VOI	"You will be called"
284	WAKEHERE.VOI	"Hello. This is your wake-up call. If you would like us to call you at the same time tomorrow, press 1."
285	LOPTSUBF.VOI	"To forward a copy of this message to someone else, press"
286	LOPTSUBR.VOI	"To reply to this message, press"
287	LOPTSUBX.VOI	"To speak with the sender of this message, press"
288	ASKFWD2.VOI	"To forward this message to another box number, enter the box number. Otherwise, press #."
289	PRMPASSW.VOI	"Please enter the database password."
290	PRMBADPW.VOI	"Your password level does not allow you to change that parameter."
291	PRMASKNM.VOI	"Enter the number of the parameter you wish to change, or press # to exit."
292	PRMASKVL.VOI	"Enter the new value."
293	PRMASKSB.VOI	"Enter the item number."
294	PRMVALID.VOI	"Values for that parameter must be between"
295	PRMVALIS.VOI	"The value of parameter number"
296	PRMSUBPR.VOI	"item number"
297	WORDIS.VOI	"is"
298	PBXASKNU.VOI	"Enter the ID number of the PBX you are connecting to."
299	PBXASKLN.VOI	"How many digits are there in your extension numbers?"
300	PBXSRIAL.VOI	"If you intend to use the serial-port integration, press 1, otherwise press 2."
301	PBXPCIU.VOI	"If you intend to use PCIUs, press 1, otherwise press 2."
302	PBXASKOK.VOI	"Press 1 to confirm that it is OK to disconnect all calls and reconfigure your system for the new setup."
303	PBXASKEX.VOI	"Enter the extension number for voice mail port"
304	SUPASKHR.VOI	"Please enter the hour."
305	SUPASKYR.VOI	"Please enter the year."
306	PRMRBOOT.VOI	"Thank-you. You must restart the PC in order for this new value to take effect."
307	NOTASSGN.VOI	"Not assigned"
308	LETTER_A.VOI	"A" (<i>The letter A</i>)
309	LETTER_B.VOI	"B" (<i>The letter B</i>)
310	LETTER_C.VOI	"C" (<i>The letter C</i>)

Prompt	File Name	Wording
311	LETTER_D.VOI	"D" (<i>The letter D</i>)
312	LETTER_E.VOI	"E" (<i>The letter E</i>)
313	LETTER_F.VOI	"F" (<i>The letter F</i>)
314	LETTER_X.VOI	"X" (<i>The letter X</i>)
315	SUPSAYTI.VOI	"The current time is"
316	SUPSAYDA.VOI	"The current date is"
317	LOPTSUBT.VOI	"To reply to the sender of this message using e-mail, press" (<i>NT-based systems only</i>)
318	NEWVMSG.VOI	"New voice mail message" (<i>NT-based systems only</i>)
319	NEWVMSG.S.VOI	"New voice mail messages" (<i>NT-based systems only</i>)
320	NEWFMSG.VOI	"New fax message" (<i>NT-based systems only</i>)
321	NEWFMSG.S.VOI	"New fax messages" (<i>NT-based systems only</i>)
322	NEWTMSG.VOI	"New e-mail message" (<i>NT-based systems only</i>)
323	NEWTMSG.S.VOI	"New e-mail messages" (<i>NT-based systems only</i>)
324	NOTTSAVL.VOI	"There are currently no e-mail readers available, please try again later." (<i>NT-based systems only</i>)
325	LSTNMENX.VOI	"Message menu. To listen to new voice messages, press 1. To listen to saved voice messages, press 2. To listen to new e-mail messages, press 3. To listen to saved e-mail messages, press 4. To listen to all new messages, press 5. To listen to all saved messages, press 6. Or to return to the main menu, press #."
326	VMORACD.VOI	For voice mail functions, press 1. To enter customer service mode, press 2. Or to exit, press #.
327	EXTNACD.VOI	This extension is currently being used for customer service. If you want to use this extension to open a mailbox, you must first log off from all customer service groups, then press 'Clear'.
328	MBOXACD.VOI	Your mailbox is currently in customer service mode. If you want to open your mailbox, you must first log off from all customer service groups, then press 'Clear'.
	MASSMENU.VOI	"To begin mass recall, press 1. To cancel any mass recall in progress for this group box, press 2." Or, to exit, press #"

15.1 Recording System Prompts

You can record prompts in additional languages and you can re-record any system prompt to modify it as you like or to include additional options required for a particular application. (Several commonly used prompt options have been pre-recorded and are also available for you to use. See section 15.4 for more information.)

To re-record system prompts, use the prompt recording utility provided with the VP system:

VP System Type	Utility	Location	To start the utility...
DOS-based using Rhetorex voice boards	RSPROMPT.EXE	\VM	Type RSPROMPT then press <Enter> from the \VM directory.
DOS-based using Dialogic voice boards	VSPROMPT.EXE	\VM	Type VSPROMPT then press <Enter> from the \VM directory.
NT-based using Dialogic voice boards	NTPROMPT.EXE	\VM	Double-click on the VP DATABASE icon, enter the password at the prompt, then select SYSTEM PROMPTS from the System pull-down menu.

15.1.1 Using RSPROMPT and VSPROMPT (DOS-based VP Systems)

Once you start the RSPROMPT or VSPROMPT utility, the SYSTEM PROMPTS screen displays. For each system prompt, this screen identifies:

- The prompt's number
- A brief text description of the prompt (the full text of the prompt is provided earlier in this section)
- Whether the prompt has been recorded

As you move through each prompt field, a menu displays, allowing you to play or record the prompt. By selecting RECORD you can record the prompt via the telephone line connected to the voice processing board. To record the prompt, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak. To end the recording, press <Enter> again. To hear the recording, select PLAY.

The MICROPHONE field requires the use of optional hardware and a direct connection to the voice board. For additional information, see section 2.

When re-recording prompt, select PLAY to listen to the prompt before re-recording it. This allows you to hear the inflections and general tone that is appropriate for the prompt.

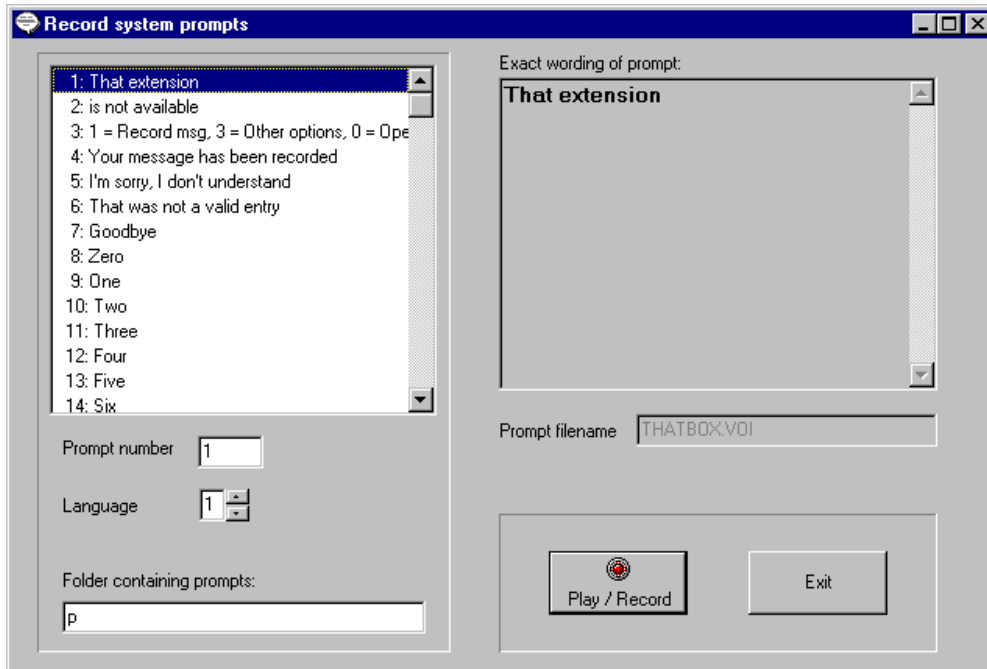
By default, each prompt exists on the VP system hard drive in a separate file in the \VM\P directory.

If you are using the multi-lingual option, record each prompt in Language 1 first, then select NEW LANGUAGE from the menu. The current language number (displayed at the top of the menu) changes to Language 2, and the Yes/No fields update to indicate which prompts have been recorded in Language 2. You can now record the prompts in the second language. If you are using more than two languages, select NEW LANGUAGE again and record the prompts in each subsequent language.

The prompts for Language 1 are stored by default in the \VM\P directory. The prompts for Languages 2 through 9 are stored in subdirectories \VM\P\L2 through \VM\P\L9 respectively.

15.1.2 Using NTPROMPT (NT-based VP Systems)

Once you start the NTPROMPT utility, the RECORD SYSTEM PROMPTS screen displays.



For each system prompt, this screen identifies:

- The prompt's number
- A brief text description of the prompt
- The complete text of the prompt (shown on the right side of the screen)
- A number indicating a language to which the prompt is associated (a complete set of prompts for up to 9 languages can be recorded on the system)
- The folder containing the prompt file
- The prompt filename
- Whether the prompt has been recorded (an existing recording is signified by a red light displaying on the Play/Record button)

You can play or record a prompt by clicking on the Play/Record button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See information presented later in this section for details on using the Sound Recorder dialog box.

When re-recording prompt, play the prompt before re-recording it. This allows you to hear the inflections and general tone that is appropriate for the prompt.

Each prompt exists on the VP system hard drive in a separate file in the \VM\P directory.

If you are using the multi-lingual option, record each prompt in Language 1 first, then select Language 2. You can now record the prompts in the second language. If you are using more than two languages, continue to select the next language number in the series and record the prompts in each subsequent language.

The prompts for Language 1 are stored by default in the \VM\P directory. The prompts for Languages 2 through 9 are stored in subdirectories \VM\P\L2 through \VM\P\L9 respectively.

15.2 Using the Sound Recorder Dialog Box (NT-based VP Systems)

The Sound Recorder is a utility provided with Windows NT that allows you to easily record and manipulate WAV files, which is the file type used to store prompts, greetings, and messages on NT-based VP systems. Though the Sound Recorder includes a sophisticated set of recording manipulation options, you need only be familiar with the utility's fundamental record and playback features.



To record a prompt, name, or greeting, click on the circle button in the lower-right of the Sound Recorder dialog box and speak into the microphone connected to the PC. Click on the rectangle button to the left of the circle button to end the recording. Click on the triangle button to the left of the rectangle button to play the recording. For additional information on using the features available with the Sound Recorder, consult the utility's online help.

Note: Before making any recordings using the Sound Recorder dialog box, you must set up the proper audio recording properties. Do this by selecting the Audio Properties option from the Edit menu on the Sound Recorder dialog box. On the Audio tab that displays, select the Customize button. In the FORMAT field, select PCM. In the ATTRIBUTES field, select 11 KHZ, 8 BIT, MONO. Click the Save As button, type the word DIALOGIC in the field that displays, then select the OK button. Select the OK button again to exit the box. The PREFERRED QUALITY field on the Audio tab now reflects the DIALOGIC setting. Select the OK button to close the Audio Properties box and return to the Sound Recorder dialog box.

Note that the Sound Recorder utility requires a sound card and microphone be installed in the PC from which the Sound Recorder is run. Most NT-based VP systems are shipped from Key Voice with this equipment pre-installed.

For information on installing or using a sound card and microphone on a Windows NT system, consult the Windows NT documentation.

15.3 Preventing Certain Prompts from Playing

In some circumstances, you may want a particular prompt to never play on the VP system. Use the procedure provided below to omit a prompt on a system-wide basis. Before you proceed, however, review the following points regarding the VP system's prompts:

- By adjusting the OTHER CUSTOMIZATIONS screen (DOS-based VP systems) / GENERAL INFORMATION screen (NT-based VP systems), you can prevent prompt 97 from playing when a WAIT FOR ANSWER call is answered.
- For individual mailboxes, you can select what callers are to hear just before they are transferred to an extension by using the @ and & symbols in the FIRST NAME field (see section 5.5) .
- If you want to permanently prevent a prompt from playing, do not delete the prompt's file. If you do, the system will generate an error message. Instead, substitute an empty voice file. The VP system still locates and plays the file, but since there is no prompt recorded, this process takes less than 1 second.

To omit a prompt on a system-wide basis:

1. Shut down the VP system if it is currently running.
2. Change to the directory where system prompts are stored. By default, this is the \VM\P sub-directory.
3. To store the existing prompt for future use, rename the existing prompt's file with a different extension. For example, to use a command prompt to re-name prompt number 155 with a new extension .SAV, from the \VM\P directory type REN GOXFER.VOI GOXFER.SAV then press <Enter>.
4. Create a new file with the original name GOXFER.VOI. Do this from a command prompt, for example, by typing EDIT GOOXFER.VOI then pressing <Enter>.
5. On the blank screen that displays enter two letters, for example XX (the file cannot be totally empty), then press <Enter>. Save the file by pressing <Alt-F>, then < X>, then <Enter>. Return to the \VM directory (if you used a command prompt, type CD.. then press <Enter>).
6. Re-start the VP system.

15.4 Using Pre-Recorded Prompt Options

The prompts supplied with the VP system have been selected to conform with the majority of new installation requirements. Available options for prompt phrase contents are shown below. These prompt options have been pre-recorded and are stored in the prompts subdirectory on the VP system. By default this is \VM\P. Each prompt option uses the same filename as the default, but has a different extension (.OP1, .OP2, etc.).

To copy a modified prompt to the active system:

1. If the system is a DOS-based VP system, shut it down if it is currently running. For procedures, see section 2.5.
2. Locate the text you want to use in the following table and make a note of the filename.
3. Copy the file over the prompt with the .VOI file extension. (You may want to first rename the . VOI prompt an extension .OLD, so if you ever want to revert back to it, the prompt is still available.) For example, on a DOS-based VP system, to replace the existing prompt 3 with MBOXMENU.OP1, access a command prompt and type:

COPY \VM\P\MBOXMENU.OP1 \VM\P\MBOXMENU.VOI

then press <Enter>.

4. When you finish modifying prompts, re-start the VP system.

Prompt	Filename	Wording
3	MBOXMENU.OP1	"If you would like to leave a message, press 1. If you would like to try another extension, press 3. To have your call announced over our P.A. system, press 5. Or, to speak to an operator, press 0."
260	MBOXMEN2.OP1	"If you would like to leave a message, press 1. If you would like to have your party paged, press 2. If you would like to try another extension, press 3. To have your call announced over our P.A. system, press 5. Or, to speak to an operator, press 0."
65	MAINMENU.OP1	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To change languages, press 5. Or to exit, press #."
65	MAINMENU.OP2	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. For supervisor functions, press 6. Or to exit, press #."
65	MAINMENU.OP3	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To input a fax document, press 7. Or to exit, press #."
65	MAINMENU.OP4	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To change languages, press 5. To input a fax document, press 7. Or to exit, press #."
65	MAINMENU.OP5	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. For supervisor functions, press 6 To input a fax document, press 7. Or to exit, press #."
65	MAINMENU.OP6	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. Or to exit, press #."

Prompt	Filename	Wording
66	CMAINMNU.OP1	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change languages, press 5. Or to exit, press #."
67	MAINMENX.OP1	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. To change languages, press 5. Or to exit, press #."
67	MAINMENX.OP2	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. For supervisor functions, press 6. Or to exit, press #."
96	XPLSHOLD.OP1	"Please hold while I transfer your call."
99	XSTRACCP.OP1	"Press 1 to take the call, or press 2 if you would like me to take a message."
125	MSGOPTIN.OP1	"To send this message, press 1. To review the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. To resume recording from the point where you stopped, press 8. To play back the last few seconds of your message, press 9."
131	DIRPRES1.OP1	"If this is the person you want, press 1, or press 2 for the next name. To try a different spelling, press 3, or to exit from the directory, press #."
139	HLDOPN.OP6	"Please remain on the line and your call will be answered as soon as possible."
165	MSGOPCNF.OP1	"To send this message, press 1. To replay the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. If you would like to be notified when your party has received this message, press 5. To send this message to several mailboxes, press 6. To resume recording from the point where you stopped, press 8. To play back the last few seconds of your message, press 9. To schedule this message to be sent at a future time and date, press *."
228	SPELNAME.OP1	"Please spell out the first 3 letters of the first name."

16. Understanding File Organization

The VP system uses files to store its database information, voice recordings, call log, and other data. When you install the VP system, five new directories are created: \ VM, \VM\LOG, \VM\M, \VM\P, and \VM\T. Directory \VM\DATA is created if you use the data entry feature, and \VM\FAXMAIL is created if you use the fax optional module.

Though you can elect to house VP system files in directories other than the default structure (shown below), it is strongly recommended that you retain the default structure. Doing so eases system maintenance tasks and facilitates technical support activities, should you require assistance .

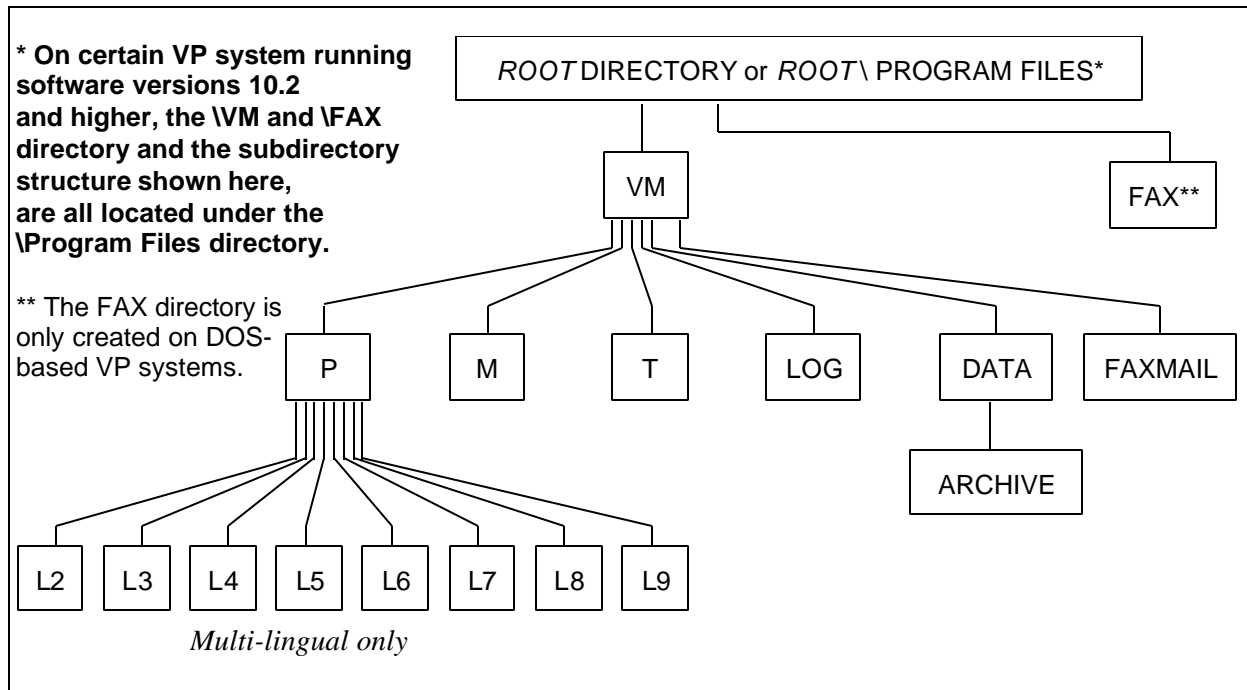


Figure 16-1 Default VP Directory Structure

P Directory

The \P directory stores the pre-recorded system prompts. Each prompt is contained in a separate file. All files end with the extension . VOI. For a complete list of all the system prompts, and their filenames, see section 15.

L2 - L9 Directories

If you use the multi-lingual feature, directories \ L2 through \L9 store the Language 2 through Language 9 prompts, respectively. These directories are automatically created as needed.

M Directory

The \M directory stores the voice files containing the recorded box greetings, recorded names, Question box questions and answers, and mailbox messages.

If you are using the optional Fax Retrieval module, the \ M directory is also the fax document storage location. If you are using the optional Talking Classifieds module and you indicated the system is to record callers' names (specified using the TCNAME parameter in the VM.CFG file). Files are stored as follows:

File Contents	Filename	Key
Mailbox messages	MG00XXXX.MMM	xxxx is the Mailbox number (this may be up to 9 digits on NT-based VP systems) mmm is the message number
Group box messages	GP00XXXX.MMM	xxxx is the Group box number mmm is the message number
Question box answers	ANQ0XXXX.MMM	xxxx is the Question box number qq is the question number (first answer is number 0) mmm is the answer-set number <i>(see Notes that follow for more information on Question box answers)</i>
Question box questions	QNX00BBBB.QQQ	x is the language number bbbb is the Question box number qqq is the question number (first question is number 0)
Box greeting	GTNNXXXX.GRY	xxxx is the box number (this may be up to 9 digits for Mailboxes on NT-based VP systems) nn is the greeting number (0 is the default greeting) y is the language number (or 'T' for language 1. The file extension is always .GRT if you are not using the multi-lingual option)
Box name	NM00XXXX.NAM	xxxx is the box number (this may be up to 9 digits for Mailboxes on NT-based VP systems)
Talking Classifieds caller's name	NAME0XXX.TC	xxx is the call number, as referenced in the CALL HISTORY screen
Documents for Fax Retrieval	FX00XXXX.FAX	xxxx is the number of the Fax box containing this document
ACD box queue announcements	ACDQXXXX.QQY	xxxx is the ACD box number qq is the announcement number y is the language number
Mailbox messages scheduled for future delivery	SCHDXXXX.MSG	xxxx is the position of the message in the future delivery queue.

Notes on Question Box Answers:

If you are using the data-entry feature, the answers entered by callers are stored in a data file in the \ DATA directory. Otherwise, the answer to each question in a Question box is stored in a separate file. Since each question can have an answer-type of digits or voice, the answer stored in the answer file (ANqqxxxx.nnn) may be in the form of digitized voice or ASCII digits. There is a special answer file named AN99xxxx.nnn associated with each set of answers. This file indicates which answers within the

answer set are *digits*, and which are *voice*. The file contains one byte for each answer. If the byte is 0, the answer type is voice. If the byte is 1, the answer-type is digits. If the answer-type is digits, then the digits are stored in the file as ASCII digits, terminated with a 00 byte.

For example, assume that Question box 4112 has 3 questions recorded in it. Question 1 has an answer type of *voice*, while questions 2 and 3 have answer types of *digits*. Also assume that two callers have answered the questions in the box. The following files will exist in the \M sub-directory:

Files	Contents
AN004112.000	Answer to question 1, stored as digitized voice.
AN014112.000	Answer to question 2, stored as ASCII digits followed by a zero.
AN024112.000	Answer to question 3, stored as ASCII digits.
AN994112.000	Information on the first answer set, indicating that question 1 has an answer-type of <i>voice</i> , while questions 2 and 3 have answer-types of <i>digits</i> (the file contents are 00,01,01).
AN004112.001 AN014112.001 AN024112.001 AN994112.001	Information on the second answer set (provided by the second caller). The format is the same as that for the first answer-set.

T Directory

This directory is currently not used.

LOG Directory

If you specify that you want the VP system to store its call log to a file, this directory stores the daily log, up to one year's worth of calls. The call log for each day is stored in a separate file called *mmdd.LOG* where *mm* and *dd* represent the month and day of the log, respectively. For example, the call log for March 24 is stored in the file 0324.LOG.

You can select where to record the call log files on the GENERAL INFORMATION screen.

DATA Directory

The VP system creates the \DATA directory only if you use the data entry feature. The directory stores the files containing data entered by the callers in response to Question box questions. Note that the data entry feature records *only* answers entered as DTMF digits (voice answers are not permitted in data entry Question boxes).

FAX Directory

On DOS-based VP systems, if you use any of the Fax optional modules, the \FAX directory stores the necessary driver and operating files for the fax boards. The \FAX directory may contain several sub-directories, depending on the system configuration.

FAXMAIL Directory

If you use the optional FaxMail module, incoming fax messages are stored in the \FAXMAIL sub-directory using filenames in the format MG00xxxx.yyy, where xxxx is the mailbox number receiving the FaxMail document and yyy is the FaxMail message number. This is the same format as a voice message, except this file is a PCX graphics (DOS-based VP systems) or TIFF graphics (NT-based VP systems) file instead of a digitized voice file.

VM directory

The \VM directory contains all the other files the VP system runs. The most critical files are:

Filename	Description
*.DVM	VP system database files (see next section for details).
*.HLP	DOS-based VP systems only: Files containing HELP information, accessed by pressing <F1>.
BOXDISPLAY.EXE	NT-based VP systems only: Application that displays high-level box setup information.
D40DRV.EXE GENLOAD.EXE GENBOOT.* DIALOGIC.CFG	DOS-based VP systems only: Contain operating and driver information for Dialogic voice boards.
DBA.EXE	NT-based VP systems only: Database Administrator application.
DBA.HLP	NT-based VP systems only: Application that provides online help.
DCONVERT.EXE	NT-based VP systems only: File conversion utility to move information from DOS-based VP systems to NT-based VP systems.
EVERKEY 2.19 (LINESCAN.EXE)	NT-based VP systems only: Coordinates communication with the Authorization key.
GOVM.BAT	DOS-based VP systems only: Starts all components of the VP system program.
KV_FTP_SERVER.EXE	NT-based VP systems only: Service used with VCM that transfers .WAV files to VCM when it requests them.
KVDBSERVER.EXE	NT-based VP systems only: Service that reads from and writes to the voice mail .DVM database files.
MAKEBOX.EXE	Box creation utility.
MENU.FIL	DOS-based VP systems only: File containing screen information.
MSGSCHEQ.Q	File contains the delivery schedule for future delivery messages stored in queue.
NETREG.EXE	NT-based VP systems only: File that invokes utility used to create NETREG.REG file containing registry information used to create voice mailbox address in the Personal Address book on client PCs.
NTPROMPT.EXE	NT-based VP systems only: Prompt recording utility program for NT-based VP systems with Dialogic boards.
NTRENEW.EXE	NT-based VP systems only: Code entered to activate optional modules or add ports.
NUMLINES.TXT	Contains the code number authorizing the software key for the number of lines in the system.

Filename	Description
PANEL.FIL	DOS-based VP systems only: File containing screen information.
PBXSETUP.EXE	NT-based VP systems only: Switch integration utility program.
PEC.EXE	NT-based VP systems only: Service used to communicate with the e-mail server for unified messaging.
RENEW.EXE	DOS-based VP systems: Code entered to activate optional modules.
RHETDRV.EXE VOICECNF.EXE CONFIG	DOS-based VP systems only: Contain operating and driver information for Rhetorex voice boards.
RMAIL.EXE	DOS-based VP systems only: Starts some components of VP system program (Rhetorex voice board version).
RPROMPT.EXE	DOS-based VP systems only: Prompt recording utility program for Rhetorex-based VP systems.
SWITCHES.TXT	DOS-based VP systems only: Contains the code number authorizing the software key for the standard VP system and optional modules.
VERBFAXDLL.DLL	NT-based VP systems only: Allows communication with GammaLink boards.
VIEWER.EXE	NT-based VP systems only: Application that displays port activity.
VMAIL.EXE	DOS-based VP systems only: Starts some components of the VP system program (Dialogic voice board version).
VMSERVICE.EXE	NT-based VP systems only: Service that exchanges data with primarily the Voice Mail Viewer application.
VMWIN.EXE	NT-based VP systems only: The VP system program.
VPROMPT.EXE	DOS-based VP systems only: Prompt recording utility program for Dialogic-based VP systems.

DVM Database Files

All of the system's database information is stored in files with the .DVM extension. The following table shows the filenames and a description of each file's contents:

Filename	Description
BDTABASE.DVM	Contains information on all system boxes (mailbox, Routing box, Question box, etc.)
SDTABASE.DVM	Contains all information in the System Information screens except for the line information.
LDTABASE.DVM	Contains all data from the LINE INFORMATION screen.
MDTABASE.DVM	Contains information about voice message files in mailboxes and Question boxes. These are not the actual voice files.
CDTABASE.DVM	Contains the call-count information, which is displayed next to each line in the LINE STATUS screen (DOS-based VP systems) / LINE ACTIVITY screen (NT-based VP systems).

Filename	Description
DATE.DVM	If the system is powered down, this file keeps the date when the power-down occurred. Activities that are missed due to the power-down are usually executed upon power-up.

17. Understanding VP System Integration

Section 2 gives an overview of how to connect the VP system to the telephone system. This section goes into more detail on integrating the voice mail and phone system so they work together.

Note: If the phone system you are working with was listed when you ran the Setup program as described in section 3, you can skip this section and review it only if you experience an integration problem.

17.1 Detecting Hang-Up

The VP system continually monitors active lines for hang-ups, so it can release the lines as soon as possible. If a hang-up is not detected, the line remains in use for several seconds after the caller hangs up. During this time, the system cannot use the line to perform other call processing tasks.

The VP system has several ways to detect that the caller has gone on-hook:

- Detecting breaks in line current
- Detecting a specific touch-tone digit sequence from the host, signaling that the other party has disconnected
- Detecting call progress tones while recording or playing messages, greetings etc. (including dial tone)
- Absence of touch-tone when one is requested
- Absence of voice when it is requested
- Detecting a period of silence while the VP system is recording.

Several of these hang-up indicators is described in detail below.

Break in Line Current

When the host system sends a disconnect signal to the VP system, it is usually a break or reversal in the line current. Not all Central Offices (COs) or key systems provide this type of disconnect signal. It is, however, the most reliable form of disconnect. If you are in doubt about whether the telephone system can provide this type of signal, consult the phone system documentation. Even if a system is currently unable to provide this feature, it may be possible to program it to do so.

Disconnect Digit Sequence

Some telephone systems send a sequence of touch-tone digits to the VP system to signal that the calling party has disconnected. You can set up the VP system to respond to this digit sequence by

setting the DISCONNECT DIGIT SEQUENCE field to the appropriate value on the TECHNICAL INFORMATION screen (DOS-based VP systems) / PBX INFORMATION screen (NT-Based VP systems).

<p>Note: If you are using Dialogic boards, the disconnect digit sequence can be only one-digit long.</p>

Call Progress Tones

If the VP system is recording a message, the presence of dial tone, busy tone, etc. on the line is interpreted as the caller having disconnected. Presence of dial tone automatically triggers a disconnect by the VP system. If the telephone system generates an interrupted tone to indicate disconnect (busy tone, fast busy, error tone, etc.), you must program the voice processing board to detect this tone as a hang-up indication.

Absence of Touch-Tones

When a call is routed through various Routing boxes, the caller may hang up at any time without being detected. To ensure a line does not remain in use longer than necessary, program each Routing box so, if no digits are dialed by a caller, the VP system drops the call after a few seconds. Do this by setting the field IF NO DIGITS DIALED to HANG UP. Be advised, however, that because the system may receive calls from callers using rotary phones (which cannot generate touch-tones), the initial box answering each line should be set up to use the voice detection feature (see section 5.7).

<p>Hint: Rather than hang up immediately if no digits are dialed in a Routing box, it may be more acceptable to route the call to another Routing box that asks the caller to press a key to continue. If no digit is dialed within this box, the VP system can drop the call. Routing the call this way gives the caller another chance to continue, in case he/she was confused or distracted. If the VP system detects a digit, it can then continue processing the call by routing it on to another box.</p>

17.2 Integrating with PBXs

The single most important consideration when connecting the VP system to the telephone system is whether the telephone system provides voice mail integration using either *in-band* or *out-of-band* signaling. There are several programming decisions you must make based on this information, and the VP system will not operate properly without specific programming.

Out-of-Band Signaling

The VP system can integrate with any telephone system using out-of-band signaling, provided the signaling adheres to industry standard Simplified Message Desk Interface (SMDI) protocol. Out-of-band signaling via SMDI requires special optional VP system software, and documentation on this is provided with the software.

In-Band Signaling

In-band signaling consists of standard DTMF tones (0 - 9 and A - D) that are sent by the telephone system immediately after the VP system goes off-hook to answer a call. These signals fall into three main categories:

- Station Identifier Digits
- Reason Codes
- C.O. Line (Trunk) Identifier Digits

If any of the above types of in-band signaling are used, you must program the VP system to provide an *initial pause*. This is a short time period, usually 1 or 2 seconds, between the time the VP system answers a call by going off-hook and the beginning of the initial greeting. See section 4 for information on programming the initial pause.

Once you set up the initial pause “window” for the various in-band signals, you must determine in what cases the signals are sent and how the VP system is to treat them.

Station Identifier Digits

Station identifier digits are sent to the VP system in several circumstances. If the system transfers a call to a busy or a ring-no-answer station and the TRANSFER TYPE field on the MAILBOX screen for the mailbox is set to BLIND or WAIT FOR ANSWER, the telephone system must return the unanswered call to the VP system and provide in-band station identifier digits to inform the VP system from what station the call is returning (for more information, see section 5.5).

Station identifier digits are also sent when one station within the telephone system calls another station (an internal or "intercom" call) and that party is either using or away from the phone. If the calling party is to have access to the called party's mailbox to leave a message, the called party's phone must be set to forward on busy and/or ring-no-answer to the VP system *and* to provide station identifier digits. Without the station ID's, the calling party does not receive the personal greeting of the called party, but the main greeting instead.

Station identifier digits are also used with direct calls. A direct call is one made from the telephone system to the VP system by a mailbox owner who wants to access his/her mailbox. A direct call may be made by dialing the number of the voice mail hunt group or, on some phone systems, by using a DSS or Auto Log-on button. When a mailbox owner places a direct call, some telephone system automatically send the caller's extension number and also may send additional digits to enable auto log-on. These additional digits fall into a category called *Reason Codes*.

Reason Codes

Some telephone systems send additional digits along with extension numbers when a call is forwarded to the VP system. These additional digits are called *Reason codes* because they explain why the call has been sent to the VP system. The terminology used by each telephone system varies, but the most common reasons for a call to be sent to voice mail are:

- Forwarded on no-answer
- Forwarded on busy

- Forwarded all calls
- Direct call
- Message retrieval (auto log-on)
- Recall

These Reason codes may be sent before or after the station identifier digit. Sometimes the codes and their placement are fixed by the telephone system, and sometimes you can make modifications. Not all telephone systems have the ability to send Reason codes.

C.O. Line Identifier Digits

C.O. line identifier digits are used only in special cases where the VP system is being used as an auto attendant and different C.O. lines must be answered with different initial greetings. If you are not using the auto attendant feature or if the auto attendant answers every line with the same initial greeting, the C.O. identifier digits are *not* needed and should be disabled within the telephone system. See section 7.13 for more information.

Using Translation File TRANS.TXT

It is usually necessary to build a DTMF tone translation table. This table is located in a text file called TRANS.TXT in the \VM directory. The number and type of entries required in this table varies depending on the telephone system and on the requirements of the installation. A complete description of the digit translation feature is found in section 7.13.

<p>Note: If the VP system is not properly processing calls involving in-band DTMF tones received during the initial pause, it is usually because the TRANS.TXT file has not been built correctly. See section 7.13.</p>
--

17.3 Interfacing with PBXs without Voice Mail Integration

If the telephone system does *not* have voice mail integration capabilities, the VP system can still provide excellent quality auto attendant and voice mail service with just a few limitations. When using auto attendant, every call transfer must be monitored for ringing, busy, and answer (refer to section 5.5 for information on specifying call transfer types). This means the VP system's ports must handle more of the call transfer process and devote more time to the process. If the telephone system is handling a high volume of calls, you may need more ports than would be necessary with full integration.

Because without full integration you must use certain call transfer types, the call transfer process takes a few seconds longer from the time the VP system first answers an incoming call to the time it is successfully transferred to the called party. Again, this is because the VP system must monitor each step of the call to insure the called party has answered the call (without in-band signaling, the telephone system cannot automatically return a ring-no-answer call to the called party's mailbox).

Without full voice mail integration, internal ("intercom") calls to busy or ring-no-answer stations *cannot* be automatically forwarded to a mailbox owner's personal greeting. Also, auto log-on is usually not available unless the telephone system provides user-programmable intercom speed dialing.

Call Progress Tone Detection

For the VP system to properly process calls, it must be able to recognize certain *call progress tones*, such as ringing tone, busy tone, fast busy (or re-order) tone, etc. This tone recognition is a function of the voice processing board.

The VP system software includes a default tone recognition program that usually functions well if the telephone system uses industry standard call progress tones. If, however, the telephone system has non-standard tones or tones in addition to those mentioned above, you need to teach the voice board to recognize the tones.

Included with the VP system software is a utility program designed to perform this function . This program instructs the voice board to place calls to numbers on the telephone system you select. By doing so, the board learns to recognize the frequency and cadence of certain tones (such as the tones emitted when a call is placed to a ringing phone, to a busy phone, to a phone in Do-Not-Disturb mode, etc.).

See section 13 for complete instructions on running the call progress tone detection program for the model of voice processing board in the system.

18. System Error Messages

This section lists all the system error messages generated by the VP system. When an error message displays on the screen, it is also written to a log file called `ERROR.LOG`.

Note: To check for file corruption (an action suggested if you encounter several of the error messages discussed below), run a disk maintenance utility. On DOS-based systems, use `SCANDISK` or `CHKDSK`. On NT systems, use the `DISKEEPER` program. For more information on using disk maintenance programs, refer to section 21.

0101 Cannot open softkey definitions file "<t>"

(For systems with LCD / soft-key integration only.) The VP system tried to open the file that defines the messages to be displayed on the caller's telephone. It was unable to find the file. Copy the file from the VP system CD or diskettes.

0102 Error <y> on line <x> of softkey definitions file <t>

(For systems with LCD / soft-key integration only.) The VP system tried to read the file that defines the messages to be displayed on the caller's telephone. It found an error in the file. Copy the file from the VP system CD or diskettes.

0201 Mailbox <x> in invalid state

This is an internal error. If the problem persists, contact technical support.

0202 Cannot create batch file "<t>" for setup

While using the teleparameter feature to configure the system to work with a specific PBX, the VP system was unable to create an internal file that it needs. Make sure the hard disk is not full. If a file of the same name already exists, delete it and try again.

0301 Mailbox <x> in invalid state

This is an internal error. If the problem persists, contact technical support.

0302 Cannot open parameter file "<t>"

The VP system was unable to open the file that contains information it requires for the teleparameter feature. Copy the file from the VP system CD or diskettes.

0303 Error <x> in parameter file (<t>)

While reading the file that contains information it requires for the teleparameter feature, the VP system encountered an error. The file is probably corrupt. Copy the file from the VP system CD or diskettes.

0401 Read Error is <x> Reported from Message Database (Box <y>)

This error is encountered while reading the file MDTABASE.DVM, containing information on the messages held in each mailbox. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run MSGAUDIT to allow the VP system to rebuild it.

0402 Number of <t> Messages Went to <y> For Box <x>

While updating the count of messages for the specified box, the VP system realized that the count was not valid. The VP system fixed the problem automatically, so no action is required.

0601 Unknown Box-Type (<x>) in Database

During initialization, the VP system found bad data in the box database file (BDTABASE.DVM). This is normally due to disk problems. Run the SCANDB utility to delete all invalid boxes.

0602 Cannot Open Database-Display Window

The VP system was unable to display the database on the screen. This is normally due to a shortage of memory.

0603 Cannot Open File <t>

The VP system was unable to open the specified file. Check that the FILES statement in the CONFIG.SYS file is set to at least 40 (FILES=40).

0701 Cannot Open History File <t>

The VP system was unable to prepare a Talking Classifieds report, as it could not find the file containing the call history information. Make sure the file is on the disk.

0801 Attempt to Delete Box <x> from Empty List

An internal error occurred while deleting a box. Exit from the VP system to DOS, and reset the computer. If the problem persists, contact technical support.

0802 Unable to Find Box <x> on List, for Deletion

An internal error occurred while deleting a box. Exit from the VP system to DOS, and reset the computer. If the problem persists, contact technical support.

0901 Cannot Update Telemarketing Table for Box <x>

This error is encountered while attempting to update internal tables for the telemarketing feature. If the error repeats, exit to DOS, and restart the program.

0902 Internal Error Number <x>

This is an internal logic error. Report this problem to technical support.

0904 Cannot Delete Box <x>

This error is encountered while attempting to delete the specified box. You cannot delete reserved system boxes (those numbered between 9900 and 9999). Exit to DOS, and try the operation again.

0905 Invalid Database Modification Request (<x>) for Box <y>

The VP system was unable to process a request to modify the database. This error occurs only if the VP system is operating in a multitasking environment, such as DESQVIEW.

0906 Cannot Incorporate Box <x> into Database

The VP system was unable to process a request to modify the database. This error occurs only if the VP system is operating in a multitasking environment, such as DESQVIEW.

0908 Cannot Create Question Box Directory "<y>"

The VP system was unable to create the DOS directories required while adding a Question box to the database.

0909 Error <y> Creating Message-Info Buffer for Box <x>

While adding the specified box to the database, the VP system was unable to allocate space in the message-information file MDTABASE.DVM. Exit to DOS, and try the operation again. Make sure the file is not corrupted and is not write-protected.

0913 Cannot Read System Database File

An error occurred while the VP system was attempting to read the database file SDTABASE.DVM. Exit to DOS, and start the VP system again. If the problem persists, check the hard drive for problems.

0914 AUDIT Cannot Fix Box Information for Box <x>

During its automatic audit of the database, the VP system found some inconsistencies in the information relating to the specified box. In this case, the inconsistencies were of such a nature that the VP system was unable to automatically fix it. Check the box yourself, for any obvious problems. If the problem persists, delete the box, and add it again.

0915 Invalid Box-Type (<y>) for Box <x> (Position <t>)

While accessing the database, the VP system encountered a box whose type (Mailbox, Routing, Question, etc.) was not valid. Exit to DOS, and run the program again. If the problem persists, delete the box, if

possible. If you cannot delete the box using the VP system program, try deleting it using the `SCANDB` utility provided (from the DOS command line, type `SCANDB -D`).

0917 AUDIT Had to Adjust Box <x> in Database

While performing its automatic audit of the database, the VP system found some inconsistencies relating to the specified box. The VP system was able to fix this error automatically. No further action is required.

0923 Cannot Create Call-History File "<t>"

The VP system maintains a file of information about recent calls to the Talking Classifieds database. During start-up, the VP system checks to make sure the file exists. If it does not exist, the VP system attempts to create it. This error message means that the VP system was unable to create the file. Check the hard drive. Make sure it is not full. Run the program again, and watch for errors.

0924 Cannot Create Telemarketing Control File "<t>"

The VP system maintains files of information about the progress of telemarketing calls—one file per Outbound Telemarketing box. During start-up, the VP system checks to make sure the files exist. If one does not exist, the VP system attempts to create it. This error message means that the VP system was unable to create the file. Check the hard drive. Make sure it is not full. Run the program again, and watch for errors.

0926 Cannot Add Box to Database - Too Many Boxes

This error is encountered while attempting to add the specified box to the database. If you are running the demonstration program, the VP system allows a maximum of 25 boxes in the database. If you are not running the demonstration program, exit to DOS and try again.

0928 This Version is Limited to <x> Boxes

This error is encountered while attempting to add the specified box to the database. You are running a version of the program that allows only the specified number of boxes.

0929 Cannot Delete - This Box Owns Question Box <x>

You are attempting to delete a mailbox that is the owner of at least one Question box. You should assign another owner to the Question box, or delete the Question box before deleting this mailbox.

0930 Warning: Had to Add System Box <x> to Database

The VP system requires certain reserved system boxes to exist in the database for proper operation. During start-up it checks that these boxes exist. If a required box does not exist, the VP system automatically creates it. No further action is required. This error is normally due to a missing database file. Other error messages probably display.

0931 Unable to Initialize Database

One or more of the VP system database files (files with the extension . DVM) is missing or corrupted. This error messages is usually preceded by another error message identifying the missing or corrupt file(s).

0932 Small Office Version Supports Up to <x> Boxes of This Type

The maximum number of boxes of this type has been reached in this VP system version. Verify there are no boxes of this type that are not used and can be deleted.

933 Database Not Compatible (Database Version = <x>)

This version of the VP system is not compatible with the database. If you have just upgraded the system, be sure to run the database conversion utility provided.

935 Unable to add box <x> to internal list

An error occurred while the VP system was attempting to add a new box. This is an internal error. Check the ERROR.LOG file to see if any other errors were reported at the same time, as these might identify what the original problem was.

1101 Error Closing File in Module <x>, Position <y>

This is an internal error. Normally no further action is required. If this error occurs frequently, contact technical support.

1301 Cannot Open Source File <t> to Copy It

The VP system was attempting to make a copy of the specified file, but was unable to open it. Check that the file exists.

1302 Cannot Open Destination File <t> For File-Copy

The VP system was attempting to make a copy of a file. The new copy was to be given the specified name. However, the VP system was not able to create a file with that name. Check that a read-only file of the same name does not exist. Make sure (networks only) that the VP system is allowed to write to the specified directory.

1303 Play / Record Filename is Blank, But Handle Not Null (Line <x>)

This is an internal error encountered during a play or record operation. If the problem persists, contact technical support.

1306 Invalid Class-of-Service Category <x> (Data = y)

This is an internal error. Normally no further action is required. If this error occurs frequently, contact technical support.

1307 File <t> Has Incorrect Attributes. Data = <x> , <y>

This is an internal error. Normally no further action is required. If this error occurs frequently, contact technical support.

1501 Error <x> Reported While Accessing Call-History File

While preparing a Talking Classifieds report, the VP system was unable to access the call history file RCALL.HST. Make sure this file is not corrupted. (If the file had been missing at start-up, the VP system would have warned you that it was missing, and then automatically created a new one).

1502 Read Error <x> Reported While Accessing Box <y> Data

While accessing the box database, to process one of the setup screens, the VP system was unable to read the data for the specified box. Try the operation again. If the error occurs, exit to DOS and try again. If the error still persists, contact technical support.

1503 Write Error <x> Reported While Accessing Box <y> Data

While accessing the box database, to process one of the setup screens, the VP system was unable to write the data for the specified box into the database. Try the operation again. If the error occurs, exit to DOS and try again. If the error still persists, contact technical support.

1504 Write Error <x> Reported While Writing System Information

While processing one of the system information setup screens, the VP system was unable to update the database. The file in question is called SDTABASE.DVM. Make sure it is not corrupt. Exit to DOS and run the program again.

1505 Write Error <x> Reported While Writing Line Information

While processing the LINE INFORMATION screen, the VP system was unable to update the database. The file in question is called LDTABASE.DVM. Make sure it is not corrupt. Exit to DOS and run the program again.

1506 Box <x> is Not a Mail Box

Only mailboxes can be members of a Group box. The box specified is not a mailbox, but you have tried to add it to the current Group box.

1507 Database Password Must Consist of Numbers and Letters Only

You have entered an invalid database-access password. The password must consist of the letters A through Z, and/or the numbers 0 through 9 only.

1508 You Must Enter a Filename for the RESULTS File

When exiting from an Outbound Telemarketing box screen, there must be a filename in the RESULTS field.

1509 Telemarketing Source File "<t>" Does Not Exist

When exiting from an Outbound Telemarketing box screen, the filename in the SOURCE field must be the name of an existing file.

1510 Holiday <x> Does Not Have a Valid Date

You entered an invalid date for the holiday indicated. Enter a valid date, or select NONE for the month.

1601 Cannot Open Menu Information File "<t>"

The VP system was unable to read the information it needs to build its on-screen menus. The information is held in the file MENU.FIL. Make sure the file exists in the current directory.

1602 Too Many Items (<x>) on Menu. <t> Probably Corrupted

While the VP system was reading the menu-information file MENU.FIL, it encountered invalid information. The file is probably corrupted. Copy the file from the master distribution disks.

1603 Too Many Items (<x>) In File. <t> Probably Corrupted

While the VP system was reading the menu-information file MENU.FIL, it encountered invalid information. The file is probably corrupted. Copy the file from the master distribution disks.

1604 Not Enough Memory to Load Menu Information

The VP system ran out of DOS conventional memory while reading the menu information file.

1605 Cannot Open Window to Display Menu. Probably Out of Memory

When the VP system opens a new window on the screen, it saves any screen information that the new window will cover. If there is not enough memory to save the information, this message displays.

1801 Cannot Open TRANSFER Panel

The VP system was unable to open a window to display the CALLTRANSFER screen. This is probably due to a shortage of memory.

1802 Cannot Add Box <x>

This error is encountered while attempting to add the specified box to the database. If you are running the demonstration program, the VP system allows a maximum of 25 boxes in the database. If you are not running the demonstration program, exit to DOS and try again.

1803 Cannot Add Box <x>

This error is encountered while attempting to add the specified box to the database. If you are running the demonstration program, the VP system allows a maximum of 25 boxes in the database. If you are not running the demonstration program, exit to DOS and try again.

1804 Cannot Delete Box <x>

The VP system was unable to delete the box you specified. Exit to DOS and try again. Make sure the box database file (BDTABASE.DVM) is not corrupt by running the utility SCANDB -V.

1805 Cannot Initialize Telemarketing File

The VP system was unable to properly initialize one of the files that control the Outbound Telemarketing features. These files are TMKT.CTL, TK009970.CTL, TK009971.CTL, TK009972.CTL, TK009973.CTL, and TK009974.CTL. Exit to DOS and see which one is missing, then restore the latest backup of the file. These files are used to remember where each box is in its number-list file.

1806 This Requires the Talking Classifieds Package

You have attempted to access a screen that is accessible only if you have the Talking module.

1807 This Requires the FAX Feature Package

You have attempted to access a screen that is accessible only if you have the Fax module.

1808 This Requires the Telemarketing Package

You have attempted to access a screen that is accessible only if you have the Outbound Telemarketing module.

1810 Boxes numbered 9900 through 9999 are reserved

You cannot add or delete boxes numbered between 9900 and 9999. These box numbers are reserved for system use.

1811 Box <x> Already Exists (a <t>-Box)

You have attempted to add a box to the database. However, the box number is already in use.

1812 Box <x> Does Not Exist

You have attempted to select a box that does not exist in the database. If you are trying to add a new box to the database, use the <F2> key.

1813 Box <x> is a <t>-Box

You have attempted to select a box that does exist in the database, but is not of the type you are currently displaying. Press <F10> to go back to the Box menu, and select the appropriate box type.

1814 Box <x> is Open - You Cannot Access it Right Now

You have tried to display the information about the mailbox specified on the screen. However, the mailbox is currently open (the owner has called in and opened his/her mailbox). The VP system does not allow screen access to the mailbox while it is open. You must wait until the owner exits from the mailbox, or (if it is urgent) go to the LINE STATUS screen and force-disconnect the line that the owner is using.

1815 Cannot Open Call-History File

While preparing a Talking Classifieds report, the VP system was unable to access the call history file RCALL.HST. Check this file for corruption. (If the file had been missing at start-up, the VP system would have warned you that it was missing, then automatically created a new one.)

1816 Small Office Version Supports Up to <x> Boxes of this Type

The maximum number of boxes of this type has been reached in the Small Office version. Verify that there are no boxes of this type that are not used and can be deleted.

1818 This Requires the IVR Package

You have attempted to access a screen that is accessible only if you have the IVR module.

2101 Not Enough Memory for Background-Copy Buffers

The VP system has run out of conventional DOS memory.

2102 Internal Error <x> Reported in Background Copy (Data = <y>)

While copying a message file, the VP system encountered an error. This will probably result in a message not being forwarded properly or not being broadcast properly. Report this error to technical support.

2104 Background Copy Module in Invalid State (<x>)

While copying a message file, the VP system encountered an error. This will probably result in a message not being forwarded properly or not being broadcast properly. Report this error to technical support.

2105 Cannot Open Destination File "<t>" to Copy from Box <x> to Box <y>

While copying a message file, the VP system was unable to open a file into which the copy should be placed. This will probably result in a message not being forwarded properly or not being broadcast properly. Make sure a file with this name does not have read-only attributes.

2106 Cannot Open Source File "<t>" to Copy from Box <x> to Box <y>

While copying a message file, the VP system was unable to open the file from which the copy was to be made. This will probably result in a message not being forwarded properly or not being broadcast properly.

2107 Cannot Rename Msg File to "<t>" for Box <x> on Line <y>

When copying a message file, the VP system uses temporary filenames. In this case, it was unable to rename the message file to the specified temporary filename. Make sure a file with this name does not have read-only attributes.

2108 Too Many Simultaneous Copies - Maximum is <x>

The VP system copies messages in the *background*. This means that it copies parts of the message when it has some free time. It queues requests to copy messages and actually copies them when there is idle time on the system. The maximum number of requests that can be queued at any one time is shown in this error message.

2301 Cannot Open Trace File "<t>"

There is a diagnostic utility in the VP system that allows it to trace all activity and place the results in a file. This error message means that the trace utility has been invoked, but the trace file cannot be accessed. The trace feature should only be run under the supervision of a technical support representative. Report this error to technical support.

2302 Trace File "<t>" Not Open - Cannot Store Trace Information

There is a diagnostic utility in the VP system that allows it to trace all activity and place the results in a file. This error message means that the trace utility has been invoked, but the trace file cannot be accessed. The trace feature should only be run under the supervision of a technical support representative. Report this error to technical support.

2401 Multiple Calls to Open Telemarketing Windows - Ignored

This is an internal error. It has no effect on system operation. If the error persists, report it to technical support.

2402 Label Information Corrupted

The VP system was unable to read the internal label information contained in the file ACCER.DAT. Copy the original from the distribution disks.

2403 Less than <x> Minutes of Recording-Time Left on Disk

This is a warning that the hard drive is almost full. If there are between 2 and 5 minutes left, this warning is repeated every 30 seconds. If there are less than 2 minutes left, the warning is repeated, and the VP system does not accept messages for mailboxes, informing callers that the system is temporarily out of space.

2502 Internal Voice / Fax Error <x> (Data =<y>)

This is an internal error. Report it to technical support.

2506 Fax Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If this error persists, contact technical support.

2601 File <t> Left Open From Play / Record on Line <x>

The specified file was not closed properly when it was last played or recorded. This is a warning only, and does not affect system operation.

2602 Cannot Open File <t> to Play on Line <x>

The VP system tried to play the specified file, but was unable to access it. Make sure the file exists. If it does not, copy it from the distribution disks.

2603 Cannot Open File <t> to Record on Line <x>

The VP system tried to record the specified file, but was unable to create it. Make sure there is not already a file of that name with its read-only attribute set.

2604 Invalid Start-Position for Indexed-Play Operation, Line <x>

This is an internal error. It results in a fast-forward or rewind operation failing (the VP system plays the message from the beginning). If the error persists, report it to technical support.

2701 Not Enough Memory for Group-Distribution Lists

The VP system has run out of conventional DOS memory.

2702 Mailbox <x> Full. Cannot Accept Group Box <y> Message

While the VP system was distributing a Group box message to the members of the Group box, it found that one of the member mailboxes already reached its maximum number of messages. This error message lets you know that the message was not delivered to the specified mailbox.

2703 Cannot Read Data for Mail Box <x> in Group Box <y>

While the VP system was delivering a Group box message to the members of the Group box, it was unable to find one of the members in the database. Since group distribution of messages is performed in the background (when the system has some free time), it is possible that the mailbox was deleted while the message was still pending. If this is not the case, check that the box database file (BDTABASE.DVM) is not corrupt, by running the SCANDB utility.

2901 Unable to Send Internal Event <x> (<t>) on Line <y>

This is an internal error. If it persists, contact technical support.

2902 Unable to initialize internal event queue (<x>)

This is an internal error. If it persists, contact technical support.

2903 Cannot queue database change event (object = <x>, type = <y>)

The database server informed the VP system that a change had been made to the database. The VP system was unable to process this change. Shut down the VP system, then re-start it. If the problem persists, contact technical support.

3001 Telemarketing Box <x> in Invalid State (<y>). Call Terminated

This is an internal error. If it persists, contact technical support.

3002 No Tone on Line <x> During Telemarketing Call. Call Terminated

While the VP system was making an outgoing telemarketing call, it did not detect any tone for 60 seconds after dialing the telephone number.

3003 Cannot Open Telemarketing Control File "<t>" for Box <x>

The VP system maintains files of information about the progress of telemarketing calls—one file per Outbound Telemarketing box. This error message means that the VP system was unable to access the file. Check the hard drive for corruption. Run the program again. If the file was missing, the VP system creates a new one.

3004 Cannot Open Telemarketing Input File "<t>" for Box <x>

The VP system tried to look in the specified file for a list of telephone numbers to call. It was unable to open that file. Make sure the file exists and is in the proper directory.

3005 Cannot Open Telemarketing Non-Allowed Numbers File "<t>"

Before making any telemarketing call, the VP system checks a file of non-allowed numbers, if you specified one in the Outbound Telemarketing box. The VP system tried to look in the specified file for a

list of telephone numbers that are barred. It was unable to open that file. Make sure the file exists and is in the proper directory.

3101 Driver Error <x> Reported While Reading Driver Version

The VP system encountered an error when it tried to get the version number of the voice board driver. See error 6306 for a list of possible driver errors.

3102 Driver Error <x> Reported While Setting System Configuration

The voice board driver reported an error while the VP system was trying to initialize it. See error 6306 for an explanation of the various driver errors.

3103 Driver Error <x> Reported While Starting Driver

The voice board driver reported an error while the VP system was trying to initialize it. See error 6306 for an explanation of the various driver errors.

3104 Driver Error <x> Reported While Enabling Line <y>

The voice board driver reported an error while the VP system was trying to initialize it. See error 6306 for an explanation of the various driver errors.

3105 Hardware Driver Not Responding

The VP system was not able to communicate with the voice board. There may be interrupt conflicts or shared-memory conflicts with other boards in the computer. If the VP system has already been running on this computer, consider the following: Have you added new boards lately? Did you make changes to the CONFIG.SYS file or the AUTOEXEC.BAT file? If the VP system has not yet run on this computer, remove all boards except the video board, the voice board, and the disk controller from the computer, and try the program again. If you know how to change the memory address of the board, try a different address, otherwise call technical support.

3106 OFFHOOK Error <y> Initializing Line <x>

This error occurs when initializing a Dialogic D42D-SX, -SL, or -NS board. Check to see that the station port connected to this line is active and functioning normally. An error on one particular line could indicate a bad port on the Dialogic board. Try replacing the board if all PBX ports test fine.

3107 ONHOOK Error <y> Initializing Line <x>

This error occurs when initializing a Dialogic D42D-SX, -SL, or -NS board. Check to see that the station port connected to this line is active and functioning normally. An error on one particular line could indicate a bad port on the Dialogic board. Try replacing the board if all PBX ports test fine.

3108 Error <x> in GetEvent During Initialization

This error occurs when initializing a Dialogic D42D-SX, -SL, or -NS board. Try re-booting the computer. If error persists, replace the Dialogic board.

3201 Error <x> Opening Call log File <t>

The VP system was unable to open the file VOICMAIL.LOG. This file contains the call logging information for the current day's calls. If the problem persists, contact technical support.

3202 Error <y> Storing Daily Log File <t> (Data =<x>)

At midnight every night, the VP system takes the current day's call log information (in VOICMAIL.LOG) and moves it into the LOG sub-directory. To do this, it needs to create a file in the LOG sub-directory. This error indicates that the VP system was not able create the new file. Make sure the LOG sub-directory exists.

3203 Cannot Create Call-Count File <t>

The VP system keeps certain statistics in a file called CDTABASE.DVM. When the program starts up, the VP system makes sure this file exists. If it does not exist, the VP system automatically creates a new one. This error message indicates that the VP system was unable to create the new file. If the problem persists, contact technical support.

3204 Printer is Not Ready

The VP system was unable to send call log information to the printer because the printer was not ready. Make sure the printer is connected as LPT1, is powered up, is online, and has paper.

3301 Listing Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

3401 Mailbox <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

3402 Unknown Digit Type <x> Received on Line <y>

The voice board reported a digit to the VP system that was neither DTMF or Dial Pulse. If error persists, replace the voice board.

3501 Mail Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

3502 No Tone Detected During Call-Analysis on Line <x> (Box <y>)

While the VP system was making a call, it did not detect any tone for 60 seconds after dialing the telephone number.

3601 Error Delivering Message <y> to Mail Box <x>

When the VP system tried to insert a new message into the specified box, an error was encountered. If the problem persists, contact technical support.

3603 Setting Message Notification for Box <x> - Not a Mail Box

The VP system maintains a queue of mailboxes that must be notified because they have new messages. This error message indicates that the VP system found a box on that queue that was not a mailbox (for example, Routing box, Question box, etc.).

3701 Mail Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

3902 Error <x> Reported From Driver While Polling for Event

The voice board driver reported an error. See error 6306 for a list of driver errors.

.3903 Error Generated Manually (For Test)**.3904 Unknown database modification request (class=<x>, action=<y>)**

The database server informed the VP system that a change had been made to the database. The VP system was unable to process this change. Shut down the VP system, and re-start it. If the problem persists, contact technical support.

3905 Database server has shut down. Program will now terminate

The database server informed the VP system that it is shutting down. The VP system cannot operate without the database server, so it also must shut down.

.3906 Cannot Add Box <x> to Database – Max boxes allowed is <y>

An attempt was made to add a box to the database. Each VP product (for example, Small Office, Small Office Lite, etc.) is limited in the number of boxes it can hold in its database. The limit has been reached. If you need to upgrade to the next level, contact your sales representative.

4001 Cannot Queue Message Notification Request for Box <x>

The VP system was unable to initiate message notification for the specified box. If the problem persists, contact technical support.

4002 Out of Memory - Please Unload Any Resident Programs

The computer does not have enough conventional memory to load the VP system. Remove any other TSR programs and re-boot the computer. Type MEM at the \VM directory prompt and verify that there is 640 K bytes total conventional memory available.

4101 Mail Box <x> Cannot Find New Messages for Question Box <y>

Although the Question box has some new messages, the VP system was unable to find them in the database. Exit to DOS, and run the auditing utility program MSGAUDIT .

4102 Mail Box <x> Cannot Find Old Messages for Question Box <y>

Although the Question box has some new messages, the VP system was unable to find them in the database. Exit to DOS, and run the auditing utility program MSGAUDIT .

4201 Box <x> is a Member of Group Box <y>, But is Not a Mail Box

Only mailboxes are allowed to be members of a Group box. While performing message notification, the VP system encountered a box that is not a mailbox, but that is a member of the specified Group box. Remove this box from the Group box.

4202 Cannot Read Information for Mail Box <x> in Group Box <y>

While performing message notification, the VP system was unable to access the specified member of the Group box in the database. This mailbox does not be notified of the new Group box message. If the problem persists, check the FILES statement in the CONFIG.SYS file. This should be at least 40.

4401 Mail Box <x> in Invalid OPEN State (<y>)

This is an internal error. If the problem persists, contact technical support.

4505 Mail Box <x> in Invalid OPEN State <y> While Receiving Fax

This is an internal error. If the problem persists, contact technical support.

4601 Mail Box <x> in Invalid OPEN State <y>

This is an internal error. If the problem persists, contact technical support.

4701 Mail Box <x> in Invalid OPEN Supervisor State <y>

This is an internal error. If the problem persists, contact technical support.

4702 Invalid Supervisor-Function Request <y> From Mail Box <x>

This is an internal error. If the problem persists, contact technical support.

4801 Paging Module in Invalid State <x>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

4802 Not Enough Memory to Initiate Paging Module

The computer does not have enough conventional memory to load the VP system. Remove any other TSR programs and re-boot the computer. Type MEM at the \VM directory prompt (depending on system setup) and verify that there is 640 K bytes total conventional memory available.

4901 Delete-Queue Corrupted. Data =<t>, <x>, <y>. Queue Rebuilt.

When you ask the VP system to delete a message, the VP system does not delete the message immediately, but places the request on a queue called *delete-queue*. This queue is contained in the file VMDELETE.Q. When there is idle time on the system, the VP system processes entries on the delete-queue. As a safety precaution, the VP system regularly monitors this queue, to make sure the information is valid. This error message indicates that the VP system found the queue to be corrupted. The VP system deletes the queue, and re-creates a new (empty) delete-queue. This results in some messages not being deleted. The mailbox owners find the messages are still in their mailboxes, and they can delete them again. The probable cause of the error is a hard drive problem.

4902 Cannot Create Delete-Queue

When you ask the VP system to delete a message, the VP system does not delete the message immediately, but places the request on a queue called *delete-queue*. This queue is contained in the file VMDELETE.Q. When there is idle time on the system, the VP system processes entries on the delete-queue. As a safety precaution, the VP system regularly monitors this queue, to make sure the information is valid. This error message indicates that the VP system found the queue to be corrupted or missing, but when it attempted to re-create the queue, it was unable to create the file VMDELETE.Q. If the problem persists, contact technical support.

4903 Cannot Open Delete-Queue File <t> to Add Entry

When you ask the VP system to delete a message, the VP system does not delete the message immediately, but places the request on a queue called *delete-queue*. This queue is contained in the file VMDELETE.Q. When there is idle time on the system, the VP system processes entries on the delete-queue. This error indicates that the VP system was unable to add a request to the queue. Make sure the file VMDELETE.Q exists, and does not have its read-only attribute set.

4904 Delete-Queue File Corrupted. Error =<x>

When you ask the VP system to delete a message, the VP system does not delete the message immediately, but places the request on a queue called *delete-queue*. This queue is contained in the file VMDELETE.Q. When there is idle time on the system, the VP system processes entries on the delete-queue. As a safety precaution, the VP system regularly monitors this queue, to make sure the information is valid. This error message indicates that the VP system found the queue to be corrupted. The VP system deletes the queue, and re-creates a new (empty) delete-queue. This results in some messages not being deleted. The mailbox owners find the messages are still in their mailboxes, and they can delete them again. The probable cause of the error is a hard drive problem.

4905 Cannot Open Delete-Queue File <t> to Service it

When you ask the VP system to delete a message, the VP system does not delete the message immediately, but places the request on a queue called *delete-queue*. This queue is contained in the file called VMDELETE.Q. When there is some idle time on the system, the VP system processes entries on the delete-queue. This error indicates that the VP system was unable to access the queue to process the next request. Make sure the file VMDELETE.Q exists, and does not have its read-only attribute set.

5001 Question Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

5003 Cannot Create Data File <t>

While collecting digits in a Question box, the VP system was unable to create a file in which to store the digits. Check the FILES setting in the CONFIG.SYS file. It should be at least 40.

5101 Talking Classifieds Gateway <x> in Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

5201 Event Received for Box <x>, Whose Type is Invalid (<y>)

The VP system tried to process the specified box, but its type is not one of the valid box types (for example, mailbox, Routing box, etc.). If the box number is valid, exit to DOS and run the program again. If the problem persists, contact technical support.

5202 Event <y> Received for Line <x> - No Such Line

The VP system received a request to process the specified line number. However, there is not that many lines connected to the system.

5203 DOS Error <x> Reported on Line <y>

DOS reported an error on the specified line. The VP system terminates the call. If the problem persists, contact technical support. The most common DOS errors are listed below:

Error Number	Description
2	File not found
3	Path not found
4	Too many open files
5	Access denied
6	Invalid handle
8	Insufficient memory
15	Drive is invalid
255	Hardware problem on voice board

5204 Event <y> Received on Line <x> is Not Valid For Outgoing Call

This is an internal error the system encounters while preparing to make an outgoing call. If the problem persists, contact technical support.

5205 Invalid State / Event Combination on Line <x> (<t>)

This is an internal error. If the problem persists, contact technical support.

5206 Line <y> in Invalid State <x>

This is an internal error. If the problem persists, contact technical support.

5207 Cannot Go To Box <x> - Unable To Read It From Database

The VP system attempted to route the call to the specified box, but was unable to retrieve information about that box from the database file BDTABASE.DVM. Make sure the box exists. Exit to DOS, and check the hard drive for errors. Run the program again, and try to access the box.

5208 IVPC Port <x> Lost Communication With Phone System

The specified port lost communication with the phone system. This can be due to the phone line being disconnected or a fault in the PBX or VP system computer.

5209 IVPC Port <x> Re-established Communication With Phone System

The specified port lost communication with the phone system, but the problem has been corrected.

5301 No Onhook-Acknowledgment From Hardware on Line <x>

While the VP system was clearing down a line, it did not get an acknowledgment from the voice board that the line had returned to an on-hook state. The VP system waits for 5 seconds for this acknowledgment, then assumes that the line is on-hook anyway. If the problem persists, contact technical support.

5302 Cannot Read Box <x> From File For Notification-Check

While performing checks for the message notification feature, the VP system was unable to retrieve information about the specified mailbox from the database (the file in question is BDTABASE.DVM). The effect is that the mailbox is not notified about the message. Make sure the box exists. If it does, exit to DOS, and check for hard drive errors.

5303 Cannot Read Box <x> From File for Auto-Forward Check

While performing checks for the auto-forwarding feature, the VP system was unable to retrieve information about the specified mailbox from the database (the file in question is BDTABASE.DVM). The effect is that a message may not be auto-forwarded from this mailbox. Make sure the box exists. If it does, exit to DOS, and check for hard drive errors.

5304 Line <x> is Not Idle, But Has Been Inactive Too Long. Forced Idle.

The VP system continually checks all lines in the system, to ensure that the lines do not get locked up due to some error condition. If a line is not in an idle state, but does not do anything for a 10 minutes, the VP system assumes that the line has become locked up and forces it back to an idle state. If the problem persists, contact technical support.

5307 No More Timer Records For Line <x>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

5308 Key error <x>. Data = <t>

The VP system encountered a problem while checking the security key. Ensure the key is connected to the PCs parallel port.

5309 Mail box <y> exceeds limit of VCM users allowed (limit is <x>)

VCM can be enabled for 10, 20, 30, or any certain number of users. The VP system noted that although VCM was enabled for a number of users, there was more than that number of mailboxes in the database marked as VCM users. Review all mailboxes in the database, and make sure you have not exceeded the authorized number of VCM users.

5401 Routing Box <x> in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

5402 Unexpected End-of-File In File <t>

There is an error in the file format of the specified file.

5403 Comma Missing in File <t> For Box <x>

There is an error in the file format of the specified file.

5404 Error in Database-Look Up File <t>, Box <x>

The database-lookup file format is incorrect. See section 7 for information on the correct format.

5405 Cannot Open Database Lookup File <t>, Box <x>

The database-lookup file is missing. Check the spelling of the filename. Check the hard drive for errors.

5406 Unknown Digit Type (<x>) Received on Line <y>

See error 3402.

5601 Voicemail Gateway in Invalid State (<x>). Call Terminated.

This is an internal error. If the problem persists, contact technical support.

5602 Voicemail Gateway Was Unable to Open Box <x>

Although the correct password was entered, the VP system was unable to open the specified box, as it was unable to retrieve the box information from the database (file BDTABASE.DVM). Try the operation again. If you still cannot open the mailbox, exit to DOS, and check the hard drive for errors.

5701 Message-Wait Module in Invalid State <y>. Call Terminated

This is an internal error. If the problem persists, contact technical support.

5702 Cannot Queue Message-Wait Request for Box <x>

When the VP system needs to turn on / off a message waiting lamp, it places a request on the message-wait queue. It then processes the queue when a line is available. This error message means that the VP system was unable to place a request on the queue. This may happen if the system is extremely busy, or if you do not have enough lines set up to allow message waiting calls. The effect is that the message waiting lamp associated with the specified mailbox may not be turned on or off at the appropriate time. Also, check that there is dial tone on the lines you are using to activate message waiting lamps.

5703 Msg-Wait Module Cannot Read Member <y> From Group Box <x>

While the VP system was attempting to operate a message waiting lamp for a the specified member of the Group box, it encountered a problem retrieving information about the mailbox from the database (file BDTABASE.DVM). The effect is that the message waiting lamp associated with the specified mailbox does not be turned on at the appropriate time.

5704 Not enough memory for message-waiting queues

The VP system ran out of memory during initialization.

5801 Not Enough Memory for Digit-Translation Tables

The VP system ran out of memory during initialization.

5802 Too many Digit-Translation Rules, Maximum Allowed Is <x>

The digit-translation file (TRANS.TXT) contains too many translation rules. Delete some of the rules. See section 7 for more information on the format of the digit-translation file.

5803 Illegal Character #<x> In Digit-Translation Rule: <t>

One of the rules in the digit-translation file (TRANS.TXT) contains an illegal character. See section 7 for more information on the format of the digit-translation file.

5804 Left Side of Digit-Translation Rule Too Long: <t>

The part of the specified digit-translation rule on the left of the “=” sign is too long (in the file TRANS.TXT). See section 7 for more information on the format of the digit-translation file.

5805 Right Side of Digit-Translation Rule Too Long: <t>

The part of the specified digit-translation rule on the right of the “=” sign is too long (in the file TRANS.TXT). See section 7 for more information on the format of the digit-translation file.

5806 "EQUAL" Sign Missing From Digit-Translation Rule: <t>

The “=” sign is missing from the specified digit-translation rule in the file TRANS.TXT. See section 7 for more information on the format of the digit-translation file.

5807 Digit-Translation Character #<x> Not Defined on Left-Side: <t>

In the specified digit-translation rule in the digit-translation file (TRANS.TXT), there is an identifier on the right side of the “=” sign that is not defined on the left side. See section 7 for more information on the format of the digit-translation file.

5808 Wrong Format For Greeting. Example of Correct Form is 4X=X*,*:G2

A digit-translation rule using the Greetings by Reason Code feature has been entered incorrectly. The correct format is a standard digit translation rule, followed by a colon (:), the letter **G**, and the desired greeting number.

5901 Directory-Box in Invalid State (<x>). Call Terminated.

This is an internal error. If the problem persists, contact technical support.

6001 Invalid Response: <t>

When you are recording or playing a box greeting, the VP system asks you for a language number and/or a greeting number (depending on whether you are using multiple languages and/or multiple greetings). The language number must be within the range indicated (this can be changed via the configuration file VM.CFG, see section 12 for details). The greeting number must be within the specified range

(configurable via the mailbox's assigned class of service). You may also press <Esc> to cancel the play or record operation.

6002 Cannot Open Screen Information File "<t>"

The VP system needs to read the specified file to retrieve information on the various screen layouts. It was unable to open the file. Make sure the file exists. Make sure the FILES statement in the CONFIG.SYS file specifies at least 40 files.

6003 Error <x> in Screen-Information File "<t>" (data =<y>)

The VP system needs to read the specified file to retrieve information on the various screen layouts. While reading the file, the VP system found that its format was not correct. Copy the file from the distribution disks, and run the program again.

6004 Not Enough Memory for Screen Information

The VP system ran out of memory while reading screen-formatting information.

6005 Cannot Create New Screen (<x>). Probably Insufficient Memory.

The VP system was unable to allocate enough memory for its screen information. It most likely ran out of memory.

6006 Cannot Allocate Memory for New Screen (<x>)

The VP system was unable to allocate enough memory for its screen information. It most likely ran out of memory.

6101 Not Enough Memory for Line Information

The VP system needs to allocate a small amount of conventional memory to hold line-related information. There was not enough free memory to allow this allocation.

6102 Label Information Corrupted

The VP system was unable to read the file containing screen formatting information (ACCER.DAT). Copy the file from the distribution disks.

6103 Label Information File Missing

The VP system was unable to find the file containing screen formatting information (ACCER.DAT). Copy the file from the distribution disks.

6104 Not Enough Memory to Run Program (You Need at Least <x> KB More)

The computer does not have enough conventional memory to load the VP system. Remove any other TSR programs and re-boot the computer. Type MEM at the \VM directory prompt (depending on system setup) and verify that there is 640 K bytes total conventional memory available.

6105 Error in Config File - Line <x>

An incorrect or invalid parameter has been entered in the configuration file VM.CFG on line <x>. Locate the error by counting down lines of text from the top of the file (blank lines are not counted). See section 12.

6201 Not Enough DOS Memory for Line Information

After finding that there was not enough EMS memory to hold its line-related information, the VP system attempted to use DOS conventional memory. However, there was not enough conventional memory either.

6202 Not Enough EMS Memory for Box Information

The VP system attempted to allocate EMS memory for its own use, but found that there was not enough free EMS memory.

6203 Internal EMS Error <x> on Line <y>. <t>

This is an internal error. If problem persists, contact technical support.

6204 Tried to Access EMS for Line <x>. Highest Line is <y>

This is an internal error. If problem persists, contact technical support.

6301 Internal Driver-Interface Error <x>. Data = <y> <t>

Internal logic error. If the problem persists, contact technical support.

6302 Cannot Open Call-Progress File <t>

The VP system was unable to access the specified file, which contains information on the various call-progress tones (for example, ring-tone, busy-tone). Run the call-progress training program to create the file (see section 13). The effect of this error is that the VP system uses a default set of call-progress tone parameters when it is making outgoing calls (for example, for call transfer or message notification). These defaults work in most cases. However, in some cases this may result in the VP system not being able to tell the difference between a telephone that is ringing and one that is busy, or it may fail to detect when the called party has answered the call.

6303 Error <x> Reading Call-Progress File. Data = <t>, <y>

The VP system was unable to read the information in the specified file, which contains information on the various call-progress tones (for example, ring-tone, busy-tone). The file may be corrupted. Run the call-progress training program to re-create the file (see section 13). The effect of this error is that the VP system uses a default set of call-progress tone parameters when it is making outgoing calls (for example, for call transfer or message notification). These defaults work in most cases. However, in some cases this may result in the VP system not being able to tell the difference between a telephone that is ringing and one that is busy, or it may fail to detect when the called party has answered the call.

6304 Error <x> in Global-Parameters File <t>

In the specified file, the VP system expected to find special setup information, but the format of the information was not correct. The file may have become corrupted. Restore the latest backup copy of the file, or contact technical support.

6305 Error <x> in Channel-Parameters File <t>

In the specified file, the VP system expected to find special setup information, but the format of the information was not correct. The file may have become corrupted. Restore the latest backup copy of the file, or contact technical support.

6306 Error <x> Reported from Get Event

The Rhetorex RDSP driver reported an error while the VP system was polling it for events. If the problem persists, contact technical support. The most common errors are listed below:

Error Number	Description
4	System not active
5	Hardware error
9	Bad line number
16	Insufficient buffer memory
34	EMS memory error

6307 Unknown Digit Type <x> on Line <y>

A digit was received on the specified line, but it was invalid. If the problem persists, contact technical support.

6308 DOS Seek Error During Play / Record Operation on Line <x>

DOS reported an error to the VP system when it tried to start a play or record operation on the specified line. The effect is that the particular prompt does not play, but the call continues. If the problem persists, contact technical support.

6309 Board Not Configured for This Program

The VP system was unable to initialize the voice board. The board will only operate with voice boards supplied by the VP system manufacturer. Contact technical support.

6310 WARNING: Cannot Find External Call-Progress File <t>

The file containing the structure of the external (telephone network) call-progress tones is missing or corrupt. Replace the file, or run call progress analysis to re-create the file.

6311 Error <x> Initializing Call-Progress Parameters On Line <y>

The voice board driver reported an error when the VP system attempted to set up the call-progress tone parameters for the specified line. The result is that the VP system uses the default call-progress tone parameters for that line.

6312 Error <x>, <y> Reading Tone File: <t>

The file containing the structure of the call-progress tones is missing or corrupt. Replace the file or run call progress analysis to re-create the file. See section 13 this procedure.

6313 Hardware Failure

An error condition was detected from the voice board. Power down the computer and re-seat the board(s), then re-boot the computer. If error persists, replace the voice board(s).

6314 Error <y> Opening File <t> in Mode <x>

This is an internal error. If the problem persists, contact technical support.

6315 Error in function <t> on line <y>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6316 Term mask error with event <x> on line <y>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6317 Call-progress error from voice API. Value = <x>

The VP system encountered an error while making an outgoing call. If the problem persists, contact technical support.

6318 Error event from voice API. Handle = <x>, Dlg event = <y>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6319 Voice API call <t>. Result = <x>, handle = <y>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6320 Invalid event from voice API. Dlg event = <x>, handle = <y>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6321 Invalid event handle from voice API. Handle = <x>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6322 Error <y> opening line <x>. Name = <t>

The VP system encountered an error while communicating with the voice board. If the problem persists, contact technical support.

6323 Error <x> in “<t>” while starting voice driver.

The VP system encountered an error while communicating with the voice board during initialization. If the problem persists, contact technical support.

6324 No tone detected while dialing out on line <y>

The VP system tried to make a call on the specified line. It went off-hook, dialed the number, and then waited for a call-progress tone (for example, ringing or busy tone). No tone was detected. Check the VP system setup. Make sure the ‘Sequence to seize a line on external call’ is set properly. Also, verify extension numbers and message delivery numbers are entered correctly in each mailbox.

6401 Software Type Does Not Match Board Type (<x>)

The VP system software loaded in the computer does not match the make and model of voice board(s) installed.

6402 Key Error <x> <t>

The VP system has detected an error from the security key. Contact technical support.

6403 System not authorized for Windows NT

To run the VP system under Windows NT, you need to use a security key that has been enabled for NT. The VP system has detected a key that is authorized only for DOS-based VP systems.

6404 ITT-3100 Driver Not Found

The VP system was programmed to work with the ITT-3100 driver, but was unable to find the driver in memory. Make sure the driver is loaded either from the AUTOEXEC.BAT file or from the VERBATIM.BAT file.

6405 In-Band Integration Feature Not Authorized

The in-band integration feature has not been enabled for this installation. Make sure you have entered the correct authorization code in the PBXLINK.TXT file.

6406 System not authorized for this version of software

The VP system has detected a key that is authorized to run an older version of software. Contact technical support if you think this is an error. Or contact your sales representative if you need to upgrade to a newer key.

6407 Key not authorized

The security key connected to the VP system is not authorized. Contact technical support if you think this is an error.

6501 Mail Box <x> in Invalid OPEN State (<y>)

This is an internal error. If error persists, contact technical support.

6601 Missing ']' in Line <x> of Language File <t>

The LANGUAGE.TXT file is used to translate certain screen text into other languages. Each word subject in this file must be enclosed in brackets [].

6602 Missing '[' in Line <x> of Language File <t>

See error 6601.

6603 Unexpected End-of-File in Language File <t> (Line <x>)

If you have edited the LANGUAGE.TXT file, check the line indicated in the error message for mistakes. If no changes have been made to the file, re-copy the file from the installation disks to the hard drive.

6701 Serial Link Down. Attempting to Reconnect.

The serial link connection with the host telephone system went down. The VP system sends re-start messages at regular intervals to try to re-establish communication. Make sure all connections are tight, and check the communications port on the telephone system. Since the VP system uses timing parameters to determine the condition of the link, you may also see this message if you adjust the clock on the PC.

6801 Cannot Open File <t>

This error is for serial port integrations. The .LNK file is missing or corrupted, or an internal error has occurred.

6802 Error <y> on Line <x> of Serial-Link File <t>

An entry on line x of the specified .LNK file is not in the proper format (a value is missing or out of range). The file is probably corrupt. Make a backup of the .LNK file, then copy the original from the distribution disks.

6803 Missing EQUALS Sign on Line <x> in File <t>

See error 6802.

6804 Unknown Character in Line <x> of File <t>

See error 6802.

6805 Error in Message-Type on Line <x> of File <t>

See error 6802.

6806 Error in Response-Type on Line <x> of File <t>

See error 6802.

6807 Unknown Message-Type on Line <x> of File <t> (Data = <y>)

See error 6802.

6808 Error <y> in Message waiting Declaration on Line <x> of File <t>

See error 6802.

6809 Error <y> in Call-Progress Result on Line <x> of File <t>

See error 6802.

6810 Error <y> in Voice-Mail Port ID on Line <x> of File <t>

See error 6802.

6811 Error in Call-Type Format on Line <x> of File <t>

See error 6802.

6812 Unknown Call-Type on Line <x> of File <t>

See error 6802.

6813 Error <y> in Internal/External Field on Line <x> of File <t>

See error 6802.

6814 Error <y> in FORWARD FROM Field on Line <x> of File <t>

See error 6802.

6816 Unknown SEND Command (<t>) in Line <x>

See error 6802.

6817 Unknown Character (<y>) on Line <x> of File <t>

See error 6802.

6818 Unknown Miscellaneous Info on Line <x> of File <t>

See error 6802.

6819 Not Enough Memory For PBX-LINK Tables

There is not enough conventional memory available in the computer to load the VP system with serial port integration. Remove any other TRS programs from the computer, then type MEM and verify that the computer has a total of 640K bytes of conventional memory available.

6901 Error <x> Opening Port COM<y>

Check for a hardware failure with the associated COM port or a hardware interrupt conflict within the computer.

6902 Error <x> Setting Speed on Port COM<y>

See error 6901.

6903 Error <x> Setting Parity on Port COM<y>

See error 6901.

6904 Error <x> Setting Data Bits on Port COM<y>

See error 6901.

6905 Error <x> Setting Stop Bits on Port COM<y>

See error 6901.

6906 Error <x> Closing Port COM<y>

See error 6901.

6907 Error <x> Sending Data to Port COM<y>

The system is unable to send data on the specified serial port. Common errors are:

Error Number	Description
2	This is an invalid port number. Valid ports are COM1 through COM4.
3	The port is not open. This is an internal error. If the problem persists, contact technical support.
7	The output queue is full. This error occurs if the VP system tries to send data faster than it can be sent across the serial link. Try increasing the link speed. Note that if you change the speed of the link on the VP system, you must change it on the telephone system also.

6908 Error <x> Reading Data From Port COM<y> (Status = <t>)

An error was encountered while trying to reading data on the specified serial port. Common errors are:

Error <x>	Description
0	See status field (in following table).
2	Invalid port number. Valid ports are COM1 through COM4.
3	The port is not open. This is an internal error. If the problem persists, contact technical support.
7	Output queue full. This error occurs if the VP system tries to send data faster than it can be sent across the serial link. Try increasing the link speed. Note that if you change the speed of the link on the VP system, you must change it on the telephone system also.

Status <t>	Description
0001	Some information was lost because data was received on the link faster than it could be processed by the VP system.
0002	This is an internal error.

Status <t>	Description
0010	This is a Parity error. Make sure the link settings are set correctly at both ends of the link.
0020	This is an Overrun error.
0040	This is a Framing error. Make sure the link settings are set correctly at both ends of the link.

7001 Unknown Message-Type <x> in PBX-Link Information

Unknown or incorrect data has been received in a serial data packet. Check for compatible transmission characteristics (baud rate, data bits, parity, etc.). Verify that you have the correct .LNK file for the telephone system being connected.

7002 Bad Format in PBX-Link Information

See error 7001.

7101 SMDI Send Queue is Full

The queue holding outgoing SMDI packets (message waiting on or off packets) is full. Make sure the data link is operational. If this error occurs during a global refresh of message waiting lamps, you may need to increase the speed of the data link. If this is not possible, you may need to discontinue using the global refresh feature.

7201 Error in Configuration File (Line <x>)

An error has been detected on line x of the configuration file VM.CFG. Additional error messages may give more detailed information about the error, or see section 12 for the proper format and permitted range of values for the associated parameter.

7202 Wrong Format (<t>) in Configuration File

See error 7201.

7203 Value Out of Range in Configuration File, Must Be Between <x> And <y>

See error 7201.

7204 Unknown Option (<t>) On Line <x> of Configuration File

See error 7201.

7205 Value Must be a Valid DTMF Digit (0-9, *, #, or A - D)

See error 7201.

7206 Option Not Available (<t>)

This option is not provided with the software. See error 7201.

7301 Fax Queue is Full

The maximum number of documents waiting in queue to be sent has been reached. If this error persists, consider adding additional fax hardware for high traffic considerations.

7302 Internal Fax-Queue Error <x> (Data = <y>)

This is an internal error. If problem persists, contact technical support.

7401 Internal Fax Error <x>. Data = <y>

This is an internal error. If problem persists, contact technical support.

7402 Fax: <t>, line <y> (fax port <x>)

An error has occurred on the associated fax port. If error persists, check for hardware faults on the fax board or hardware interrupt conflicts within the computer.

7403 Unable to Fine Fax Document <t>

The named document file is missing, corrupted, or not in the proper directory.

7404 Unable to Create Fax Information

This is an internal error. If problem persists, contact technical support.

7405 Unable to Create Serial Number File in Directory <t>

This is an internal error. If problem persists, contact technical support.

7406 Fax Channel <x> Failed Initialization (Result = <t>)

This is an internal error. Re-boot the PC. If problem persists, contact technical support.

7407 Cannot Disable Auto-Answer on Fax Channel <x> (Result = <t>)

This is an internal error. If problem persists, contact technical support.

7408 Fax Call Aborted on Line <x>

This is an internal error. If problem persists, contact technical support.

7409 No Dial-Tone for Fax on Line <x>

While attempting to send a fax, no dial tone was detected. Make sure the fax ports are wired properly.

7410 Unable to Reach Fax Number <t> (After <x> Tries)

The VP system made a number of attempts to send a fax to the specified number, but was unable to deliver the fax. The number was probably busy or invalid.

7411 Fax port waiting too long, line <x>

The VP system was attempting to send a fax. The fax hardware reported that it was in a 'waiting' state, but remained in that state for more than 90 seconds.

7412 Error <x> reported while attempting to start fax module

The VP system was unable to initialize the fax module.

7413 Invalid fax status (<y>) reported on line <x>

The VP system was attempting to send a fax. The fax hardware reported that it was in an invalid state.

7501 Mail Box <x> in Invalid State (<y>). Call Terminated

This is an internal error. If problem persists, contact technical support.

7601 Mail Box <x> in Invalid State <y> While Retrieving Faxes

This is an internal error. If problem persists, contact technical support.

7702 Cannot Schedule Message From Box <x> to Box <y> - Queue is Full

The maximum number of messages scheduled for future delivery has been reached.

7703 Cannot Create Schedule-Message File <t>

This is an internal error. If problem persists, contact technical support.

7704 Error <x> Opening Schedule-Message File <t>

This is an internal error. If problem persists, contact technical support.

7705 Unable to Deliver Scheduled Message From Box <x> To Box <y>

This is an internal error. If problem persists, contact technical support.

7706 Entry <x> in Schedule-Message File Was Corrupted (<y>)

This is an internal error. If problem persists, contact technical support.

7707 Cannot Create Schedule-Message <t> From Box <x> To Box <y>

This is an internal error. If problem persists, contact technical support.

7708 Cannot Dequeue Schedule-Message <t> From Box <x> To Box <y>

This is an internal error. If problem persists, contact technical support.

7801 Error Creating Telemarketing Retry Queue

This is an internal error. If problem persists, contact technical support.

7802 Read Error Adding Entry To Telemarketing Queue (Data = <x>)

This is an internal error. If problem persists, contact technical support.

7803 Telemarketing Retry Queue Header is Corrupted (Data = <x>)

This is an internal error. If problem persists, contact technical support.

7804 Telemarketing Retry Queue Corrupted (Data <x>, <y>, <t>)

This is an internal error. If problem persists, contact technical support.

7901 Error <x> Opening Port COM<y>

See error 6901.

7902 Error <x> Setting Speed on Port COM<y>

See error 6901.

7903 Error <x> Setting Parity on Port COM<y>

See error 6901.

7904 Error <x> Setting Data Bits on Port COM<y>

See error 6901.

7905 Error <x> Setting Stop Bits on Port COM<y>

See error 6901.

7906 Error <x> Closing Port COM<y>

See error 6901.

7907 Error <x> Sending Data to Port COM<y>

See error 6901.

7908 Error <x> Reading Data From Port COM<y>

See error 6901.

8101 ACD Box <x> in Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

8201 IVR Box <x> In Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

8301 Account Box <x> In Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

8401 Network Not Detected (Are Network Drivers Loaded?)

The VP system was programmed to communicate with VCM over a local area network (LAN). However, the VP system was unable to detect the network. Make sure you have loaded the network drivers in the AUTOEXEC.BAT file. Make sure you have loaded the Netbios emulator for the network. For more information, contact the LAN administrator.

8402 Unable to initialize LAN interface

The VP system was unable to initiate communication with the Local Area Network (LAN). Make sure all required network drivers are loaded. . For more information, contact the LAN administrator.

8501 Unknown Protocol <x> In Use on LAN

This is an internal error. If the problem persists, contact technical support.

8601 Invalid Data (<y>, <t>) in LAN Login Record For Line <x>

This is an internal error. If the problem persists, contact technical support.

8602 Not Enough Memory to Log in New User (<x> Logged In)

The VP system ran out of conventional memory when it tried to allow a VCM user to log in. The message indicates the number of users currently logged in.

8603 Login Cross-Check <x> Failed. Data =<y>

This is an internal error. If the problem persists, contact technical support.

8604 Login Audit Error <x>. Data =<t>

This is an internal error. If the problem persists, contact technical support.

8701 Cannot Find LAN Fax Control File <t>

A VCM user tried to send a fax via the VP system. The VP system was unable to access the file that it uses for VCM fax record-keeping. The file was probably corrupt or missing. The VP system created a new version of the file. Some pending faxes (waiting to be sent) may be lost when the new file was created.

8801 LAN Module in Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

8802 Login Record Corrupt on Line <x>. Stored Line = <y>.

This is an internal error. If the problem persists, contact technical support.

8901 Cannot Create Directory File <t>

The VP system was unable to create the file indicated. VCM uses this file to create its own directory of mailboxes. Make sure the VP system computer has network write access to the indicated directory.

8902 Cannot Add Box <x> To Directory File <t>

While creating the directory file used by VCM, the VP system was unable to add the indicated box to the file. VCM uses this file to create its own directory of mailboxes. Make sure the VP system computer has network write access to the indicated directory

9101 Fax-Transfer Box <x> In Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

9102 Cannot Find File <t>. Exit and Run EXTNS Utility

While processing a fax call, the VP system was unable to find the file containing the extension numbers of its fax-enabled ports. Exit to DOS, and run the EXTNS utility. This allows you to enter the information the VP system requires.

9201 Fax-Transfer Box <x> In Invalid State <y>

This is an internal error. If the problem persists, contact technical support.

9202 Cannot Create Receive-Area For Incoming Fax on Line <x>.

The VP system was unable to allocate a memory buffer into which it could receive a fax document.

9203 Status <x> Reported While Receiving Fax on Line <y>

While receiving an incoming fax document, the VP system encountered a bad status value from the fax hardware. The VP system stops receiving and clears the call. The various status values are described below:

Status	Description
1	The document file has been opened.
2	The document file has been moved.
3	The document file has been deleted.

9204 Line <y> Was Receiving Fax For <x> Minutes (Data =<t>)

While receiving an incoming fax document, the VP system found that the line was in a receive state for more than a reasonable amount of time. As a safety precaution (to prevent the lines from being tied up under error conditions), the VP system cleared the line. What constitutes a *reasonable* time can be defined using the configuration file VM.CFG (FAX TIMEOUT parameter).

9205 Result <x> Reported From GET_FAX on Line <y> (Data =<t>)

While the VP system was receiving an incoming fax document, the fax hardware reported a completion result indicating that there was a problem. The various result codes are as follows:

Result Code	Description
4	Received data lost
258	File not found
259	Path not found
260	Too many open files
261	Access denied
263	Memory corrupted
264	Insufficient memory

Result Code	Description
642	Bad PCX file header
643	Unexpected end-of-file
644	Unexpected disconnect
770	Cannot find file
771	Cannot find path
1025	Remote unit not Group 3 compatible
1027	Remote unit requested disconnect

Result Code	Description	Result Code	Description
269	Invalid data	1030	Excessive line noise
271	Invalid drive	1037	Remote unit disconnected
277	Drive not ready	1045	Tried to receive from incompatible hardware
287	General failure	1055	Unexpected end-of-file while receiving
641	Bad phone number		

9206 Status <x> reported while receiving fax on line <y>

See error 9203.

9207 Could not retrieve received fax on line <x>

The VP system was receiving a fax. The fax module indicated that the fax had been received completely. However, when the VP system tried to place the fax in the appropriate box, the fax module did not make the document available.

9301 Unknown Answer-Type <y> For Question <x> In Q-Box <t>

The VP system tried to play the specified answer from the Question box indicated, but the answer-type was not valid (the valid answer types are VOICE and DIGITS).

9304 Group-Box <x> Is Full, and Cannot Accept Messages

The specified Group box has no room for new messages. The members of the Group box should delete old messages. A Group box message is not deleted from the Group box until *all* members have asked for it to be deleted. Once all members have asked for the message to be deleted, the VP system deletes it the following midnight.

9305 Group-Box <x> is Full, Message Discarded

The specified Group box has no room for new messages. The members of the Group box should delete old messages. A Group box message is not deleted from the Group box until *all* members have asked for it to be deleted. Once all members have asked for the message to be deleted, the VP system deletes it the following midnight.

9306 Cannot Deliver Message To Box <x>, Box Type <y> Is Invalid

An attempt was made to deliver a message to the specified box, but the box type is not a mailbox or a Group box. The message was discarded.

9307 Cannot Confirm Receipt of Message. Sender = <x>, Receiver = <y>

While processing a message that was marked for receipt-confirmation, the VP system was unable to notify the sender that his/her message was received. If the problem persists, contact technical support.

9308 Cannot Play Voice Menu <x>

The VP system was unable to play a certain voice menu. This is an internal error. Contact technical support.

9401 Unable to Deliver Message to Box <x>. Box Type <y> is Invalid

An attempt was made to deliver a message to the specified box, but the box type is not a mailbox or a Group box. The message was discarded.

9501 Netbios Error <x> In <t>. Data = <y>.

Netbios reported an error while the VP system was trying to send or receive information. If the problem persists, contact technical support.

9502 Overflow Occurred while Sending Network Messages

The local area network was busy and was unable to keep up with the VP system's requests to send information.

9503 Netbios Not Responding (<x>)

The VP system was programmed to communicate with VCM over a local area network (LAN). However, the VP system was unable to detect the network. Make sure you have loaded the network drivers in the AUTOEXEC.BAT file. Make sure you have loaded the Netbios emulator for the network. For more information, contact the LAN administrator.

9504 Not Enough Memory to Load Network Module

The VP system ran out of conventional memory while trying to load the LAN module.

9601 Not Enough Memory to Load PCIU Module

The VP system ran out of conventional memory while trying to load the PCIU module.

9602 PCIU Receive Queue is Full

The VP system was unable to handle all the messages coming from users of VCM. If the problem persists, contact technical support.

9603 Attempt to Send Unknown Message Type <x> to PCIU

This is an internal error. If the problem persists, contact technical support.

9604 Unknown Message Type <x> Received from PCIU

A message was received from a VCM user that the VP system did not recognize. If the problem persists, copy the COMDIAL.LNK file from the distribution disks into the VP system directory. If the problem persists, contact technical support.

9701 Not Enough Memory to Load PCIU Module

The VP system ran out of conventional memory while trying to load the PCIU module.

9702 Tried to Send Unknown Message Type <x> to PCIU

This is an internal error. If the problem persists, contact technical support.

9801 Call-Record Module in Invalid State (<x>)

This is an internal error. If the problem persists, contact technical support.

9901 Mail box <x> in invalid state. Call terminated.

This is an internal error. If the problem persists, contact technical support.

9902 Unknown digit type <x> received on line <y>

The voice board reported a digit to the VP system that was neither DTMF or Dial Pulse. If error persists, replace the voice board.

10001 Key error <x>. Data=<t>

An error was detected while reading the security key. Ensure the key is connected to a printer port. If the problem persists, contact technical support.

10002 Key not detected

The security key was not detected. Ensure the key is connected to a printer port. If the problem persists, contact technical support.

10401 Not enough conventional memory for line information

After finding that there was not enough EMS memory to hold its line-related information, the VP system attempted to use DOS conventional memory. However, there was not enough conventional memory either.

10402 Label information corrupted

The VP system was unable to read the internal label information contained in the file ACCER.DAT. Copy the original (AC CER*.DAT) from the VP system CD or diskettes.

10403 Label information file missing

The VP system was unable to open the file ACCER.DAT, containing the label information. Copy the original (AC CER*.DAT) from the VP system CD or diskettes.

10404 Not enough memory to run program (you need at least <x>KB more).

The computer does not have enough conventional memory to load the VP system. Remove any other TSR programs and re-boot the computer. Type MEM at the \VM directory prompt (depending on system setup) and verify that there is 640 K bytes total conventional memory available.

10405 Cannot allocate enough file handles

The VP system needs to be able to open several files at once while it is running. DOS was unable to guarantee that there would be enough file handles available. Make sure the CONFIG.SYS file sets the FILES setting to at least 40.

10501 Error <x> Opening System-Database File "<t>"

The VP system was unable to open the database file containing the system information (SDTABASE.DVM). If this error is encountered during start-up, the VP system automatically creates a new system-information file, using its own default values. You should then go to the SYSTEM INFORMATION menu, and update the information on each screen. (The information displayed on the LINE STATUS screen has not been affected). Alternatively, you can restore the latest backup of the system information database file SDTABASE.DVM.

10502 Error <x> Opening Line-Database File "<t>"

The VP system was unable to open the database file containing the line information (LDTABASE.DVM). If this error is encountered during start-up, the VP system automatically creates a new line-information file, using its own default values. You should then go to the LINE INFORMATION screen, and update the information. The information displayed on the LINE INFORMATION screen is the only information that has been affected.

10503 Error <x> Opening Box-Database File "<t>"

The VP system was unable to open the database file containing the box information (BDTABASE.DVM). In most cases, this error is generated because the file has been deleted, or there is a hard drive problem. If this error is encountered during start-up, the VP system automatically creates a new box information file. This new file does not contain any of the boxes, only the system reserved boxes (those numbered between 9900 and 9999). You must either re-enter all box information or restore the latest backup of the database files (*.DVM). If you are unsure of how to proceed, contact technical support before you do anything.

10504 Cannot open message database file "<t>" (<x>)

The VP system was unable to open the database file containing the message information (MDTABASE.DVM). In most cases, this error is generated because the file has been deleted, or there is a hard drive problem. If this error is encountered during start-up, the VP system automatically creates a new file.

10505 Cannot add box <x> to database

The VP system was unable to add the indicated box to the database. Exit to DOS, and check that the box's file is not corrupt. Also, confirm that the hard drive has sufficient space.

10506 Cannot read box <y> information from database (<x>)

The VP system was unable to read information from the file containing the database box information (BDTABASE.DVM). Exit to DOS, and check that the file is not corrupt. Also, confirm that the hard drive has sufficient space.

10507 Cannot write box information to file "<t>"

The VP system was unable to write information to the file containing the database box information (BDTABASE.DVM). Exit to DOS, and check that the file is not corrupt. Also, confirm that the hard drive has sufficient space.

10508 File pointer error accessing box <x> (pointer = <t>)

This error can be generated when the VP system is updating the file MDTABASE.DVM, which contains information on messages held in each mailbox. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility MSGAUDIT to allow the VP system to rebuild the file.

10510 Cannot rename database file <t> (error = <x>)

When the VP system is compressing the database (to save hard drive space), it uses a temporary file. When the compressing operation is complete, the VP system renames the temporary file to the proper database filename BDTABASE.DVM. This error message indicates that the VP system was unable to rename the temporary file. Exit to DOS, and rename the file yourself. From the DOS prompt, type:

```
RENAM BDTABASE.TMP BDTABASE.DVM
```

10511 Cannot re-index database (error = <x>)

When the VP system is shutting down, it compresses the box database to make processing more efficient. During compression, the VP system encountered an error. Normal operation will not be affected. If the problem persists, contact technical support.

10512 Cannot allocate auxiliary buffer for box <x>

This error can be generated when the VP system is updating the file `MDTABASE.DVM`, which contains information on the messages held in each mailbox. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility `MSGAUDIT` to allow the VP system to rebuild the file.

10513 Error <x> reading message <t> info for box <y>

The VP system encountered an error while trying to read the database files for the specified box. The problem is probably localized to the database file `MDTABASE.DVM`. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility `MSGAUDIT` to allow the VP system to rebuild the file.

10514 Cannot initialize auxiliary module

The VP system was not able to initialize its internal tables. Re-start the system.

10515 Cannot delete message <y> in box <x>

Due to an internal error, the VP system was unable to delete a message from the specified box. The problem is probably localized in the database file `MDTABASE.DVM`. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility `MSGAUDIT` to allow the VP system to rebuild the file.

10516 File pointer error <x> in box <y>

This error can be generated when the VP system is updating the file `MDTABASE.DVM`, which contains information on messages held in each mailbox. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility `MSGAUDIT` to allow the VP system to rebuild the file.

10517 Error <x> writing box <y> to database

The VP system was unable to update its database with information for the specified box. The problem is probably localized in the `BDTABASE.DVM` file or the `MDTABASE.DVM` file. If the problem persists, restore backups of these files. If that does not solve the problem, contact technical support.

10518 Link error <x> while accessing box <y>

This error is encountered while updating the file `MDTABASE.DVM`, containing information on the messages held in each mailbox. If the problem persists, check the hard drive for errors. If you do not have a backup, delete the file, and run the utility `MSGAUDIT` to allow the VP system to rebuild the file.

10519 File "<t>" missing while auditing box <x>

During its automatic database audit, the VP system found that a voice message file was missing. This may be due to disk errors or a power failure, for example. The VP system noted and corrected the

problem by updating its database. No further action is required. If the problem persists, contact technical support.

10520 File "<t>" missing while auditing Group box <x>

During its automatic database audit, the VP system found that a voice message file was missing for a Group box message. This may be due to disk errors or a power failure, for example. The VP system noted and corrected the problem by updating its database. No further action is required. If the problem persists, contact technical support.

10521 Link error <x> encountered while auditing box <y>

An internal error was detected during the VP system's automatic audits. If the problem persists, try deleting the box, then adding it again.

10522 Error <x> while allocating space for box <y>

The VP system had a problem allocating memory or disk space for a new box. Check that the disk is not full.

10523 Error <x> while reading header info for box <y>

An error was encountered while the system was reading information about the messages in a box. If the problem persists, try deleting the box, and adding it again. If that does not solve the problem, run the utility MSGAUDIT to re-build the message database.

10524 Error in new-message counts for box <x> (<t>)

During its automatic database audit, the VP system found inconsistencies in the database. It fixed these automatically. No further action is required. If the problem persists, contact technical support.

10525 Error in old-message counts for box <x> (<t>)

During its automatic database audit, the VP system found inconsistencies in the database. It fixed these automatically. No further action is required. If the problem persists, contact technical support.

10526 Cannot initialize box index

The VP system maintains an internal list of boxes while it is running. It was unable to create this list. If the problem persists, contact technical support.

10527 Cannot read box index

The VP system maintains an internal list of boxes while it is running. It was unable to read this list. If the problem persists, contact technical support.

10528 Error <x> updating box index

The VP system maintains an internal list of boxes while it is running. It was unable to update this list. If the problem persists, contact technical support.

10529 Audit cross-check failed (boxes are <x> and <y>)

During its automatic database audit, the VP system found inconsistencies in the database. It fixed these automatically. No further action is required. If the problem persists, contact technical support.

10530 Cannot add box <x> to database – already exists

An attempt was made to add a box to the database. The box already exists.

10701 Invalid Month (<x>) Encountered While Reading Date

While preparing to say a date, the VP system encountered a value for the month that is not between 1 and 12. Check for file corruption in the message directory.

19. Mapping Menu Options

Every voice menu in the VP system can be configured so that any digit can correspond to any option. For example, the menu that offers callers the option to send or re-record their message is:

*“To send this message, press 1.
To replay the message, press 2.
To re-record the message from the beginning, press 3.
Or, to cancel the message, press 4.”*

You can change this menu so that callers can press different keypad keys to invoke any or all of these options. You indicate the key mapping you want to use in the `VM.CFG` configuration file. In the above example, if you want to change the menu so the caller presses “**R**” (the 7 key) to re-record the message, you make the following entry in the `VM.CFG` file:

```
MENU.SENDMSG.RECORD = 7
```

If you want to disable a menu option, simply enter an “**X**” as the digit corresponding to the option. For example, to disable the P.A. call announcing option available to callers hearing a mailbox’s personal greeting, you include the following line in the `VM.CFG` file:

```
MENU.MBOX.PA = X
```

Note: If you change menu mapping, you must re-record the appropriate system prompts to indicate the keypress modifications.

This section includes a list of all the voice menus in the VP system. Shown with each menu are the prompts played in conjunction with the menu and the menu options, as you would enter them in the `VM.CFG` file to map them to different keypresses. The default keypress associated with each menu option is shown in parentheses beside the option.

For the contents of the default prompt recordings, see section 15. For information on adjusting the `VM.CFG` file, see section 12.

Main Menu Played when an Owner Opens a Mailbox

Prompts: 65, 66, 67

menu.main.listen	(1)	
menu.main.send		(2)
menu.main.options	(3)	
menu.main.qbox	(4)	
menu.main.language	(5)	
menu.main.supervisor	(6)	
menu.main.fax	(7)	<i>(only if a Fax module is enabled)</i>
menu.main.quickold	(8)	
menu.main.quick	(9)	

menu.main.outdial	(0)
menu.main.wakeup	(*)
menu.main.exit	(#)

Menu Offered to Mailbox Owner when He/She Selects “Listen to Messages”

Prompt: 68

menu.listen.newvmail	(1)	
menu.listen.oldvmail	(2)	
menu.listen.newemail	(3)	
menu.listen.oldemial	(4)	
menu.listen.newall	(5)	
menu.listen.oldall	(6)	
menu.listen.exit	(#)	
menu.listen.getfax	(*)	<i>(Only if a Fax module is enabled)</i>

Menu Played when Mailbox Owner Selects the Options Menu to Make Changes

Prompt: 69

menu.change.name	(1)
menu.change.greeting	(2)
menu.change.password	(3)
menu.change.transfer	(4)
menu.change.notify	(5)
menu.change.page	(6)
menu.change.schedule	(7)
menu.change.pdl	(8)
menu.change.tutorial	(9)
menu.change.acd	(0)
menu.change.edit	(*)
menu.change.exit	(#)

Menu Options when Mailbox Owner Selects the “Review Messages For Future Delivery” Option

Prompt: 189

menu.sreview.play	(1)
menu.sreview.next	(2)
menu.sreview.delete	(4)
menu.sreview.exit	(#)

Menu Options the Mailbox Owner Has when His/Her Transfer/Pager/Notification Number is Being Played

Prompt: 123

- menu.feature.change (1)
- menu.feature.toggle (*)
- menu.feature.exit (#)

Menu Played when Mailbox Owner Chooses to Forward a Message with a Comment

Prompt: 124

- menu.comment.prefix (1)
- menu.comment.append (2)
- menu.comment.none (3)
- menu.comment.exit (#)

Valid Options while a Message is Being Played and after a Mailbox Owner Has Listened to One of His/Her Messages

Prompt: 71

- menu.message.replay (1)
- menu.message.next (2)
- menu.message.savenew (3)
- menu.message.delete (4)
- menu.message.volume (5)
- menu.message.options (6)
- menu.message.tagfax (7) *(Only if a Fax module is enabled)*
- menu.message.rew (8) *(rewind)*
- menu.message.ff (9) *(fast-forward)*
- menu.message.pause (0)
- menu.message.getfax (*) *(Only if a Fax module is enabled)*
- menu.message.exit (#)

Second Digit Selections when Mailbox Owner Selects “Other Message Options” (Default Digit 6 in Previous Menu) after Listening to a Message

Prompts: 285, 286, 287, 178

- menu.msg.options.forward (1)
- menu.msg.options.reply (2)
- menu.msg.options.xfer (3)
- menu.msg.options.delete (4)
- menu.msg.options.timedate (5)
- menu.msg.options.exit (#)

Menu Played when Mailbox Owner Selects “Listen to Questionnaire Answers” from the Main Menu

Prompt: 82

menu.question.new	(1)
menu.question.old	(2)
menu.question.exit	(#)

Valid Options when Questionnaire Answers Are Being Played and when Mailbox Owner Has Just Listened to a Questionnaire Answer

Prompt: 70

menu.answer.replay	(1)	
menu.answer.next	(2)	
menu.answer.savenew	(3)	
menu.answer.delete	(4)	
menu.answer.volume	(5)	
menu.answer.timedate	(6)	
menu.answer.rew	(8)	<i>(rewind)</i>
menu.answer.ff	(9)	<i>(fast-forward)</i>
menu.answer.pause	(0)	
menu.answer.exit	(#)	

Menu Played when Mailbox Owner Selects “Change Your Name” from the Make Changes Menu

Prompt: 94

menu.chgname.play	(1)
menu.chgname.record	(2)
menu.chgname.delete	(3)
menu.chgname.exit	(#)

Menu Played when Mailbox Owner Selects “Change Your Greeting” from the Make Changes Menu

Prompt: 93

menu.chggreet.play	(1)	
menu.chggreet.record	(2)	
menu.chggreet.delete	(3)	
menu.chggreet.category	(4)	<i>(Only if Talking Classifieds module is enabled)</i>
menu.chggreet.number	(5)	
menu.chggreet.exit	(#)	

Menu Played when Mailbox Owner Wants to Administer ACD Group

Prompt: 236

- menu.acdadmin.add (1)
- menu.acdadmin.remove (2)
- menu.acdadmin.exit (#)

Menu Played to Caller when Offering Option to Hold for ACD Group

Prompt: 219

- menu.acdq.other (1)
- menu.acdq.hold (2)
- menu.acdq.opr (0)

Options Available to Caller Listening to the Directory

Prompt: 131

- menu.dir.accept (1)
- menu.dir.reject (2)
- menu.dir.restart (3)
- menu.dir.wildcard (*)
- menu.dir.exit (#)

Menu Played to a Caller after He/She Has Recorded a Message and Pressed # for Options

Prompt: 125 for messages from external callers

Prompt: 165 for messages from mailbox owners

- menu.sendmsg.send (1)
- menu.sendmsg.replay (2)
- menu.sendmsg.record (3)
- menu.sendmsg.cancel (4)
- menu.sendmsg.addfax (7) *(Only if a Fax module is enabled)*
- menu.sendmsg.append (8)
- menu.sendmsg.recap (9)
- menu.sendmsg.opr (0)
- menu.sendmsg.sendcnfrm (5) } *(Valid only when message is being*
- menu.sendmsg.multiple (6) } *sent from within a mailbox)*
- menu.sendmsg.schedule (*) }

Menu Played to a Caller After He/She Has Recorded a Message and Pressed 1 to Send

Prompt: 230

- menu.sendspcl.normal (1)
- menu.sendspcl.urgent (2)
- menu.sendspcl.private (3)
- menu.sendspcl.sendcnfrm (5)
- menu.sendspcl.schedule (*)

Options Available to a Caller while the VP System is Playing a Mailbox Personal Greeting

Prompts: 2 and 3

- menu.mbox.record (1)
- menu.mbox.page (2)
- menu.mbox.other (3)
- menu.mbox.transfer (4)
- menu.mbox.pa (5)
- menu.mbox.hold (6)
- menu.mbox.faxmail (7) *(Only if a Fax module is enabled)*
- menu.mbox.faxdirect (8) *(Only if a Fax module is enabled)*
- menu.mbox.vm (#) *(Voice mail gateway)*
- menu.mbox.opr (0)

Menu Played to a Mailbox Owner when He/She Chooses “Supervisor Functions” from the Main Menu

Prompt: 142

- menu.supv.mbox (1)
- menu.supv.rbox (2)
- menu.supv.qbox (3)
- menu.supv.port (4)
- menu.supv.broadcast (5)
- menu.supv.daymode (6)
- menu.supv.exit (#)

Menu Played to a Supervisor when He/She Chooses “Box Administration” from the Supervisor Main Menu

Prompts: 242 and 243

- menu.supv.box.add (1)
- menu.supv.box.delete (2)
- menu.supv.box.modify (3)
- menu.supv.box.suspend (4)
- menu.supv.box.restore (5)

menu.supv.box.reset (6)
 menu.supv.box.exit (#)

Menu Played to a Supervisor when He/She is Asked if He/She Wants to Change a Parameter

Prompt: 246

menu.supv.mod.change (1)
 menu.supv.mod.exit (#)

Menu Played to a Supervisor when He/She Wants to Change Day / Night Service Mode

Prompt: 254

menu.supv.mode.day (1)
 menu.supv.mode.night (2)
 menu.supv.mode.lunch (3)
 menu.supv.mode.exit (#)

Menu Played to a Supervisor when He/She Wants to Enable or Disable a Port

Prompt: 244

menu.supv.port.disable (1)
 menu.supv.port.enable (2)
 menu.supv.port.exit (#)

Menu Played to a Supervisor when He/She Wants to Modify a Routing Box

Prompt: 245

menu.supv.rbox.greeting (1)
 menu.supv.rbox.routing (2)
 menu.supv.rbox.exit (#)

Menu Played to a Supervisor when He/She Wants to Modify a Routing Box Routing Digit Other Than 0 Through 9

Prompt: 248

menu.supv.spcl.nodgts (1)
 menu.supv.spcl.invalid (2)
 menu.supv.spcl.voice (3)
 menu.supv.spcl.star (*)
 menu.supv.spcl.pound (#)

Menu Played to a Supervisor when He/She Chooses “Broadcast Message” from the Supervisor’s Menu

Prompt: 190

menu.broadcast.play	(1)
menu.broadcast.record	(2)
menu.broadcast.delete	(3)
menu.broadcast.exit	(#)

Options Available when Participating in the Tutorial

Prompts: 199, 201, 203

menu.tutorialyes	(1)
menu.tutorial.no	(2)
menu.tutorial.cancel	(*)
menu.tutorial.exit	(#)

Talking Classifieds Main Menu and Subsequent Menu (“Press 1 To Hear a Sample of Our Listings, or Press 2 to Choose New Categories”)

Prompt: 1003 *in the Talking Classifieds module*

menu.tc.main.play	(1)
menu.tc.main.chg	(2)
menu.tc.main.exit	(*)

Talking Classifieds Caller Options while Listening to Listing Box Questions

menu.tc.repeatquestion	(0)	
menu.tc.wildcard	(#)	<i>(also used by a Listing box owner to remotely assign the ‘wildcard’ value to a category)</i>

Talking Classifieds Menu Played Between Listings

Prompt: 1002 *in the Talking Classifieds module*

menu.tc.list.next	(1)	
menu.tc.list.chg	(2)	
menu.tc.list.xfer		(3)
menu.tc.list.info	(4)	
menu.tc.list.replay	(5)	
menu.tc.list.exit	(*)	

Talking Classifieds Menu Played to Caller After the VP System Has Completed Automatic Allocation of a New Mailbox

Prompt: 1014

- menu.alloc.number (1)
- menu.alloc.general (2)
- menu.alloc.proceed (3)

Menu Played to Called Party when Receiving a Screened Transfer

Prompt: 99

- menu.screen.accept (1)
- menu.screen.playgrt (2)
- menu.screen.other (3)
- menu.screen.pickgrt (4)
- menu.screen.gotobox (5)
- menu.screen.recordcall (6)

Menu Played when Mailbox Owner Selects Personal Distribution Lists from Options Menu

Prompt: 266

- menu.pdl.add (1)
- menu.pdl.remove (2)
- menu.pdl.list (3)
- menu.pdl.name (4)
- menu.pdl.exit (#)

Menu Played when Mailbox Owner Selects Name from Personal Distribution List Menu

Prompt: 267

- menu.pdl.name.play (1)
- menu.pdl.name.record (2)
- menu.pdl.name.exit (#)

Menu Played when Mailbox Owner Selects Edit from Options Menu

Prompt 276

- menu.msghedit.play (1)
- menu.msghedit.next (2)
- menu.msghedit.delete (3)
- menu.msghedit.exit (#)

20. Installing Voice Boards

20.1 Using Dialogic Voice Boards

The following Dialogic boards are described in this section:

- DIALOG/4
- ProLine/2V
- D/41D
- D/41E
- D/41H
- D160SC-LS

Dialogic boards are packed in static-proof bags. Make sure you are grounded when you remove the boards from the bags. You can ground yourself by touching the frame of the computer.

All Dialogic boards must be configured via hardware and software. You configure the hardware by installing or removing shorting jumpers on the boards and switch settings. On DOS-based VP systems, you configure the software by modifying a file named `DIALOGIC.CFG`. This file is stored by default in the `\VM` directory. On NT-based VP systems, you modify Dialogic board settings using the Dialogic Configuration Manager program. This program is accessible from the Windows NT desktop by selecting the Start button then Programs / Dialogic / Dialogic Configuration Manager.

20.1.1 Dialogic Board Installation Considerations

Each Dialogic board installed in the VP system must be assigned an address in memory using the switch settings explained later in this section. Board 1 (as determined by the switch settings) is assigned memory address 1, board 2 is assigned memory address 2, etc.

The VP system ports begin with port 1 on board 1, but the alignment of the rest of the ports depends on the system configuration and the types of Dialogic boards used. For example, consider a 6 port system using one D/21D board and one D/41D board. If you address the D/21D board as board 1 and the D/41D board as board 2, then the VP system ports (lines) 1 and 2 reside on the D/21D board and ports 3-6 reside on the D/41D board.

If you reverse the above example and install the D/41D board as board 1 and the D/21D board as board 2, then the VP system ports 1-4 reside on the D/41D board and ports 5 and 6 reside on the D/21D board.

20.1.2 Installing a DIALOG/4 Board (DOS-based VP Systems)

Configuring DIALOG/4 Jumper and Switch Settings

The positions of the jumpers and switches on the DIALOG/4 board are shown in Figure 20-1.

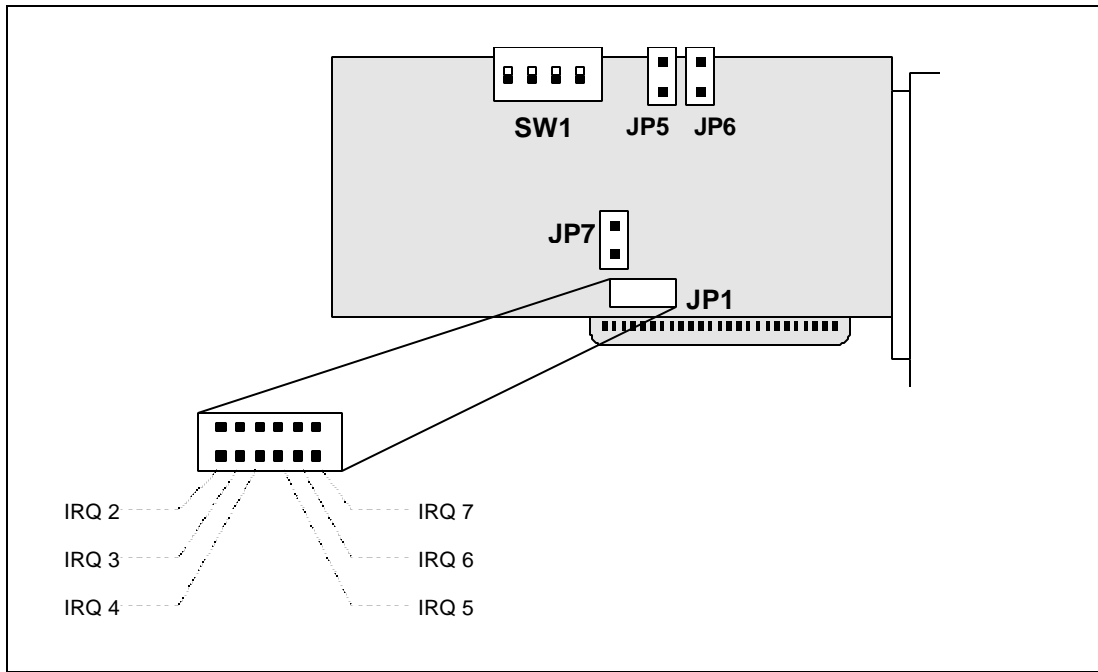


Figure 20-1 DIALOG/4 Board

Setting the DIALOG/4 Hardware Interrupt

The VP system uses hardware interrupt IRQ5 by default. This requires that a shorting jumper be placed in position 4 of JP1.

Note: If the system has more that one Dialogic board, all boards must have JP1 set to the same hardware interrupt setting.

If you need to use a different hardware interrupt, follow these steps:

1. Make sure the new interrupt chosen is not being used by any other hardware in the VP system PC.
2. Set the proper jumper on JP1 for the interrupt selected:

Position 1 = IRQ 2
 Position 2 = IRQ 3
 Position 3 = IRQ 4
 Position 4 = IRQ 5
 Position 5 = IRQ 6
 Position 6 = IRQ 7

3. Edit the configuration file `DIALOGIC.CFG` to change the statement `D41DINTERRUPT = 5` to the new IRQ value. To use a DOS editor to make changes to the file, type `EDIT DIALOGIC.CFG` then press `<Enter>` from the `\VM` prompt.
4. Edit the `GOVM.BAT` file. To use a DOS editor to make changes to the file, type `EDIT GO.BAT` then press `<Enter>` from the `\VM` prompt.

- Find the line beginning with the word `TONEDNLD`, and change the ‘-h5’ to the new interrupt (for example, ‘-h4’ for IRQ 4).
- Find the line beginning `D40DRV -I62 -Y -E`, and change the number after the letter ‘E’ so it reflects the number of ports in the system multiplied by 16. If the system is an 8 port system, for example, the line should read `D40DRV -I62 -Y -E128`.

Setting the DIALOG/4 Memory Address

The VP system uses memory addresses D0000, D2000, D4000..by default. Set the memory address of each board using switch SW1. Table 20-1 shows the position of each switch.

Board Number	SW1 Switch number				Address
	1	2	3	4	
1	off	off	off	off	D0000
2	off	off	on	off	D2000
3	off	on	off	off	D4000
4	off	on	on	off	D6000
5	on	off	off	off	D8000
6	on	off	on	off	DA00
7	on	on	off	off	DC00
8	on	on	on	off	DE00

Table 20-1 DIALOG/4, D/41D,and ProLine/2V Board Memory Addresses

Setting Other DIALOG/4 Hardware Settings

Jumper JP7 must be in place on the first Dialogic board installed in the system. It must be removed on all other boards in the system.

Jumpers JP5 and JP6 should be in the open position on all boards.

Configuring the DIALOG/4 Software

When you run the System Setup utility, you are prompted to enter the number of lines (ports) being installed in the system. When you enter this number, the VP system automatically configures the Dialogic software. (Always select the actual number of ports being installed, even if the system will not be currently utilizing all ports. For example, if you are installing two 4-port Dialogic boards but are currently going to use only six ports, with two ports for future growth, you must still select 8 ports in the Setup utility.)

If you are adding new Dialogic boards to an existing system, you do not need to run the Setup utility again. Simply edit the Dialogic configuration file `DIALOGIC.CFG` and add an entry for each new board being installed:

A typical `DIALOGIC.CFG` file for two 4-port boards is shown below:


```
[Genload - All Boards]
BusType =None
D41DInterrupt=5
D41DAddress=D0000
D41DAddress=D2000
```

To add a board to an existing system, just add one line containing its address. The entry for each board should match the address for that board as shown in Table 20-1.

20.1.3 Installing a ProLine/2V Board (DOS-based VP Systems)

Configuring the ProLine/2V Jumper and Switch Settings

The positions of the jumpers and switches on the ProLine/2V board are shown in Figure 20-2.

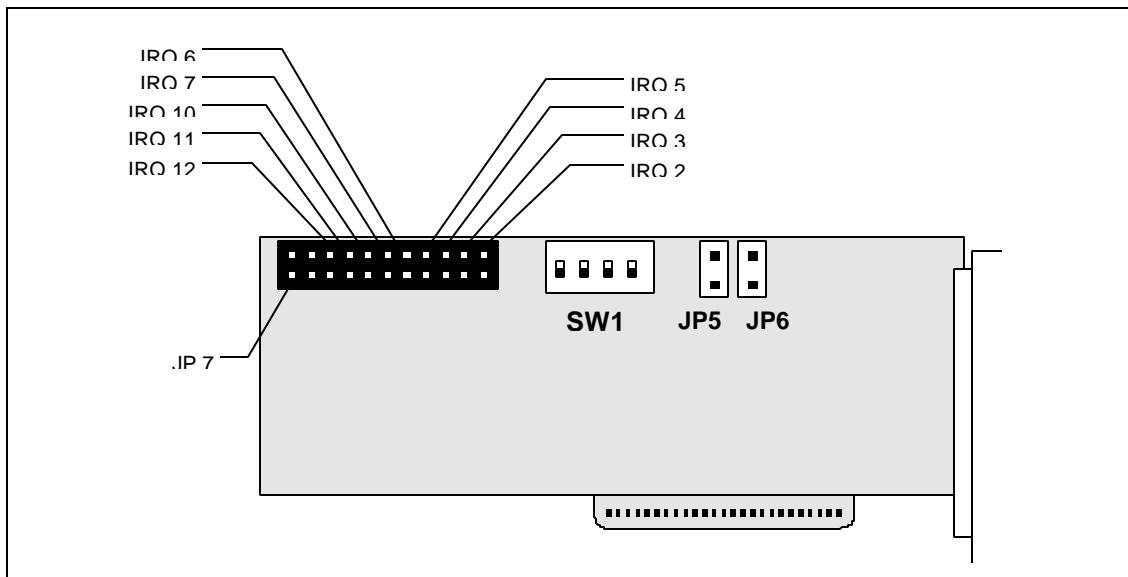


Figure 20-2 ProLine/2V Board

Setting the ProLine/2V Hardware Interrupt

The VP system uses hardware interrupt IRQ5 by default. This requires that a shorting jumper be placed on the fourth jumper from the left.

Note: If the system has more than one Dialogic board, all boards must use the same hardware interrupt setting.

If you need to use a different hardware interrupt, follow these steps:

1. Make sure the new interrupt chosen is not being used by any other hardware in the VP system PC.
2. Set the proper jumper, as shown in Figure 20-2.

3. Edit the configuration file `DIALOGIC.CFG` to change the statement `D41DINTERRUPT = 5` to the new IRQ value. To use a DOS editor to make changes to the file, type `EDIT DIALOGIC.CFG` then press <Enter> from the `\VM` prompt.
4. Edit the `GOVM.BAT` file. To use a DOS editor to make changes to the file, type `EDIT GO.BAT` then press <Enter> from the `\VM` prompt.
 - Find the line beginning with the word `TONEDNLD`, and change the `'-h5'` to the new interrupt (for example, `'-h4'` for IRQ 4).
 - Find the line beginning `D40DRV -I62 -Y -E`, and change the number after the letter `'E'` so it reflects the number of ports in the system multiplied by 16. If the system is an 8 port system, for example, the line should read `D40DRV -I62 -Y -E128`.

Setting the ProLine/2V Memory Address

The VP system uses memory addresses D0000, D2000, D4000.. by default. Set the memory address of each board using switch SW1. Table 20-1 shows the position of each switch.

Setting Other ProLine/2V Hardware Settings

Jumper JP7 must be in place on the first Dialogic board installed in the system. It must be removed on all other boards in the system.

Jumpers JP5 and JP6 should be in the open position on all boards.

Configuring the ProLine/2V Software

When you run the System Setup utility, you are prompted to enter the number of lines (ports) being installed in the system. When you enter this number, the VP system automatically configures the Dialogic software. (Always select the actual number of ports being installed, even if the system will not be currently utilizing all of the ports. For example, if you are installing two 4-port Dialogic boards but are currently going to use only six ports, with two ports for future growth, you must still select 8 ports in the Setup utility.)

If you are adding new Dialogic boards to an existing system, you do not need to run the Setup utility again. Simply edit the Dialogic configuration file `DIALOGIC.CFG` and add an entry for each new board being installed:

A typical `DIALOGIC.CFG` file for two 4-port boards is shown below:

```
[Genload - All Boards]
BusType =None
D41DInterrupt=5
D41DAddress=D0000
D41DAddress=D2000
```

To add a board to an existing system, just add one line containing its address. The entry for each board should match the address for that board as shown in Table 20-1.

20.1.4 Installing a D/41D Board (DOS-based VP Systems)

Configuring the D/41D Jumper and Switch Settings

The positions of the jumpers and switches on the D/41D board are shown in Figure 20-3.

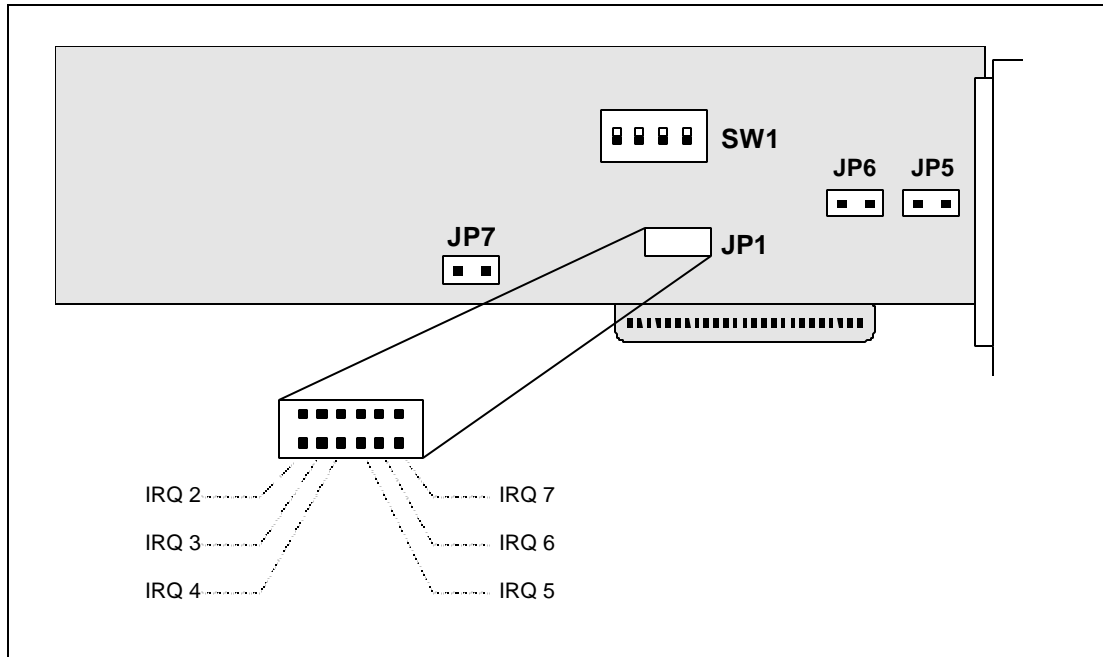


Figure 20-3 D/4xD Board

Setting the D/41D Hardware Interrupt

The VP system uses hardware interrupt IRQ5 by default. This requires that a shorting jumper be placed in position 4 of JP1.

Note: If the system has more than one Dialogic board, all boards must have JP1 set to the same hardware interrupt setting.

If you need to use a different hardware interrupt, follow these steps:

1. Make sure the new interrupt chosen is not being used by any other hardware in the VP system PC.
2. Set the proper jumper on JP1 for the interrupt selected:

Position 1 = IRQ 2
 Position 2 = IRQ 3
 Position 3 = IRQ 4
 Position 4 = IRQ 5
 Position 5 = IRQ 6
 Position 6 = IRQ 7

3. Edit the configuration file `DIALOGIC.CFG` to change the statement `D41DINTERRUPT = 5` to the new IRQ value. To use a DOS editor to make changes to the file, type `EDIT DIALOGIC.CFG` then press `<Enter>` from the `\VM` prompt.
4. Edit the `GOVM.BAT` file. To use a DOS editor to make changes to the file, type `EDIT GO.BAT` then press `<Enter>` from the `\VM` prompt.
 - Find the line beginning with the word `TONEDNLD`, and change the `'-h5'` to the new interrupt (for example, `'-h4'` for IRQ 4).
 - Find the line beginning `D40DRV -I62 -Y -E`, and change the number after the letter `'E'` so it reflects the number of ports in the system multiplied by 16. If the system is an 8 port system, for example, the line should read `D40DRV -I62 -Y -E128`.

Setting the D/41D Memory Address

The VP system uses memory addresses D0000, D2000, D4000..by default. Set the memory address of each board using switch SW1. Table 20-1 shows the position of each switch.

Setting Other D/41D Hardware Settings

Jumper JP7 must be in place on the first Dialogic board installed in the system. It must be removed on all other boards in the system.

Jumpers JP5 and JP6 should both be in the open position on all boards.

Configuring the D/41D Software

When you run the System Setup utility, you are prompted to enter the number of lines (ports) being installed in the system. When you enter this number, the VP system automatically configures the Dialogic software. (Always select the actual number of ports being installed, even if the system will not be currently utilizing all of the ports. For example, if you are installing two 4-port Dialogic boards but are currently going to use only six ports, with two ports for future growth, you must still select 8 ports in the Setup utility.)

If you are adding new Dialogic boards to an existing system, you do not need to run the Setup utility again. Simply edit the Dialogic configuration file `DIALOGIC.CFG` (stored by default in the `\VM` directory) and add an entry for each new board being installed:

A typical `DIALOGIC.CFG` file for two 4-port boards is shown below:

```
[Genload - All Boards]
BusType =None
D41DInterrupt=5
D41DAddress=D0000
D41DAddress=D2000
```

To add a board to an existing system, just add one line containing its address. The entry for each board should match the address for that board as shown in Table 20-1.

20.1.5 Installing a D/41E Board (DOS-based VP Systems)

Configuring the D/41E Jumper and Switch Settings

The positions of the jumpers and switches on the D/41E board are shown in Figure 20-4.

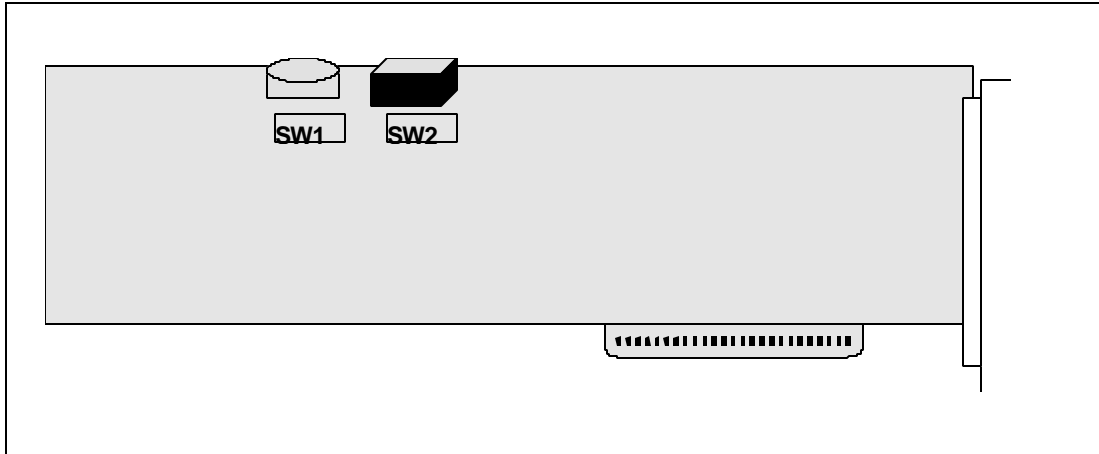


Figure 20-4 D/4xE Board

Setting the D/41E Hardware Interrupt

Modify the `DIALOGIC.CFG` file, as described below.

Setting the D/41E Memory Address

The VP system uses memory addresses D0000, D2000, D4000..by default. To configure these addresses, modify the `DIALOGIC.CFG` file as described below.

Setting Other D/41E Hardware Settings

For each board, use SW1 to select a board number. Each board must use a different ID number.

On each board, set both SW2 switches to the OFF position.

Configuring the D/41E Software

If you are using D/41E boards, create a `DIALOGIC.CFG` file that reads as shown below:

```
[Genload - All Boards]
BusType =None
BLTInterrupt=5
BLTAddress=D0000
```

Save the file in the `\VM` directory.

20.1.6 Special Connection Notes For Two-Port Boards (DOS-based VP Systems)

The Dialogic D/21D and Proine/2V two-port boards differ from most other voice processing boards used with the VP system in that the telephone line jacks are type RJ-11 rather than type RJ-14. Figure 20-5 shows a comparison of the two boards.

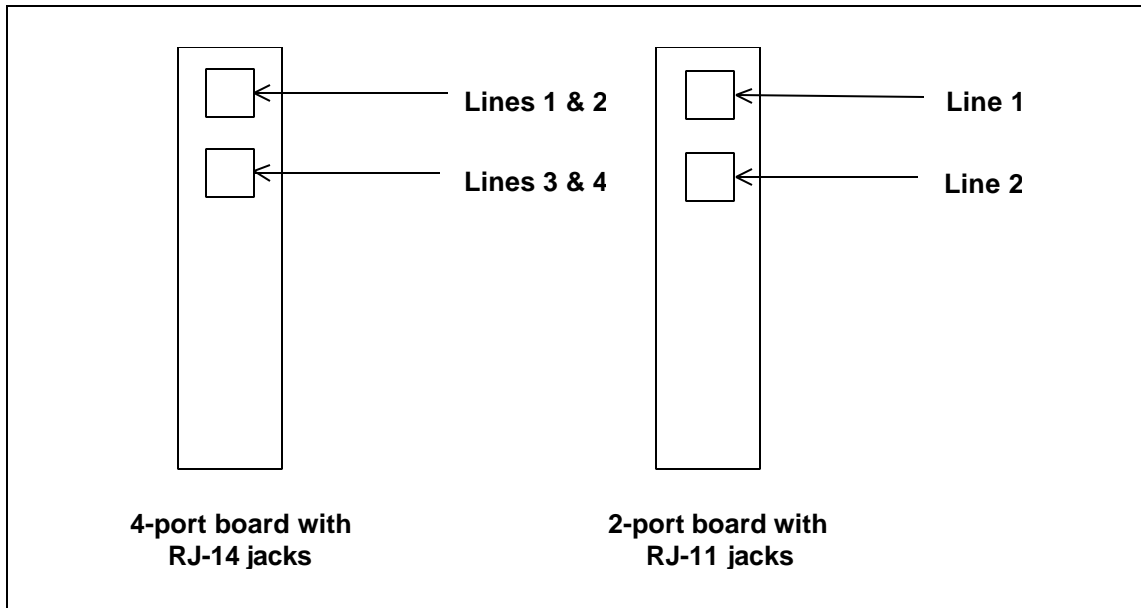


Figure 20-5 Line Connections of 4-port & 2-port Dialogic Boards

20.1.7 Installing a D/41H Board (NT-based VP Systems)

Setting the D/41H Hardware Interrupt

The VP system uses hardware interrupt IRQ5 by default. This requires that a shorting jumper be placed in position 4 of JP1.

Note: If the system has more than one Dialogic D/41H board, all boards must have JP1 set to the same hardware interrupt setting.

If you need to use a different hardware interrupt, follow these steps:

1. Make sure the new interrupt chosen is not being used by any other hardware in the VP system PC.
2. Set the proper jumper on JP1 for the interrupt selected:

Position 1 = IRQ 2
 Position 2 = IRQ 3
 Position 3 = IRQ 4
 Position 4 = IRQ 5
 Position 5 = IRQ 6
 Position 6 = IRQ 7

Setting the D/41H Memory Address

The VP system uses memory addresses D0000, D2000, D4000..by default. Set the memory address of each board using switch SW1. Table 20-1 shows the position of each switch.

Board Number	SW1 Switch number				Address
	1	2	3	4	
1	off	off	off	off	D0000
2	off	off	on	off	D2000
3	off	on	off	off	D4000
4	off	on	on	off	D6000
5	on	off	off	off	D8000
6	on	off	on	off	DA00
7	on	on	off	off	DC00
8	on	on	on	off	DE00

Table 20-1 D/41H Board Memory Addresses

Note: Address D4000 has not worked successfully during internal board testing. When installing multiple boards, you may need to skip the D4000 address and instead use the D6000 address.

Setting Other D/41H Hardware Settings

Jumper JP7 must be in place on the first Dialogic board (D0000) installed in the system. It must be removed on all other boards in the system.

Jumpers JP5 and JP6 should be in the open position on all boards.

Configuring the D/41H Software

To use Dialogic software to configure D/41H boards:

1. From the Windows NT desktop, click on the Start button, then choose Settings / Control Panel / Services. From the SERVICES screen that displays, highlight each of the following services, in the order presented, and click on the Stop button after each time you highlight a service:
 1. PROXY E-MAIL CLIENT (present only on NT-based VP systems running release 10.0 and later)
 2. KVT VOICE MAIL MANAGER
 3. KVT DATABASE MANAGER SERVICE
 4. KVT FTP SERVER
 5. DIALOGIC

Be advised that when you stop the KVT VOICE MAIL MANAGER service, all calls currently being handled by the VP system are immediately terminated. To exit the SERVICES screen, click on the Close button.

2. From the Windows NT desktop, select the Start button, then choose Programs / Dialogic System Software / Dialogic Configuration Manager - DCM.
3. On the DIALOGIC CONFIGURATION MANAGER screen, click on the Action drop down menu , select the Add Device option. Next, under the Family area, highlight the board type D/X1H. Under the Model area, highlight D/41H. Click on the Next button. Finally, enter a board ID (for example, board1) for the board at the prompt and then select the Next button. There is a pause while the board is detected in the system.
4. On the DIALOGIC CONFIGURATION MANAGER PROPERTIES screen, confirm the configuration information is correct for the board (including the correct interrupt value is specified—IRQ 5 is recommended), then click on the OK button. If you must correct information displayed, select the item you need to correct, re-enter the value, select the Apply button, then click on the OK button.
5. The DIALOGIC CONFIGURATION MANAGER screen displays. Repeat steps 3-4 for each D/41H board in the system.
6. When information for each board has been entered, select the Service drop down menu, select Startup Mode, then select the AUTOMATIC option.
7. On the DIALOGIC CONFIGURATION MANAGER screen, select the File drop down menu , then select the Exit option.
8. To restart the VP system, restart the PC by clicking on the Start button, selecting Shutdown, verifying Restart is selected, and clicking on the OK button.

20.1.8 Installing a D160SC-LS Board (NT-based VP Systems)

Setting the D160SC-LS Board ID

Assign a unique board ID to each D160SC-LS board in the VP system by rotating the board ID indicator on each board to an appropriate number.

Setting the D160SC-LS Hardware Interrupt and Memory Address

When you configure D160SC-LS boards using the Dialogic board configuration software, an available hardware interrupt and memory address is automatically assigned to each board. You do not need to manually enter this information or adjust physical board settings prior to running the Dialogic configuration software.

Configuring the D160SC-LS Software

To use Dialogic software to configure D160SC-LS boards:

1. From the Windows NT desktop, click on the Start button, then choose Settings / Control Panel / Services. From the SERVICES screen that displays, highlight each of the following services, in the order presented, and click on the Stop button after each time you highlight a service:
 1. PROXY E-MAIL CLIENT (present only on NT-based VP systems running release 10.0 and later)
 2. KVT VOICE MAIL MANAGER

3. KVT DATABASE SERVER
4. KVT FTP SERVER
5. DIALOGIC

Be advised that when you stop the KVT VOICE MAIL MANAGER service, all calls currently being handled by the VP system are immediately terminated. To exit the SERVICES screen, click on the Close button.

2. From the Windows NT desktop, select the Start button, then choose Programs / Dialogic System Software / Dialogic Configuration Manager - DCM.

When the system has one or more Dialogic D160SC-LS 16-port boards, the Dialogic Configuration Manager program detects each of these boards and assigns each an available IRQ and memory address. In most instances, IRQ 5 and address D800 is assigned. If the system also includes one or more Dialogic D/41H 4-port board, however, it is recommended you use IRQ 5 for the D/41H board(s). Under these circumstances you should modify the IRQ setting assigned to the 16-port board(s) to IRQ 9. You can modify this IRQ and, if necessary, the memory address assigned (D800 should be fine in most installations) on the DIALOGIC CONFIGURATION MANAGER PROPERTIES screen. Select the item you need to correct, enter a new value, and select the Apply button. When you are satisfied with the board settings, click on the OK button.

3. The DIALOGIC CONFIGURATION MANAGER screen displays. If necessary, manually enter information on additional boards that were not automatically detected. Refer to steps 3-4 of the procedure provided under the heading, "Configuring the D/41H Software."
4. When information for each board has been entered, select the Service drop down menu, select STARTUP MODE, then select the AUTOMATIC option.
5. On the DIALOGIC CONFIGURATION MANAGER screen, select the File drop down menu , then select the EXIT option.
6. To restart the VP system, restart the PC by clicking on the Start button, selecting Shutdown, verifying Restart is selected, and clicking on the OK button.

20.2 Using Rhetorex Boards

The Rhetorex boards are packed in static-proof bags. Make sure you are grounded when you remove the boards from the bags. You can ground yourself by touching the frame of the computer.

All Rhetorex boards must be configured via hardware and software. You configure the hardware by installing or removing shorting jumpers on the boards. You configure the software using a Rhetorex program called CONFIGUR.

20.2.1 Rhetorex Board Installation Considerations

Each Rhetorex board installed in the VP system must be assigned an address in memory using the CONFIGUR program explained later in this section. Board 1 (as determined by the jumper settings) will be assigned memory address 1 in the CONFIGUR program.

The VP system ports begin with port 1 on board 1, but the alignment of additional ports depends on the system configuration and the types of Rhetorex boards used. For example, consider a 6 port system using one 2132 board and one 4132 board. If you address the 2132 board as board 1 and the 4132 board as board 2, then the VP system ports (lines) 1 and 2 reside on the 2132 board and ports 3-6 reside on the 4132 board.

If you reverse the above example and install the 4132 board as board 1 and the 2132 board as board 2, the VP system ports 1-4 reside on the 4132 board and ports 5 and 6 reside on the 2132 board.

Configuring Rhetorex Board Jumper Settings

Rhetorex boards require jumpers to be set according to the board number as explained above. The settings are shown in illustrations below.

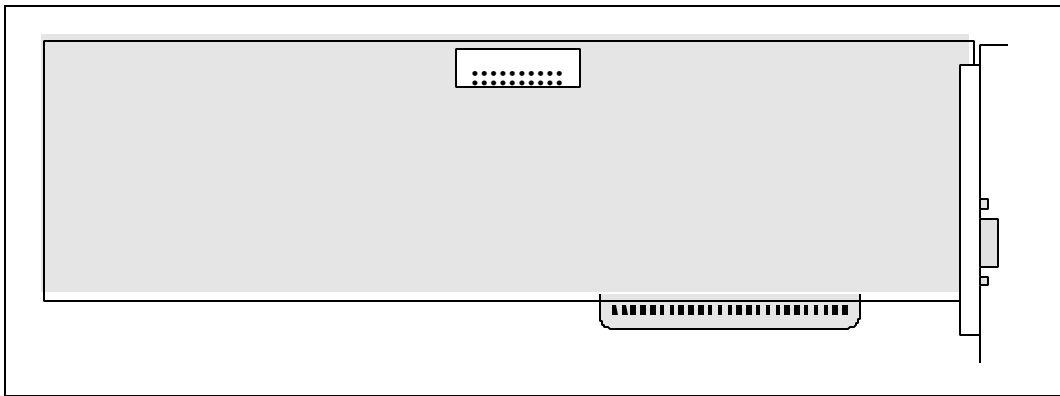


Figure 20-6 Rhetorex 2132 and 4132 Boards

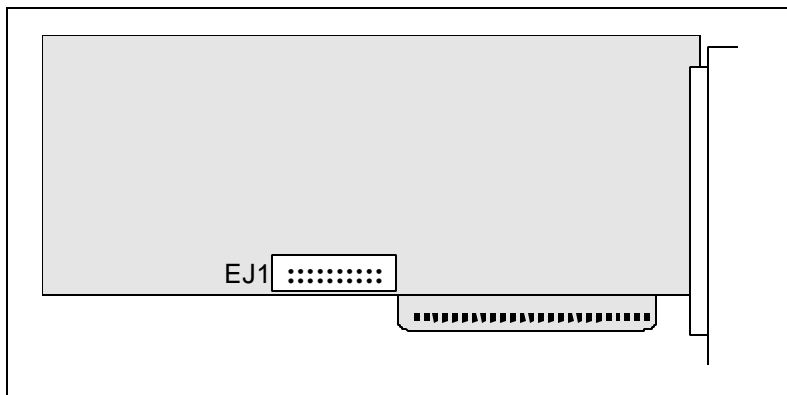


Figure 20-7 Rhetorex 232 and 432 Boards

The Rhetorex 232, 2132, 432, and 4132 boards are configured with a 10-pin jumper array with removable shorting jumper plugs. Install or remove the appropriate jumpers according to the information provided below.

Rhetorex 208 and 408 boards can only be configured as board 1 or board 2, therefore a maximum of two of these types of boards may be installed in a system. Configure the boards as follows:

- Board 1 - Jumper EJ1 installed
- Board 2 - Jumper EJ1 removed

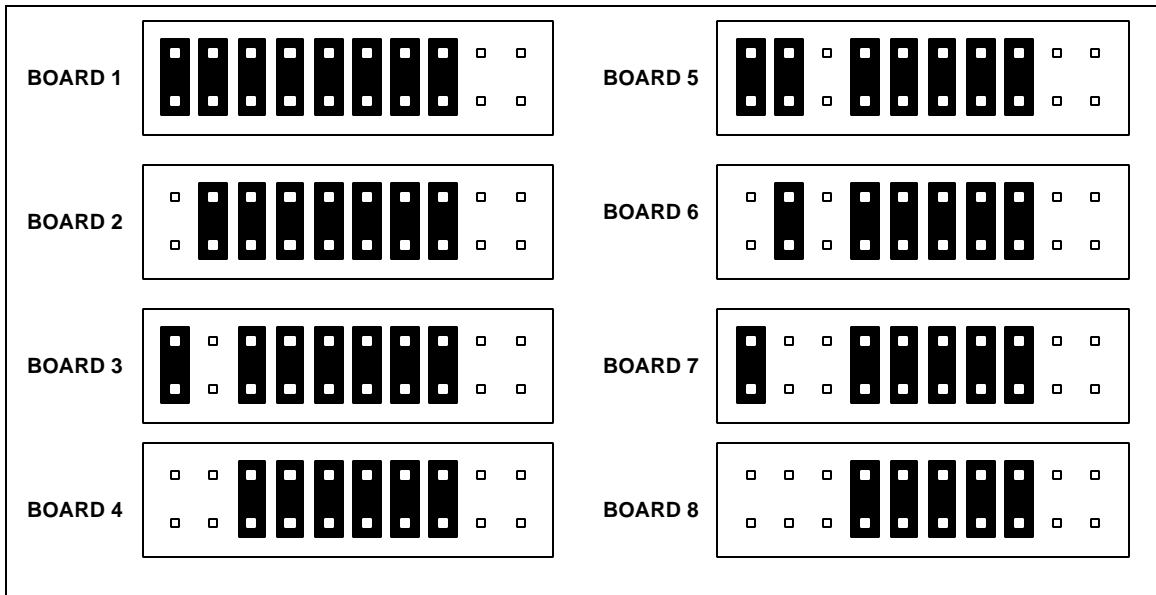


Figure 20-8 Jumper Settings for Rhetorex 208 and 408 Boards

Note: Rhetorex 208 and 408 boards are no longer in production and are shown here for reference with existing systems. These boards have been replaced with 208B and 408B boards, which are discussed below.

20.2.2 Configuring Rhetorex RDSP 208B (Duet) and 408B (Quartet) Boards

The Rhetorex 208B and 408B boards are not configurable and are limited to one board per system. This board must be set up as board 1. To add additional ports to a system using either a 208B or a 408B board, you must use one of the previously discussed model boards configured as board 2, 3, 4 etc.

If an existing system contains a single 208 or 408 board, you can expand the system by one board (2 or 4 ports) using a 208B or 408B board. Since the newly installed 208B or 408B board is fixed as board 1, you must re-configure the existing 208 or 408 board as board 2 by removing jumper EJ1 (Figure 20-7).

20.2.3 Installing Rhetorex Boards in the Computer

Rhetorex boards fit into any 8-bit or 16-bit slot. 2132 and 4132 boards require full-length slots, and 208 and 408 boards require half-length slots. Choose an empty slot, and remove the screw holding the blank bracket in place. Remove the blank bracket, and save it. Position the board with the bracket towards the rear of the computer. If you are installing a full-length board, make sure the other end of the board is positioned in the plastic guide. Slide the board down until the gold-fingered connector makes contact with the slot. Verify that the connector and slot are aligned , then firmly push the board into the slot. Screw the end bracket of the board down firmly, using the screw that held the blanking plate.

If you are installing more than one Rhetorex board, repeat these instructions for each board.

By default one Rhetorex board is configured with address 300H. For each additional board installed, addresses must be added in order down the column. These addresses are the same whether the board is a 2-port board or a 4-port board. The following table shows the addresses for the first 8 boards:

BOARD #	1	2	3	4	5	6	7	8
RDSP =	300H	301H	302H	303H	304H	305H	306H	307H

Setting Up the Rhetorex Board MEMORY

Memory space must be assigned for the number of Rhetorex voice board ports installed. Here, the term *ports* refers to telephone line connections. For example, if you are installing a total of two 4132 boards, you must configure memory for 8 ports.

Each port requires 16K of EMS memory (64KB for each 4-port board and 32KB for each 2-port board). Enter the total memory needed for the system in the field EMSMEMORY. The REALMEMORY and RAMDISK fields should both be 0KB.

The FILE area of the screen is used in conjunction with the Rhetorex program ACCUCALL (see section 13).

When you have completed the data entry on the screen, exit the CONFIGUR program by pressing <F10>.

Note: Whenever you have entered or modified data in the Rhetorex CONFIGUR program, you must re-boot the computer for the changes to take effect.

21. Installing Kit Systems

Most VP systems are sold as *turnkey* systems and are shipped with VP system software and voice boards pre-installed. If you are working with a VP system *kit*, however, you must manually install the voice board hardware and the VP system software. Section 20 provides information on installing voice boards. This section identifies the minimum hardware and software requirements of the VP system and details the procedure for installing VP system software.

21.1 DOS-based VP System Requirements

The minimum configuration required to install and operate a DOS-based VP system is outlined below:

- IBM PC-AT, 386 (or compatible), with at least 4 MB of memory (RAM). The PC should contain a conventional motherboard and separate video and multi I/O cards. Unitary motherboards in which the video and multi I/O functions are integrated are *not* recommended due to possible conflicts with the voice processing board(s).
- Computer hard drive with at least 20 MB of free space. After DOS loads, this provides approximately 1 hour of message and greeting recording time. Add 15 MB for each additional hour of recording time required.
- DOS version 5.0 or above (loaded high).
- Diskette drive.
- Parallel port.
- At least one voice processing board.
- Expanded-memory manager (such as EMM386, which is part of the DOS package).
- Hard disk drive maintenance utility, such as Microsoft DEFRAG (included with DOS 6.0 and above) or Norton Utilities (for use with DOS 5.0). Norton Utilities is a product of the Symantec Corporation.

21.2 Configuring the PC for the DOS-based VP System

This section discusses basic configuration considerations you should keep in mind when setting up the system. Note that some PCs do not include all options and settings discussed here.

In the computer BIOS settings, verify the following settings:

- Under Advanced CMOS Setup, all ROM Shadow Memory is DISABLED.

- Depending on the PC options, WAIT FOR F1 IF ANY ERROR is DISABLED or the option IGNORE KEYBOARD ERRORS is ENABLED.
- Under Advanced Chip Setup, the setting for A/T Clock Select is no greater than CPUCLK/5. Note that not all PC boards provide this option.
- All Power Management options are DISABLED.

<p>Note: When allocating computer resources in the CONFIG.SYS file (for example, video boards, I/O ports, modems, etc.), do not use the D000 and D800 memory blocks. This area of memory must be available for use by the VP system and the voice processing boards.</p>

21.3 NT-based VP System Requirements

The minimum configuration required to install and operate an NT-based VP system is outlined below:

- IBM Pentium PC / 233 MHz (or compatible), with at least 64MB of memory (RAM). The PC should contain a conventional motherboard and separate video and multi I/O cards. Unitary motherboards in which the video and multi I/O functions are integrated are *not* recommended due to possible conflicts with the voice processing board(s).
- Computer hard drive with at least 1GB of free space.
- NT version 4.0 or above with Service Release 5.0.
- CD-ROM drive.
- Parallel port.
- At least one voice processing board.
- Hard disk drive maintenance utility (recommended).
- Tape backup drive (strongly recommended).
- Sound card and microphone (necessary for re-recording system prompts).

21.4 Configuring the PC for the NT-based VP System

This section discusses basic configuration considerations you should keep in mind when setting up the system. Note that some PCs do not include all options and settings discussed here.

In the computer BIOS settings, verify the following settings:

- Under Advanced CMOS Setup, all ROM Shadow Memory is DISABLED.

- Depending on the PC options, WAIT FOR F1 IF ANY ERROR is DISABLED or the option IGNORE KEYBOARD ERRORS is ENABLED or the option HALT ON: ALL, BUT KEYBOARD is selected.
- All Power Management options are DISABLED.

Note: When allocating computer resources in the CONFIG.SYS file (for example, video boards, I/O ports, modems, etc.), do not use the D000 and D800 memory blocks. This area of memory must be available for use by the VP system and the voice processing boards.

Note: Set IRQs 3, 4, 5, 7, 9, and 10 to LEGACY ISA.

21.5 Installing the Voice Processing Board

See section 20 for information on how to install the various voice processing boards supported by the VP system.

21.6 Installing the Key

The VP system software itself is not copy-protected. Backup copies can be made of DOS-based VP system master diskettes using the normal DOS COPY, XCOPY, or DISKCOPY commands. However, VP systems run only if the *Authorization key* (shown in Figure 21-1) is attached to one of the PC's parallel (printer) ports. If an Authorization key is not attached to the PC, the VP system operates in the *single-line demonstration* mode. In this mode, the VP system answers calls only on line 1 and processes only 20 calls before it must be manually re-started.

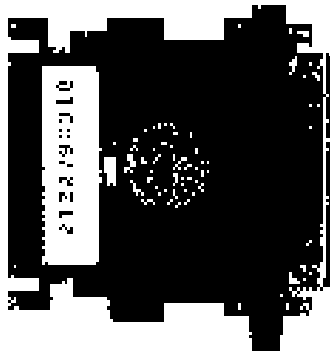


Figure 21-1 Authorization key

Note: If you are using a locally attached printer to output log file reports, etc., you can connect the printer to the female end of the software key. If attached to the key, the printer *must* be powered on and in the on-line state at all times. If it is not, the VP system does not operate. For this reason, it is recommended you attach a printer to the VP system on an alternate printer port or print using a network printer. The key can be connected to any active LPT port.

21.7 Installing DOS-based VP System Software

21.7.1 Selecting the Appropriate Installation Diskettes

The VP system software is written to support various manufacturers and models of voice processing boards. Each diskette of the DOS-based VP system software is labeled for a specific voice board. Make certain you install the software designed for the voice board hardware used in the installation.

21.7.2 Running the DOS-based VP System Installation Program

The DOS-based VP system Install program copies all the VP system files from the Installation diskettes into the directory \VM on the PC's hard drive.

The instructions provided below detail the steps for running the Install program. These steps assume that the diskette drive on the VP system PC is drive A and the hard drive on the VP system is drive C. If you are using drives with different drive letter designations, substitute the appropriate drive letters in the following steps:

To install DOS-based VP software on the PC:

1. Make the hard drive the current drive by typing `C:` then pressing <Enter>.
2. Switch to the root directory, by typing `CD\` then pressing <Enter>.
3. Put the VP System Disk 1 in drive A.
4. Type `A:INSTALL` then press <Enter>.
5. When the main Install menu appears, use the ↓ key to highlight `INSTALL NEW SYSTEM` then press <Enter>.
6. When prompted to enter the disk/directory, select the default `(C:\VM)` by pressing <Enter>. The program prompts you to confirm your selections. Enter `Y`. The program begins copying files on the diskette to the PC hard drive.

Note: Though you may indicate an alternative file installation location, you are strongly urged to use the default file storage structure suggested. Doing so greatly facilitates system maintenance efforts by VP system technicians and VP system Technical Support. It also facilitates system setup since instructions provided in this manual assume that files are stored using the default file locations.
7. When prompted, insert the requested diskette then press <Enter>.
8. At the prompt to replace the `AUTOEXEC.BAT` and `CONFIG.SYS` files, type `Y`. The existing files are renamed as `AUTOEXEC._VM` and `CONFIG._VM` and saved.
9. At the prompt for the DOS boot drive, press <Enter> to select the default drive C then press <Enter>.

10. When the Install program displays the Install Main menu, press the ↓ key to highlight EXIT, then press <Enter>. (You perform First Time Setup (also referred to as PBX setup) using instructions in section 3.)
11. Press Y to exit program.
12. Remove the diskette from the diskette drive then press <Enter>. The PC re-boots, and the VP system starts automatically.

21.7.3 Installing Optional Modules on a DOS-based VP System

If the VP system kit purchase included optional program modules, install and activate the modules using the instructions provided in section 23.

21.8 Using Disk Maintenance Utilities on DOS-based VP Systems

As the VP system performs call processing tasks, it continually creates and deletes files, mostly message files. This causes hard drive defragmentation. For the VP system to function properly, the VP system PC hard drive must be defragmented regularly. To set up scheduled disk de-fragmentation, use the information provided below.

21.8.1 Defragmenting Systems Using DOS 6.0 and Above

On the GENERAL INFORMATION screen, enter a system maintenance time (in 24-hour format) in the field AUTOMATICALLY EXIT TO DOS AT. See section 4.4 for details on making this entry.

<p>Note: When you specify a maintenance time, the VP system can perform an exit to DOS one time immediately after leaving the programming mode. This is normal. After this immediate exit, the VP system exits to DOS only at the time programmed.</p>

By default, the VP system exits to DOS at the time you specify each day Thursday through Tuesday, then immediately re-starts the VP system and performs a system audit. This takes approximately 2-3 minutes. On each Wednesday, the Microsoft DEFRAG program runs at the time you specify, then the VP system re-starts. DEFRAG can take from 10-40 minutes to run, depending on the amount of message traffic that was processed by the voice mail system.

21.8.2 Defragmenting Systems Using DOS 5 and Norton Utilities

By default, the VP system is configured to automatically run the Norton Utilities SPEEDISK program when the PC system is running any version of DOS 5.

Install Norton Utilities in the directory `C:\NU`. If Norton Utilities is installed on the PC in another directory, edit the file `NDD.BAT` in the `C:\VM` directory, changing the command line `CD\NU` so `NU` is replaced with the directory name where Norton Utilities is located.

On the GENERAL INFORMATION screen, enter a system maintenance time (in 24-hour format) in the field AUTOMATICALLY EXIT TO DOS AT. See section 4.4 for details on making this entry.

Note: When you specify a maintenance time, the VP system may perform an exit to DOS one time immediately after leaving the programming mode. This is normal. After this immediate exit, the VP system exits to DOS only at the time programmed.

By default, the VP system exits to DOS at the time you specify each day Thursday through Tuesday, then immediately re-starts the VP system and performs a system audit. This takes approximately 2-3 minutes. On each Wednesday, the Norton Speedisk program runs at the time you specify, then the VP system re-starts. SPEEDISK can take from 10-40 minutes to run, depending on the amount of message traffic that was processed by the voice mail system.

21.8.3 Defragmenting Systems Using DOS 5 and Other Disk Maintenance Utilities

You can use other utility programs to perform disk maintenance by modifying the file `NDD.BAT` so it runs the appropriate maintenance utilities at the maintenance time you specify. Example setup steps are provided below. This example shows the modifications you make to set up the system to use the Compress program provided in PC Tools (manufactured by Central Point Software, Inc.).

1. Load the PC Tools software onto the computer using the manufacturer's instructions. The program installs in the directory `PCTOOLS`.
2. Edit the `NDD.BAT` file in the `C:\VM` directory as follows:
 - Replace the line `CD\NU` with `CD\PCTOOLS`
 - Replace the line `speedisk C: /F/Q/V` with `C: /CC`

21.8.4 Modifying the Automatic Maintenance Schedule on DOS-based VP Systems

The file `DISKM.BAT` (stored by default in the `\VM` directory) controls the execution of maintenance commands and programs on DOS-based VP systems. By editing this file, you can specify which system maintenance tasks (including any additional programs you load on the system) are to run on which days of the week. The following example identifies how you would modify the `DISKM.BAT` file so every Friday the system creates a back up of the VP system database files to another directory called `C:\BACK`:

1. Open the `DISKM.BAT` file using a text editor. Using the DOS editor for example, type `EDIT DISKM.BAT` at the `C:\VM` prompt then press <Enter>.
2. Immediately following the line `ECHO "TODAY IS FRIDAY"` add the line:

```
COPY *.DVM C:\BACK
```

Note: Do not make any other modifications to this file. Doing so may impair the ability of the VP system to function effectively.

3. Save the DISKM.BAT file, and exit the editor.

21.9 Installing NT-based VP System Software Components

21.9.1 Installing the NT-based VP System Software

Section 22 details the procedures for installing and setting up version 10.1 VP system software on systems that are using unified messaging and e-mail reader features. Carefully follow the instructions in section 22.2 to implement kit systems using version 10.1 VP system software with unified messaging and e-mail reader features.

If you are installing a new version 10.1 NT-based VP system without unified messaging and e-mail reader features, follow the instructions provided below.

Materials Required for Installation

To perform the installation you must have the materials listed below.

- VP System Installation CD-ROM
- NT Service Pack 5 CD-ROM (note that although some Service Pack 5 files are included on the VP System CD-ROM, you must install Service Pack 5 from an NT Service Pack 5 CD-ROM to install the complete pack)
- NTRenew code (if needed, will be listed on the system invoice)

Performing the Installation

To install version 10.1 (without unified messaging or e-mail reader features) on the VP system PC, you complete the following general procedures:

- Install the VP system software and running the PBX Setup utility
- Enter system and box and setup information
- Run the Updatedbreport utility

Because VP system engineers strive continually to improve the efficiency and ease of installations, installation instructions change frequently. For the most up-to-date installation instructions for unified messaging and e-mail reader features, please refer to the Installation Notes provided in the inside front cover pocket of this manual. The Installation Notes are step-by-step instructions for installing your VP system. If Installation Notes are not located in the front cover pocket of this manual, contact technical support.

21.9.2 Installing Optional Modules on an NT-based VP System

If the NT-based VP system kit purchase included optional program modules, you activated the modules in the previous procedure when you entered the NTRenew authorization code provided on the system invoice. If you need to activate additional optional modules at a later time, see section 23 for instructions.

21.10 Using Disk Maintenance Utilities on NT-based VP Systems

As the VP system performs call processing tasks, it continually creates and deletes files, mostly message files. This causes hard drive defragmentation. For the VP system to function properly, the VP system PC hard drive should be defragmented regularly.

NT-based VP systems purchased as turnkey systems include Executive Software's Diskeeper, a disk maintenance utility you can use to regularly defragment the hard drive on the NT-based VP system PC. (If you purchase a kit NT-based VP system, you must purchase the Diskeeper package separately, and install it either before or after you install the VP system software.)

Use the following procedures to run the Diskeeper utility manually on the VP system or to set up the utility to run automatically.

To run the Diskeeper disk maintenance utility manually at any time:

1. From the Windows NT desktop, click on the Start button, then select Programs / Diskeeper. From the menu that displays, select the DISKEEPER option. If this is the first time you are running the utility, several welcome screens may display. Provide any requested information. The Diskeeper main screen then displays.

<p>Note: Before running Diskeeper manually during hours when the VP system is actively processing calls, lower the priority assigned to the defragmentation process. You set the priority by selecting the PRIORITY option from the Options pull-down menu on the main Diskeeper screen. Lowering the priority will extend the time it takes to defragment the drive, but it will ensure that call processing by the VP system is not interrupted.</p>

2. On the left side of the main Diskeeper screen, a directory tree identifies the hard drives installed in the PC. Under each drive letter, an ANALYZE option and a DEFRAGMENT option display. Highlight the ANALYZE option under the drive letter of the drive on which the VP system is installed. Then click on the Go button, which is a small, blue arrowhead icon at the very left of the icon bar shown below the menu bar. Diskeeper analyzes the drive then identifies the number of fragmented files and whether defragmentation would be efficient.
3. If defragmenting the drive is deemed efficient, select the DEFRAGMENT option under the drive letter of the drive on which the VP system is installed. Then click on the Go button. The Diskeeper utility defragments the drive.

To set up the Diskkeeper disk utility to run automatically at times you specify:

1. From the Windows NT desktop, click on the Start button, then select Programs / Diskkeeper. From the menu that displays, select the DISKEEPER option. If this is the first time you are running the utility, several welcome screens display. Provide any requested information. The Diskkeeper main screen then displays.
2. From the Set It and Forget It pull down menu, select the PARTITION SCHEDULES option. From the window that displays, click on the letter of the drive on which the VP system is installed. You can set up the Diskkeeper utility to defragment the drive as frequently as you would like, including continually—if you set the utility's run priority to Low (see the Note above for procedures). To set up the utility to run once a day (a standard run rate), set the RUN field to EVERY 24 HOURS. Set the WHEN field to EVERYDAY. Set the BETWEEN fields to run the utility during hours that are the most off-peak phone-usage times for the business, for example 2:00 AM to 5:00 AM.
3. Click on the Start button. The scheduled time identified in the window at the top of the screen updates to identify the next scheduled defragmentation. When you have made all necessary screen modifications, click on the Close button.

22. Installing and Using CTI Features

22.1 Implementing VCM

VCM is a feature available with NT-based VP systems that provides 5 users (or more if additional VCM licenses are purchased) with a visual interface to their mailboxes. Using VCM, users can play and record greetings and messages, manage message and pager delivery numbers and schedules, direct and screen calls, and perform other tasks from their Windows 95/98 or Windows NT PC desktops in addition to their telephones.

VCM is installed on the VP system PC automatically, when other program files are installed. Note the following system setup considerations, which must be adhered to for VCM to function properly on a LAN:

- The VP system PC must be assigned a static IP address on the network. Note the VP system PC's assigned IP address for future reference. You can check the address by selecting Control Panel from the Start button at the bottom left of the VP system PC screen, then selecting Network tab / Protocol / TCP/IP/ Properties.
- VCM communicates with client PCs on the network by passing TCP/IP information packets. Therefore, the network on which the VP system is installed must run TCP/IP. To verify that the VP system PC can communicate with clients using TCP/IP, open a window on a client machine and type `PING IPADDRESS` then press <Enter> (where `IPADDRESS` is the static IP address assigned to the VP system PC. If the ping does not reveal that the machines are communicating, the network most likely is not set up to properly run TCP/IP, and the client PC and VP system PC are attempting communications using a different protocol (such as NetBIOS or IPX/SPX). Though you may be able to locate the VP system PC by browsing over the network, the client and VP system PC can communicate only if the TCP/IP protocol is functioning properly.
- The first time a subscriber logs into VCM from a client PC, the program broadcasts to find the VP system PC's IP address. The client PC then stores that address in its registry, and references it during future logins. During their initial login, subscribers will notice a slight delay (as the broadcast initiates) before VCM permits access to the mailbox.
- If you are setting up the VP system to operate on a WAN, you must hardcode the IP address assigned to the VP system PC in each client PC's registry. Note that using VCM in a WAN environment is not recommended due to data integrity issues.
- The following two configuration file entries must be present in the `VM.CFG` file. These entries are made automatically when NT-based VP system software is installed on the VP system PC. If, however, you encounter operational problems with VCM, ensure both entries are present in the `VM.CFG` file:

```
VCM NAME=TCPIP  
EXPORT PATH=C:\VM
```

You install VCM on the subscriber's PC using the VP system installation CD ROM or by accessing the client software installation program over the network from the VP system PC.

In addition to installing client software on subscriber PC's, you must also modify the mailbox assigned to each subscriber who will be using VCM by checking the USES VCM field on the subscriber's MAILBOX screen. You make this mailbox modification from the VP system PC before or after installing VCM client software on the subscriber's PC.

Note: If you check the USES VCM box in more than 5 mailboxes (or in more than the number of mailboxes for which you have purchased additional licenses) VCM will automatically log off random mailbox owners who log on to control unauthorized access.

22.1.2 Setting up Subscriber Workstations to Use VCM

VCM client software requires a PC that is running Windows NT or Windows 95/98/2000. The PC must have at least 10 MB of free hard disk space—5.5 for the installation of VCM files and approximately 5 or more for the recording and playback of messages and greetings. If the subscriber's PC is equipped with a sound card and speakers, the subscriber can use the PC's multimedia features for playing messages and greetings. If the PC does not include this equipment, the subscriber must use the telephone handset for these operations.

To install VCM client software on a subscriber PC using the VP system installation CD ROM:

1. Insert the VP system installation CD ROM in the CD ROM drive on the subscriber's PC. If the installation routine automatically starts, cancel out of the installation on the first available screen.
2. Select the Start button from the Windows 95/98/2000 or Windows NT desktop, then select Run. The Run dialog box displays.
3. In the OPEN field, type D:\VCM\SETUP.EXE (where D: is the letter of the CD ROM drive).
4. Follow the on-screen prompts to complete the installation.

Note: It is strongly recommended you accept all default installation entries. Doing so will facilitate any system support efforts that may be necessary.

Once the installation process is complete, the PC desktop is updated to include a VCM program icon. To start VCM, the subscriber simply double-clicks on this icon.

Note: Refer to section 22.2 for important information on adjusting subscriber mailboxes to permit VCM access. A subscriber cannot use VCM unless the USES VCM field is activated on his/her MAILBOX screen.

Note: For a client PC to be able to communicate with the VP system PC, the following two lines must be present in the client PC's registry after the line LastAdapter=0:

DestRemFtpIP=*VMSEVIP*
DestVmlp=*VMSEVIP* (where *VMSEVIP* is the IP address of the VP system PC)
InstallDir=C:\VCM (on workstations running NT workstation of NT server software only. C is the hard drive of the client PC)

These entries are made automatically when VCM client software is installed on the VP system PC. If, however, you intend to operate VCM over a WAN or you encounter problems with VCM, you should ensure both the above entries are present in the registry and that they reflect the correct IP address of the VP system PC.

You can edit these entries in the PC's registry by clicking on the Start button at the bottom-left of the PC screen, selecting Run, then typing `REGEDIT` and pressing <Enter>. Next, select `HKEY_CURRENT_USER \ SOFTWARE \ KEYVOICE \ VCM \ 2`.

To install VCM client software on a subscriber PC by accessing files over the network:

You can easily install VCM software on subscriber PCs by first installing the client software on a network drive accessible by subscriber PCs. Simply create a directory on the network, and copy the contents of the \VCM sub-directory on the VP system installation CD ROM into that directory. To install the client software on subscriber PCs by accessing files over the network, use the following procedure:

1. Select the Start button from the Windows 95/98/2000 or Windows NT desktop, then select Run. The Run dialog box displays.
2. In the OPEN field, type `[PATH]\SETUP.EXE` (where [PATH] is the complete drive and directory path to the network directory into which you copied the VCM files).
3. Follow the on-screen prompts to complete the installation.

Note: It is strongly recommended you accept all default installation entries. Doing so will facilitate any system support efforts that may be necessary.

Once the installation process is complete, the PC desktop is updated to include a VCM program icon. To start VCM, the subscriber simply double-clicks on this icon.

Note: Refer to section 22.1.3 for important information on adjusting subscriber mailboxes to permit VCM access. A subscriber cannot use VCM unless the USES VCM field is activated on his/her MAILBOX screen.

Note: For a client PC to be able to communicate with the VP system PC, the following two lines must be present in the client PC's registry after the line LastAdapter=0:

DestRemFtpIP=*VMSEVIP*
DestVmlp=*VMSEVIP* (where *VMSEVIP* is the IP address of the VP system PC)
InstallDir=C:\VCM (on workstations running NT workstation of NT server software
only. C is the hard drive of the client PC)

These entries are made automatically when VCM client software is installed on the VP system PC. If, however, you intend to operate VCM over a WAN or you encounter problems with VCM, you should ensure both the above entries are present in the registry and that they reflect the correct IP address of the VP system PC.

You can edit these entries in the PC's registry by clicking on the Start button at the bottom-left of the PC screen, selecting Run, then typing `REGEDIT` and pressing <Enter>. Next, select `HKEY_CURRENT_USER \ SOFTWARE \ KEYVOICE \ VCM \ 2`.

22.1.3 Adjusting Subscriber Mailboxes to Permit VCM Access

Before a subscriber can use VCM, the `USES VCM` field on the subscriber's `MAILBOX` screen must be checked. Use the procedure detailed below.

To adjust a subscriber's mailbox to permit VCM access:

1. From the Windows NT desktop of the VP system PC, double-click the `DATABASE ADMINISTRATOR` icon. You are prompted to enter a password.
2. Type `1234` then press <Enter> to log on using the default Technician level password.
3. Access the `BOXES` pull-down menu.
4. Select `MAIL BOX` from the Boxes menu. Use the Select button to access the `MAILBOX` screen for the subscriber to be permitted VCM access.
5. Move the cursor to the `USES VCM` field on the General tab. Check the box by clicking on it or by pressing the Spacebar.
6. Use the Select button to modify additional subscriber mailboxes as necessary.
7. Press <F10> to save the changes or click on the Save icon on the screen. You return to the main screen.

22.1.4 Using VCM

VCM has been designed with an intuitive user interface that allows users to move easily through the program and use the program's options and features. Extensive online help is also available to assist new users with understanding the program's functionality. To access online help, use options provided on the Help pull-down menu.

22.2 Implementing Unified Messaging and E-mail Reader

Version 10.1

Unified messaging allows subscribers to access and manage their voice mail messages, including those with fax attachments, alongside their e-mail messages—all in one place, a Microsoft Outlook Inbox. This way, in addition to viewing and sending e-mail messages, unified messaging subscribers can listen to and work with voice mail messages and view and manipulate fax messages, all from their PC desktop Inbox.

The e-mail reader furthers this overall message management capability by allowing subscribers who are away from their Inbox to call in to their voice mailbox to manage all their voice and e-mail messages. Subscribers can hear, reply to, and forward voice mail messages as well as work with e-mail messages and fax mail messages, all by calling in from any telephone.

Access to the unified messaging feature is sold on a per-seat license. If 25 seats were purchased, only 25 subscribers can have the unified messaging feature running with their desktop Outlook Inbox at one time. Similarly, access to the e-mail reader feature is sold on a by-port license. If a 2-port license is purchased, only 2 subscribers can access and use the e-mail reader feature to hear their e-mail over the telephone at one time.

<p>Note: Initial releases of the unified messaging and e-mail reader features do not include all planned functionality. The user online help file identifies most of the to-be-implemented capabilities. Note, however, that one planned enhancement not mentioned in the user online help involves providing unified messaging subscribers with mailbox and greeting setup, message/pager delivery setup, and incoming call control capabilities similar to those offered in the Visual Call Management (VCM) feature. Once this functionality is incorporated into unified messaging, it will be unnecessary for unified messaging subscribers to also run VCM on their desktops—VCM will offer no additional functionality.</p>

22.2.1 Understanding Unified Messaging and E-mail Reader Requirements

LAN Requirements for Unified Messaging and E-mail Reader

The unified messaging and e-mail reader features function on any local area network (LAN) running the TCP/IP protocol. LANs that can run this protocol include Windows 95/98/2000, Windows NT, and Novell LANs. For information on setting up TCP/IP protocol, contact a LAN administrator.

E-mail Client Software Requirements for Unified Messaging

The unified messaging feature functions with Outlook 98 or Outlook 2000 installed in Corporate or Workgroup mode. **Unified messaging will not function with other client e-mail packages, including Outlook Express or either Outlook 98 or 2000 installed in Internet mode.**

<p>Note: If Internet Explorer is installed on the client PC, verify that it is not set up to run Outlook Express as the default e-mail client. Instead, it must specify Outlook in the MAPI mode.</p>
--

E-mail Server Software Requirements for E-mail Reader

The e-mail reader feature functions with any e-mail server that is POP3 compliant, such as Exchange Server and many others, including those used by Internet Service Providers. For complete functionality, the e-mail package must use SMTP when sending e-mails. If it does not, when the subscriber accesses an e-mail over the telephone when his/her Outlook Inbox is not running on the desktop, the subscriber loses the ability to record a voice mail reply to a message and send that message via e-mail.

Note: In an Exchange Server environment, the e-mail Mailbox Name and User name set up for a user must be identical. Otherwise, that individual will be unable to access the e-mail reader feature.

Also, the unified messaging feature supports both Exchange server-based and Personal Folders-based Inboxes.

22.2.2 Understanding How Unified Messaging and the E-mail Reader Function on the LAN

Unified Messaging

Understanding the Agent and the Relationship Between the Client PC Outlook Inbox and the VP System PC

Unified messaging client software works in conjunction with a Microsoft Outlook 98 or 2000 Inbox (installed in Corporate or Workgroup mode). When you install and configure unified messaging client software on a client PC, a component of the client software referred to as the “agent” runs on the client PC’s desktop whenever Outlook is running. The agent communicates directly with the VP system PC. When the status of the Outlook Inbox changes (new e-mail messages arrive, for example), the agent notifies the VP system PC via TCP/IP packets. A copy of the text in any new e-mail message is transported to the VP system PC. This communication allows:

- **The VP system PC to keep message waiting lights on the subscriber phones up to date.** (Message waiting lights on phones at unified messaging PC workstations can reflect new voice mail and e-mail, only voice mail, or only e-mail. This is configurable on a mailbox by mailbox basis on each subscriber’s MAILBOX screen.)
- **The VP system PC to relay accurately the client Inbox status (number of new and saved e-mail and voice mail messages) to a subscriber when he/she calls his/her voice mailbox through the telephone.** (Message counts for unified messaging subscribers can reflect both new voice mail and e-mail, only voice mail, or only e-mail. This is configurable on a mailbox by mailbox basis on each subscriber’s MAILBOX screen.)
- **The subscriber to retrieve e-mail messages along with voice mail messages when he/she calls in to his/her voice mailbox over the telephone.** Text from each e-mail message is copied to the VP system PC from the e-mail server. A subscriber can hear each e-mail’s text by calling into his/her mailbox on the VP system PC. Text is voiced to the subscriber through a text-to-speech e-mail reader feature available on the VP system PC. (Attachments to e-mails are not opened or voiced.)

In addition to communicating to the VP system PC whether and when e-mail messages are received in the client PC Outlook Inbox, the agent also monitors the VP system PC and notifies the client Outlook Inbox via TCP/IP when new voice mail messages arrive on the VP system PC. This way, voice mail messages

display in the Inbox window alongside new and saved e-mail messages, and they can be retrieved via the Inbox interface. Subscribers can play, delete, save, and otherwise work with the voice mail messages by selecting them through the Inbox interface.

While the subscriber is logged into his/her Outlook Inbox, the agent continuously maintains synchronization over the network between the Outlook Inbox on the client PC and the mailbox for the subscriber on the VP system. This means that if the subscriber deletes a voice mail message through the Inbox interface, it is simultaneously deleted from the subscriber's mailbox on the VP system PC. And if the subscriber deletes a voice mail message by logging into his/her voice mailbox and listening to the message over the telephone, the message is immediately deleted from the Outlook Inbox on the client PC.

Understanding the E-mail Reader Feature

If the subscriber logs off of the client PC Outlook Inbox or shuts off the client PC, the e-mail server cannot deliver new e-mail messages to the client PC Outlook Inbox. Subsequently, the agent running on that client PC cannot copy new e-mail messages to the Inbox owner's voice mailbox on the VP system PC. Also, since the client PC Outlook Inbox is not running, the agent cannot transport new voice mail messages received on the VP system PC to the Outlook Inbox. This means when the subscriber shuts down the Outlook Inbox, the agent is disabled.

At these times, the VP system PC's Proxy E-mail Client service (or *PEC*) acts on behalf of the agent on the client PC. The PEC uses POP3 technology to poll the e-mail server periodically—logging into the e-mail server on the client PC's behalf, and retrieving textual copies of e-mail messages that have arrived for the client/subscriber. The PEC works this way whenever the agent is not running on the client PC (because Outlook is not running). This way, e-mail messages are still copied to and available along with voice mail messages on the VP system PC. A subscriber calling in to his/her mailbox over the telephone (such as from other outside phones, for example) can retrieve, save, delete, and otherwise work with both types of messages. Like with each voice mail message, when listening to each e-mail message, the subscriber can rewind, fast-forward, or pause the message playback, then save, delete, and reply to the e-mail by making keypress entries on the telephone handset.

Whether the agent is up and running on the client PC desktop, transporting messages back and forth to the VP system PC, or the PEC is retrieving messages from the e-mail server for the VP system PC, a subscriber can use the e-mail reader feature to call in to a voice mailbox over the telephone and access e-mail messages in addition to voice mail messages.

When a subscriber accesses his/her mailbox over the telephone and works with e-mail messages (saves them or deletes them for example), information on the updated status of each e-mail message is retained on the VP system PC. If the agent is running on the client PC associated with that mailbox, the updated status of the message is immediately communicated from the VP system PC to that client PC Outlook Inbox, and the message is displayed appropriately in the Inbox (a message saved by a subscriber calling into his/her mailbox over the telephone appears as a Saved message in the Inbox, for example). If the PEC is running (instead of the agent) the updated status of the message is communicated from the VP system PC to the client PC Outlook Inbox the next time the subscriber logs into his/her Outlook Inbox and the unified messaging client software agent is restarted for that Inbox. When the Outlook Inbox is restarted, these steps take place:

1. The e-mail server populates the Inbox with new e-mails that have arrived for the subscriber.
2. The agent updates the status of each of those e-mail messages with any status changes that were made by a subscriber who worked with those e-mail messages by calling into his/her voice mailbox from the telephone while the agent was inactive.

3. The agent populates the Outlook Inbox with any new voice mail messages stored for the subscriber on the VP system server.
4. The agent updates the status of any voice mail messages stored in the Outlook Inbox with any status changes that were made by a subscriber who worked with those voice messages by calling into his/her voice mailbox from the telephone while the agent was inactive.

Understanding Synchronization

Synchronization involves the ability of the VP system to effectively monitor the number of new and saved voice and e-mail messages a subscriber has, and use this information accurately:

- Activate and de-activate the subscriber's telephone message waiting light. (As stated earlier, message waiting lights on phones at unified messaging PC workstations can reflect new voice mail and e-mail, only voice mail, or only e-mail. This is configurable on a mailbox by mailbox basis on each subscriber's MAILBOX screen.)
- Voice message counts over the telephone that accurately reflect the actual status of the subscriber's Outlook Inbox on his/her client PC. (As stated earlier, message counts for unified messaging subscribers can reflect both new voice mail and e-mail, only voice mail, or only e-mail. This is configurable on a mailbox by mailbox basis on each subscriber's MAILBOX screen.)
- Update the status of a voice and/or e-mail message in a mailbox on the VP system PC when a subscriber changes the status of that message by working with it from the Outlook Inbox on a unified messaging-enabled client PC.
- Update the status of a voice and/or e-mail message in the Outlook Inbox on a unified messaging-enabled client PC when the subscriber changes the status of that message by working with it when calling into his/her voice mailbox from a telephone.

Understanding Problems Associated with the Loss of Synchronization

When synchronization is lost between the Outlook Inbox on a client PC running unified messaging client software and the VP system PC, you may experience the following problems:

- The count of new and/or saved messages voiced to the subscriber over the telephone when he/she logs into his/her mailbox does not match the actual count of new and/or saved messages displayed in the subscriber's unified messaging Outlook Inbox.
- There are "orphaned" e-mail messages on the VP system for a subscriber. These are messages that the subscriber can access and hear only by calling into his/her voice mailbox over the telephone and selecting to hear new and/or saved e-mail messages over the telephone. These orphaned e-mail messages do not display in the subscriber's unified messaging Outlook Inbox.

In most instances a subscriber loses synchronization due to two general reasons. To understand these reasons, be sure to review the following:

As explained earlier, when the unified messaging client PC's agent software is *not* running, the PEC periodically retrieves e-mails that come in for the subscriber directly from the e-mail server, copying the text of the e-mail to the VP system PC. This allows the subscriber to call into his/her voice mailbox and manipulate the status of the message over the telephone (change the message from new to saved, for example). The updated status of the message is communicated from the VP system PC to the

client PC Outlook Inbox the next time the subscriber logs into his/her Outlook Inbox and the unified messaging client software agent is restarted for that Inbox. When the Outlook Inbox is restarted, these steps take place:

1. The e-mail server populates the Inbox with new e-mails that have arrived for the subscriber.
2. The agent updates the status of each of those e-mail messages with any status changes that were made by a subscriber who worked with those e-mail messages by calling into his/her voice mailbox from the telephone while the agent was inactive.
3. The agent populates the Outlook Inbox with any new voice mail messages stored for the subscriber on the VP system server.
4. The agent updates the status of any voice mail messages stored in the Outlook Inbox with any status changes that were made by a subscriber who worked with those voice messages by calling into his/her voice mailbox from the telephone while the agent was inactive.

Loss of Synchronization Reasons

- **A subscriber manipulated the status of his/her e-mail messages on the e-mail server by logging into the server using a means other than the unified messaging-enabled client PC Outlook Inbox**—*This can include by accessing the e-mail server over the web or through another e-mail account.* Consider the following scenario : John shuts down his unified messaging-enabled client PC Inbox at his work. The agent is no longer running, and the VP system PC PEC is now retrieving e-mails that arrive for John and copying the e-mail text to the VP system PC. John accesses his e-mail account on the e-mail server from another PC—from home via the web, for example, and he deletes 3 e-mails. John comes back to the office and restarts his unified messaging-enabled Outlook Inbox on his client PC. Because the 3 e-mails John deleted from home are gone from the e-mail server, they do not display in his unified messaging-enabled Outlook Inbox. They do, however, still exist on the VP system PC, since the PEC copied them there while John's PC at the office was off. When John calls into his voice mailbox over the telephone, the message count for new and saved voice and e-mail messages includes counts for the 3 e-mail messages that were copied to the VP system PC by the PEC, but are not displayed in John's unified messaging-enabled Outlook Inbox. The only way these 3 “orphaned” messages can be deleted from the VP system PC is by having John call into his voice mailbox and delete each orphaned e-mail using the telephone keypad options.

Note: If another individual is accessing a subscriber's e-mail messages via the Delegation feature available in Outlook, the subscriber will have an orphaned e-mail message on the VP system PC for any message the other individual deleted from the subscriber's Inbox or moved from the Inbox into another folder.

- **A subscriber set up rules to automatically move new messages to folders other than the main Outlook Inbox**—Consider the scenario where John has a unified messaging-enabled Outlook Inbox that has been set up to use a rule to automatically send all new messages from ksmith@abc.com to a certain folder he set up in Outlook. John shuts down his unified messaging-enabled client PC Inbox. The agent is no longer running, and the VP system PC PEC is now retrieving e-mails that arrive for John and copying the e-mail text to the VP system PC. While the PEC is running, it copies the text for 4 new messages that arrive from ksmith@abc.com to the VP system PC. John comes back to the office and restarts his unified messaging-enabled Outlook Inbox on his client PC. The first step in the four step cycle described above takes place. The rule in John's Inbox immediately moves the ksmith@abc.com messages to the folder John set up. When it is the agent's turn to execute step 2 above, the agent only consults the Outlook Inbox (not any folders set up in Outlook). Because the

agent cannot find the 4 messages from ksmith@abc.com in John's Outlook Inbox, it retains them on the VP system PC. When John calls into his voice mailbox over the telephone, the message count for new and saved voice and e-mail messages includes counts for the 4 e-mail messages from ksmith@abc.com that were copied to the VP system PC by the PEC, but are not displayed in John's unified messaging-enabled Outlook Inbox (since they have been moved automatically to a folder). The only way these 4 "orphaned" messages can be deleted from the VP system PC is by having John call into his voice mailbox and delete each orphaned e-mail using the telephone keypad options.

Also be advised that, as stated earlier, while the subscriber is logged into his/her client PC Outlook Inbox, the agent continuously maintains synchronization over the network between the Inbox and the mailbox for the subscriber on the VP system server PC. Note, however, that when the PEC is operating in place of the agent it is periodically polling the e-mail server to retrieve e-mail copies. By default, the PEC polls the e-mail server every 10 minutes. Because the polling takes place at intervals, a subscriber calling in to access e-mail messages over the telephone will not hear a message that was received on the e-mail server between the time of the last poll by the PEC and the subscriber's call into the voice mailbox.

<p>Note: Currently, the unified messaging feature supports synchronization of all e-mail messages that include a unique ID header.</p>

22.2.3 Understanding the Installation and Setup Process

To implement unified messaging and e-mail reader capabilities, you must install and set up software on both the VP system PC and on the client PC belonging to each subscriber who will be using these features. The method you use to install and set up unified messaging and e-mail reader capabilities **on the VP system PC** differs depending on whether:

- You are setting up an NT-based VP system kit system
- You are setting up a turnkey VP system that was sent to you with VP system version 10.1 software pre-installed

A table presented later in this section identifies the procedures you must follow to install unified messaging and e-mail reader capabilities under both of the conditions identified above. Be advised that under all conditions, part of the implementation will involve completing and/or accessing the MAILBOX SETUP screen for each subscriber who will be using these features and entering on it the subscriber's e-mail server log in name and password. Be advised that you will need to obtain this information from the network administrator and/or from each subscriber. **You will also need to inform subscribers that if they change their e-mail server login password at any time after you set up their mailbox for unified messaging/e-mail reader usage, the system administrator must be informed of the new password so it can be manually updated on the subscriber's MAILBOX SETUP screen.**

The method you use to install and set up unified messaging and e-mail reader capabilities **on each client PC** is the same under all the conditions listed above. Information presented later in this section provides the step-by-step procedures.

22.2.4 Installing Unified Messaging and E-mail Reader Features on the VP System PC

Materials Required for Installation

To perform the installation you must have the materials listed below.

- A tape you can use to make a tape backup of any existing VP system*
- Key Voice Installation CD-ROM*
- NT Service Pack 5 CD-ROM (note that although some Service Pack 5 files are included on the VP System CD-ROM, you must install Service Pack 5 from an NT Service Pack 5 CD-ROM to install the complete pack)*
- The static IP address assigned to the VP system PC
- The computer name assigned to the VP system PC
- The network port number to be used for voice mail network messages (a port number is automatically selected during VP system software installation—you can choose to accept this default if the LAN administrator does not require that a specific network port be indicated)
- A blank 3.5" diskette or access from the VP system PC to a network drive that is accessible by all unified messaging client PCs (optional)
- NTRenew code (listed on the system invoice)

<p>Note: If you purchased a turnkey VP system that included VP system software version 10.1 or higher, you do not need to back up the system or re-install software on the VP system PC. Therefore, you do not need the items that are followed by an asterisk (*).</p>
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Performing the Installation

Because VP system engineers strive continually to improve the efficiency and ease of installations, installation instructions change frequently. For the most up-to-date installation instructions for unified messaging and e-mail reader features, please refer to the Installation Notes provided in the inside front cover pocket of this manual. The Installation Notes are step-by-step instructions for installing your VP system. If Installation Notes are not located in the front cover pocket of this manual, contact technical support.

The following table identifies the general procedures you follow to complete the installation. Whether you are installing a new NT-based VP system kit or turnkey system with version 10.1 or higher software, the steps you follow to complete some of the procedures are detailed in other sections of this manual that are referenced in the table.

If you are:	Complete these Procedures to Install and Set up VP System PC:	Where to Go for Instructions:
Installing a turnkey VP system with version 10.1 or higher software pre-installed.	<ol style="list-style-type: none"> Follow the procedures in sections 2 to attach the key to the VP system PC, in section 3 to run the PBX Setup utility, in section 4 to set up system setup screens, and in section 5 to set up Mailbox information screens. Run the UpdatedBReport utility. Run the NetReg utility (optional). 	<ul style="list-style-type: none"> Section 2 Section 3 Section 4 Section 5 Installation Notes Installation Notes
Installing a kit VP system that includes version 10.1 or higher software on an installation CD ROM.	<ol style="list-style-type: none"> Follow the procedures in section 2 to attach the key to the VP system PC, in section 20 to set up and install the voice/fax boards, in the Installation Notes to install the VP system software and run PBX setup, in section 4 to set up system setup screens, and in section 5 to set up Mailbox information screens. Run the UpdatedBReport utility. 	<ul style="list-style-type: none"> Section 2 Section 20 Installation Notes Section 4 Section 5 Installation Notes

22.2.5 Setting up Unified Messaging and E-mail Reader Features on the VP System PC

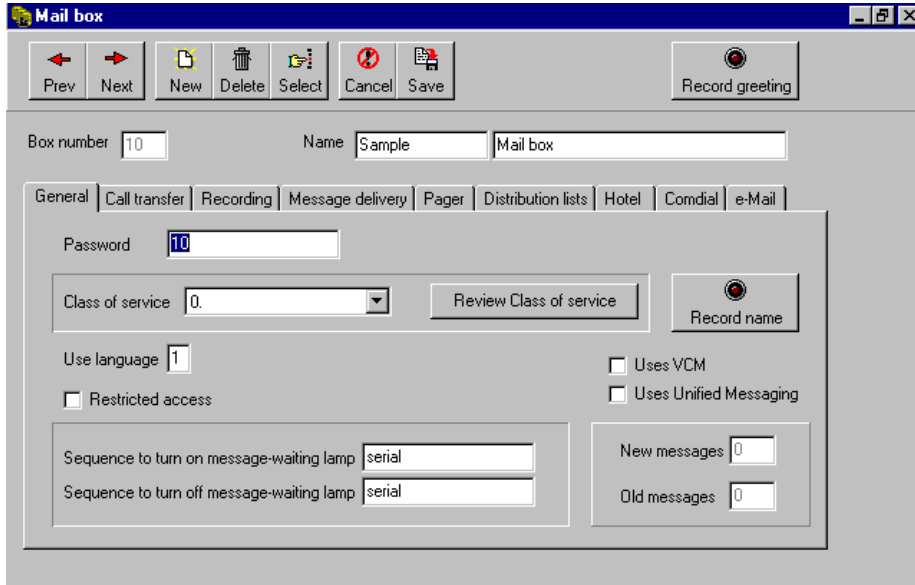
To set up this release with unified messaging and e-mail reader features on the VP system PC, you must adjust the MAILBOX SETUP screen belonging to each subscriber who will be using these features. Use the procedure detailed below.

To adjust each subscriber's Mailbox Setup screen:

- When you re-install NT-based VP system software on the VP system PC, the MAILBOX SETUP screen for each mailbox on the system is updated. The first tab, GENERAL, is adjusted to include a new field: USES UNIFIED MESSAGING. An additional tab, E-MAIL, is also added.

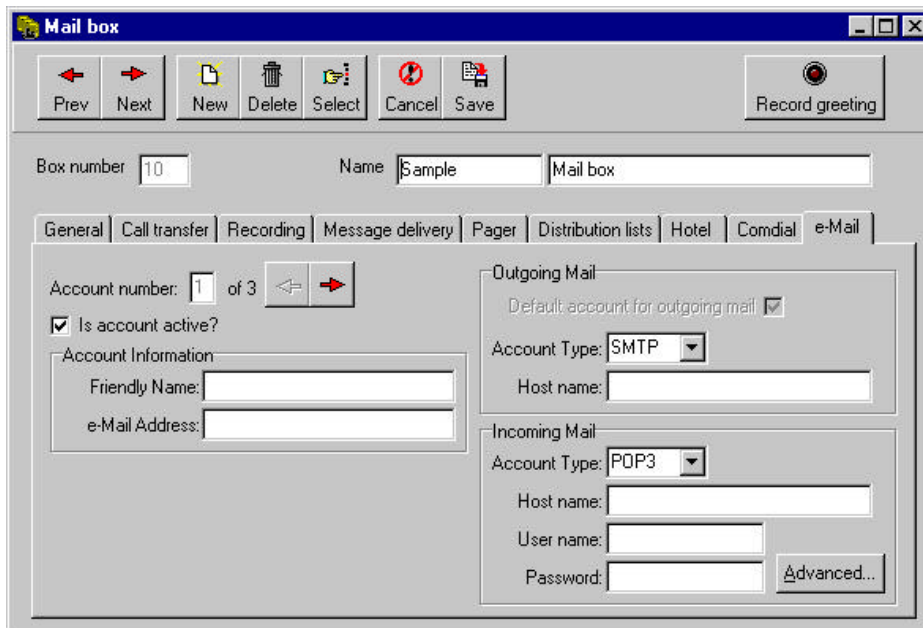
Access the MAILBOX SETUP screen for each subscriber who will be using unified messaging, and select the USES UNIFIED MESSAGING checkbox on the GENERAL tab.

Note: The unified messaging and e-mail reader features are available as optional add-on features to the NT-based VP system. Access to the unified messaging feature is sold on a per-seat license. Though you can check the USES UNIFIED MESSAGING checkbox on as many subscriber MAILBOX SETUP screens as you like, if 25 seats were purchased, only 25 subscribers can have the unified messaging feature running with their desktop Inbox at one time. Similarly, access to the e-mail reader feature is sold on a by-port license. If a 2-port license is purchased, only 2 subscribers can access use the e-mail reader feature to hear their e-mail over the telephone at one time.



Mailbox Setup Screen General Tab

- Next, select the E-MAIL tab of the MAILBOX SETUP screen. If the subscriber wants to be able to listen to e-mail messages over the telephone when Microsoft Outlook is not up and running on his/her desktop (because the subscriber is away from the office, for example), complete the e-mail tab of the mailbox setup screen. This information allows the voice mail server's PEC service to log into the e-mail server on behalf of the client PC and copy messages to the voice mail server. This way, subscribers can retrieve (via telephone) new e-mail messages they receive while Outlook is not running on their desktop. **Be advised that if the subscriber changes his/her e-mail login password from the password entered on this screen, the screen must be updated or the PEC will no longer retrieve e-mails for the subscriber.**



Mailbox Setup Screen E-mail Tab

On the E-MAIL tab of the MAILBOX SETUP screen you enter information on up to 3 different e-mail accounts the subscriber uses. By completing this tab for each account, the VP system is able to retrieve e-mail when the desktop Inbox is not running. This way, the mailbox owner can call into his/her mailbox from the telephone to retrieve the e-mail he/she has received through each of the accounts defined—in addition to his/her phone mail messages.

Complete the fields on the E-MAIL tab, using the field descriptions provided below:

Field: Account Number

If the mailbox owner has more than one e-mail account, you can set up information on the E-MAIL tab for up to 3 different accounts. Once you complete all fields on this screen for the first e-mail account, you can access a second and third e-mail tab on which you can enter information for additional accounts by clicking on the left and right arrow buttons next to the ACCOUNT NUMBER field.

<p>Note: The e-mail reader will not be able to voice e-mail to you over the telephone for any account that you are not using on your desktop.</p>
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Field: Is Account Active

Un-check this box if an account for which you previously entered information is no longer an active account for the mailbox owner. The e-mail reader will no longer access and voice e-mails for that account.

Field: Account Information Area – Friendly Name

Indicate the name that is to display in the From field on messages recipients receive in their e-mail Inbox from this mailbox owner. Typically, the Friendly Name is simply the mailbox owner's first and last name.

Field: Account Information Area – E-Mail Address

Indicate the e-mail address to be used to send the subscriber's e-mail messages.

Field: Outgoing Mail Area – Default Account for Outgoing Mail

This field is active only if more than one E-MAIL tab is completed for the subscriber because he/she has multiple e-mail accounts. Check the field on the appropriate E-MAIL tab to indicate which account is to be used to send outgoing e-mail the subscriber sends.

Field: Outgoing Mail Area – Account Type

This field cannot be changed at this time. (The VP system requires that e-mail client software sends messages via SMTP.)

Field: Outgoing Mail Area – Host Name

Indicate the IP address assigned to the e-mail server that is to be used to send the subscriber's outgoing e-mail.

Field: Incoming Mail Area – Account Type

This field cannot be changed at this time. (The VP system communicates with the e-mail server via POP3 technology.)

Field: Incoming Mail Area – Host Name

Indicate the IP address assigned to the e-mail server that receives the subscriber's incoming e-mail.

Field: Incoming Mail Area – User Name

Indicate the User Name the subscriber uses to log on to the e-mail server that receives the subscriber's incoming e-mail.

Field: Incoming Mail Area – Password

Indicate the password the subscriber uses to log on to the e-mail server that receives the subscriber's incoming e-mail.

Note: Alert subscribers that if they change their e-mail server access password at any time, the system administrator must update it on the MAILBOX SETUP screen. If the password is not up-to-date, subscribers attempting a system log in may find that their computer is locked. This occurs because when the Inbox is not up and running on a client PC desktop, the PEC attempts to access e-mails from the e-mail server on the client PC's behalf. It must log on to e-mail server using the password you provide here. If it attempts to log on with the password you enter in this field after this password has been changed by the subscriber, after several log in attempts, the server may lock down the client PC.

Be particularly aware of this in an Exchange Server environment, since anytime subscribers change their *network* login password in this setting, they must inform their system administrator.

(This is a temporary issue that will be resolved in an upcoming release of the unified messaging feature.)

If you click on the **Advanced** button from the **E-MAIL** tab on the MAILBOX SETUP screen, the **ADVANCED PROPERTIES** screen displays. This screen is only applicable in environments where an Exchange Server e-mail server is used with the Exchange Service. Do not alter the defaults on this screen (shown in the illustration), unless authorized to do so by a technical support representative.



3. Once you adjust the mailbox information for each subscriber who will be using unified messaging and e-mail reader features, click on the Save button to save your entries and exit the mailbox screen.

22.2.6 Installing and Setting up Unified Messaging and E-mail Reader Features on a Client PC

Note that you must complete procedures in this section on each client PC whose user will be working with unified messaging and e-mail reader features.

Understanding Client PC Requirements

Unified messaging client software requires a client PC:

- That is running Windows NT workstation 4.0 or Windows 95/98/2000
- With at least 15 MB of free hard disk space
- With at least 32 MB of available RAM
- That uses one of the following e-mail client software packages—Exchange 4.0, Outlook 98 or Outlook 2000 installed in Corporate or Workgroup mode. Unified messaging will not function with non-MAPI-compliant client e-mail packages, such as Outlook Express or Outlook 98 or 2000 installed in Internet mode.

Note: If Internet Explorer is installed on the client PC, verify it is not set up to run Outlook Express as the default mail client. Instead, Internet Explorer must specify Microsoft Outlook as the default mail client.

For on-screen fax viewing functionality, you must install the Imaging for Windows application on each client PC from the appropriate Microsoft Windows installation CD-ROM. (The Imaging for Windows program is available on Microsoft Windows 95, 98, and NT software CD-ROMs and is often installed by default during Microsoft Windows installation.)

Additionally, to record and playback voice mail messages through the Inbox interface, the PC must also be equipped with a sound card, microphone, and speakers. (Future releases of unified messaging will allow subscribers to also use the telephone handset for these operations.)

Understanding Voice Mail Addresses and How Messages are Sent from the Inbox

The unified messaging feature allows a subscriber to compose, forward, and send a voice mail message using options available through the Inbox interface. This voice mail message is sent out from the Inbox one of two ways : As a straight voice mail message (sent to a voice mailbox of another subscriber on the system), or as an e-mail message that includes the voice mail message as a .WAV file attachment. When a voice mail message is sent as a straight voice mail message, the recipient can listen to it over the telephone by logging in to his/her voice mailbox (from on- or off-site) and selecting the option to listen to messages. If the recipient is also a unified messaging subscriber on the system, the recipient can also listen to the voice mail message by double clicking on it from the main Inbox screen.

When a voice mail message is sent as an e-mail message that includes the voice mail message as a .WAV file attachment, the recipient can access the voice mail only through the Inbox window. Because a message sent this way is not a voice mail message, the recipient cannot call into his/her voice mailbox over the telephone to access it (from outside the office, for example).

After composing a voice mail message, to send the message as a straight voice mail message, the subscriber must specify the To: field recipient from his/her Personal Address book. When unified messaging client software is installed, the Personal Address book on the client PC is populated with special addresses for the voice mailboxes of other subscribers on the system. These entries display showing each subscriber' s name with the word **(VMAIL)** following it. If the message sender selects a voice mailbox address, the message is sent as a voice mail to the recipient.

If, when the subscriber addresses the message, he/she specify an address other than a voice mailbox address, the message is sent to the recipient as an e-mail with a .WAV file attachment.

(The only exception to this rule occurs under circumstance where Microsoft Exchange is the e-mail server on the LAN, the recipient is another subscriber with unified messaging installed on his/her PC, and the recipient is logged into his/her Inbox on the desktop. In this situation, if the message sending subscriber composes a voice mail message and addresses it to the recipient using the recipient' s e-mail address, the VP system recognizes and delivers the message as a straight voice mail message (not an e-mail with an attached .WAV file) even though the message was addressed to an e-mail address.)

Creating and Updating Voice Mail Addresses

To provide senders the option of selecting voice mailbox addresses, the client PC installation program sets up the voice mailbox addresses on each unified messaging client PC. To do so, it runs a utility (named Createvoicepab) that creates the voice mailbox addresses based on the mailboxes that are already set up on the VP system. Once compiled, the voice mailbox addresses are stored in the Personal Address Book accessible from the Inbox on each client PC. Voice mail addresses display in the Personal Address Book as the first and last name of each subscriber followed by **(VMAIL)** to designate the name as a voice mail address--for example **John Smith (VMAIL)**.

<p>Note: If it is not running already, start the Personal Address Book service on each client PC prior to installation of client software.</p>

Because the Createvoicepab utility creates voice mailbox addresses based on the mailboxes currently set up on the VP system, the utility must be re-run periodically on each unified messaging desktop. By re-running the utility, you update VMAIL addresses to reflect addresses for new mailboxes that were added to the system and to eliminate addresses for mailboxes that were deleted. To update voice mail addresses on client PCs, refer to the following procedure:

To periodically update the voice mail addresses on a unified messaging client PC:

1. On the client PC, exit and log out of the client e-mail program.
2. Click on the Start button from the Windows desktop then select Programs / Voice Messaging / Download Voice Address Book. Follow the prompts to complete the procedure.

<p>Note: A voice mail address cannot be created for the owner of a mailbox unless the owner's first and last name is typed into the NAME fields on the MAILBOX SETUP screen.</p>

Performing the Client PC Unified Messaging/E-mail Reader Installation

To install unified messaging and e-mail reader client software on a client PC:

<p>WARNING: All virus detection software must be disabled prior to installation. You can re-enable detection software after the installation has been completed.</p> <p>Note: Be advised that before installing the client software, start the Personal Address Book service on each client PC if it is not running already.</p>
--

1. Verify that the Personal Address Book service is running, as described in the note directly above.
2. Shut down the e-mail client software that is installed on the desktop.
3. When/if you created the file NETREG.REG, you were prompted to indicate whether you wanted to store the file on a diskette or on a network drive accessible by all unified messaging client PCs. If you indicated that the file was to be stored on diskette, insert the diskette into the diskette drive on the client PC.
4. Insert the VP system installation CD-ROM in the CD-ROM drive. The PC automatically launches the installation wizard. (If the installation program does not automatically launch, from the Start button at the bottom of the Windows NT desktop, select Run, then in the Run dialogic box, select the CD-ROM drive in the LOOK IN field. Double-click on the SETUP.EXE file.)

<p>Note: It is strongly recommended you accept all default installation entries. Doing so will facilitate any system support efforts that may be necessary.</p>
--

5. Follow the on-screen prompts to progress through the installation. Note the following screen entries:
 - On the SELECT COMPONENTS screen, ensure both options (NETWORK SETUP USES NETREG.REG FILE and ADD VOICE MAIL USERS TO PERSONAL ADDRESS BOOK) are selected then click on the Next button.

- On the CLIENT REGISTRY SETUP screen, either use the top two fields to enter the voice mail server name and static IP address **or** use the last field to identify the path to the NETREG.REG file created from the VP system PC. (The NETREG.REG file simply contains the voice mail server name and static IP address.)

To set up unified messaging and e-mail reader client software on a client PC:

1. Select the Start button from the Windows 95/98/2000 or Windows NT desktop, then select Settings / Control Panel. The Control Panel dialog box displays.
2. Select the Mail option. The Properties screen displays. From the Services tab, click on the Add button and select UNIFIED MESSAGING then click on OK. Click on the SERVER ACCOUNT tab.
3. In the IP address field enter the static IP address of the VP system PC.
4. In the MAILBOX NUMBER field and MAILBOX PASSWORD field enter the number of the subscriber voice mailbox to be associated with this Inbox and voice mailbox' s log in password.
5. Under Connection Type, verify CONTINUOUS NETWORK CONNECTION is selected. Also confirm the OPTION AUTOMATIC SILENT RE-CONNECT AFTER A DISCONNECTION is selected.
6. To save the entries and exit the screen, click on OK.

WARNING:

If the client PC is running Windows 95 or Windows 98, verify the entries you make in the MAILBOX NUMBER and MAILBOX PASSWORD fields are retained when you exit then re-enter the Properties screen. If these entries are not retained, you must create a new MAPI profile for the subscriber. Do so by completing the following procedure:

1. From the Start button, select Settings / Control Panel / Mail.
2. From the Services tab, click on the SHOW PROFILES button. Highlight the profile for the subscriber, and click on the COPY button.
3. Indicate a new profile name for the profile copy, then select the OK button.
4. In the WHEN STARTING MICROSOFT OUTLOOK USE THIS PROFILE field, select the copy you created.
5. From the Start button, select Settings / Control Panel / Mail.
6. From the Services tab, in the Services area, click on the VOICE MAIL SERVER option, then click on the Remove button.
7. Click on the Add button.
8. Highlight UNIFIED MESSAGING option, then click on the OK button.
9. On the Server Account tab, re-complete the first 3 fields and make any other modifications to this screen that you made previously (see procedure above).
10. Click on the OK button. Restart Microsoft Outlook as prompted.

Note: Troubleshooting the Creation of Voice Mail Addresses

If a unified messaging subscriber cannot successfully use options in the Inbox to compose and send a straight voice mail message to another subscriber on the system:

From the main Inbox screen, click on the Tools menu / Address Book. From the screen that displays, click on the Tools menu. From the ADDRESSING screen, click on the ADDRESSING tab. Verify that PERSONAL ADDRESS BOOK displays in the field: WHEN SENDING MAIL, CHECK NAMES USING THESE ADDRESS LISTS IN THE FOLLOWING ORDER. If it does not, click on the Add button and select PERSONAL ADDRESS BOOK from the list that displays and click on the Add button to add it. To save and exit the dialog, click on the Close button.

22.2.7 Using Unified Messaging and E-mail Reader Features

When you install unified messaging and e-mail reader client software on a client PC, an online help file is installed to provide users with information on working with unified messaging and e-mail reader features. Subscribers can access this help file from a client PC desktop by selecting the Start button, then Program / UM Client / UM Help.

Please also be advised of the following client software considerations:

- On each client PC, the unified messaging feature will support only 250 total messages in the Inbox. *Total messages* refers to all voice, fax, and e-mail messages, both new and saved. Additional messages stored in Inbox folders, attachments to e-mails, and fax attachments to voice mails are not counted in this total. Note that once the 250 message limitation is reached, when messages are deleted or moved from the Inbox window, the Inbox is populated with any additional messages stored for the Inbox owner on the voice mail server PC.
- Unified messaging subscribers should not launch and use the VCM program at the same time their Inbox is running (even in minimized mode) on their desktops.
- If a unified messaging subscriber wants to log on to his/her Exchange Server Inbox from more than one PC, unified messaging client software should be installed on only one of the PCs. For roaming profile-based users, two separate MAPI profiles are needed: One MAPI profile that includes the Voice Mail Service (set up to connect to the user's voice mailbox) and one profile that does not include the Voice Mail Service. The subscriber must also be prompted upon log on to specify which profile he/she wants to use (this is an Outlook option). If the subscriber attempts to log on to two (or more) PCs using, on both, a profile that includes the Voice Mail Service set up to connect to the same voice mailbox, the second log on will fail.
- A subscriber cannot use unified messaging features:
 - * When accessing someone else's Inbox using the "Delegate" Exchange Server feature
 - * When accessing his/her Inbox using Outlook Web Access
 - * When accessing his/her Inbox via either the LAN while at the office or via a RAS connection while out of the office from a PC *not* installed with unified messaging client software

23. Installing Optional Modules

If the original VP turnkey system purchase included optional program modules, those modules were installed on the system before it was shipped to you. If you purchase a VP kit system or if optional modules are purchased after the original system, you must install the modules using the instructions provided in this section. These instructions identify how you install the following VP system optional modules:

- Fax Distribution and FaxMail
- Talking Classifieds
- IVR
- Outbound Telemarketing

If an optional module was not specifically purchased, you cannot activate it on the system. If more than one optional module is purchased, you must activate each individually.

Note: For instructions on installing and using unified messaging, e-mail reader, and VCM features, refer to section 22.

23.1 Activating Modules and Installing Module Prompts

Note: When you install an optional module, you may be prompted to indicate the module's switches.txt authorization code number. This code is indicated on the system invoice and/or on a small card packaged with the system's software key.

To install optional modules and optional module prompts on DOS-based VP systems:

1. Shut down the VP system if it is currently running.
2. Insert the first VP system installation diskette in the VP system diskette drive and change to that drive.
3. From the diskette drive prompt, type `INSTALL` then press <Enter>.
4. From the menu that displays, highlight `ADD OPTIONAL FEATURE` then press <Enter>.
5. At the installation directory prompt, press <Enter> to select the default directory `\VM` (or indicate the directory into which you want to install the optional modules—you are strongly urged to use the default directory `\VM`).
6. At the prompt, remove the installation diskette from the VP system diskette drive and insert the first Optional Features installation diskette. To continue, press <Enter>.
7. At the prompt, remove the first Optional Features diskette and insert the second Optional Features diskette. To continue, press <Enter>.
8. At the prompt, enter the switches.txt authorization code for the optional module(s). This code is indicated on the system invoice and/or on a small card packaged with the system's software key.

9. To continue, press <Enter>. The VP system activates the module by writing the authorization code to the file SWITCHES.TXT and returns to the module selection screen. Follow the prompts to exit the screen, then reboot the PC to restart the VP system.

For instructions on using each optional module, refer to sections 24-28.

To install optional modules and optional module prompts on NT-based VP systems:

Note: If you installed an NT-based VP system kit using procedures in section 21, any optional modules you purchased were activated when you completed the installation program screens. You do not need to take additional steps to install or activate optional modules and optional module prompts unless additional modules are purchased later.

On NT-based VP systems, access to optional modules is controlled by either an NTRenew code, which activates the module on the software key attached to the back of the PC. For information on entering an NTRenew code refer to section 2.4.

On NT-based VP systems, you do not need to install additional prompts for optional modules. These prompts are installed when the VP system software is installed.

For instructions on using each optional module, refer to sections 24-28. For instructions on installing and setting up the VCM or unified messaging feature, refer to section 22.

23.2 Installing Hardware/Software Required for Fax Modules

Information in this section is designed to help you install and configure hardware and software required to use fax features available with the Fax Distribution and FaxMail optional modules.

The VP system can support up to 4 single-line fax boards. The following types of fax boards are supported:

- DOS-based VP systems: PureData Satisfaxion 200 / 400 and 2000 / 4000 boards
- NT-based VP systems: GammaLink 2 and 4 port boards

Use the instructions provided below to connect the fax boards to the telephone lines and to install the fax board and software in the VP system with which you are working.

Note: The procedures in this section assume that the diskette drive on the VP system is drive A and the hard drive is drive C. If the system uses other drive letter designations, substitute the appropriate letters in the procedures provided.

23.2.1 Connecting the Telephone Lines to the Fax Boards

Each fax board is actually connected in parallel (bridged) with one of the VP system's voice board lines. Use the adapter arrangement shown in the following illustrations.

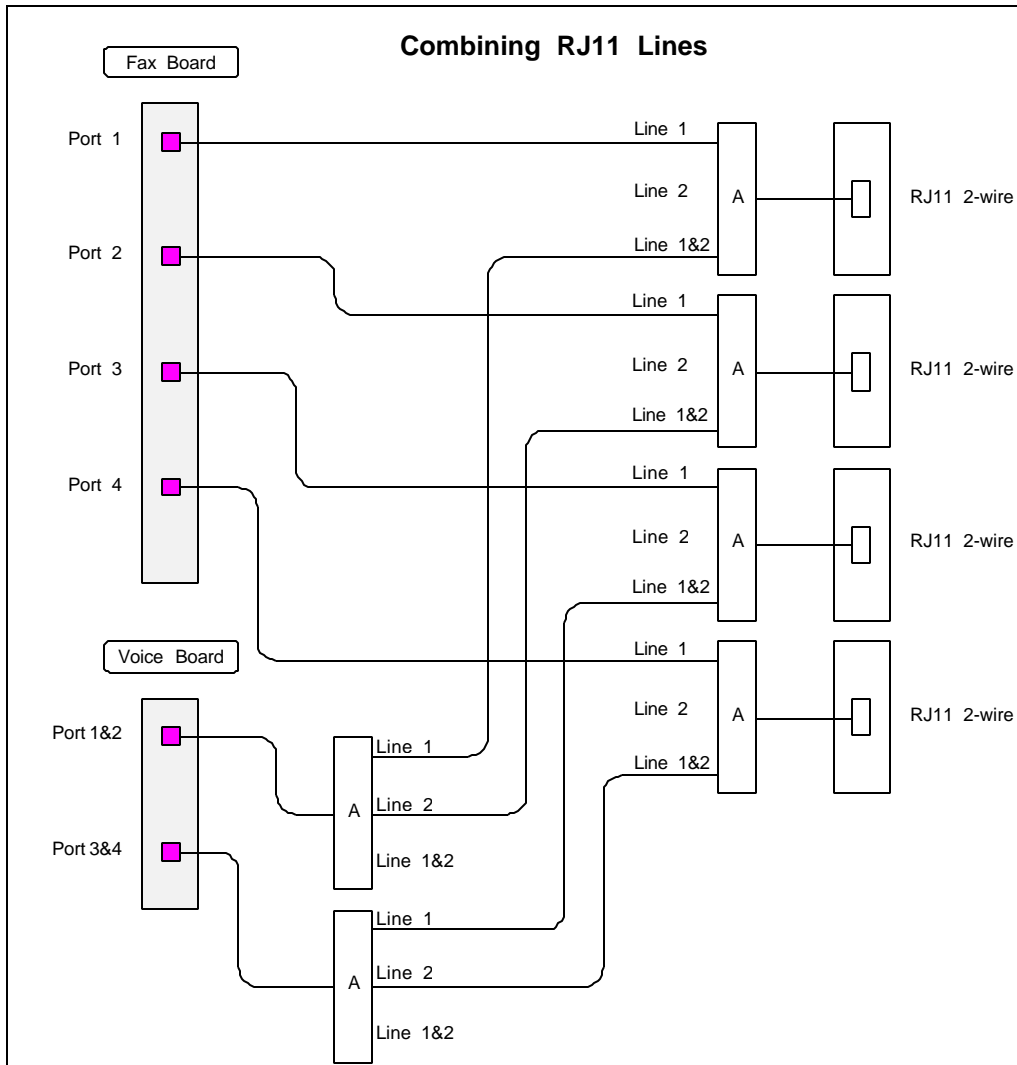


Figure 23-1 Connecting Telephone Lines to the Fax Boards, (Combining RJ11 Lines)

Note: Adapter A accepts either a 2-wire (1 pair) or 4-wire (2 pair) input. In the usage above, the inputs to the adapters on the right side of the illustration are 2-wire (1 pair) RJ11. The usage for those adapters splits the 1 pair input into two identical feeds, one feed being for the fax board and the other for the voice board adapters.

The voice board's adapters usage on the left side of the illustration combines the two single pair inputs into one 4-wire (2 pair) feed to the RJ14 voice ports.

Adapter A can be purchased at Radio Shack, stock number 279-402.

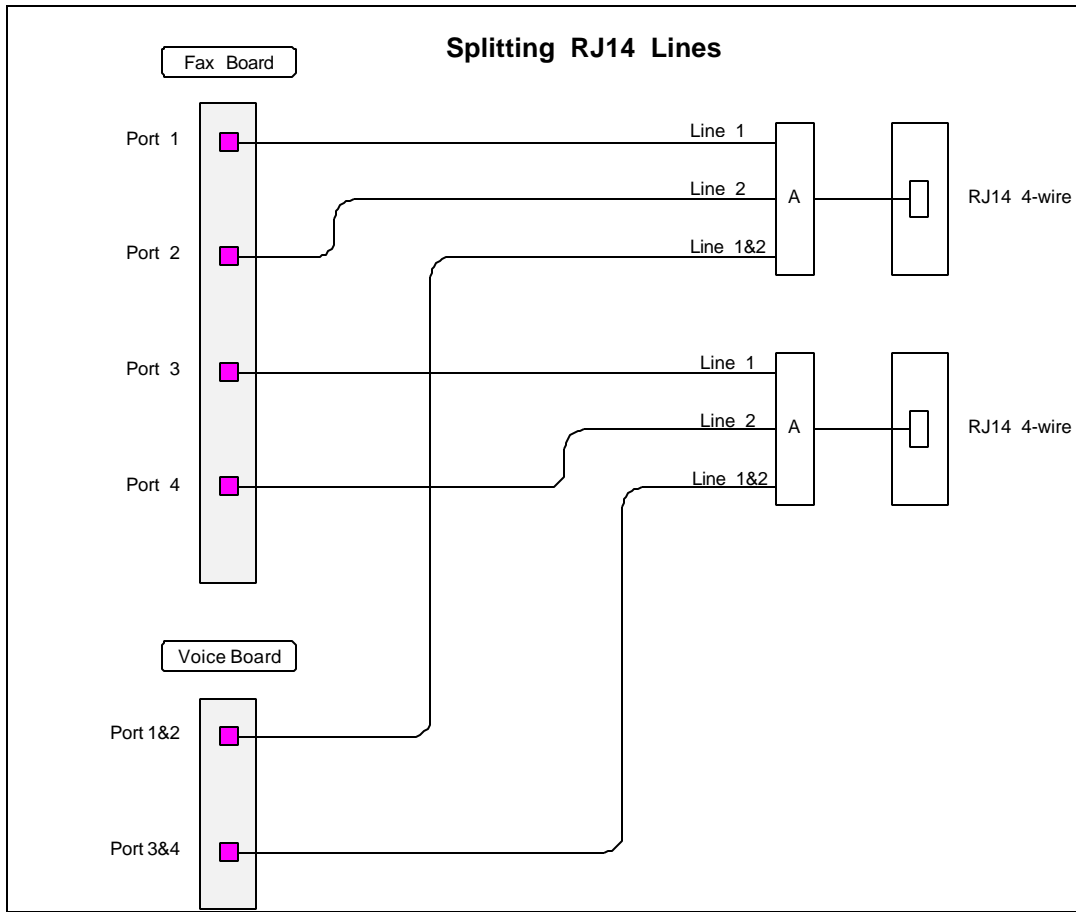


Figure 23-2 Connecting Telephone Lines to the Fax Boards (Splitting RJ14 Lines)

Note: Adapter A accepts either a 2-wire (1 pair) or 4-wire (2 pair) input. In the usage above, the input is a 4-wire (2 pair) RJ14. The outputs are as illustrated: Line 1 (the first pair), Line 2 (the second pair), and Lines 1&2 (both pairs).

Adapter A can be purchased at Radio Shack, stock number 279-402

23.2.2 Installing Satisfaxion Fax Boards

To install each fax board:

1. Shut down the VP system and turn off power to the PC.
2. Remove the PC' s cover.
3. Insert the board in a slot in the PC. Refer to installation instructions provided with the board.
4. Turn on power to the PC.
5. Refer to the instructions later in this section to install the board software and configure the board.
6. If you are installing multiple fax boards, repeat the steps 3-5 for each fax board you are installing.

Note Each board must be configured individually. Only after all boards are configured with the Satisfaxion software can you insert all boards into the PC.

7. Replace the cover of the PC.

23.2.3 Installing Satisfaxion Software and Configuring Each Board

To install the Satisfaxion software and configure each board:

Note: This Satisfaxion board software installation procedure assumes you are using PureData's 5-diskette installation pack. If the installation pack you are using does not include 5 diskettes, contact Technical Support for instructions.

You should not need to adjust the I/O addresses on the boards. The Satisfaxion installation and configuration program determines how the addresses are to be set.

1. Insert the Satisfaxion diskette labeled Support Disk 1 into the diskette drive.
2. From a DOS prompt type `A:INSTALL` then press <Enter>.
3. To continue, press <Enter>.
4. At the prompt, confirm the default directory by pressing <Enter>.
5. At the prompt regarding Windows support, leave the field blank (no Windows) and press <Enter>.
6. As prompted, insert each Support Disk (2-5).

Note: At the end of the installation of the fax software you may see the error:
"Error loading CONFIG.OVL: Path or file name not found"

Once the error displays, verify the last installation diskette is still inserted in the diskette drive, and type `A:LOAD` (where A is the diskette drive letter) then press <Enter>.

The file CONFIG.OVL is copied to the PC and the Setup program identified in the following step starts automatically. Continue with step 8 below to complete the setup.

7. When prompted, press any key to run the Setup program.
8. From the menu that displays, select `NEW DEVICE`.
9. At the prompt, indicate the type of fax board installed in the VP system by selecting either:

`SATISFAXION 428/500/2K/4K`
`SATIFAXION 200/400`

The program indicates the I/O address it will be using for the board.

10. Select `ADVANCED SETTINGS`.
11. Set the field `SEND RETRY ATTEMPTS` to `0` then select `OK`.

12. To save the changes and edit the setup program, select OK then press <Enter>.
13. To continue, press any key.
14. Restart the computer. Continue with the following procedure for making necessary file modifications. If you are installing multiple boards, you can make these modifications once, after the last board has been configured using this procedure.

To make necessary file modifications for Satisfaxion boards:

1. Shut down the VP system if it is running.
2. Change to the directory in which the VP system is installed (by default, the \VM directory).
3. Using a text editor, access the VM.CFG file. If you are using the DOS editor for example, type EDIT VM.CFG then press <Enter>.
4. If you are installing either Satisfaxion 2000 or 4000 boards, add the following lines to the VM.CFG file:

```
FAX LINK=CD
SAME CALL FAX OK
```

5. If you want to share fax ports on the system (regardless of which type of fax board you are using) add the following line to the VM.CFG file (see information later in this section for additional details on sharing fax ports):

```
SHARE FAX PORTS
```

Note: If you are using a Comdial phone system, add the line above as
SHARE FAX PORTS=BLIND

6. Save and exit the file.
7. Using a text editor, access the VERBATIM.BAT file. If you are using the DOS editor for example, type EDIT VERBATIM.BAT then press <Enter>.
8. If the system is using Rhetorex voice boards and Satisfaxion 2000 or 4000 boards, add the following lines immediately before the line that begins RHETDRV:

```
CD\INSTCOM
I3LOAD
CD\VM
```

9. If the system is using Dialogic voice boards and Satisfaxion 2000 or 4000 boards, add the following lines immediately before the line that begins VMAIL:

```
CD\INSTCOM
I3LOAD
CD\VM
```

10. If you are converting from older Satisfaxion drivers or are upgrading from a Satisfaxion 200 or 400 board:

- Remove the lines in the AUTOEXEC.BAT file that call CASMGR.
 - Remove the lines in the CONFIG.SYS file that invoke the SATISFAX driver.
11. If the VP system is being installed to use a phone system that does not use dial tone (such as a Comdial switch), you must modify the I3LOAD.INI file in the sub-directory C:\INSTCOM. Using a text editor, access the I3LOAD.INI file. If you are using the DOS editor for example, from the C:\INSTCOM directory prompt, type EDIT I3LOAD.INI then press <Enter>. After each of the lines that read DEVICE_MULTIPLEX_NUMBER, add the following line (with no blank line after it):

DIAL_PROGRESS_MODE = NONE

12. Restart the computer.

23.2.4 Installing GammaLink Fax Boards

To install each fax board:

1. Shut down the VP system and turn off power to the PC.
2. Remove the PC's cover.
3. Select a different I/O address for each fax board. If you are installing only one board in the system, the default settings of switch SW1 on the board should not need to be modified. Refer to the table below.

CPI100 Boards, Dip Switch SW1, 7&8 'ON'

Switch SW1-					Physical Channel	I/O Address
1	2	3	4	5		
Off	Off	Off	Off	Off	0 (default)	350-353
On	Off	Off	Off	Off	1	360-363
Off	On	Off	Off	Off	2	370-373
On	On	Off	Off	Off	3	250-253

CPI200 Boards, Dip Switch SW1

Switch SW1-			Channel A	A Physical Address	Channel B	B Physical Address
1	2	3				
Off	Off	Off	350h-353h	0	360h-363h	1
On	Off	Off	260h-263h	4	270h-273h	5
Off	On	Off	100h-103h	8	104h-107h	9
On	On	Off	110h-113h	12	114h-117h	13
Off	Off	On	280h-283h	16	284h-287h	17
On	Off	On	290h-293h	20	294h-297h	21
Off	On	On	120h-123h	24	124h-127h	25

Switch SW1-						
1	2	3	Channel A	A Physical Address	Channel B	B Physical Address
On	On	Off	130h-133h	28	134h-137h	29

CPI4 Boards, Rotary Switch SW1

I/O Addresses (Physical Channels)				
Switch Setting	Channel A	Channel B	Channel C	Channel D
0	350h-353h(0)	360h-363h(1)	370h-373h(2)	250h-253h(3)
1	260h-263h(4)	270h-273h(5)	150h-153h(6)	160h-163h(7)
2	100h-103h(8)	104h-107h(9)	108h-10Bh(10)	10Ch-10Fh(11)
3	110h-113h(12)	114h-117h(13)	118h-11Bh(14)	11Ch-11Fh(15)
4	280h-283h(16)	284h-287h(17)	288h-28Bh(18)	28Ch-28Fh(19)
5	290h-293h(20)	294h-297h(21)	298h-29Bh(22)	29Ch-29Fh(23)
6	120h-123h(24)	124h-127h(25)	128h-12Bh(26)	12Ch-12Fh(27)
7	130h-133h(28)	134h-137h(29)	138h-13Bh(30)	13Ch-13Fh(31)

4. Label each board using an indelible marker on the metal retaining bracket with the board's I/O address from the appropriate table above. (This facilitates any support for the board you may need later.)
5. Insert each board in a slot in the PC. Refer to installation instructions provided with the board.
6. Turn on power to the PC.
7. Refer to the instructions later in this section to install the board software and configure the boards.
8. Replace the cover of the PC.

23.2.5 Installing GammaLink Software and Configuring Each Board

Note: If you are installing GammaLink software on a VP system connected to a Comdial phone system, there are specific GammaLink parameter adjustments you must make after the installation. Refer to the phone system technical bulletin for details.

To install the GammaLink software and configure each board on NT-based VP systems:

Note: If you installed an NT-based VP system kit using procedures in section 21, you installed GammaLink software and configured each fax board when you completed GammaLink installation program screens. You do not need to take additional steps to install or configure GammaLink software or boards unless you add GammaLink boards to the system later. Use this procedure only to re-run the GammaLink installation and configuration portion of the VP system installation so you can set up boards you added.

1. Shut down the VP system if it is running. For complete procedures, refer to section 2.5.
2. Insert the VP system installation CD-ROM in the CD-ROM drive and close the drive. The PC automatically launches the installation wizard. (If the installation program does not automatically launch, from the Start button at the bottom of the Windows NT desktop, select Run, then in the Run dialogic box, select the CD-ROM drive in the LOOK IN field. Double-click on the SETUP.EXE file.)
3. On the WELCOME screen, click on the Next button.
4. On the SELECT COMPONENTS screen, click on the Custom button.
5. From the screen that displays, check the GammaLink option and clear all other options. To continue, click on the Next button.
6. On the START SELECTED INSTALLATIONS screen, click on the Next button. The GammaLink system setup starts.
7. On the WELCOME screen for GammaLink Fax software, click on the Next button.
8. On the LICENSE AGREEMENT screen, click on the Yes button.
9. If a Warning message displays indicating that an existing installation was detected, click on the Next button to continue the installation and overwrite the existing files.
10. On the SELECT TYPE screen, verify Typical is selected, then click on the Next button. A progress bar displays as the software installs.
11. On the GAMMALINK COUNTRY ASSIGNMENT screen, highlight the board found from the Board Type list displayed and click on the Change Country button. Highlight the country in which the VP system is being installed, then click on the OK button. To continue, click on the Next button.
12. On the QUESTION screen, click on the No button.
13. On the SETUP COMPLETE screen, click on the Finish button. There is a pause while the installation completes.
14. From the second SETUP COMPLETE screen, verify the option Yes is selected to restart the system, then click on the Finish button.
15. The PC reboots and the VP system restarts automatically.

To install the GammaLink software and configure each board on DOS-based VP systems:

1. Shut down the VP system if it running.
2. Insert the GammaLink diskette labeled Disk 1 into the diskette drive.
3. From a DOS prompt type A : INSTFAX A C then press <Enter>.
4. When prompted, insert Disk 2. To continue, press <Enter>.
5. From the C:\VMFAXG prompt, access the C:\VMFAXG\BIN sub-directory by typing CD BIN then pressing <Enter>.
6. Run the setup program by typing GFXSETUP then pressing <Enter>.

7. When the setup program finishes initializing, at the prompt, press <F2> (scan all addresses). The setup program detects all fax channels in the PC. If it does not detect all channels, re-configure the fax board(s) using different I/O addresses.
8. Press <Esc> to exit the setup program. The program indicates that it will change the fax configuration file.
9. To continue, press <Enter>.
10. Type FAXNUM then press <Enter> to run the Faxnum utility. This utility verifies the link and address for each board. If the utility indicates a fax link other than CC, note the link indicated.
11. Restart the computer. Continue with the following procedure for making necessary file modifications. If you are installing multiple boards, you can make these modifications once, after the last board has been configured using this procedure.

To make necessary file modifications for GammaLink boards on DOS-based VP systems:

1. Shut down the VP system if it is running.
2. Change to the directory in which the VP system is installed (by default, the \VM directory).
3. Using a text editor, access the VM.CFG file. If you are using the DOS editor for example, type EDIT VM.CFG then press <Enter>.
4. Add the following lines to the VM.CFG file:

```
FAX LINK=CC
SAME CALL FAX OK
```

Note: If the Faxnum utility indicated a fax link other than **CC**, indicate that link above instead of **CC**.

5. Save and exit the file.
6. Using a text editor, access the VERBATIM.BAT file. If you are using the DOS editor for example, type EDIT VERBATIM.BAT then press <Enter>.
7. If the system is using Rhetorex voice boards, add the lines shown below immediately before the line that begins RHETDRV. If the system is using Dialogic voice boards, add the lines shown below immediately before the line that begins VMAIL:

```
CD\VMFAXG\BIN
I3LOAD
CD \VM
```

8. If the system was pre-loaded with GammaFax software, and you are re-loading the software at this time, remove the following lines from the top of the VERBATIM.BAT file, if they exist:

```
\VMFAXG\BIN\FAXNUM\VMFAXG\BIN\I3LOAD.INI
\VMFAXG\BIN\I3LOAD\VMFAXG\BIN\I3LOAD.INI
```

9. Save and exit the file.
10. If the VP system is being installed to use a switch that does not use dialtone (such as a Comdial switch), you must modify the I3LOAD.INI file in the sub-directory C:\VMFAXG\BIN. Using a text

editor, access the I3LOAD.INI file. If you are using the DOS editor for example, from the C:\VMFAXG\BIN directory prompt, type EDIT I3LOAD . INI then press <Enter>. After the line that reads [GAMMAFAX], add the following line (with no blank line after it):

```
DIAL_PROGRESS_MODE = NONE
```

11. Save and exit the file.
12. Restart the computer.

23.3 Sharing Fax Ports

If a caller requests a fax be sent on the current call, the VP system determines whether there is a fax board connected to the current line. If so, the call continues. If the current line is not connected to a fax board, the VP system checks the configuration file VM.CFG to see if fax-port sharing is permitted (see section 12 for more information).

To indicate fax port sharing is permitted, insert the following line in the VM.CFG file:

```
SHARE FAX PORTS
```

If fax port sharing is permitted, the VP system hook-flashes and dials the extension number of a voice mail port that is both free and attached to a fax board. Once the called voice mail port answers, the original voice mail port releases the call to the port attached to a fax board.

If the original port is unable to connect to a fax-enabled port, it informs the caller that all fax lines are busy, and it offers the caller the option to hold.

To set up the system to permit fax port sharing:

1. Shut down the VP system if it is running. See section 2.5 for procedures.
2. From the \VM directory, run the program EXTNS.
3. When prompted, enter the extension number of each voice mail port , then press <Enter>.
4. Once you have entered an extension number for each voice mail port, press <Esc>.
5. You are asked to confirm the extension numbers. Press **Y** to indicate they are correct.
6. Using a text editor, access the VM.CFG file. If you are using the DOS editor for example, type EDIT VM . CFG then press <Enter>.
7. Edit the VM.CFG file by inserting the following line:

```
SHARE FAX PORTS
```

<p>Note: If the telephone system does not allow one voice mail port to perform a supervised transfer to another voice mail port, use this line in the VM.CFG file:</p>

```
SHARE FAX PORTS = BLIND
```

8. Save and exit the VM.CFG file.

9. Re-start the VP program.

23.4 Using Enhanced Fax Configurations

23.4.1 Using Fax Boards with Dedicated Telephone Lines

If the VP system is handling many fax requests, you may find access to standard features (voice mail and auto attendant) is being limited. You may want to re-configure the system to give the fax boards their own, dedicated telephone lines. Although the voice boards are still involved with the fax *requests*, the actual fax *transmissions* do not involve any of the VP system's voice-processing facilities.

Be advised, there are distinct limitations when using this configuration:

- The same-call fax distribution feature is not available.
- You cannot send a fax to the VP system from the fax machine. All faxes must be loaded from files (see section 24).
- The fax broadcast feature (see section 24) is not available.

To set up the system to use fax boards with dedicated phone lines, you must adjust the connection of the phone lines, adjust system settings, and set up necessary external dialing rules:

- **Connecting to the Phone Lines**—An example of a VP system with 4 voice ports (lines 1 - 4) and 4 independent fax lines (lines 5 - 8) is shown in Figure 23-3. Consult this illustration for information on connecting the phone lines on the VP system with which you are working.
- **Adjusting System Settings for Fax Boards Using Dedicated Telephone Lines**—On the FAX SETUP screen (see section 24), specify `LINE 0` (VP systems) / `PORT 0` (NT systems) as the connection for all fax boards. Also include the configuration file option `EXTERNAL FAX` in the `VM.CFG` file (see section 12).
- **Setting Up External Dialing Rules when Using Dedicated Telephone Lines**—Create any required Insert and Delete rules (see section 7).

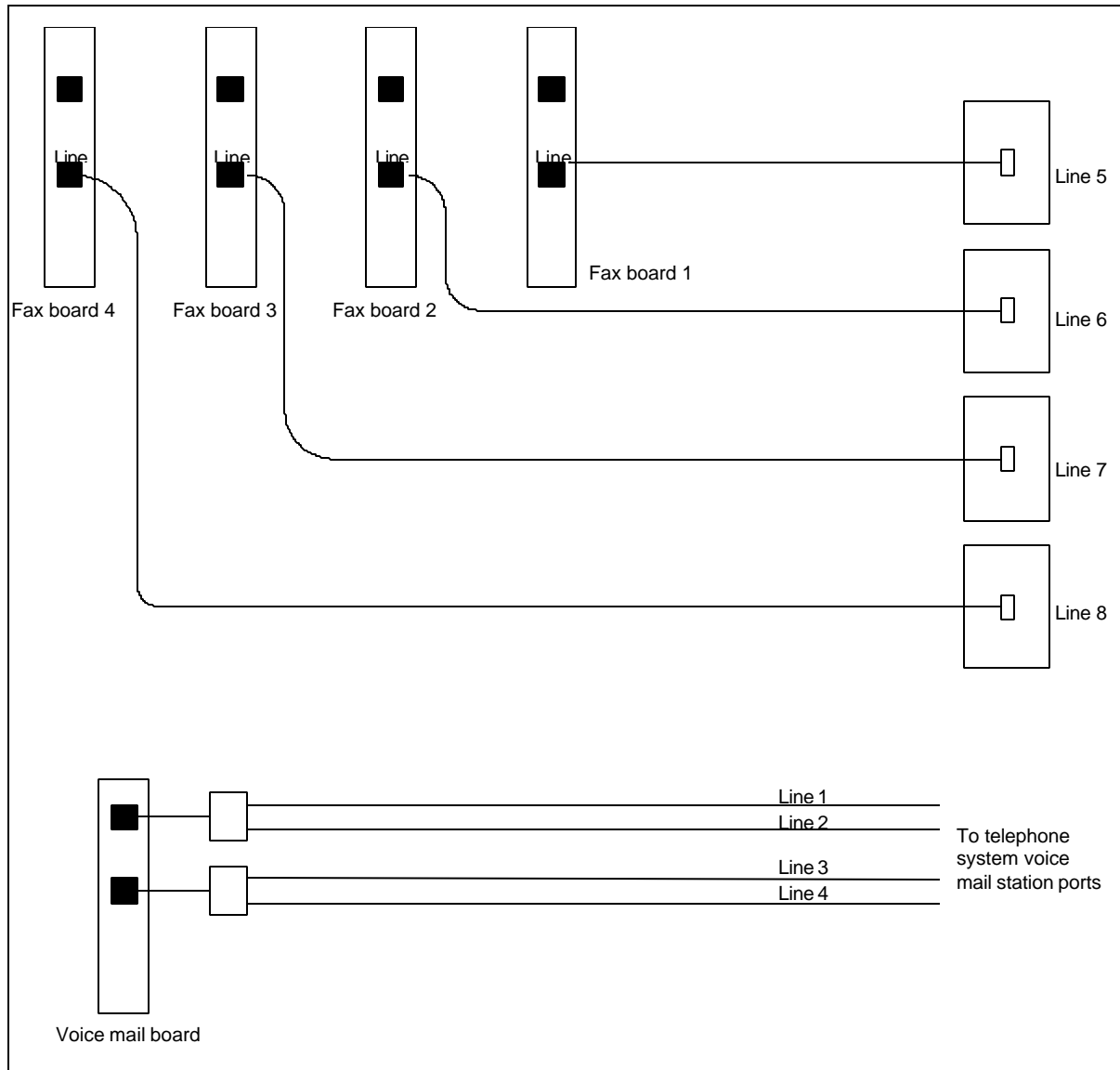


Figure 23-3 Connecting the Fax Boards to Dedicated Telephone Lines

23.4.2 Using a Third-Party Application to Send Faxes

The VP system allows you to send faxes via a third-party fax server instead of the integrated fax distribution configuration. When a caller orders one or more fax documents, the order is placed in a file that is located in a directory on a network server drive or a drive in a dedicated fax server. The third-party application can then "pick up" this order and send the required fax documents.

This configuration has the advantage of being able to fulfill a high volume of fax requests without sharing the resources needed to process voice mail and auto attendant functions. However, the following features are not available:

- The same-call fax distribution feature
- Fax broadcasting using the VP system Outbound telemarketing software

Installing the Hardware

You must install a compatible network board in the VP system PC. Follow the manufacturer's installation instructions, taking care that the network board does not use any memory addresses or hardware interrupts (IRQs) required in the basic VP system configuration.

Programming the Fax Box

The Fax box data should be entered as described in section 24. In the field DOCUMENT FILE-NAME, enter the drive number, directory, and file name of the document contained in the Fax box. For example, if the VP system node on the network considered the hard disk drive of the fax server to be drive M, and the fax documents are in the directory FAXDOCS, the entry in this field is:

```
M:\FAXDOCS\<>filename>.PCX
```

Adjusting System Settings for Third-Party Fax Server

When programming the FAX SETUP screen, specify that faxes are to be sent using the method CALL BACK ALWAYS.

Other entries you must make on the FAX SETUP screen and whether you must use external dial rules depends on the dialing capabilities of the third-party fax server software. The fax documents themselves reside on the remote fax server, which also assumes the task of dialing the caller's fax machine and sending the requested fax(es). If that unit requires only the caller's 7 or 10 digit telephone number and can add any necessary prefixes and delete any unnecessary area codes, then the balance of this may be left at its default value, and no dial rules need be built. However, if the fax server can only dial the exact numbers sent to it in the fax order (see below), you must follow procedures in section 24 to ensure the VP system examines the callback digits entered by the party requesting the fax(es), then inserts and /or deletes the required digits before placing the numbers in the fax order file.

Understanding the Fax Order File

When a caller orders one or more fax documents, the order is sent to a file located in a directory with the default name FAXORDER (this can be changed as explained later in this section). The format of the file is as follows:

```
date time
sender's company name
recipient's fax machine telephone number
recipient's extension (or ID) number
cover page filename (no path)
filename of the first fax document (including path)
filename of the second fax document (including path)
file name of the third fax document (including path)
```

To demonstrate how the VP system sends a typical fax order request, assume the following:

- A caller has requested 3 documents to be delivered to 555-1212, attention of extension 1122.
- The fax server can only dial the exact digits within the fax order, and the fax boards being used recognize the * digit as a pause.
- The fax server is connected to PBX extensions, and it must dial a 9 to get an outside line.

- The 555 exchange is a long-distance call and requires a **1** prefix.
- The FAX SETUP screen specifies NO COVER PAGE and EXT (for an external dial rule).

Under these conditions, the fax order sent to the server looks like this:

```
01-18-94    15:55:10
ACME Sales Company
9*15551212
1122
```

(This line is blank as there is no cover page.)

```
M:\FAXDOCS\PRICES.PCX
M:\FAXDOCS\CONTRACT.PCX
M:\FAXDOCS\PICS.PCX
```

The VP system automatically generates a filename for this fax order in the format:

```
FB000xxxx.FBX
```

where xxxx is an order number in the range of 0000 through 9999. When the order numbers reach 9999, it automatically resets to 0000.

Adjusting the Configuration File

To tell the VP system you are using the third-party fax server option, enter the following line in the VM.CFG configuration file (see section 12):

```
CUSTOM = 32
```

To designate a different network drive for the fax order files and/or to use a directory name other than the default FAXORDER, enter:

```
FAX ORDER PATH = <drive> \ <directory>
```

For example, if you want to place the orders in the directory ORDERS on the G drive, enter:

```
FAX ORDER PATH = G:\ORDERS
```

Note: The drive location of the fax documents is not necessarily the same drive as the fax orders (drives M: and G:, respectively in this example).

The VP system also automatically creates a file in the FAXORDER directory with the filename SERIAL.TXT. This file contains the VP system serial number and is provided for the use of the third-party fax application. It may be used, ignored, or deleted at any time.

Call Logging Files

The only VP system log files available with this configuration are those that record calls to the Fax box. This would not necessarily indicate that a document was sent, since the caller may have listened to the document description and decided not to order the document.

Also, the VP system does not keep copies of the fax orders it sends to the fax server. If possible, set up the fax server program to add a time and date stamp to fax orders after they have been filled and store these records to its own log file.

24. Using the Fax Distribution Module

Note: Refer to instructions in section 23 for information on installing the Fax Distribution module on VP systems.

Using the optional Fax Distribution (also known as *Fax Retrieval*) module, you can store fax documents on the VP system and allow callers to retrieve them. Any mailbox owner can be given the ability to send fax documents into the VP system. Any caller can then call in to retrieve those documents.

Note: You can control caller access to documents by assigning passwords to documents. The VP system prompts callers to enter the document's password before permitting fax access to the document.

A caller can retrieve a fax two ways:

- Using the Call Back method, the caller identifies which document(s) he/she requests, then enters the number of his/her fax machine. The VP system calls the fax machine and delivers the documents.
- Using the Same Call method, the caller must be placing a call from a fax machine *and* the VP system line receiving the call must be connected to a fax board or fax-port sharing must be enabled. The VP system faxes the caller the document(s) he/she requests during the same call.

24.1 Setting up a Fax Box

Every fax document is contained in a Fax box, and each Fax box contains one document, referenced by a DOS filename. This file in the Fax box can contain several pages of text or graphics.

24.1.1 Accessing the Fax Box Screen

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access the Fax box screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select FAX BOX. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access the Fax box screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select FAX BOX. When you have made any necessary modifications to the screen press <F10> to save the changes or click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: **To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.**

24.1.2 Fax Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field displays the Fax box number. A box number can be any number between 1 and 9899 (boxes 9900 - 9999 are reserved for the system). You cannot change the box number on the screen. To view a new box, use keys <F4> (select a box number), <F5> (previous Fax box), or <F6> (next Fax box). To add a new Fax box, press <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name
NTVP: Box Name

This field identifies the name of the Fax box. The name is used for administration purposes only, and it appears in the database listing.

VP: Document Name Recorded
NTVP: Name Recorded button

This field identifies whether the document name has been recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The name is normally a short description of the document (for example, “ Summer price list”). When a caller requests this document, the document name is played to confirm that this is the correct document:

“Summer price list. If this is correct, press 1.”

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the name. By selecting RECORD you can record the name via a telephone line connected to the voice processing board. To record the name, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the name. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the name by clicking on the Record Name button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Owner Box
NTVP: Owner

This field contains the mailbox number of the owner of the Fax box. The owner is the only caller who can send a fax document into the Fax box (all other callers can retrieve the document).

VP: Document File-Name
NTVP: Document Filename

This field identifies the actual file containing the fax document. If the files do not reside in the default directory \VM\M, then you must include the full path and filename.

If you leave this field blank, the VP system automatically names the files for you and places them in the \VM\M directory.

VP: Document Type
NTVP: Document Type area

If the document to be placed in this box is a text file, this field must be set to TEXT (or WIDE TEXT if there are more than 80 characters per line), otherwise it should be set to GRAPHICS. If the document is faxed into this fax box, select GRAPHICS.

If you are using this Fax box to send IVR confirmation (in conjunction with the optional IVR module), select IVR RESPONSE.

VP: Document Security Code
NTVP: Document is Password Protected

This field identifies the security code a caller must enter to access the document. The security code allows you to restrict access to a document (specify the code using digits 0 through 9). The fax is not sent unless the code is entered correctly by the caller. Leave this field blank if you do not want to protect this document.

VP: When Exiting Box, If Caller May Order More Documents
NTVP: If Caller Can Order More Documents

Once the VP system has confirmed that the document will (or will not) be delivered, it continues with the call. It tells the caller how many more documents he/she can order on this call. If the caller has not yet ordered the maximum number of documents, the call follows the routing instructions indicated in this field. The options are:

Option	Description
GO TO BOX	Choosing this option allows the call to be routed to another box. The new box number can be entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the box from which it came.
HANG UP	The VP system immediately hangs up.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. The field contains the box number to which the call is to be routed if the caller enters a valid account number.

VP: When Exiting Box, If Caller Has Ordered Max Number of Docs
NTVP: If Maximum Number of Documents Ordered

If the caller has ordered the maximum number of documents, the call follows the routing instructions indicated in this field. The options are:

Option	Description
GO TO BOX	Choosing this option allows the call to be routed to another box. The new box number can be entered in the next field.
SAY GOODBYE	The VP system says, "Good-bye," then hangs up.
RETURN	The VP system goes back to the box from which it came.
HANG UP	The VP system immediately hangs up.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. The field contains the box number to which the call is to be routed.

24.2 Setting up System Settings for Fax

There are several system parameters you can change to customize operation of the Fax Distribution module. You modify these parameters on the FAX SETUP screen.

24.2.1 Accessing the Fax Setup Screen

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access the Fax Setup screen through the DOS-based VP system screen interface:

1. From the VP system main screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select FAX SETUP. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the System Information menu.

To access the Fax Setup screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the System pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select FAX SETUP. When you have made any necessary modifications to the screen press <F10> to save the changes or click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens are discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

24.2.2 Fax Setup Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Fax Cover-Page Preference
NTVP: Fax Cover Page area

This field allows you to specify whether and what type of cover page the VP system is to generate with the fax. If you choose **DEFAULT** from the menu, the VP system sends the default cover-page, which contains the company name and the extension number of the recipient of the fax. It also contains the company logo, if you specify the name of a file in the next field (see below). If you choose **CUSTOM**, the VP system transmits the contents of the file you specify in the next field (see below). If you choose **NONE** or **NO COVER PAGE**, then no cover page is sent.

VP: Filename for Cover-Page Logo
NTVP: Custom – From File

This field identifies the name of the file to be used as or on the fax cover page. If the fax cover page option is set to **CUSTOM**, specify in this field the name of a **.PCX** file (VP systems) / **.TIF** file (NTVP systems) containing the image you want the VP system to send as a cover page. The file should be stored in the directory housing the VP system (by default this is **\VM**). If you selected **DEFAULT** as the fax cover page option, and you want to have the company logo included on the cover page, specify in this field the name of a **.PCX** file (VP systems) / **.TIF** file (NTVP systems) containing the logo. This file also should be stored in the directory housing the VP system.

Note: To create a **.TIF** file on the VP system containing a custom fax cover page, fax the document you want to use into a file on the VP system by following the procedures for Faxing a Document on Disk into the VP System or Faxing a Document on Paper into the VP system.

VP: How to Transmit Faxes
NTVP: Send options area

This field allows you to specify how faxes are to be sent to callers. The options are:

Option	Description
OFFER OPTION	If there is a fax board connected on this line (or fax-port sharing is enabled), the VP system asks the caller if he/she is calling from a fax machine. If the caller is calling from a fax machine, then the VP system sends the documents before ending this call. If the caller is not calling from a fax machine, then the VP system asks the caller for the number of the fax machine to which it should send the documents. At the end of the call, the VP system looks for a line that is free and that has a fax board connected to it. It uses that line to make an outgoing call to the number supplied by the caller.
CALL BACK ALWAYS	The VP system never sends fax documents as part of this call. It always asks the caller for his/her fax number (and also an extension number, if you are using the default cover-page option), and calls the number back.
SAME CALL ALWAYS	The VP system never offers to call the caller's fax machine. It sends the documents as part of the current call. This means that the caller must be calling from a fax machine. You should make this clear to the callers before routing them to a Fax box. Do not use SAME CALL ALWAYS unless you have a fax board connected to every line or fax-port sharing is enabled.

The flow chart in Figure 24-1 illustrates how the VP system uses this information.

VP: Max Faxes We Will Send Per Call
NTVP: Maximum Number of Documents to Send per Call

A caller can request more than one document per call. The VP system accepts orders for up to ten documents. If you want to restrict callers to fewer than ten documents, enter the new number here. Once a document has been ordered, the VP system tells the caller how many more documents he/she can order on this call. For example:

“You may order up to 4 more fax documents.”

If a caller attempts to order more than the allowed number of documents, the VP system says:

“I'm sorry, you have already ordered the maximum number of faxes.” and continues as normal.

VP: Sending Resolution
NTVP: Resolution area

This field indicates the resolution at which the fax is sent. Select FINE if you want to send faxes at the higher resolution. Select STANDARD for lower-resolution faxes. High-resolution faxes take longer to send, but may look better.

VP: Fax 1 is Connected to Line
NTVP: Fax Port 1 is Connected to Voice Port (*Wiring tab*)

Fax boards and the voice boards share telephone lines. Any fax board can be connected to any telephone line. Use this field to tell the VP system to which line fax board 1 is connected. Enter **0** if fax board 1 is not used.

VP: Fax X is Connected to Line
NTVP: Fax Port X is Connected to Voice Port (*Wiring tab*)

If you are using more than one fax channel, use these fields to indicate to the VP system to which lines fax channels 2 through 16 are connected. Enter **0** to indicate that a particular fax channel is not in use.

Note: The remaining fields of the FAX SETUP screen and the external dial rules define how the VP system dials the caller's fax machine. If the system is connected to a key system, PBX, or Centrex, the same rules specified in the field DIGITS TO GET A LINE ON EXTERNAL CALL (GENERAL INFORMATION screen (VP systems) / PBX INFORMATION screen (NTVP systems)) apply. If, for example, you have Centrex service with 4-digit extensions and the caller's fax machine is on an extension at another location, the VP system does not insert a **9**. If another caller leaves a 7 or 10 digit callback number, the system inserts a **9** plus any other modifications as explained below.

VP: Digits to Strip From Callback Number
NTVP: Digits to Strip from Callback Number (*Miscellaneous tab*)

When a caller is entering the number of his/her fax machine, he/she will probably enter the area code. To prevent the VP system from dialing the *local* area code, enter it in this field. Before making a call, the VP system checks the leading digits of the number it is about to dial. If these digits match the digits in this field, then the VP system strips them from the number. For example, if the local area code is 305, and the caller enters the fax number as 305-555-1234, the VP system dials 555-1234 when making the call.

Note: If you need to modify the number entered by the caller in some other way (for example, if you need to strip out the area code only for certain calls or you need to prefix a 1 on certain 7-digit numbers), enter EXT in this field, to tell the VP system to look for a file containing this information. The VP system looks in the VP system directory—by default this is \VM—for the file DIALRULE.TXT. You must create this file, and enter the information (see section 7.25).

VP: Prefix a Digit-1 For Long-Distance
NTVP: Insert a '1' for Long-Distance (*Miscellaneous tab*)

Note: If you entered EXT in the previous field (for external dial rule), this field is not used and should be left blank.

In the North American numbering plan, a caller must dial a 1 before making a long-distance call. If you set this field to YES, then the VP system counts the number of digits in the callback number. If there are exactly 10 digits (area code plus telephone number), the VP system automatically inserts the digit 1 in front of the number. Note that the VP system strips off the local area code entered in the previous field first, before counting the digits.

VP: If Call Fails, Try X More Times
NTVP: If Call Fails, Try X More Times (*Miscellaneous tab*)

When the VP system makes an outgoing fax call, it monitors the call to see if the fax was transmitted successfully. If not, it can retry up to the number of times specified in this field.

VP: At Intervals of X Minutes
NTVP: At Intervals of X Minutes (*Miscellaneous tab*)

If the called fax machine is busy or does not answer, you can program the VP system to make several attempts to get through. Use this field to tell the system how long it should wait before trying again. While waiting, the VP system continues processing other queued fax requests.

VP: Path for Fax Distribution Documents
NTVP: Directory for Fax Distribution Documents (*Miscellaneous tab*)

Indicate where you want to store the fax distribution documents. Each time you add a new fax document, it is stored in this location. The default is the \VM\M directory.

VP: Path for Fax-Mail Documents
NTVP: Path for Fax-Mail Documents (*Miscellaneous tab*)

If you are using the optional FaxMail module, indicate the path where you want for the incoming fax documents to be stored. The default is the \VM\FAXMAIL directory. See section 25 for details on the FaxMail module.

24.2.3 Setting up Fax Distribution Restrictions

When callers are retrieving documents using the callback method, the VP system requests them to enter the telephone number of their own fax machine. You may use fax restriction fields to restrict certain area and / or office codes, or to restrict “nuisance” calls (911, 1900, etc.).

NT-based VP system users can access fax restriction fields on the Restricted Numbers tab of the FAX SETUP screen. DOS-based VP system users access fax restriction fields using the following procedure:

To access the Fax Restriction screen through the DOS-based VP system screen interface:

1. From the VP system main screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select FAX RESTRICTIONS. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the System Information menu.

Note: The field name used in both the DOS-based VP systems and NT-based VP systems is identified with each field description. Fields used in DOS-based VP systems are prefaced with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

VP: Restriction Type
NTVP: Restriction Type (*Restricted Numbers tab*)

This field identifies the restriction type. The options are (NTVP system options are worded slightly differently):

Option	Description
ALLOW ONLY THESE	The VP system prohibits all calls except those to numbers indicated in the following fields. This is the most secure form of restriction, since you can restrict calls to individual area codes, area code / office code combinations, or even individual telephone numbers.
BLOCK ONLY THESE	The VP system allows all calls except those to numbers indicated in the following fields. Typically, you block calls to the operator (0), calls to 911, calls to 1-900 numbers, and calls to 976 and 1-976 numbers.

VP: Digits
NTVP: Digits (*Restricted Numbers tab*)

These fields allow you to define up to 20 digit sequences that should be blocked or allowed (depending upon what you selected for RESTRICTION TYPE). The VP system looks at each DIGITS field to determine if any entry matches the callback number entered by the caller. If the callback number begins with any of the digit sequences entered in these fields, the VP system considers this a match and allows or blocks the call.

Note: The VP system looks for a match in the Digits field based on the callback number entered by the calling party before any digit prefixing, digit stripping, or external dial rules are applied. Even though the system prompts the caller to enter only his/her area code and telephone number, you must allow for the case where the caller also enters a 1. Therefore, to provide a positive block for 900 numbers, for example, you need to enter both 900 and 1900 in a Digits field.

Be advised that the VP system looks for a match for only the digits you have entered. For example, if you selected BLOCK ONLY THESE and you entered 1900 in one of the DIGITS FIELDS, 1-900-555-1212, 1-900-123-4567, and 1-900-111-2222 are all considered matches and these callback numbers are blocked. Telephone number 1-901-555-1212 is *not* considered a match and is allowed.

If you enter the digit 0 in one of the DIGITS fields, the VP system considers all numbers beginning with 0 to be matches. This would include 0, 00, 0+ and 011+ calls.

24.3 Sending a Fax into a Fax Box

The document you want to place in a Fax box may exist in one of two forms:

- A file on the computer disk
- A document on paper

24.3.1 Sending a Document on Disk into a Fax Box

<p>Note: On DOS-based VP systems, documents must be stored in the .PCX file format. On NT-based VP systems, documents must be stored in .TIF file format.</p>
--

To send a document on disk into a Fax box:

1. Access the FAX BOX screen as described in section 24.1.
2. Complete all fields using information provided earlier in this section.

In the FILENAME field, indicate the complete filename of the document. Include the directory path before the filename if you are storing the document file in a directory other than the default set on the FAX SETUP screen). Do not store documents on diskette in the diskette drive, as access time is significantly slowed.

3. Press <F10> to exit from the Fax box.

<p>Note: On NT-based systems, you can use the Fax from the Desktop feature in VCM to fax a document created in a Microsoft Windows application directly into a Fax box (requires VCM version 2.1.7 or higher). To do so, access the document in the Microsoft Windows application. Print the document as you would if you were faxing it from the desktop (select FAX FROM THE DESKTOP as the printer). When the FaxDrv screen displays, de-select the FAX COVER PAGE option and clear the FROM, TO, COVER SHEET, SIGNATURE, and LOGO fields. Select the TO VM FILE option. Select the Send button to transmit the document. On the FAX TO FILE screen, check the FAX DIRECTORY ON VOICE MAIL option. Type the filename of the document (do not change the default directory shown unless necessary). Complete steps 1-3 above to indicate the filename you typed on the appropriate FAX BOX screen.</p>
--

Be advised that if you follow the procedure to fax a *paper* document into a fax box, the VP system automatically creates a file in which the document is stored. If, in this procedure, you do not indicate a specific filename, the file is named using the following convention: FX00xxxx.FAX, where xxxx is the box number (if the box number is less than 4 digits, include leading zeros so the filename is 8 characters in length plus the extension). For consistency, you may want to follow this convention when you type a filename for a document you send into a fax box through VCM.

You have now placed the document in the Fax box. Callers are able to access the document by routing to the Fax box in the same way they route to any other box (for example, by entering the Fax box number or making the appropriate selection in a Routing box).

24.3.2 Sending a Document on Paper into a Fax Box

To send a document on paper into a Fax box:

1. Access the FAX BOX screen as described in section 24.1.
2. Complete all fields using information provided earlier in this section.

In the FILENAME field, you can indicate the complete name of the file in which you want to store the fax document on the system. Include the directory path before the filename if you want to store the document file in a directory other than the default set on the FAX SETUP screen, which is the \VM\M directory.

If you leave the FILENAME field blank, the VP system will automatically name the document file it creates using the following convention: FX00XXXX.FAX, where XXXX is the box number (if the box number is less than 4 digits, leading zeros are included so the filename is 8 characters in length plus the extension).

Specify GRAPHICS as the document type.

3. Press <F10> to exit from the Fax box.

The Fax box has now been created. Now you must fax the document into the box.

1. From a fax machine, call in to the VP system on a line to which a fax board is connected (or on *any* line, if fax-port sharing is enabled).
2. When the VP system answers, open the mailbox assigned as the owner of the Fax box (by routing to the voice mail gateway, then entering the mailbox number and password).
3. The VP system plays the Main menu.

“To listen to your messages, press 1.

To send a message, press 2.

To change your options...”

4. Press 7 for fax options. The VP system prompts you for a Fax box number.
5. Enter the Fax box number. The VP system verifies you are the owner of the Fax box, then plays the document name and number for confirmation.
6. Press 1 to confirm this is the correct Fax box. The VP system prompts you to press START on the fax machine.
7. Press the START button to fax the document into the VP system. The document is accepted by the VP system and placed in the specified Fax box.

24.4 Retrieving a Fax from the VP System

To give a caller access to a document, simply route the call to the Fax box containing the document. The VP system plays the document name to confirm the caller's selection. Once the caller has confirmed the document is the one he/she wants to receive, the VP system determines how it is going to send this and other documents ordered during the call. Figure 24-1 shows how the VP system makes its determination:

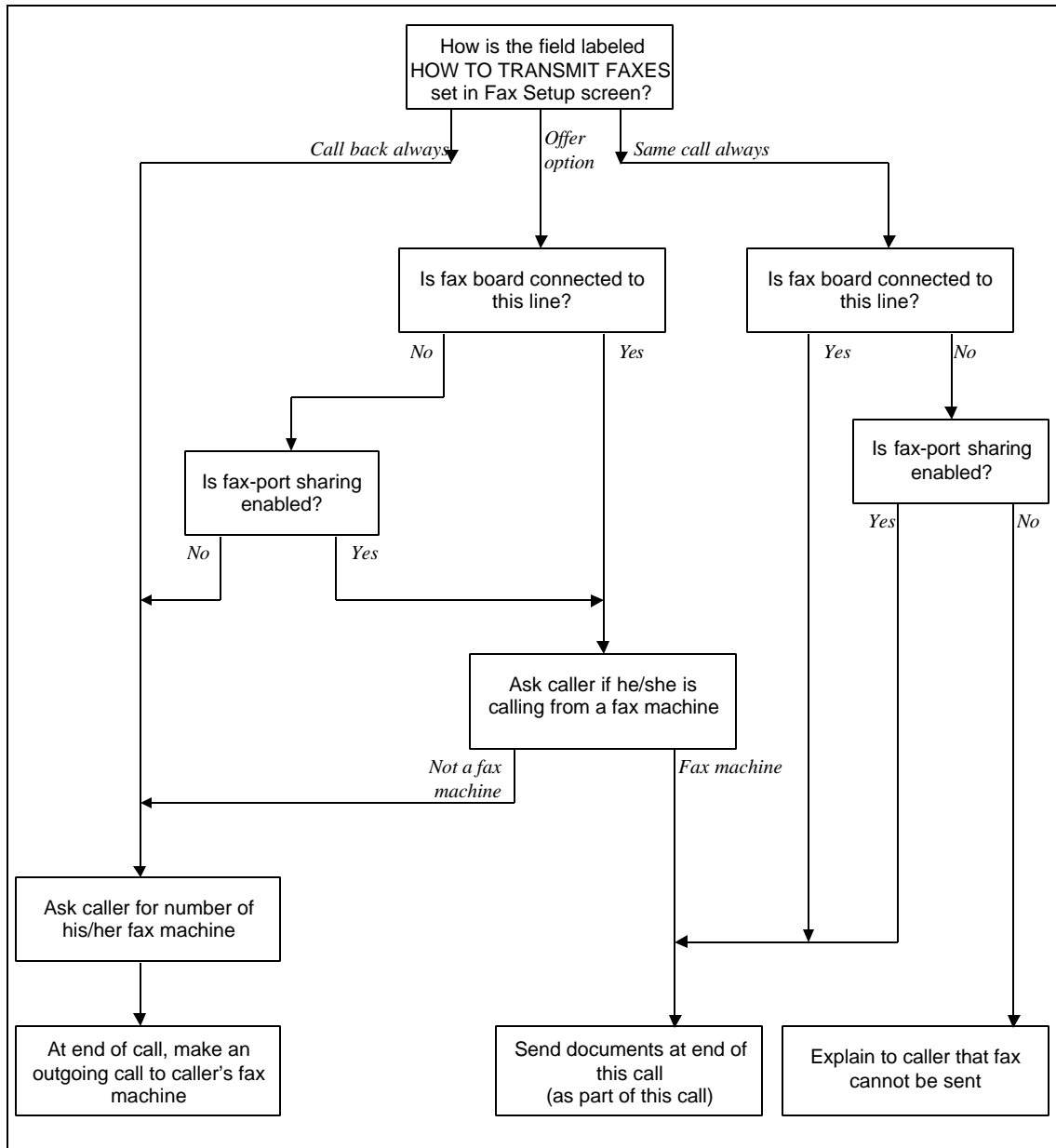


Figure 24-1 Determining How to Send Fax Documents to the Caller

Assume, for example, John Smith has two documents he wants to make available to the public, a price list and a product catalog. These exist on paper, so he follows the steps outlined above to place them in Fax boxes 4000 and 4001 respectively .

Also assume John has set the following options on the FAX SETUP screen:

Fax cover page preferences:	Default
How to transmit faxes:	Offer option
Max faxes we will send per call:	4

A customer, Mary, calls in for a price list and hears the greeting recorded in John's initial Routing box.

“Welcome to Smith Products. If you know the extension number of the person to whom you want to speak, please dial it now. If you would like us to fax you a price list, dial 4000, or for a product catalog, dial 4001. Otherwise, stay on the line, and an operator will be right with you.”

Mary dials 4000. The VP system routes the call to Fax box 4000 then plays the document name recorded by John when he set up this Fax box. The VP system then asks Mary to confirm her choice:

“Smith Products summer price list. If this is correct, press 1.”

Mary presses 1 to confirm that this is the document she wants. The VP system looks at the field on the FAX SETUP screen and sees that it should offer the caller the option of having the documents transmitted on this call or via a callback. The VP system prompts Mary to indicate whether she is calling from a fax machine:

“If you are calling from a fax machine, please press 1.”

Mary is calling from a regular telephone, so she presses 2 (or does nothing), to tell the VP system that she is not calling from a fax machine. The VP system now knows it must send the documents by making an outgoing call to the caller's fax machine, so it asks for the telephone number:

“Please enter the telephone number of your own fax machine now.”

Mary enters the telephone number 555-1234. The VP system asks Mary to confirm the number:

“The number is 555-1234. If this is correct, press 1.”

Mary confirms this is the correct number. Since the VP system will be sending the default cover page (see assumptions above), it can insert an identifying number (for example, an extension number) into the cover page. The VP system gives Mary the option to include this information:

“If you have an extension number, please enter it now.”

Mary can enter up to 10 digits. The VP system then indicates that it will send the document:

“That fax will be sent when you hang up.”

It then tells Mary how many more documents she can order during this call:

“You may order up to 3 more fax documents.”

John has configured Fax box 4000 to go to another Routing box when the caller requests no more faxes. The VP system routes the call to that Routing box, and the call continues as normal. At the end of the call, the VP system places the fax request on a queue for the fax board. The fax(es) will be sent when this request gets to the top of the queue.

When Mary's request reaches the top of the queue, the VP system examines the telephone number that Mary entered. Before dialing the number, the VP system may need to add digits or remove digits. For example, assume Mary is in area code 305 and the VP system is also in area code 305. When Mary entered her fax telephone number, she may have included the area code (305-555-1234). If John has configured the VP system to strip area code 305 from entered numbers, the VP system dials only 555-1234.

Alternatively, assume Mary is in a different area code such as 919. She enters her fax number as 919-555-1234. Because this is a different area code, the VP system must dial a 1 first. To accommodate this situation, John must indicate during setup that the VP system should prefix all 10-digit numbers with a 1.

These two settings are sufficient for most applications. However, there are occasions when the telephone network requires you to prefix some 7-digit numbers with a 1. Also, there are occasions when you are required to include the area code in the dialed number, even when dialing within the same area code.

If you install the VP system in an area where these factors apply, you need to provide the VP system with extra information (as explained earlier in this section), so it knows when to prefix digits and when to remove digits.

24.5 Setting Up Fax Broadcasting

If you want the VP system to send a fax document to several fax machines, you can use the Fax Distribution module in conjunction with the optional Outbound Telemarketing feature package.

To broadcast a fax document, there four general steps:

1. Create a text file containing a list of the fax telephone numbers you want the VP system to dial.
2. Create a Fax box containing the fax document to be transmitted.
3. Include the following statement in the configuration file `VM.CFG`:

```
FASTFAX
```

4. Set up a Telemarketing box to process the list of numbers (see section 28). Enter the number of the Fax box created in the `ON ANSWER, GO TO BOX` field of the Telemarketing box.

24.6 Logging Fax Calls

24.6.1 Using the General Call Log File

When you use the fax distribution module, the general call log file (`VOICMAIL.LOG`) includes an entry for outgoing fax calls. This entry is denoted by `F` in the `CALL TYPE` field of the log. The `AUDIT TRAIL` fields indicate which faxes (Fax boxes) were sent.

Note that this call type log record is generated only for those documents transmitted using the fax callback option. If the fax documents were sent using the same-call method, the Fax boxes display in the incoming-call record only.

Also note that this log indicates that a call was made, it does not indicate whether or not the fax was successfully transmitted. The fax log file (see below) gives details about the result of the transmission.

24.6.2 Reviewing the Fax Log File

The VP system keeps a log of all outgoing fax calls. The log file includes the time and date of the call, the destination fax number, the contents of the 'To' and 'From' fields, and the result (for example, Success, Busy, etc.).

If an EXPORT PATH is defined in the VM.CFG file, the log file is stored there, under the name VMFAX.LOG. If no export path is defined, the file is stored in the same directory as the general call log files (by default, the \VM\M directory). At midnight each night, the VMFAX.LOG file is renamed to FAXmmdd.LOG, where **mm** is the current month, and **dd** is the day that has just ended. For example, at midnight on July 23, the VMFAX.LOG file is renamed to FAX0723.LOG. A new VMFAX.LOG is generated as soon as a new fax call is made on July 24.

24.7 Using Fax Distribution Prompts

24.7.1 Using New Prompts

The following prompts are used by the Fax Distribution module:

Prompt	Filename	Contents of Phrase
1100	FAXCONF.VOI	"That fax will be sent when you hang up."
1101	FAXCANCL.VOI	"That fax will not be sent."
1102	ENTERFAX.VOI	"Please enter the number of your own fax machine now."
1103	MAXFAXES.VOI	"I'm sorry, you have already ordered the maximum number of faxes."
1104	NOTFAXLN.VOI	"This line does not offer fax service."
1105	FAXDONE.VOI	"To receive your fax documents now, press 1. Or to continue, press 2."
1106	FAXMACHN.VOI	"If you are calling from a fax machine, press 1. If not press 2."
1107	ENTERFID.VOI	"If you have an extension number, please enter it now."
1108	FAXORDER.VOI	"You may order up to"
1109	FAXMORE.VOI	"more fax document."
1110	FAXESMOR.VOI	"more fax documents."
1111	FAXPRESS.VOI	"Please press the START button on your fax machine, and then hang up."

24.7.2 Modifying Existing Prompts

The following prompts, which are part of the standard VP system package, must be modified to include the options for the Fax Distribution module. The phrase that needs to be added is shown below. A few of the most commonly used versions of these prompts have been pre-recorded and are described below. You can use these pre-recorded modified prompts by copying them onto the system, or you can re-record the prompts that must be modified using procedures detailed in section 15.

Prompt	Filename	Modification Required
65	MAINMENU.VOI	Add fax option (number 7)... to input a fax document, press 7..."
67	MAINMENX.VOI	Add fax option (number 7)... to input a fax document, press 7..."

24.7.3 Copying Pre-Recorded Modified Prompts

The following prompts were pre-recorded and can be used to replace the existing prompts supplied with the standard VP system software package. These prompts were copied to the \VM\P directory when the Fax Distribution module was installed. Pre-recorded modified prompts have the same filenames as their corresponding standard prompts, but they use a different file extension.

To copy a modified prompt to the active system, follow these steps:

1. Shutdown the VP system if it is currently running.
2. Locate the prompt you want to use in the following table and make a note of the filename.
3. Copy the file over the prompt with the .VOI file extension. (You may want to first rename the . VOI prompt an extension .OLD, so if you ever want to revert back to it, the prompt is still available.) Copy the file. For example, to replace the existing prompt 65 with MAINMENU.OP3, access a command prompt and type the following command:

```
COPY \VM\P\MAINMENU.OP3 \VM\P\MAINMENU.VOI then press <Enter>
```

4. When you finish modifying prompts, re-start the VP system.

Prompt	Filename	Contents of Phrase
65	MAINMENU.OP3	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To input a fax document, press 7. Or to exit, press #."
65	MAINMENU.OP4	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To change languages, press 5. To input a fax document, press 7. Or to exit, press #."
65	MAINMENU.OP5	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. For supervisor functions, press 6. To input a fax document, press 7. Or to exit, press #."

Prompt	Filename	Contents of Phrase
67	MAINMENX.OP3	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. To input a fax document, press 7. Or to exit, press #."
67	MAINMENX.OP4	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. To change languages, press 5. To input a fax document, press 7. Or to exit, press #."
67	MAINMENX.OP5	"Main menu. To listen to your messages, press 1. To send a message, press 2. To change your options, press 3. To listen to questionnaire answers, press 4. For supervisor functions, press 6. To input a fax document, press 7. Or to exit, press #."

25. Using the FaxMail Module

Note: Refer to instructions in section 23 for information on installing the FaxMail module on VP systems.

The VP system optional FaxMail module is designed to function much like a traditional fax machine used to receive incoming faxes with 3 exceptions:

- Every person in the company can have their own “personal” fax machine. Incoming faxes are stored as documents on the VP system disk accessible only by a mailbox owner through his/her mailbox.
- Mailbox owners are notified immediately that they have received a fax via the mailbox notification features (message waiting lamps, pagers, message delivery, etc.).
- Mailbox owners may retrieve their fax documents from any fax machine anywhere in the world, and also forward copies of the fax to any other fax machine.

25.1 Configuring the System for FaxMail

When you set up the Fax Distribution module to equip the VP system for sending fax documents, you configure the feature for SAME CALL faxing or CALLBACK faxing. One of the considerations is whether or not the caller is on a line that is equipped with a companion fax board.

When equipping the VP system to receive fax documents, incoming FaxMail calls must always be able to access a fax board. There are three methods to accomplish this:

Options	Description
Set up the system to share fax ports	See section 23 for information on sharing fax ports. This is the recommended technique.
Install a fax board for each VP system port	On DOS-based VP systems, this is practical only for a system with up to four ports, since that is the maximum number of fax boards that can be installed.
Dedicate one or more ports for the FaxMail service	This requires you to publish a telephone number that callers dial to send a fax to a mailbox owner's mailbox. Incoming C.O. calls to this number terminate directly to dedicated VP system ports (ports not used for normal voice mail or automated attendant service).

25.2 Sending a FaxMail Document

As with any type of fax service, you must inform callers how to send faxes to mailboxes on the VP system. You can provide VP system callers any of the following sets of dialing instructions:

- Dial the telephone number, and send the fax immediately.
- Dial the telephone number, specify the mailbox, then send the fax.
- Dial the telephone number, specify the mailbox, leave a voice message, then send the fax.

Each of these is described below.

Dial the Telephone Number, and Send the Fax

When the VP system answers a call, it can detect the fax tone from a sending fax machine and store the fax as a message in the FAX GENERAL DELIVERY mailbox. By default, this is mailbox 888. You can change this default in the configuration file VM.CFG using the FAX GENERAL DELIVERY option. For example, if you want these faxes to be stored in mailbox 4123, include the following line in the VM.CFG file:

```
FAX GENERAL DELIVERY = 4123
```

Dial the Telephone Number, Specify the Mailbox, then Send the Fax

Using this option, the caller would:

1. Dial the published number for the VP system and wait for it to answer.
2. Enter the mailbox number of the person to whom the fax should be sent.
3. Immediately press *8 to tell the VP system not to try to transfer to the extension associated with the mailbox number and to indicate a fax is to be sent.

<p>Note: Consult section 7.3 for information on the transfer bypass feature. On some systems, the transfer bypass digit * may need to be dialed prior to the mailbox number.</p>

4. Press START on the fax machine when prompted.

The VP system stores the fax document as a message in the mailbox.

Dial the Telephone Number, Specify the Mailbox, Leave a Voice Message, then Send the Fax

<p>Hint: If these dialing instructions are provided to callers, replace system prompt 155 with an "empty" file (see section 15 for this procedure). If you use the alternate "speed dialing" method described later in this section, this action is not necessary.</p>

Using this option, the caller would:

1. Dial the published number for the VP system and wait for it to answer.

2. Enter the mailbox number of the person to whom the fax should be sent.
3. Immediately press * to tell the VP system not to try to transfer to the extension associated with the mailbox number, but to immediately take a message (see transfer bypass information in section 7.3). The VP system plays the mailbox owner's personal greeting.

<p>Note: Consult section 7.3 for information on the transfer bypass feature. On some systems, the transfer bypass digit * may need to be dialed prior to the mailbox number.</p>

4. Press 7 to indicate he/she wants to record a voice message and send a FaxMail message.
5. Record a voice message when prompted. This is typically a short description of the FaxMail document being attached to the message.
6. Press # when he/she has finished speaking.
7. Press START on the fax machine when prompted.

The VP system stores the fax message and voices message in the specified mailbox.

25.3 Retrieving Documents from a Mailbox

Mailbox owners are notified of FaxMail messages the same way they are notified of voice mail (via message waiting lamps, paging, and message delivery). When mailbox owners call in to retrieve their messages, they are informed of any new FaxMail messages are also in their mailbox. After logging in to a mailbox, the mailbox owner hears a prompt such as, *“You have 4 news messages. There are fax documents with 2 of your new messages.”*

The mailbox Main menu then plays, *“To listen to your messages, press 1. To send a message, press 2...” etc.*

If you press 1 to listen to messages, the VP system voices any message recorded with the FaxMail then plays the following message retrieval options:

“If you would like to select this document to be retrieved during this call, press 7. To replay the message, press 1. To save and hear the next message, press 2. To save this message as new, press 3...” etc.

Select from the options:

- Press 7 to “tag” the document for retrieval at this time.
- Press 2 to move on to the next new message. The FaxMail document is retained as a saved message and remains in the mailbox for retrieval at a later time (if the mailbox class of service is set to automatically delete old messages after a certain number of days, FaxMail documents are also be deleted after that time).
- Select any other valid option from this menu (forward a copy of the FaxMail message to another mailbox, for example).

If you press 7 to mark this FaxMail document for retrieval, you must indicate whether the document is to be retrieved during the same call or after the VP system calls back a number you indicate. Each of these options is described below.

Same Call Retrieval

To retrieve a FaxMail message during the same call, you must be calling from a fax machine or must be on a line that is connected to a fax board (or fax-port sharing must be enabled). Also, the system must allow same-call fax retrieval (see the FAX SETUP screen). If same-call fax retrieval is allowed in the system, you hear the following prompt:

“If you are calling from a fax machine, press 1.”

If you are calling from a fax machine and press 1, the VP system announces how many additional FaxMail documents you are allowed to request on this call (also set on the FAX SETUP screen). The system then plays the menu heard between each new message:

“To replay the message, press 1.

To save and hear the next message press 2.

To save the message as new, press 3. ...” etc.

To receive the fax document at this time, press * from this menu. You are prompted, *“Press the start/send button on the fax machine.”*

<p>Note: If the line you are connected to does not have a fax board attached, the VP system says, <i>“One moment please,”</i> and transfers you to a voice mail port that <i>does</i> have a fax board attached. The call then continues as normal. If there are no free fax-enabled ports, you are offered the option to hold until one becomes available.</p>
--

To continue hearing other messages, press 2 from this menu. The next message plays. When all of the new messages have played, you return to the Main menu:

“To listen to messages, press 1.

To send a message, press 2.

To change your options, press 3. ...” etc.

Press 1 to hear the message menu:

“To listen to new messages, press 1.

To listen to saved messages, press 2.

*To begin receiving the fax documents you have selected, press *.*

Or to return to the Main menu, press #.”

To retrieve the fax document at this time, press *. You are prompted, *“Press the start/send button on the fax machine.”*

Callback Retrieval

If you are not calling from a fax machine and you are not on a line that is connected to a fax board (and fax-port sharing is not enabled), you must arrange for the VP system to call a fax machine to deliver a FaxMail message after you exit the open mailbox. When the VP system asks, *“If you are calling from a*

fax machine, press 1 if not press 2,” press 2. The VP system prompts you to specify the phone number of a fax machine:

“Please enter the phone number of your own fax machine now.”

This telephone number can be located anywhere that is not restricted by the long-distance dialing plan. Once you enter a number, the VP system confirms the number, then plays:

“That fax will be sent when you hang up.”

Next, the system voices the menu normally heard between each new message:

*“To replay the message, press 1.
To save and hear the next message press 2.
To save the message as new, press 3. ...” etc.*

You may continue to play back any additional new messages. If you select any additional FaxMail documents for retrieval, the VP system does not repeat its request for sending information.

Once all messages are played, the mailbox owner then hears, *“You have no more new messages.”*

Next, the mailbox Main menu plays:

*“Main menu.
To listen to your messages, press 1.
To send a message, press 2.
To change your options, press 3. ...” etc.*

Simply exit the mailbox at the Main menu. Once you disconnect, the VP system queues the fax to be sent to the callback number you entered.

25.4 Sending a FaxMail from an Open Mailbox

In addition to sending a FaxMail document as an outside caller (as described in section 25.2), a mailbox owner can also send FaxMail documents to other mailbox owners on the system from his/her open mailbox. Of course, the mailbox owner must be placing the call from a fax machine and be calling on a VP system port that is connected to a fax board connected (or fax-port sharing must be enabled).

To send a fax from within a mailbox, from the mailbox Main menu, press 2 to send a message. Record a brief message introducing the fax you are sending, then press # to end the recording.

The Sending Options menu plays:

*“To send this message, press 1.
To replay the message, press 2.
To re-record the message from the beginning, press 3...”*

Option 7 allows you to add a FaxMail document. If you press 7, you hear the system prompt:

“Please press the start/send button on your fax machine now.”

To include the fax with the message you recorded, press the fax machine’s START button and hang up.

25.5 Using New and Modified Prompts

25.5.1 Using New Prompts

The following new prompts are copied to the prompts directory when the FaxMail module is installed. By default, the prompt directory is \VM\p.

Prompt	Filename	Contents of Phrase
1112	FAXNOTE.VOI	"Please record a short description of your document."
1113	FAXFAIL.VOI	"I'm sorry, we are unable to receive your document at this time"
1114	HASFAX.VOI	"There are fax documents with"
1115	OFNEWMMSG.VOI	"of your new messages."
1116	MSGISFAX.VOI	"This message contains a fax document."
1117	KEYTOTAG.VOI	"If you would like to select this document to be retrieved during this call, press 7."
1118	NOFAXAVL.VOI	"I'm sorry, all fax channels are busy right now. If you would like to wait until a channel becomes free, press 1."
1119	FAXIVR.VOI	"If you would like us to send you a fax copy of this information, press 1." <i>(used for sending a fax copy of information obtained via the IVR feature).</i>

25.5.2 Modifying Existing Prompts

The following prompts that are part of the standard VP system package must be modified to include the options for the FaxMail module. The phrase that needs to be added is shown below. A few of the most commonly used versions of these prompts have been pre-recorded and are described below. You can use these pre-recorded modified prompts by copying them onto the system, or you can re-record the prompts that must be modified using procedures detailed in section 15.

Prompt	Filename	Modification Required
3	MBOXMENU.VOI	<i>Add FaxMail option (number 7): "...If you are calling from a fax machine and would like to send this party a fax, press 7..."</i>
68	LSTNMENU.VOI	<i>Add FaxMail option (digit *): "...To begin receiving the fax documents you have selected, press *..."</i>
71	LNEWSUBM.VOI	<i>Add FaxMail option (digit *): "...To begin receiving the fax documents you have selected, press *..."</i>
165	MSGOPCNF.VOI	<i>Add FaxMail option (digit 7): "...To add a Fax mail document to this message, press 7..."</i>
260	MBOXMEN2.VOI	<i>Add FaxMail option (digit 7): "...If you are calling from a fax machine and you would like to send this party a fax, press 7..."</i>

25.5.3 Copying Pre-Recorded Modified Prompts

The following prompts were pre-recorded and can be used to replace the existing prompts supplied with the standard VP system software package. By default, these prompts were copied to the \VM\P directory when the Fax Distribution module was installed. Pre-recorded modified prompts have the same filenames as their corresponding standard prompts, but they use a different file extension.

To copy a modified prompt to the active system, follow these steps:

1. Shutdown the VP system if it is currently running.
2. Locate the prompt you want to use in the following table and make a note of the filename.
3. Copy the file over the prompt with the .VOI file extension. (You may want to first rename the . VOI prompt an extension .OLD, so if you ever want to revert back to it, the prompt is still available.) For example, to replace the existing prompt 3 with MBOXMENU.OP2, access a command prompt and type the following command:

```
COPY \VM\P\MBOXMENU.OP2 \VM\P\MBOXMENU.VOI then press <Enter>
```

4. When you finish modifying prompts, re-start the VP system.

Prompt	Filename	Contents of Phrase
3	MBOXMENU.OP2	"If you would like to leave a message, press 1. If you would like to try another extension, press 3. If you are calling from a fax machine and would like to send this party a fax, press 7. Or, to speak to an operator, press 0."
3	MBOXMENU.OP3	"If you would like to leave a message, press 1. If you would like to try another extension, press 3. To have your call announced over our P.A. system, press 5. If you are calling from a fax machine and would like to send this party a fax, press 7. Or, to speak to an operator, press 0."
260	MBOXMEN2.OP2	"If you would like to leave a message, press 1. If you would like to have your party paged, press 2. If your would like to try another extension, press 3. If you are calling from a fax machine and you would like to send this party a fax, press 7. Or, to speak to an operator, press 0."
260	MBOXMEN2.OP3	"If you would like to leave a message, press 1. If you would like to have your party paged, press 2. If you would like to try another extension, press 3. To have your call announced over our P.A. system, press 5. If you are calling from a fax machine and would like to send this party a fax, press 7. Or, to speak to an operator, press 0."
68	LSTNMENU.OP1	"Message menu. To listen to new messages, press 1 To listen to saved messages, press 2. To begin receiving the fax documents you have selected, press *. Or to return to the main menu, press #."

Prompt	Filename	Contents of Phrase
71	LNEWSUBM.OP1	<p>“To replay the message, press 1. To save and hear the next message, press 2. To save the message as new, press 3. To delete the message, press 4. To hear the time and date of the message, press 5. To forward a copy of this message to someone else, press 6,1. To reply to this message, press 6, 2. To transfer to this party, press 6, 3. To begin receiving the fax documents you have selected, press *. Or, to return to the main menu, press #.”</p>
165	MSGOPCNF.OP2	<p>“To send this message, press 1. To replay the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. If you would like to be notified when your party has received this message, press 5. To send this message to several mailboxes, press 6. To add a Fax mail document to this message, press 7. To schedule this message to be sent at a future time and date, press *.”</p>
165	MSGOPCNF.OP3	<p>“To send this message, press 1. To replay the message, press 2. To re-record the message from the beginning, press 3. To cancel the message, press 4. If you would like to be notified when your party has received this message, press 5. To send this message to several mailboxes, press 6. To add a Fax mail document to this message, press 7. To resume recording from the point where you stopped, press 8. To play back the last few seconds of your message, press 9. To schedule this message to be sent at a future time and date, press *.”</p>

26. Using the IVR Module

Note: Refer to instructions in section 23 for information on installing the IVR module on VP systems.

26.1 What is IVR?

Interactive Voice Response (IVR) is a feature that allows a caller to enter a number that the VP system uses to search a database. Typical applications are banking-by-phone, where a caller enters an account number to hear his/her balance, and inventory-stocking, where a caller enters a part number to hear whether or how many of a certain part are in stock.

26.2 Setting Up an IVR Box

26.2.1 What Does an IVR Box Do?

An IVR box collects caller input then conducts the database search. To allow a caller to use an IVR application, you simply route the call to an IVR box.

When a call routes to an IVR box, the VP system prompts the caller to input answers to one or several questions, then uses the input to conduct the database search. If the IVR box finds a database record that matches the inputs given by the caller, it reads the appropriate information from the database. (If several matching records exist, you can specify how many of them the VP system is to read to the caller).

The database must be a text file with one record per line. Fields within a record can be separated using any delimiter. If you have an existing database (for example, one stored in dBase or Oracle), you can often use the existing database management tools to export the data as a text file.

When a call is routed to an IVR box, it follows the actions shown in Figure 26-1.

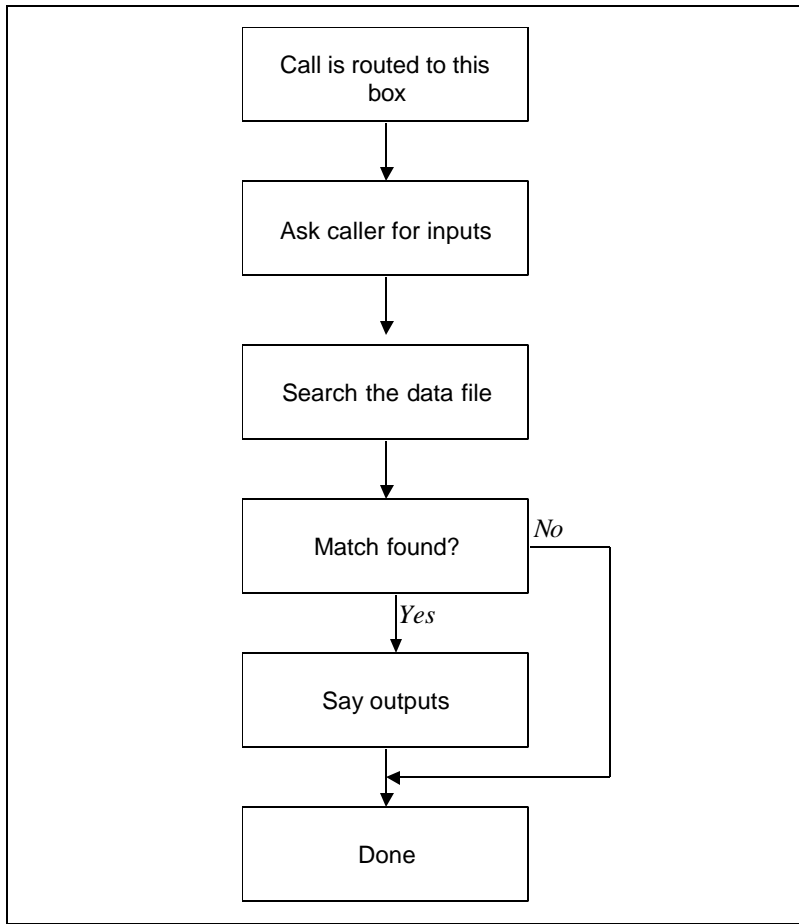


Figure 26-1 Typical Operation of an IVR Box

26.2.2 Accessing the IVR Box Screen

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access the IVR box screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select IVR BOX. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access the IVR box screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select IVR BOX. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: **To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.**

26.2.3 IVR Box Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

On DOS-based VP systems, the IVR BOX screen consists of 3 pages:

- Page 1 contains general setup information and information about the data file.
- Page 2 is used to set up the input questions, and to set up the database search criteria.
- Page 3 is used to define how the output should sound when played back to the caller.

On NT-based systems, this information is housed on five tabs you can access on the IVR BOX screen.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number (Page 1, Page 2, Page 3, Page 4)
NTVP: Box Number

This is the IVR box number. A box number can be anywhere between 1 and 9899 (boxes 9900 - 9999 are reserved for the system). You cannot change the box number on the screen. To view a new box, use

<F4> (select a box number), <F5> (previous IVR Box), or <F6> (next IVR Box). To add a new IVR box, use <F2> (add). (NT-based VP system users can also select from icons at the top of the screen.)

VP: Box Name (Page 1 screen)
NTVP: Box Name

This field identifies the name of the IVR box. The name is used for administration purposes only, and it appears in the database listing.

Note: By default, the VP system finds only the first matching record, and reads it to the caller. If you want the VP system to read more than one matching record to the caller, enter the number in the field THEN SEARCH FOR X MORE MATCHING RECORDS (see below).

VP: Greeting Recorded (Page 1 screen)
NTVP: Record Greeting button

This field identifies whether a greeting has been recorded for the IVR box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played as soon as a caller is routed to the IVR box.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting RECORD you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the greeting by clicking on the Record Name button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

The greeting can also be recorded remotely by the owner of the IVR box. Note that once an IVR box has been assigned an owner, the IVR box is allowed the same number of greetings as the owner mailbox, as defined in the mailbox's assigned class of service. The greetings are numbered 0 through 9.

VP: Owner (Page 1 screen)
NTVP: Owner

This field contains the mailbox number of the *owner* of the IVR box. The owner has the ability to call in to the system to re-record the IVR box greeting or select a different active greeting. If you do not want to offer the option to re-record the greeting remotely, or not more than one greeting is needed for this IVR box, leave this field blank.

VP: Max Secs Between Digits (Page 1 screen)
NTVP: Max Time to Wait Between Digits X Seconds

When the caller is entering digits (for example, his/her credit card number), the VP system does not know in advance how many digits the caller is to enter. If the caller pauses for the number of seconds listed in this field, the VP system assumes that he/she has finished dialing. For example, assume this field is set to 3. If the caller enters 5551111 and then pauses for 3 seconds, the VP system assumes the number the

caller attempted to dial is 5551111. (To allow callers to immediately precede (without pausing) after entering the requested number, instruct them to press # after entering the requested digits. For example, record the box greeting as, “Please enter your credit card number, followed by the pound key.”).

VP: Bail-out Digits (Page 1 screen)
NTVP: Bail-out Digits

Bail-out digits allow a caller to cancel the IVR request. If the caller presses the digit(s) listed in this field, the VP system takes whatever action is specified in the field IF MATCH NOT FOUND.

<p>Note: Although any digit 0 - 9, *, and # can be used as bail-out digits, it is recommended you do not use a single #. In other parts of the VP system, # is used as an “end of dialing” digit that allows frequent callers to speed the processing of their call.</p>

VP: If Account Number Not Yet Entered (Page 1 screen)
NTVP: If Account Number Not Yet Entered area

If you do not intend to use a number previously collected during the call by an Account Number box to search the database, choose CONTINUE here.

If you intend to use a number collected by an Account Number box to search the database, and the number has not yet been collected, the VP system cannot perform the search. To accommodate these situations, choose GO TO BOX here and specify an Account Number box in the next field. The VP system routes the call to that Account Number box and prompts the caller to enter a specific number. You must then route the call from the Account Number box back to this IVR box on the ACCOUNT NUMBER BOX screen.

VP: Box (Page 1 screen)
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. Enter the box to which the call is to route if the caller has not entered a number in an Account Number box.

VP: Filename (Page 1 screen)
NTVP: Name of File Containing Data (Data File tab)

This field contains the name of the database file containing the data. The VP system searches this file. The file should be in regular text format, with one record per line. Fields within a record can be separated using any delimiter. If you do not include a path in the filename, the VP system assumes the file is in the VP system directory. By default this is \VM. (NT-based VP system users can select the Review File button to view and edit the source file.)

VP: Delimiter Between Fields (Page 1 screen)
NTVP: Delimiter Between Fields (Data File tab)

The file containing the data should be in regular text format, with one record per line. Fields within a record can be separated by any sequence of characters (this character sequence is called a *delimiter*). Enter the delimiter characters here.

If the fields are separated by spaces, use the underline character () to represent spaces.

VP: Field Types (Page 1 screen)
NTVP: Field X is (Data File tab)

Each field in a record represents a specific type of information (for example, money or a date). Enter the type of data each field represents. This information is used by the VP system in two ways:

- When comparing the data input by the caller with the data in the file.
- When deciding how to voice the data in a field. For example, if a field contains the number 121956, Table 26-1 shows how the VP system reads the contents of the field to the caller.

Field Type	How the VP System Interprets 121956	How the VP System Reads 121956 to the Caller
NOTHING		The VP system says anything.
DIGITS	1-2-1-9-5-6	"One-two-one-nine-five-six"
NUMBER	121,956	"One hundred twenty-one thousand, nine hundred fifty-six" (Note that negative numbers are also allowed, for example -123)
MONEY	\$121,956.00	"One hundred twenty-one thousand, nine hundred fifty-six dollars, and no cents"
DATE	12-19-1956	"December 19, 1956"
TIME	12:19:56	"Twelve-nineteen PM"
VOICE FILE	\\MMM\121956 or \\MMM\121956	The VP system looks for a file with the name 121956 (in the directory where the greetings are stored). If it finds that file, it assumes it is in voice file format, and it plays the file.

Table 26-1 How the VP System Interprets a Field Containing 121956

Note: If you are using the VOICE FILE type, you can tell the VP system that the voice files are stored in another directory by using the IVRVOICEFILEPATH parameter in the configuration file VM.CFG. See section 12 for more information on the configuration file.

Note: If you are using the VOICE FILE type in a multi-lingual system, record each language version of the voice file. Give the voice files the same name, but end each with the language number. For example, if you want to record the word "blue" in English (Language 1), French (Language 2), and Spanish (Language 3), name the files BLUE.VO1, BLUE.VO2, and BLUE.VO3, respectively.

In the IVR data file, use the filename BLUE.VO#. The trailing # tells the VP system to insert the language number that the caller is currently using.

Note: If you are using the VOICE FILE type, and you want to send a fax confirmation of the results of the database search (see below), create a text file containing a written version of the voice file, and name it the same name as the voice file but with the extension .TXT. For example, if you recorded a voice file containing the word "blue," and called the voice file BLUE.VOX, create a text file in the same directory and name it BLUE.TXT. This file contains the text "blue." When the VP system assembles the information to create the fax, it inserts the contents of the BLUE.TXT file instead of the contents of BLUE.VOX.

VP: Prompt for Input # Recorded (Page 2 screen)
NTVP: Record Input # button (Recording Inputs tab)

This field indicates whether an input prompt has been recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The VP system can prompt the caller to enter up to 5 groups of digits, which it uses to search the database file. The VP system plays the prompts you record in each of these fields in turn, and stores the information entered by the caller as Input 1, Input 2, Input 3, Input 4, and Input 5.

Note Use the NOTE fields to enter a brief description of the purpose of each input prompt. These fields are not used by the VP system, they are there for your use only.

If you are searching the database based only on a number collected by an Account Number box, do not use these fields—simply route the call to the Account Number box.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the prompt. By selecting RECORD you can record the prompt via a telephone line connected to the voice processing board. To record the prompt, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the prompt. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the prompt by clicking on the Record Input button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: A Record Matches if... (Page 2 screen)
NTVP: A Record Matches if field (Searching tab)

After collecting the required inputs, the VP system begins searching through the database file, one record at a time, until it finds a matching record. These fields tell the VP system what constitutes a matching record. For example, if the caller entered his/her Social Security Number as Input 1 above, and the database file contains records in which field 3 is a Social Security Number, you define the match as:

FIELD 3 is EQUAL TO INPUT 1.

If the caller is also asked for his/her personal identification number (PIN) as Input 2 above, and field 6 of the database file contains PIN numbers, you can define a match as occurring only when both the Social Security Number and PIN entered by the caller match those in the database file. Do this by defining a match as:

FIELD 3 is EQUAL TO INPUT 1
and FIELD 6 is EQUAL TO INPUT 2

VP: Output Phrase # Recorded (Page 3 screen)
NTVP: Output Phrase # Recorded (Recording Outputs tab)

Once a matching record has been found, the VP system constructs sentences to voice the required information to the caller. These sentences are built from elements including:

- The fields of the database file
- The account number stored for the call
- Pre-recorded phrases

Use these fields to generate any pre-recorded phrases you need.

The VP system plays each of these input prompts in turn, asking the caller for information. The information entered by the caller is stored as Input 1, Input 2, Input 3, Input 4, and Input 5.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the phrase. By selecting RECORD you can record the phrase via a telephone line connected to the voice processing board. To record the phrase, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the phrase. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the phrase by clicking on the Record Output button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

The phrases are stored as PHRASE 1 through PHRASE 5, for use below.

Note: Use the NOTE fields to enter a brief description of the output phrase. For example, you may enter "Your balance is" in this field.

The VP system copies the contents of the NOTE fields into a fax document, if you are using the fax confirmation feature as described below.

VP: If Match Found, Say... (Page 3 screen)
NTVP: If Match Found, Construct... (Playing Results tab)

Once the VP system finds a matching record, it looks in these fields to determine what it should say to the caller. For example, if you want to say Output phrase 1 (recorded above), followed by the contents of Field 4 of the database, you select PHRASE 1 and under it, FIELD 4 here.

VP: And then Search for X More Matching Records (Page 3 screen)
NTVP: Then Search for Up to X More Matching Records (Playing Results tab)

Once the VP system has found a matching record and voiced all the information you defined above, it repeats this process until it has found and reported as many records as you specify in this field.

VP: And then (Page 3 screen)
NTVP: And then (Playing Results tab)

Once the VP system has found a matching record and voiced all the information you defined above, it examines this field to decide what it should do next. The options are:

Option		Description
RETURN		Go back to the box that routed the call to this IVR box.
SAY GOODBYE		Say, "Goodbye," and then hang up.
HANG UP		Hang up immediately.
GO TO	BOX n	Go to the box n specified.
	FIELD n	Read field n from the data file, and interpret it as a box number. Go to that box.
TRANSFER TO	BOX n	Go to the box specified (same as GO TO BOX).
	FIELD n	Read field n from the data file, and interpret it as a telephone number. Transfer the call to that number.
SEND FAX TO	BOX n	Collect the output information into a fax document. Place the document in Fax box n, then route the call to that Fax box. (Requires the optional Fax Distribution module).
	FIELD n	Collect the output information into a fax document. Read field n from the data file, and interpret it as a fax telephone number. Send the fax document to the fax telephone number. (This option uses the IVR fax distribution box 9986, so ensure you set up Fax box 9986 when using this feature. You must also have the optional Fax Distribution module).

VP: If Match Not Found (Page 3 screen)
NTVP: If No Match Found (Playing Results tab)

If the VP system does not find a matching record in the database, it looks here to determine what to do next. Typically, you send the call to a Routing box, whose greeting tells the caller that the search was unsuccessful and offers other call routing options.

VP: Box (Page 3 screen)
NTVP: (Unlabeled Box field) (Playing Results tab)

This field is only used if the option in the corresponding field is set to GO TO BOX. This field is usually a Routing box, whose greeting tells the caller that the search was unsuccessful and offers other call routing options.

26.3 Using Custom Prompts for IVR

When playing the results of an IVR search, the VP system creates its response by playing a combination of pre-recorded system prompts (for example, "dollars," "July," etc.), which are included in the VP system, and custom phrases (for example, "That order was shipped on..."), which are recorded by the installer or customer. Since different people record these sets of voice files, the voiced output that results may not sound professional.

You can re-record system prompts that IVR uses. During normal call processing, the VP system uses the default system prompts. When processing an IVR box, it uses these re-recorded, custom system prompts.

26.3.1 Setting Up Custom Prompts

In the VM.CFG configuration file, add the following line:

IVR PROMPT LANGUAGE = 9

Record the following system prompts in Language 9 (see section 15):

Prompt	Contents
8	"Zero"
9 through 17	"One" ... "Nine"
21	"AM"
22	"PM"
23 through 44	"Ten" ... Thirty-one"
45	"Forty"
46	"Fifty"
47 through 58	"January" ... "December"
78	"No"
85	"And"
191	"Sixty"
192	"Seventy"
193	"Eighty"
194	"Ninety"
195	"Hundred"
196	"Thousand"
213	"Dollars"
214	"Cents"
216	"Million"
220	"Oh"
262	"Point"
273	"Negative"

26.4 Setting Up an IVR Application

To set up any IVR application, you follow these general steps:

1. Determine what inputs you require.
2. Determine what the caller should hear.
3. Create the data file.
4. Create the IVR box.

5. Set up the inputs.
6. Set up the outputs.

Each of these steps is described in detail in the example below.

Step 1: Determine What Inputs You Require

In this example, the caller must be prompted for his/her savings account number and PIN number.

Note: We will use the term *savings account number* here instead of just *account number*. As discussed throughout this manual, the account number can be used for several purposes, including IVR. For clarity, however, the VP system account number feature is *not* used in this example.

Step 2: Determine What the Caller Should Hear

In this example, the VP system will be set up to inform the caller what his/her current balance is and when this information was last updated.

Step 3: Create the Data File

The VP system reads text files. For this example application, each line of the text file must contain one database record. Within each record, fields can be separated by any delimiter. In this example, a comma is used as the delimiter.

The data file for this application must include the following fields:

- A savings account number.
- A PIN number.
- The date that the information was updated.
- The savings account balance.

The file format is as follows:

Field 1: Savings account number
Field 2: PIN number
Field 3: Date
Field 4: Balance

The file is named EXAMPLE.IVR. An example of the data file is shown in Figure 26-2.

<i>Savings account number (Field 1)</i>	<i>PIN number (Field 2)</i>	<i>Date (Field 3)</i>	<i>Balance (Field 4)</i>
123456	3232	10-08-1998	\$459.20
445555	6432	10-08-1998	\$7543.65
457856	2568	10-08-1998	\$62352.00
547565	2746	10-08-1998	\$4555.25
907654	4467	10-08-1998	\$2227.73
453884	9087	10-08-1998	\$78653.09

Figure 26-2 Format of Sample Data File

In the data file, note that:

- Spaces are ignored
- The dollar sign is optional in money fields
- Dates can be entered as shown above, or without the dashes

Step 4: Create an IVR Box

IVR Box 5555 is created for this application example. The name of the source file containing the database data is specified as EXAMPLE.IVR.

In the FIELD TYPES fields (VP systems) / FIELD 1 IS x field (NTVP systems), field 1, a savings account number (see Figure 26-2), is typed DIGITS. Field 2, the PIN number, is also typed as DIGITS. Field 3, the date of the last update, is typed as DATE. Field 4, the balance, is typed as MONEY.

Step 5: Set Up the Inputs

In this example application, two inputs are to be collected from callers: the caller's savings account number and the PIN number. Input 1 will be used for the savings account number, and Input 2 for the PIN number.

The prompt for input 1 is recorded as:

"Please enter your savings account number."

The prompt for input 2 is recorded as:

"Please enter your PIN number."

Later, when a caller responds to these prompts by entering his/her savings account number and PIN number, the VP system stores the numbers as Input 1 and Input 2, respectively. It then searches through the data file, looking for a record that matches these inputs.

Refer back to the data file in Figure 26-2. The VP system must be set up to determine it finds a database match if the first field in the data file matches the savings account number entered by the caller, and the second field in the data file matches the PIN number entered by the caller.

Think of this as *A record matches if Field 1 of the data file is equal to Input 1 (the caller's savings account number), and Field 2 of the data file is equal to Input 2 (the caller's PIN number).*

To set up this rule in the IVR box, in the first A RECORD MATCHES IF field, the option FIELD 1 is selected. The next field is set to EQUAL TO. The final field is set to INPUT 1. This line now reflects the rule *A record matches if Field 1 is equal to Input 1.* The next line on this screen is set to FIELD 2 followed by EQUAL TO followed by INPUT 2. This completes the rule setup.

Step 6: Set Up the Outputs

When a match is found, the VP system generates two outputs, the caller's balance and the date on which the information was last updated. This information must be properly voiced in the following format.

"Your savings account balance is [balance]. This information was updated on [date]."

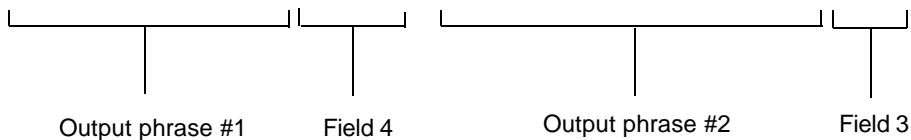
To construct the above sentences, the following phrases must be recorded:

"Your savings account balance is" and *"This information was updated on"*

The first phrase is recorded in the IVR Box as output phrase 1 and the second as output phrase 2.

The IVR box is set up to play these phrases and the database values they relate to using the fields IF MATCH FOUND...

"Your account balance is [balance]. This information was updated on [date]."



The first pair of fields (top and bottom) are set to PHRASE 1 (*"Your savings account balance is"*) and FIELD 4. The VP system now knows to say, *"Your savings account balance is"* and then read the contents of Field 4 from the data file (see Figure 26-2).

The second pair of fields (top and bottom) are set to PHRASE 2 and FIELD 3, respectively. The VP system now knows to say, *"Your savings account balance is,"* followed by the balance from Field 4 of the data file, followed by *"This information was updated on,"* followed by the contents of field 3 of the data file (see Figure 26-2).

Once the VP system is set up to convey information to the caller, the remaining fields on the IVR BOX screen must be completed to inform the VP system:

- What it is to do next after saying the information to the caller
- What it is to do if no match is found in the database file

26.5 Speeding Searches Using Indexed Files

It takes the VP system about 2 seconds to search through 1000 records in an IVR data file on a 386-33DX PC running SMARTDRIVE. If you have an IVR data file containing several thousand records, you may find that the VP System takes several seconds to perform database searches. To set up the system to process the data files more efficiently (processing 100,000 records in 3 seconds), follow these steps:

1. Using the database software (or some other third-party application), sort the data file into ascending order, based on the key field (the field that is most likely to be used during database searches).
2. Rename the file so that it has the extension .IDV. This extension informs the VP system that the file is sorted.
3. Run the VRBINDEXTM program. VRBINDEXTM generates an index file. The index file has the same name as the data file, but it has the extension .IXV.
4. Copy both the data file and the index file to the directory where you normally store the data files.
5. Run the VP system. In the IVR box, enter the name of the data file (with the .IDV extension).

26.5.1 Running VRBINDEXTM

If you run VRBINDEXTM with no parameters, you are prompted for any information required. You can run VRBINDEXTM with no parameters by opening a command prompt window, typing VRBINDEXTM then pressing <Enter> from the \VM directory prompt.

If you want to run VRBINDEXTM in a batch file, you can supply information on the command-line as follows:

```
VRBINDEXTM -F(filename) -D(delimiter) -K(key-field)
```

For example, if you have a data file PRICES.IDV, which is comma-delimited, and the sorted field is field 4 (note that the fields are numbered 0, 1, 2, 3..), type the following line at the DOS prompt to generate an index:

```
VRBINDEXTM -FPRICES.IDV -D, -K4
```

An index file PRICES.IXV is generated.

26.5.2 Notes on Delimiters

DOS does not allow the double-quote character as part of the information passed on the command-line. If the data file uses quotes as part of the field delimiter, use the letter **q** on the command-line to represent the quotes. For example, if the data file is PRICES.IDV and the records are in quotes-comma-quotes format, enter the following line:

```
VRBINDEXTM -FPRICES.IDV -Dq,q -K4
```

If the data file uses spaces as the field delimiter, use a single underscore character on the command-line to represent any number of spaces. For example, if the data file is PRICES.IDV and the fields are separated by spaces, enter the following line:

```
VRBINDEXTM -FPRICES.IDV -D_ -K4
```

27. Using the Talking Classifieds Module

Note: Refer to instructions in section 23 for information on installing the Talking Classifieds module on VP systems.

The Talking Classifieds module allows you to set up voice databases. Callers can then choose one of these databases and selectively search it based on the answers they input to question prompts.

The Talking Classifieds module adds the following features to the VP system:

- **Listing boxes:** Offer the ability to build a voice database of listings that can be searched by callers.
- **Talking Classifieds reports:** Provide details regarding which Listing boxes were accessed by callers and who listened to them.
- **Password-protected remote access to Listing boxes:** Allows an agent (the person who owns the Listing box) to call in to the VP system and change the recording or alter details about the listing (the *categories*).
- **Automatic allocation of mailboxes:** Allows customers to place their own classified listings without the aid of an administrator.

27.1 Setting Up a Talking Classifieds Application

To set up a Talking Classifieds application, you use two types of boxes on the VP system:

- Gateway box (this can be thought of as a heading in the Classifieds section of a newspaper)
- Listing box (this can be thought of as a single advertisement under a heading in the Classifieds section of a newspaper)

You provide callers access to the Talking Classifieds module by routing calls to the Gateway Box. This box prompts the caller to answer questions that indicate the types of listings the caller is interested in. The caller answers the questions using the keys on his/her touch-tone telephone.

When the caller answers all the questions in the Gateway Box, the VP system searches through all the Listing boxes, looking for those that match the criteria specified by the caller when he/she answered the Gateway box questions. Each time a matching listing is found, the VP system plays the description recorded in the Listing box for that.

Example Talking Classifieds Application

Janet Smith is a Real Estate agent with several listings in her portfolio. A high percentage of her incoming calls are from prospective clients who want to know what is currently available in a given price range, area, etc.

Janet needs to screen these calls so she only has to speak to clients who are interested in one of her listings. The VP system Talking Classifieds module can perform this function.

First, Janet creates a database of her listings. The database is simply a group of Listing boxes , all associated with one Gateway box (see Figure 27-1).

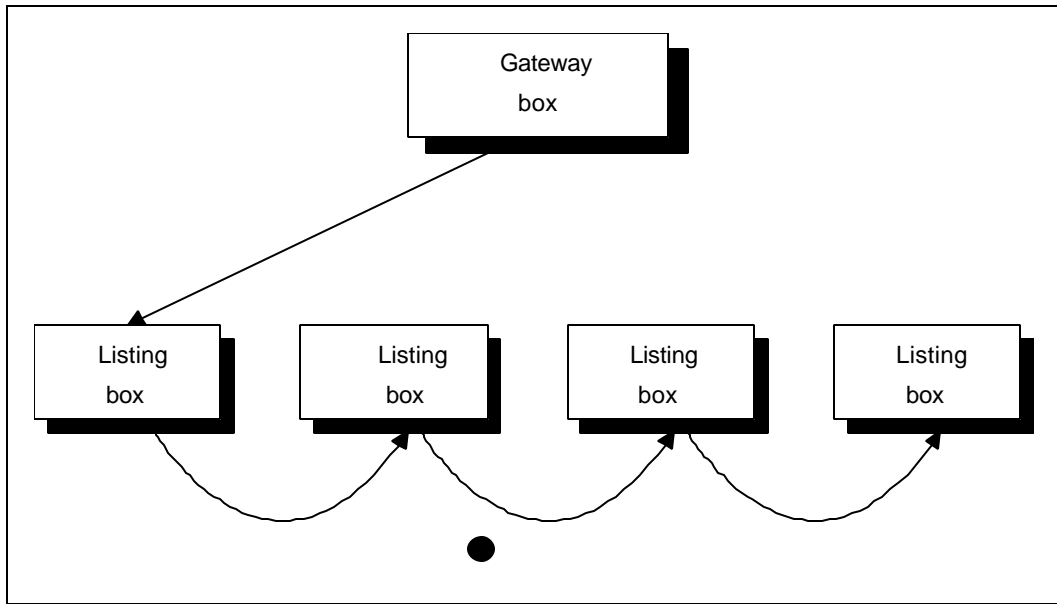


Figure 27-1 Layout of a Listing Box Database

To set up the Listing box database, Janet first creates a Gateway box (box 2000 in this example). Inside this Gateway box, she records up to four questions that are used to help callers specify the type of home they are interested in.

She then creates several Listing boxes and associates each of these with Gateway box 2000. Inside each Listing box, she records a description of a particular listing and includes relevant information on the property: price range, area, number of bedrooms, and property type (condominium, single-family, duplex, etc.).

When a prospective client calls, the VP system answers and plays options Janet set up in a Routing box:

“Welcome to Janet Smith Realty. For your convenience, we are now offering automatic access to our home database. If you want to take advantage of this, press 1 now, otherwise, please stay on the line, and someone will be with you right away.”

When the caller presses 1 to use the Talking Classifieds feature, the Routing box routes the call to Gateway box 2000. The greeting Janet recorded in box 2000 then voices:

*“Thank-you.
To hear a sample of our current listings, press 1
or, to select a specific price-range, area, etc.,
press 2.”*

If the caller presses 1 at this point, the VP system accesses each Listing box associated with Gateway box 2000, playing the description recorded in each one in turn.

Assume, however, the caller is only interested in 3-bedroom, single-family homes that are east of town and that cost less than \$100,000. He/she presses 2 to make the selections. The VP system voices the first of four search-criteria questions Janet recorded in the Gateway box:

*“For properties below \$60,000, press 1.
 For properties between \$60,000 and \$90,000, press 2.
 For properties between \$90,000 and \$100,000, press 3.
 For properties between \$100,000 and \$120,000, press 4.
 For properties above \$120,000, press 5.
 To include all properties, regardless of cost, press #.”*

The caller presses 3 for properties between \$90,000 and \$100,000 (note that the caller can press 0 in response to any question if he/she wants to hear the question again). The VP system continues with the second of the four search-criteria questions in the Gateway box:

*“For properties inside the city limits, press 1.
 For properties in the Byrum Woods area, press 2.
 For properties north of town, press 3.
 For properties east of town, press 4.
 For all other properties, press 5.
 To include properties from all areas, press #.”*

The caller presses 4 for properties east of town. The VP system continues with question three:

“Using the keys on your telephone, please enter the number of bedrooms you require.”

The caller enters 3, for 3 bedrooms. The VP system continues with the final question:

*“For apartments, press 1.
 For duplexes, press 2.
 For single-family homes, press 3.”*

The caller presses 3. The interview is now complete.

The VP system looks at each of Janet’s listings in turn and makes a note of those that match the specifications given by the caller. It then indicates how many matches it found:

“There are five listings that match your current choices. Press 1 to hear the listings, or press 2 to make new selections.”

If the caller presses 1 (to hear the listings), the VP system plays the first matching listing, for example:

“This beautiful single-family home in the Falls Lake area has forty feet of water frontage and its own private dock. A real bargain at only \$97,500. The owner is willing to negotiate.”

Once the description is finished, the VP system offers the caller the following choices:

*“To move on to the next listing, press 1.
 To choose a new price-range, area, etc., press 2.
 If you wish to speak to the listing agent, press 3.
 If you would like us to contact you, press 4.
 To hear this description again, press 5.
 To exit, press star.”*

The caller chooses 1 for the next listing. The VP system plays the next matching listing:

“Overlooking the park, this modern single-family home...”

Again, the VP system offers the above choices at the end of recording. This time, the caller is interested in the house, and so he/she chooses 3, to speak to the agent.

The VP system looks at the Listing box database again to find the mailbox number of the agent who is responsible for the listing. It then calls the agent’s office. If the call is answered, the VP system announces:

“This is Janet Smith’s listing service calling. I have a prospect for you.”

The VP system then transfers the call.

If the agent’s line is busy, or does not answer, the VP system goes back to the caller and offers to take a message. If the caller leaves a message, the VP system can use the normal message notification features to call the agent’s office or page the agent until the message is delivered.

27.2 Setting Up a Gateway Box

27.2.1 What Does a Gateway Box Do?

<p>Hint: Think of the Gateway box as a heading in the Classifieds section of a newspaper. Think of a Listing box as the individual advertisements under this heading.</p>
--

To provide a caller access to the Talking Classifieds feature, you set up the VP system to route the call to the Gateway box. When the Gateway box takes the call it:

1. Plays the instructions to the caller.
2. Asks for the caller’s name (if you enter the statement TCNAME in the VM.CFG configuration file, see section 12).
3. Offers to play all the listings in the associated Listing boxes or allows the caller to answer up to 4 search-criteria questions to narrow search.
4. Asks each of the 4 questions in turn, allowing the caller to enter specific information about his/her requirements.
5. (After all the questions have been asked and answered) Searches through all the Listing boxes, looking for those that are associated to the Gateway box and that match the specifications entered by the caller.
6. Tells the caller how many matching listings were found and offers the caller the option to listen to them or to make new selections.
7. (If the caller chooses to listen to the listings) Plays each Listing box description in turn.

At the end of each description, the VP system offers the option to:

- Go on to the next matching listing.
- Change the current selections. This option returns the caller to the questions recorded in the Gateway box.
- Contact the listing agent. This option routes the call to the box entered as the listing agent for this Listing box. This is typically a mailbox, but it can also be a Fax box or a Routing box.
- Mark the listing for more information (see section 27.5).
- Replay the listing.
- Exit.

When all the matching listings have been played, the VP system goes back to step 3.

27.2.2 Accessing the Talking Classifieds Gateway Box Screen

To access the Gateway box screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select TC GATWAY. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access the Gateway box screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select TC GATWAY BOX. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

27.2.3 Gateway Box Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field identifies the Gateway box number. It cannot be changed from this screen.

VP: Gateway Name
NTVP: Box Name

This field identifies the name of the Gateway box. The name is used for administration purposes only, and it appears in the database listing.

VP: Greeting Recorded
NTVP: Record Greeting button

This field indicates whether a greeting has been recorded for this Gateway box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

The greeting is played when the call first routes to this Gateway box. This greeting typically provides an introduction to the Talking Classifieds feature with some instructions on how it's used.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the greeting. By selecting RECORD you can record the greeting via a telephone line connected to the voice processing board. To record the greeting, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the greeting. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the greeting by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Question 1, 2, 3, 4 Recorded
NTVP: Record Question 1, 2, 3, 4 buttons

These fields indicate whether Questions 1 through 4 are recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

Questions 1 through 4 are played to the caller, to collect criteria from the caller that narrow the database listings selected for play. (For example, if the database contains information on used cars, the first question could ask callers to identify their target price-range: *“For cars under \$1000, press 1. For cars between \$1000 and \$5000, press 2. For cars above \$5000, press 3.”*)

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the question. By selecting RECORD you can record the question via a telephone line connected to the voice processing board. To record the question, select RECORD, press <Enter>, and call into voice mail line 1. When voice mail answers, select RECORD and speak the question. To end the recording, press <Enter> again. To hear the recording, select PLAY.

On NT-based VP systems, you can record the question by clicking on the Record Question buttons, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: On Exit from Talking Classifieds Area
NTVP: On Exit

When the VP system plays a menu or a question, it expects a digit from the caller as a response. If the caller does not enter a digit, it usually indicates that he/she is confused or has disconnected. This field allows you to specify how you want the VP system to handle the call. It is recommended that you send the call to a Routing box that offers further assistance. Note that callers can exit from the Talking Classifieds area by pressing *.

VP: Box
NTVP: (Unlabeled Box field)

This field is valid only if the option in the corresponding field is set to GO TO BOX. The field contains the box number to which the call is to be routed.

27.3 Setting Up a Listing Box

27.3.1 What Does a Listing Box Do?

<p>Hint: Think of the Gateway box as a heading in the Classifieds section of a newspaper. Think of a Listing box as the individual advertisements under this heading.</p>
--

The Listing box houses information on each individual listing. When a caller has answered the questions in the Gateway box, the VP system searches through all the Listing boxes associated with that Gateway box (in numerical order), looking for all that contain answer specifications that match the answers indicated by the caller in the Gateway box. If matches are found, the VP system prompts the caller to listen to the descriptions recorded in the Listing boxes.

27.3.2 Accessing the Listing Box Screen

To access the Listing box screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main Menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select LISTING BOX. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access the Listing box screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select LISTING BOX. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

27.3.3 Listing Box Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced below with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field identifies the Listing box number. It cannot be changed from this screen.

VP: Listing Agent
NTVP: Listing Agent

This field normally identifies the mailbox number of the agent who owns this listing. When a caller has heard the listing and chooses option 3 (to speak to the agent), the VP system routes the call to the box entered in this field. Although this is typically a mailbox, you could also enter a Fax box number or a Routing box number here.

VP: Description
NTVP: Description

This field is used to provide a brief text description of the listing. In the case of a real estate application, for example, this field typically identifies the address of the property. This field is used in the Talking Classifieds report (see section 27.5).

VP: Notes
NTVP: Notes

This field allows you to specify additional notes about the listing.

VP: Cross-Ref Number
NTVP: Cross-Reference Number

This field allows you to enter specific cross-reference information to cross-reference the listing to account numbers or other boxes. This field displays in the Talking Classifieds report.

VP: Description Recorded
NTVP: Record Greeting button

This field indicates whether a description has been recorded for this Listing box. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

In the case of a real estate application, for example, the recording is typically a description of the property. This is the information the caller hears while listening to the listings.

On DOS-based VP systems, when you bring the cursor into this field, a menu appears, offering the option to play, delete, copy, or record the description. By selecting `RECORD` you can record the description via a telephone line connected to the voice processing board. To record the description, select `RECORD`, press `<Enter>`, and call into voice mail line 1. When voice mail answers, select `RECORD` and speak the description. To end the recording, press `<Enter>` again. To hear the recording, select `PLAY`.

On NT-based VP systems, you can record the description by clicking on the Record Greeting button, then using the controls on the Sound Recorder dialog box. At the lower-right of the dialog, click on the circle button to begin recording. Click on the rectangle button (to the left of the circle button) to end the recording. See section 15 for more information on using the Sound Recorder dialog box.

VP: Question 1, 2, 3, 4
NTVP: Category for Question 1, 2, 3, 4

The VP system uses these fields when searching through the Listing boxes, looking for those that match the caller's choices. In the real estate application example discussed earlier, question 1 prompts callers to indicate the price-range of interest.

Assume that the listing being entered in this Listing box has a price of \$95,000.

Question 1 was recorded in the Gateway box as:

*“For properties under \$90,000, press 1.
For properties between \$90,000 and \$100,000, press 2.
For properties between \$100,000 and \$120,000, press 3.
For properties above \$120,000, press 4.
To hear all listings regardless of price-range, press #.”*

The VP system must match this listing if the caller presses 2 (between \$90,000 and \$100,000) in response to question 1. You specify this match by entering `2` in the QUESTION 1 field here.

If you want the VP system to match on this listing regardless of the caller's response to question 1, enter `99` in this field(s). (If you are changing this value remotely, you indicate the 99 entry by inputting `#` as the value for the question. See section 27.4 for details).

VP: Talking Classifieds Gateway Box
NTVP: Talking Classifieds Gateway Box

This field identifies the Gateway box with which this Listing box is associated.

27.4 Accessing a Listing Box Remotely

The owner of a Listing box can call in to the VP system from any touch-tone telephone and change the recorded description and/or categories for the Listing box. If the owner is a Routing box or a Fax box, then the owner of *that* box can perform the changes.

To access a Listing box remotely:

1. The box owner places a call to the VP system and opens his/her mailbox. The VP system plays the main menu:

*“To listen to your messages, press 1.
To send a message, press 2.
To change your options, press 3.
Or, to exit, press #.”*

2. The box owner chooses option 3 to change options. The VP system plays the Options menu:

*“To record your name, press 1.
To record your greeting, press 2.
To change your password, press 3.
To change your call transfer service, press 4.
To change your message notification service, press 5.
To change your pager service, press 6.
To exit, press #.”*

3. The box owner chooses option 2 to change greeting. The VP system asks the caller to indicate the number of the box whose greeting is to be changed.

4. The box owner enters the Listing box number. The VP system plays the current description, and offers the option to change it:

*“To replay your greeting, press 1.
To re-record your greeting, press 2.
To delete your greeting, press 3.
To change the categories of a Listing box, press 4.
To exit, press #.”*

5. The box owner chooses option 2, to re-record the description and follows the prompts, speaking after the tone and pressing any key when he/she has finished. The VP system plays the greeting options again:

*“To replay your greeting, press 1.
To re-record your greeting, press 2.
To delete your greeting, press 3.
To change the categories of a Listing box, press 4.
To exit, press #.”*

6. The box owner chooses option 4 to change matching categories. The VP system plays question 1.
7. The box owner enters the new value for question 1 in the Listing box. The box owner can press # instead of a number to signify that the answer a caller provides to this question in the Gateway box is always considered a match to question1 in this box, no matter what value the caller enters.
8. The VP system plays questions 2 through 4, each time allowing the box owner to enter the value to be used in the Listing box for that question.
9. The VP system confirms that the categories have been changed.

27.5 Generating Talking Classifieds Reports

In addition to the regular call-logging feature in the VP system, the Talking Classifieds feature allows you to generate a separate report. This new report lists each call that accessed any Gateway box, and lists the Listing boxes that were accessed by the caller.

There are two general steps required to generate the Talking Classifieds report:

- Prepare the report
- Print the report

27.5.1 Preparing the Talking Classifieds Report

If you are using the TCNAME parameter in the VM.CFG configuration file (see section 27.2), the VP system records the name of each caller who accesses any of the Talking Classifieds gateways. To convert the recorded name to text that can be printed on a report, you use the CALL HISTORY screen.

To access the Call History screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select CLASSIFIEDS. The VP system displays the Talking Classifieds menu.
5. Select PREPARE REPORT. The VP system displays the CALL HISTORY screen. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the System Information menu.

To access the Call History screen through the NT-based VP system screen interface:

[Report generation capabilities on NT-based VP systems, including accessing the Call History screen, are currently under development and will be available with an upcoming release.]

27.5.2 Completing the Call History Screen

Using the CALL HISTORY screen, you can scroll through all the calls in the call-history file (all the calls that accessed the Talking Classifieds Gateway boxes).

Use the menu available on the screen to play the caller's name, and then type the name (and telephone number if recorded) into the appropriate fields. The VP system uses these fields when printing the Talking Classifieds report.

Note the box information in the lower portion of the screen. This shows all the Listing Boxes accessed by the caller. An asterisk (*) beside a Listing box means that the caller chose option 4 (more information) after listening to that listing. These boxes and the asterisks are listed in the Talking Classifieds report.

The call-history file stores up to 500 calls. You should delete the call records regularly, after generating a report. (Use the <F3> or <F8> keys on the CALL HISTORY Screen).

27.5.3 Printing the Talking Classifieds Report

To print the Talking Classifieds report through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select CLASSIFIEDS. The VP system displays the Talking Classifieds menu.
5. Select PRINT REPORT. The VP system sends the report to the printer.

To print the Talking Classifieds report through the NT-based VP system screen interface:

[Talking Classifieds report generation capabilities on NT-based VP systems are currently under development and will be available with an upcoming release.]

27.6 Automatically Allocating Mailboxes

You can set up a Talking Classifieds application to allow callers to create a Listing box, define its criteria and record its message, then add it to the other Listing boxes available on the system—all without the intervention of the system administrator. To allow a caller to add a Listing box, you set up the VP system to first automatically allocate a mailbox to the caller. The mailbox “owns” a Listing box that is also automatically generated with it. The caller sets up this Listing box by calling into the system as a mailbox owner, and following system prompts to modify his/her mailbox's associated Listing box.

Note that mailboxes that are automatically allocated to callers are restricted in functionality, so they can only communicate with the Listing box they own. This prohibits the owners of automatically allocated mailboxes from interacting through voice mail with other employees who have mailboxes on the VP

system. Automatically allocated mailboxes can also be programmed to be de-allocated after a preset number of days. When the box is de-allocated, so is its associated Listing box.

Before anyone can use the automatic allocation feature, you must enter system information on the AUTO ALLOCATION screen.

27.6.1 Accessing the Auto Allocation Screen

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access the Auto Allocation screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays, and you are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select SYSTEM INFORMATION. The System Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select CLASSIFIEDS. The VP system displays the Talking Classifieds menu.
5. Select AUTOMATIC ALLOCATION. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the System Information menu.

To access the Auto Allocation screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the System pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select TALKING CLASSIFIEDS.
5. From the menu that displays, select AUTOMATIC ALLOCATION. When you have made any necessary modifications to the screen, click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens are discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

27.6.2 Automatic Allocation Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Allow Callers to Allocate Mailboxes Automatically
NTVP: Allow Callers to Allocate Mailboxes Automatically

This field turns the automatic allocation feature ON or OFF.

VP: Digits to Use to Automatically Allocate a Mailbox
NTVP: Digit to Use to Automatically Allocate a Mailbox

This field assigns the digit to be dialed within the voice mail gateway box (9992) to begin the allocation process. The default digit is *.

VP: General "Help" Information Recorded
NTVP: Record Help button

This field indicates whether Help information has been recorded. On NT-based VP systems, an existing recording is signified by a red light displaying on the button.

Use this field to record application-specific Help information. A caller who has just allocated him/herself a new mailbox can reach this Help by pressing 2 from the menu that is played immediately after being given the new password.

Record help using the same techniques you use to record Gateway box questions and Listing box descriptions.

VP: Automatically De-Allocate Mailbox After X Days
NTVP: Automatically De-Allocate Mailbox After X Days

You can set up the system to automatically de-allocate mailboxes after a pre-defined number of days. When a mailbox is de-allocated, it is once again available for assignment to a new owner. Entering 0 (zero, the default) in this field disables this feature (mailboxes remain on the system unless manually deleted.)

VP: Re- Start Counter Each Time Mailbox is Opened
NTVP: Restart Timer Each Time Mailbox is Opened

You can use this field to modify how the previous field functions. If you enter YES in this field, mailboxes are only automatically de-allocated after the assigned number of days if they are unused for that time period (the mailbox owner has not logged into his/her mailbox).

For example, if you enter 5 days in the previous field and if the owner does not log in to his/her mailbox within 5 days after the original allocation, the mailbox is de-allocated. However, each time the owner *does* log into the mailbox, the counter re-sets and he/she has an additional 5 days before the box is de-allocated due to inactivity.

If 0 is entered in the previous field, this field is inactive.

VP: Delete Any Existing Messages When Allocating Box

NTVP: Delete Existing Messages When Allocating Mailbox

If you are using the automatic de-allocation feature, a mailbox that is automatically de-allocated may have messages that the previous owner has not deleted. When the mailbox is returned to the pool of allocable boxes, this field allows you to specify whether any messages in the box are deleted before the box is re-allocated.

VP: If Unable to Allocate a Mailbox, Go to Box

NTVP: If Unable to Allocate a Mailbox, Go to Box

If the VP system is unable to allocate a new mailbox to a caller (for example, if there are no more boxes available), a system prompt plays, *“I’m sorry, there are no free mailboxes right now. Please try again later.”* The call is routed to the box specified in this field.

27.6.3 Setting Up Allocable Mailboxes

After setting up the AUTOMATIC ALLOCATION screen, you need to identify the mailboxes that can be allocated.

To define allocable mailboxes:

1. Create a range of mailboxes to be available for automatic allocation. In the RESTRICTED access field of each mailbox, enter **9988**. This code restricts the mailbox so it can communicate only with its associated Listing box.
2. When an incoming call is received, and the caller wants to allocate him/herself a mailbox, you must set up a method to route this caller to the voice mail Gateway box (9992). For example, you could have a Routing box greeting such as:

*“Thank you for calling the XYZ Hotline.
To hear listings, press 1.
To record your own listing, press pound.”*

3. Once the caller routes to the Gateway box, he/she hears the prompt:

“Please enter your mailbox number. If you do not have a mailbox and would like to be assigned one, press star.”

4. If the caller presses *, the VP system locates an available mailbox previously set up for allocation. It then generates a random 4-digit password and plays the password to the new box owner. The owner then has the opportunity hear the password again, hear more information (recorded as the help information on the AUTOMATIC ALLOCATION screen), or open his/her mailbox:

*“To repeat this information, press 1.
For more information, press 2.
Or, to continue, press 3.”*

If the caller presses 3, he/she hears the tutorial for first-time mailbox users (if this feature is in effect on the system (see section 6).

27.6.4 Setting up Companion Listing Boxes for Automatic Allocation Mailboxes

For each mailbox created for the Automatic Allocation feature, you should create a companion Listing box. The box numbers of the Listing boxes should be easily associated with the companion mailbox. For example, if you create a range of allocable mailboxes with box numbers 400 to 499, then the companion Listing boxes could be 1400 to 1499.

By closely associating companion Listing box numbers with their automatic allocation mailboxes, you can inform new mailbox owners how to determine their Listing box number when they are automatically assigned a mailbox.

Enter the associated mailbox number in the LISTING AGENT field of each companion mailbox. This makes the mailbox the “owner” of the Listing box, and the mailbox owner can access the Listing box to record the greeting and/or change the Listing box categories. Also, when other callers listen to this Listing box and press 3 to transfer to the listing party, their call is transferred to the companion mailbox, where the caller can leave a message.

See Section 27.4 for detailed instructions on how mailbox owners can access and modify a Listing box.

27.7 Using Talking Classified Module Prompts

27.7.1 Using New Prompts

The following prompts are used by the Talking Classifieds module:

Prompt	Filename	Contents of Phrase
1000	NOMORLST.VOI	“I’m sorry, there are no more listings in that category.”
1001	RLTNOLST.VOI	“I’m sorry, there are no listings in that category.”
1002	ONEFRMOR.VOI	“To hear the next listing, press 1. To choose a new price-range, area, size or other option, press 2. To speak to the agent, press 3. If you would like us to send you more information, press 4. To re-play this listing, press 5. You may exit at any time by pressing the * key.” <i>If you offer option 4, make sure that you set the system up to ask for the caller’s name and telephone number.</i>
1003	RMAINMNU.VOI	“To hear a selection of our listings, press 1. If you would like to select a particular price-range, area, size or other option, press 2.”

Prompt	Filename	Contents of Phrase
1004	RSUBSMNU.VOI	"To hear listings which match your selections, press 1. If you would like to select a new price-range, area, size or other option, press 2."
1005	RGETNAME.VOI	"In order for us to serve you better, you may - if you wish - leave us your name and telephone number after the tone."
1006	INFOTOGO.VOI	"Thank you. We will be in contact with you as soon as possible." <i>This prompt is played when a caller chooses option 4 in response to prompt number 1002 above.</i>
1007	RLTCHGOK.VOI	"Thank you. Those details have now been changed as requested."
1008	THEREIS.VOI	"There is"
1009	THEREARE.VOI	"There are"
1010	LS1MATCH.VOI	"listing that matches your current choices"
1011	LS2MATCH.VOI	"listings that match your current choices"
1012	ALOCNOMO.VOI	"I'm sorry, there are no free mailboxes right now. Please try again later."
1013	ALOCCANT.VOI	"I'm sorry, we cannot allocate a new mailbox right now. Please try again later."
1014	ALOCMENU.VOI	"To repeat this information, press 1. For more information, press 2. Or to continue, press 3."
1015	ALOCNMBR.VOI	"Your new mailbox number is"
1016	ALOCPASW.VOI	"and the password is"

27.7.2 Modifying Existing Prompts

The following prompts, which are part of the standard VP system package, must be modified to include the options for the Talking Classifieds module. The phrase that needs to be added is shown below. A few of the most commonly used versions of these prompts have been pre-recorded and are described below. You can use these pre-recorded modified prompts by copying them onto the system, or you can re-record the prompts that must be modified using procedures detailed in section 15.

Prompt	Filename	Modification Required
59	WHICHBOX.VOI	<i>Add option for Automatic allocation of mailboxes: " If you do not have a Mailbox and would like for me to create one for you, press star."</i>
93	GRTOPT.VOI	<i>Add the listing box option (number 4): "...to change the categories of a Listing box, press 4..."</i>

27.7.3 Copying Pre-Recorded Modified Prompts

The following prompts were pre-recorded and can be used to replace the existing prompts supplied with the standard VP system software package. These prompts were copied to the to \VM\P directory when the Talking Classifieds module was installed. Pre-recorded modified prompts have the same filenames as their corresponding standard prompts, but they use a different file extension.

To copy a modified prompt to the active system, follow these steps:

1. If the system is a DOS-based VP system, shut it down if it is currently running. For procedures, see section 2.5.
2. Locate the text you want to use in the following table and make a note of the filename.
3. Copy the file over the prompt with the .VOI file extension. (You may want to first rename the . VOI prompt an extension .OLD, so if you ever want to revert back to it, the prompt is still available.) For example, to replace the existing prompt 59 with WHICHBOX.OP1, access a command prompt and type the following command:

```
COPY \VM\P\WHICHBOX.OP1 \VM\P\WHICHBOX.VOI then press <Enter>
```

4. When you finish modifying prompts, re-start the VP system.

Prompt	Filename	Contents of Phrase
59	WHICHBOX.OP1	"Please enter your mailbox number. If you do not have a Mailbox and would like for me to create one for you, press *."
93	GRTOPT.OP1	"To replay the greeting, press 1. To re-record the greeting, press 2. To delete the greeting, press 3. To change the categories of a Listing box, press 4. To choose a new greeting, press 5. Or, to return to the Options menu, press #."

28. Using the Outbound Telemarketing Module

Note: Refer to instructions in section 23 for information on installing the Telemarketing module on VP systems.

The Outbound Telemarketing module allows you to use the existing VP system to perform outbound telemarketing functions even while the VP system is acting as a voice mail or auto attendant. The VP system always gives precedence to incoming calls, but takes advantage of any idle time by making telemarketing calls on lines not in use (or you can restrict it to use only certain lines on the system).

The VP system can do the job of up to five independently programmable automatic dialing machines, depending on the number of lines you are using. Each “machine” is represented by a Telemarketing box. The 5 Telemarketing boxes are numbered 9970 through 9974.

You supply each Telemarketing box with a file of telephone numbers. The VP system dials each of these numbers in turn. If a number is busy or does not answer, it is placed on a list to be tried again at a later time.

If the called party *does* answer, the VP system can process the call by playing a message, transferring to a live person, asking a series of questions, recording a message, or performing other functions.

The result of every call is documented in a log. This log can be the regular VP system call log, or you can set up the system to save the information to a separate file or send it to a printer.

You can also supply a list of telephone numbers that should not be called. The VP system checks this list before making each outbound call.

28.1 Setting Up a Telemarketing Box

28.1.1 What Does a Telemarketing Box Do?

All scheduling and control of outbound calls is done via the 5 Telemarketing boxes (9970 through 9974). The Telemarketing box is different from other boxes in that you cannot route callers to a Telemarketing Box. Instead, the Telemarketing box actually generates calls.

28.1.2 Accessing the Telemarketing Box

Note: Refer to section 29 for graphical illustrations of all VP system screens.

To access the Telemarketing box screen through the DOS-based VP system screen interface:

1. From the LINE STATUS screen, press <F10>. The Main menu displays and you are prompted to enter a system password.

2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Customer level passwords on the GENERAL INFORMATION screen.
3. From the Main menu, select BOX INFORMATION. The Box Information menu displays.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select TELEMARKETING BOX. When you have made necessary modifications to the screen, press <F10> to save the changes. You return to the Box Information menu.

To access the Telemarketing box screen through the NT-based VP system screen interface:

1. From the Windows NT desktop, double-click the DATABASE ADMINISTRATOR icon. You are prompted to enter a password.
2. Type **1234** then press <Enter> to log on using the default Technician level password. You can change both the Technician and Administrator level passwords on the GENERAL INFORMATION screen.
3. Access the BOXES pull-down menu.
4. Select the OPTIONAL FEATURES option, then from the menu that displays, select TELEMARKETING BOX. When you have made any necessary modifications to the screen press <F10> to save the changes or click on the Save icon on the screen. You return to the main screen.

Note: Field names and screen descriptions for both DOS-based and NT-based VP systems screens are presented in this section. Each field description identifies the field name used in both types of products. Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several screens vary slightly. All fields on all screens *are* discussed in this section.

Note: To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

28.1.3 Telemarketing Box Screen Field Descriptions

Be advised that due to differences in the screen design between DOS-based and NT-based VP systems, the placement of fields on several system screens vary slightly. To locate the information on a particular field most easily, consult the Index to find the page number of this document that contains the field description.

Fields used in DOS-based VP systems are prefaced below with **VP**, and fields used in NT-based VP systems are prefaced with **NTVP**. If the NTVP field resides on a certain tab on the screen or if the VP field resides on a certain screen page, the tab or page is identified next to the field name.

Several field descriptions discuss setting fields to YES or NO settings. In NT-based VP systems, this equates to checking or un-checking the field's checkbox, which you do by clicking on it.

VP: Box Number
NTVP: Box Number

This field indicates the box number. Telemarketing boxes are numbered from 9970 through 9974. This field identifies which one of the five Telemarketing boxes is being displayed. You cannot modify this field.

VP: Completed
NTVP: Job Complete

This field tells you whether the VP system has completed the out-dialing assignment. The VP system sets this field to YES when it has dialed every number in the list you supplied and when all busy / no-answers have either been answered or have reached the maximum number of re-tries. Once this field has been set to YES, the VP system stops dialing out for this Telemarketing box. When you supply a new list of numbers, you should press <F3> (Reset) to indicate that the VP system should start dialing again from the top of the list. (NT-based VP system users can also reset the box by clicking the Restart button.)

VP: Box Name
NTVP: Box Name

This field can be used to identify a short description of the out-dialing assignment.

VP: Use Lines in Group
NTVP: Use Lines in area

This field indicates to the VP system which lines it is allowed to use to make its outbound calls. If you are using the VP system as an incoming auto attendant or voice mail processor, you may want to reserve some of the lines for incoming calls only. To restrict the VP system to using, for example, only lines 3 and 4 for outbound calling, place lines 3 and 4 in a line group (such as Line Group B), then indicate the line group here. For more information on setting up line groups, see section 7.16.

VP: Start Date
NTVP: Start Calling on this Date (*When to Call tab*)

This field indicates the date on which you want the VP system to start making calls. The date must be entered in month-day-year format, for example, enter **4-24-98** for April 24, 1998.

VP: End Date
NTVP: Stop Calling on this Date (*When to Call tab*)

This field indicates the date on which you want the VP system to stop making calls. The date must be entered in month-day-year format, for example, enter **4-24-98** for April 24, 1998.

VP: Start Time X ... Stop
NTVP: Start Calling at X ... Stop at (*When to Call tab*)

Each Telemarketing box can be programmed to make calls only at specific periods during the day. Up to 3 separate periods can be defined. Enter the time at which the VP system should begin making calls for the first period of the day. In the STOP field, enter the time at which the VP system should stop making the calls. The time must be entered in 24-hour format (for example, for 8:00 PM, enter 20:00).

VP: Call on (Day)

NTVP: Make Calls on area (*When to Call tab*)

You can specify on which days of the week the VP system should make its outbound calls. A YES beside any day indicates the VP system is allowed to make its calls on that day.

Note: To stop a telemarketing job that is in progress, set all days to NO. Next, press <F3> to reset the box. The job in progress will stop making outcalls.

VP: Default Path

NTVP: Directory Containing Telemarketing Files (*File names tab*)

This field contains the sub-directory in which the VP system should look to find the files associated with outbound-dialing. These are:

- The file of telephone numbers to be called
- The file of numbers that should not be called (if such a file exists)
- The file in which the result of each call should be logged. Each Telemarketing box can store the results in a separate file.

If you leave this field blank, it defaults to the root directory of the disk on which the VP system is running.

VP: Source File

NTVP: Name of File Containing Telephone Numbers (*File Names tab*)

This field contains the name of the file that contains the telephone numbers you want to call. Since each Telemarketing box is independent of the others, do not use the same filename for more than one Telemarketing box. This would result in the numbers in the file being called more than one time. (NT-based VP system users can select the Review File button to view and edit the source file.)

VP: Start Col

NTVP: Telephone Number Start at Position (*File Names tab*)

This field corresponds to the above field. When the VP system reads a line from the source file, the line may contain numbers other than telephone numbers. For example, the line may also have a Social Security number or a Zip Code. Use this field to tell the VP system in what column the telephone number begins. For example, consider the line:

```
John Smith 132 West 4th Street 555-1234 SS#123-45-6789
.....111111111122222222223333...
123456789012345678901234567890123...
```

By placing the number 32 in the this field, the VP system knows to skip past the numbers in the address.

VP: Max Digits**NTVP: Maximum Number of Digits to Dial (*File Names tab*)**

In the above example, the VP system would start dialing after character position 31 on the line. The VP system allows letters and punctuation in telephone numbers (such as the dash between the **555** and the **1234**) and knows to ignore them. However, in this example, the VP system also ignores the space and the **SS**. Next it reads **#123** in the Social Security number. Because these are valid digits, they are also dialed. To prevent this “over-dialing” use the MAX DIGITS field to inform the VP system of the maximum number of digits it should expect to find in a telephone number. In this case, entering a 7 in this field causes the VP system to dial correctly.

VP: Exclude**NTVP: Name of File Containing “Do not Call” Numbers (*File Names tab*)**

If there are telephone numbers that you never want the VP system to call during a telemarketing campaign (for example, emergency numbers), place these numbers in a file, and enter the filename in this field. You define the path to this file elsewhere on this screen (see above). The VP system checks every outgoing call to ensure it does not dial one of the numbers in this file.

VP: Results**NTVP: Name of File to Log Telemarketing Call Results (*File Names tab*)**

The VP system stores the result of each call in a file. Each Telemarketing box can write results to its own log file, or you can specify the same log file name in all five Telemarketing boxes. If you want the outbound calls to be stored in the regular VP system log, along with incoming calls, pager calls, etc., then the directory path you enter at the top of the screen should be set to `\VM`, and the filename `VOICMAIL.LOG` should be specified in this field. If you want the log to be sent directly to a printer, enter the word `PRINTER` in this field. Make sure the printer is switched on, is on-line, and is connected to the `LPT1` port on the computer.

VP: Wait for Answer**NTVP: Assume No Answer After X Rings (*Call Control tab*)**

Once the VP system has dialed a number, it waits for a specified period for an answer (provided it does not detect a busy signal). This field specifies how long it should wait before moving on to the next number on the list. Enter the number of rings to wait.

VP: Retry Busy Number**NTVP: If Called Number is Busy, Try Again After X Minutes (*Call Control tab*)**

If the VP system finds that a number is busy, it notes the number and tries it again later. This field specifies the minimum interval (in minutes) between re-tries to a number that is busy.

VP: Re-Try No-Ans Number**NTVP: If Called Number Does Not Answer, Try Again After X Minutes (*Call Control tab*)**

If the VP system dials a number, but does not get an answer, it notes the number and tries it again later. This field specifies the minimum interval (in minutes) between re-tries to a number that does not answer.

VP: Number of Re-Tries**NTVP: Number of Times to Re-try Busy / No-Answer Numbers (*Call Control tab*)**

If the VP system dials a number, but finds it busy or does not get an answer, it notes the number and tries it again later at intervals specified in other fields. The number of times the VP system re-tries the number is specified in this field.

VP: On Answer, Go to Box**NTVP: When Answer is Detected, Go to Box (*Call Control tab*)**

Once the VP system determines that a called party has answered and that it is a real person (rather than an answering machine) it processes the call by routing it to another box. For example, this could be:

- A Routing box, playing a greeting and offering various menu selections (*“Press 1 to hear about our newest products, press 2 to speak to an operator...”*)
- A mailbox, which could immediately transfer the call to a live operator
- A Question box, which would conduct an interview, etc.

VP: Answering Machine Greeting Recorded?**NTVP: Answering Machine area**

The VP system determines that a real person has answered by the length of the greeting. Usually, a person answers by simply saying, *“Hello,”* while a typical answering machine plays a longer greeting, for example, *“Hello, you have reached the Smith residence. No one is here to take your call now, please leave a message at the tone.”* If the VP system detects a short response, it assumes a live person has answered the call. If the system detects a long response, it assumes the call was taken by a machine. If a greeting is recorded in this field, the VP system plays it when it determines an answering machine has answered. If you do not want to use this feature, do not record a greeting in this field. See section 28.2 for information on adjusting the answering machine parameters.

28.1.4 Specifying External Dial Rules

Depending on the source file telephone numbers, you may need to have the VP system add or delete digits before placing calls. For example, if the list contains a mixture of local and long distance numbers, you need to define an Insert rule to add a “1” to the number when required. If the list includes the area code for every number, and you need to remove the local area code from certain numbers, you need to define a Delete rule.

You specify external dial rules in the file `DIALRULE.TXT` in the `\VM` directory. The procedure for building these rules is detailed in section 7.25. When you start an outbound telemarketing job, the VP system checks for the existence of the `DIALRULE.TXT` file and, if the file does exist, follows the rules when dialing. There is no need to “flag” the existence of the dial rules as there is with the Fax Distribution module on the `FAX SETUP` screen.

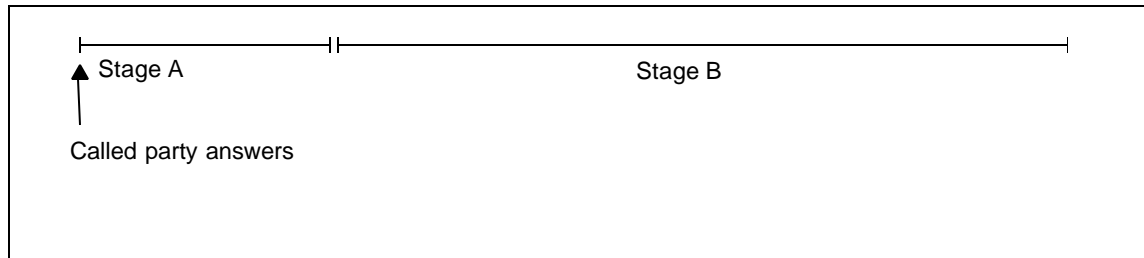
28.2 Detecting Answering Machines

When the VP system makes an outgoing telemarketing call, it listens to see if the called number is busy, ringing, or is answered. If the call is answered, the VP system analyzes the voice on the other end to determine if the call has been answered by a real person or by an answering machine.

When a live person answers a ringing telephone, he/she normally gives a brief greeting (such as “ *Hello*”), followed by a pause, waiting for a response from the caller. When an answering machine answers a call, it usually plays a longer greeting before recording a message (for example, “*Hello, this is Mary. Sorry I missed your call. Please leave me a message at the tone...*”).

The VP system uses these characteristics to determine if the call is answered by an answering machine.

The VP system breaks down the answer period into two stages : STAGE A and STAGE B. During STAGE A, if the VP system detects a short silence (by default, 2 seconds), it assumes the call has been answered by a live person.



If the period of silence is not detected within STAGE A, the VP system assumes that an answering machine is playing its message and waits for the end of the message (denoted by a long silence of about 3 seconds). If the silence period is still not detected within STAGE B, the VP system plays the answering machine greeting at the end of STAGE B anyway.

The following parameters are configurable in the configuration file `VM.CFG` (see chapter 12):

LENGTH OF SHORT SILENCE (default = 2 seconds)
 LENGTH OF STAGE A (default = 5 seconds)
 LENGTH OF LONG SILENCE (default = 3 seconds)
 LENGTH OF STAGE B (default = 10 seconds)

To change any of these parameters, you must specify all of them as follows:

```
ANS MACHINE PARMS = w,x,y,z
```

where: w is the length of the short silence (in seconds)
 x is the length of STAGE A (in seconds)
 y is the length of the long silence (in seconds)
 z is the length of STAGE B (in seconds)

28.3 Setting Up a Telemarketing Application

This section details an example application of the Outbound Telemarketing module.

The Problem

John Smith owns a delicatessen. He has a number of customers who call in for lunch every week-day around noon. Sometimes they call in their orders early, which gives John time to prepare them before the lunch-time rush. However, they often forget, so the orders have to be prepared while they wait at the counter. This is inefficient for both John and his customers.

The Solution

John uses the VP system to call each customer before lunch-time and to take his/her order.

To set up the application, John must consider two factors:

- How the VP system makes the outbound calls.
- How the VP system handles the call once it has been answered.

The Outbound Schedule

First, John collects his customers' telephone numbers and places them in a text file he names LUNCH.LST. The file is stored in the \VM directory.

Next, John accesses a TELEMARKETING BOX screen.

For BOX NAME, John enters LUNCHORDERS.

Since he wants to run these calls indefinitely, he specifies 01-01-95 (some past date) for the date on which calls are to start and 12-31-99 for the date on which calls are to stop.

John specifies the time at which calls are to start as 10:30 (AM). Since there is no point in calling anyone after lunch-time, he specifies 12:00 as the time at which calls are to stop. This gives the VP system 1½ hours to make the calls. (If this is not enough time to call all his customers, he needs to use more telephone lines).

Since there is no other period in the day during which he wants to call these customers, he leaves the other calling time fields blank.

The LUNCH.LST file containing the telephone numbers is in the VP system directory, so John specifies the default \VM as the directory containing the telemarketing files. He enters LUNCH.LST as the name of the source file containing the telephone numbers. Since he created the file himself, and each line contains only a telephone number, he specifies that the phone numbers start at position 1 (START COL field on non-NT-based VP systems) and he specifies that the maximum number of digits the VP system is to dial as 7. (All numbers are 7-digit telephone numbers.)

John knows that he can dial all the numbers on his list, so he does not use the EXCLUDE fields (VP) / NAME OF FILE CONTAINING DO NOT CALL NUMBERS field (NTVP).

To keep a log of how things went, he tells the VP system to generate a file called LUNCH.LOG, by entering this filename in the RESULTS field (VP) / NAME OF FILE TO LOG TELEMARKETING CALL RESULTS field (NTVP).

He sets the WAIT FOR ANSWER field (VP) / ASSUME NO ANSWER AFTER X RINGS field (NTVP) to 4 rings.

If a number is busy, he thinks the VP system should wait one minute before trying it again, so he sets the RETRY BUSY NUMBER field (VP) / IF CALLED NUMBER DOES NOT ANSWER TRY AGAIN AFTER X MINUTES field (NTVP) to 1 (minute). If a number does not answer, then that person is probably away from his/her desk, so John sets the corresponding no-answer field to 10 (minutes).

He decides to try each number a maximum of 3 times, so he sets the NUMBER OF RE-TRIES field to 3.

When the party answers, John wants them to hear the recorded message in Box 1000. He specifies this in the field ON ANSWER, GO TO BOX.

Since he does not work weekends, John does not want the VP system to make calls on those days, so he sets the CALL ON fields for Saturday and Sunday to NO (in the NT-based VP system, he deselects the fields). He sets Monday through Friday to YES (in the NT-based VP system, he checks the fields). (Actually, however, this entry is not necessary, as the VP system dials the complete list before the end of the day, and re-starts each morning).

John has three telephone lines. He wants to make sure there is always one line free on which he can make calls, so he sets up the VP system to use lines 2 and 3 only. He does this by placing lines 2 and 3 in line group D, and selecting line group D as the line group to use for this Telemarketing Box.

Processing the Answered Call

John has told the VP system to send the call to Routing box 1000 once it has been answered. He records the following greeting in Routing box 1000:

“Hi, this is John at the deli. If you’re planning on eating here today, press 1 to give me your order. If you want to hear today’s specials, press 2.”

Digit 1 routes to mailbox 2000, where the TRANSFER-TYPE is set to NO TRANSFER (see section 5 for information on mailboxes and Routing boxes). John records the greeting in mailbox 2000 as simply, *“Thank-you.”* So the VP system says:

“Thank-you, please speak after the tone.”

Digit 2 from Routing Box 1000 sends the caller to Routing Box 1001, in which John records descriptions of the day’s specials.

Using the Application

Now, every morning, John must do only two things:

- Record a description of the day’s specials in Routing Box 1001.
- Reset the Telemarketing box 9970 to make the days calls by accessing it and pressing <F3> (or on NT-based VP systems, selecting the Restart button).

The VP system waits until 10:30 AM, then uses lines 2 and 3 to begin calling John’s customers. As orders arrive, John can call in to the VP system and retrieve the orders from mailbox 2000.

<p>Note: To stop a telemarketing job that is in progress, set all days to NO in the field CALL ON (DAY) (VP systems) / MAKE CALLS ON AREA (NTVP systems). Next, press <F3> to reset the box. The job in progress will stop making outcalls.</p>
--

29. Program Screens

This section provides illustrations of VP system screens. For information on accessing screens, refer to procedures provided in sections 4 and 5. Note that not all screens may be accessible on all VP systems.

29.1 DOS-based VP System—System Information Screens

29.1.1 Automatic Mailbox Allocation Screen

A U T O A L L O C A T I O N	
Allow callers to allocate Mail-boxes automatically?	Yes
DIGIT TO USE TO AUTOMATICALLY ALLOCATE A MAIL-BOX:	8
General "Help" information recorded:	No
Automatically deallocate Mail-box after 0 days	
Re-start counter each time Mail-box is opened?	No
Delete any existing messages when allocating box?	Yes
If unable to allocate a Mail-box, go to box:	821

29.1.2 Business Hours Screen

B U S I N E S S H O U R S				
	Day service begins	Day service ends	Lunch service begins	Lunch service ends
SUN:	_____	_____	_____	_____
Mon:	_____	_____	_____	_____
Tue:	_____	_____	_____	_____
Wed:	_____	_____	_____	_____
Thu:	_____	_____	_____	_____
Fri:	_____	_____	_____	_____
Sat:	_____	_____	_____	_____
Change "Good afternoon" to "Good evening" at: _____				

29.1.3 Call Transfer Screen

CALL TRANSFER INFORMATION		
	INTERNAL	EXTERNAL
SEQUENCE TO INITIATE A TRANSFER :	!,	!,
Sequence to complete a transfer :		
Sequence to transfer 3-way call :		
Sequence to return from busy:	!,	!,
Sequence to return from no-ans :	!,	!,
Sequence to return call screening:	!, !,	!, !,
Detect dial tone?	Yes	
Detect call-progress tones?	Yes	
Use transfer bypass digit ?	Last digit	
Digits that mean YES, when asking for confirmation	1	
Max time for 3-way call (mins) :	5	

29.1.4 Class of Service Screen

CLASS OF SERVICE			
Class-of-service number: 0	CLASS-OF-SERVICE NAME:		
Maximum number of greetings: 10	Maximum greeting length (secs):	60	
Maximum number of messages : 200	Maximum message length (secs):	60	
Auto-delete OLD messages from system after 30 days.			
Auto-delete NEW messages from system after 99 days.			
Supervisor status ?	No	Play menu after greeting?	No
Access to Group-boxes ?	Yes	Allowed to receive faxmail?	No
Dial-out allowed?	No	Operator Box (Day):	388 (Night): 388
Access to P.A.?	Yes	When exiting open Mail Box, go to box 321	
Max lines allowed to hold for one box: 2 Digits allowed while holding:			
While in queue, say position in line? No			
Try extension 3 times, before going back to caller.			
RESTRICTED NUMBERS			
Digits:		Digits:	
Digits:		Digits:	

29.1.5 Classifieds Gateway Screen

```

          C L A S S I F I E D S   G A T E W A Y

Box number : 3907

GATEWAY NAME: Real Estate

Greeting recorded : Yes

Question 1 recorded : Yes           Question 2 recorded : Yes
Question 3 recorded : Yes           Question 4 recorded : Yes

On exit from Talking Classifieds area, Go to box ... - box 300
    
```

29.1.6 Fax Setup Screen

```

          F A X   S Y S T E M   S E T U P

Fax cover page preference: Custom
Filename for cover-page logo: pagetry.pcx
How to transmit faxes: Offer option
Max faxes we will send per call : 3
Sending resolution: Standard

Fax 1 is on line 1  Fax 5 on line 0  Fax 9 on line 0  Fax 13 on line 0
Fax 2 is on line 2  Fax 6 on line 0  Fax 10 on line 0  Fax 14 on line 0
Fax 3 is on line 0  Fax 7 on line 0  Fax 11 on line 0  Fax 15 on line 0
Fax 4 is on line 0  Fax 8 on line 0  Fax 12 on line 0  Fax 16 on line 0

Digits to strip from callback number: EXT
Prefix a digit-1 for long-distance? Yes
If call fails, try 2 more times, at intervals of 5 minutes.

Path for fax-distribution documents: \um8\m
PATH FOR FAX-MAIL DOCUMENTS: \um8\faxmail
    
```

29.1.7 Fax Distribution Restrictions Screen

```

FAX DISTRIBUTION RESTRICTIONS

Restriction type : Block only these

Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
DIGITS: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]
Digits: [REDACTED]      Digits: [REDACTED]      Digits: [REDACTED]

```

29.1.8 General Information Screen

```

GENERAL INFORMATION

COMPANY NAME : [REDACTED]
Database access password (customer): *****
Database access password (technician): *****

If call lasts more than 0 minutes, re-route to box [REDACTED]

Seconds for fast-forward / rewind operations : 5
Number of lines detected: 0
Automatically exit to DOS at 0:00
Store call log to : No log Number of boxes to log : 10
Max calls on on-screen graph: 0
Digits to get a line on external call : 9, [REDACTED]

Path for prompts : P [REDACTED]
Path for greetings : M [REDACTED]
Path for messages: M [REDACTED]
Path for Question-box voice files: M [REDACTED]
Path for call log information: LOG [REDACTED]

```

29.1.9 Holiday Schedule Screen

H O L I D A Y S C H E D U L E								
		Month	Day	Initial box		Month	Day	Initial box
Holiday 1:	1:	None	1	9999	Holiday 11:	None	1	
Holiday 2:	2:	None	1		Holiday 12:	None	1	
Holiday 3:	3:	None	1		Holiday 13:	None	1	
Holiday 4:	4:	None	1		Holiday 14:	None	1	
Holiday 5:	5:	None	1		Holiday 15:	None	1	
Holiday 6:	6:	None	1		Holiday 16:	None	1	
Holiday 7:	7:	None	1		Holiday 17:	None	1	
Holiday 8:	8:	None	1		Holiday 18:	None	1	
Holiday 9:	9:	None	1		Holiday 19:	None	1	
Holiday 10:	10:	None	1		Holiday 20:	None	1	

29.1.10 Line Information Screen

L I N E I N F O R M A T I O N											
		Day Service		Night service		Lunch service					
Line num	Initial box	Rings to ans	Initial box	Rings to ans	Initial box	Rings to ans	Outgoing allowed?	Line Groups			
								A	B	C	D
1	9999	1		1		1	Yes	No	No	No	No
2		1		1		1	Yes	No	No	No	No
3		1		1		1	Yes	No	No	No	No
4		1		1		1	Yes	No	No	No	No
5		1		1		1	Yes	No	No	No	No
6		1		1		1	Yes	No	No	No	No
7		1		1		1	Yes	No	No	No	No
8		1		1		1	Yes	No	No	No	No

29.1.11 Other Customizations Screen

OTHER CUSTOMIZATIONS			
Play message time and date:	After each message		
When called party answers, play his/her name?	Yes		
When called party answers, announce the call?	Yes		
Display Mail-box passwords on screen?	Yes		
Maximum box length (when caller is dialing):	4		
Initial pause (seconds):	1		
TRACE :	D		
Custom :	0	Custom :	0
Debug :	0	Debug :	0
Custom :	0	Custom :	0
Debug :	0	Debug :	0

29.1.12 Technical Information Screen

TECHNICAL INFORMATION	
DISCONNECT DIGIT SEQUENCE :	
Hookflash length (milliseconds) :	500
Pause length (milliseconds) :	1000
Seconds of silence to end recording :	5
Seconds of non-silence to end recording :	5
Automatically update all MWI lamps at:	0:00

29.2 DOS-based VP System—Box Setup Screens

29.2.1 Account Number Box Screen

```

A C C O U N T - N U M B E R   B O X

Box number 199          Box name :Customer Acct. Number

Greeting recorded :No

Owner:

Minimum number of digits required: 3
Maximum number of digits allowed : 10
Number of seconds to wait for a digit: 3
Repeat the number for confirmation? No
If acct number already collected on this call: Use existing number

If invalid account number entered, allow 1 more attempts,
and then Return box

If valid account number entered: Go to box ... BOX 112
    
```

29.2.2 ACD Box Screen

```

A C D   B O X

Box number: 400          BOX NAME:

Box name recorded? No
Owner:
Operator box (day): 888      Operator box (night): 889

Extn: 111      Extn: 123      Extn: 1099      Extn:
Extn: 118      Extn: 106      Extn:           Extn:
Extn: 119      Extn: 104      Extn:           Extn:

When trying an extension Transfer if free      Rings to answer: 3
Start hunting from First extension
If all extns busy Queue the call box: Say position in line?Yes
Offer other options after 3 announcements.
If caller does not want to remain in queue Go to box ... box:821

Queue announcement #1 recorded: No      Queue announcement #4 recorded: No
Queue announcement #2 recorded: No      Queue announcement #5 recorded: No
Queue announcement #3 recorded: No      Queue announcement #6 recorded: No
    
```


29.2.3 Directory Box Screen

D I R E C T O R Y B O X	
Box number :	9998 BOX NAME : Dial By Name Directory
Greeting recorded :	No
Number of times to play greeting :	1
Max number of digits to collect :	3
If no digits dialed:	Return - box
If name not found:	Return - box
Say box number before transferring?	Yes
Allow complete directory listing?	Yes

29.2.4 Fax Box Screen

F A X B O X	
Box number :	9986
BOX NAME :	IUR auto-fax
Document name recorded:	No
Owner box :	
Document file-name:	
Document type :	IUR response
Document security code:	
When exiting box:	
If caller may order more documents:	Return - box
If caller has ordered max number of docs:	Return - box

29.2.5 Group Box Screen

G R O U P B O X				
Box number :	300	Box name :	██	
Name recorded :	No	Number of messages :	0	
Max message time :	50			
List of members:				
10	████████	████████	████████	████████
11	████████	████████	████████	████████
12	████████	████████	████████	████████
100	████████	████████	████████	████████
101	████████	████████	████████	████████
102	████████	████████	████████	████████
1000	████████	████████	████████	████████

29.2.6 Listing Box Screen

L I S T I N G B O X	
Box number :	402
Listing agent :	101
DESCRIPTION :	██
Cross ref. number :	████████████████
Description recorded :	No
Question 1:	99
Question 2:	99
Question 3:	99
Question 4:	99
Talking-Classifieds gateway:	████████
Notes :	██

29.2.7 IVR Box Page 1 Screen

I V R B O X		(Page 1 of 3)
Box number:	301	BOX NAME: [REDACTED]
Greeting recorded?	No	
Owner:	[REDACTED]	
Max secs between digits:	3	Bail-out digits: [REDACTED]
If account number not yet entered:	Continue	box [REDACTED]
DATABASE FILE INFORMATION		
Filename:	IVR301.DAT	
Delimiter between fields:	,	
<u>FIELD TYPES</u>	Field 1: Nothing	Field 6: Nothing
	Field 2: Nothing	Field 7: Nothing
	Field 3: Nothing	Field 8: Nothing
	Field 4: Nothing	Field 9: Nothing
	Field 5: Nothing	Field 10: Nothing

29.2.8 IVR Box Page 2 Screen

I V R B O X		(Page 2 of 3)
Box number:	301	Box name: [REDACTED]
PROMPTING CALLER FOR INPUT		
Prompt for input #1 recorded?	No	Note: [REDACTED]
Prompt for input #2 recorded?	No	NOTE: [REDACTED]
Prompt for input #3 recorded?	No	Note: [REDACTED]
Prompt for input #4 recorded?	No	Note: [REDACTED]
Prompt for input #5 recorded?	No	Note: [REDACTED]
SEARCHING THE DATABASE		
A record matches if	Field 1 is (don't care)	Input 1 [REDACTED]
and	Field 1 is (don't care)	Input 1 [REDACTED]
and	Field 1 is (don't care)	Input 1 [REDACTED]
and	Field 1 is (don't care)	Input 1 [REDACTED]
and	Field 1 is (don't care)	Input 1 [REDACTED]

29.2.9 IVR Box Page 3 Screen

I V R B O X		(Page 3 of 3)
Box number: 2001	Box name: Customer Number Verification	
PHRASES TO USE WHEN SAYING OUTPUT		
Output phrase 1 recorded?	Yes	Note: [REDACTED]
Output phrase 2 recorded?	No	Note: [REDACTED]
Output phrase 3 recorded?	No	Note: [REDACTED]
Output phrase 4 recorded?	No	Note: [REDACTED]
Output phrase 5 recorded?	No	Note: [REDACTED]
If match found, say Phrase 1 -> Nothing -> Nothing -> Nothing -> Nothing Nothing -> Nothing -> Nothing -> Nothing -> Nothing		
and then search for 0 more matching records.		
and then Go to [REDACTED] Box 350		
If match not found Go to box ... BOX 321		

29.2.10 Mailbox Page 1 Screen

M A I L B O X		Page 1
Box number: 10	FIRST NAME: Sample	Last: Mail box
CALL TRANSFER INFORMATION Transfer type: [REDACTED] To: X [REDACTED] Rings to answer: 4 Use 3-way calling? No Get caller's name? No Record conversation? No Currently enabled? Yes Transfer schedule: Always		PERSONAL DATA Password: 10 [REDACTED] Name recorded: No Greeting recorded: No PRIVILEGES Class of service: 0 Restricted - Client of: [REDACTED]
Sequence to turn ON message-waiting lamp: [REDACTED]		New: 0
Sequence to turn OFF message-waiting lamp: [REDACTED]		Old: 0

29.2.11 Mailbox Page 2 Screen

M A I L B O X (Page 2)				
Box number: 10 First Name: Last:				
PAGER NUMBER:		Pager type: Digital		
Times to call: 1	Mins between calls: 0	Schedule: Always	Enabled? No	
After playing greeting:				
If caller chooses "other options": Go to box ... - box 821				
After leaving message, Go to box ... - box 821				
If call is via D.I.D. play greeting in language: 1				
Auto-forward NEW msgs to box after 0 hours.			Schedule: Always	
MESSAGE DELIVERY -	Where and When	Repeat	Interval	Schedule
Call:		2	60	Schedule A
Call:		3	10	Schedule B
Call:		3	10	Schedule C
Call:		3	10	Always
Call:		3	10	Always
Run this cycle 1 times.		Currently enabled? Disabled		

29.2.12 Mailbox Page 3 Screen

M A I L B O X Page 3					
Box number: 10 First Name: Sample Last: Mail box					
SCHEDULE A		Start	End	SCHEDULE B	
	SUN:	0:00	0:00	Sun:	0:00 0:00
	Mon:	0:00	0:00	Mon:	0:00 0:00
	Tue:	0:00	0:00	Tue:	0:00 0:00
	Wed:	0:00	0:00	Wed:	0:00 0:00
	Thu:	0:00	0:00	Thu:	0:00 0:00
	Fri:	0:00	0:00	Fri:	0:00 0:00
	Sat:	0:00	0:00	Sat:	0:00 0:00
SCHEDULE C		Start	End	SCHEDULE D	
	Sun:	0:00	0:00	Sun:	0:00 0:00
	Mon:	0:00	0:00	Mon:	0:00 0:00
	Tue:	0:00	0:00	Tue:	0:00 0:00
	Wed:	0:00	0:00	Wed:	0:00 0:00
	Thu:	0:00	0:00	Thu:	0:00 0:00
	Fri:	0:00	0:00	Fri:	0:00 0:00
	Sat:	0:00	0:00	Sat:	0:00 0:00

29.2.13 Mailbox Page 4 Screen

M A I L B O X (Page 4)			
Box number:	10	First Name:	[REDACTED] Last: [REDACTED]
Hotel guest privileges only? No			
WAKE-UP TIME:	7:00	Currently scheduled?	No
PERSONAL DISTRIBUTION LISTS			
Enabled?	Yes	Enabled?	Yes
Members:	[REDACTED]	Members:	[REDACTED]
Enabled?	Yes	Enabled?	Yes
Members:	[REDACTED]	Members:	[REDACTED]
Enabled?	Yes	Enabled?	Yes
Members:	[REDACTED]	Members:	[REDACTED]

29.2.14 Mailbox Page 5 Screen

M A I L B O X (Page 5)	
Box number:	10 First Name: C Last: Mail box
RECORDING CALLS (Comdial systems only)	
Allowed to record calls?	Yes
MAXIMUM TIME TO RECORD (MINS):	15
Discard recording if less than	9 seconds.
Beep every	30 seconds.
MONITORING MESSAGES (Comdial systems only)	
Play ringburst when caller begins to leave a msg?	Yes

29.2.14 Question Box Screen

QUESTION BOX						
Box number :	200	BOX NAME :	[REDACTED]			
Greeting recorded:	No	Owner box:	[REDACTED]			
Replay digit answers for verification :	No	Voice answers:	No			
Trigger notification?	No	After questions, Say Goodbye	- box	[REDACTED]	Exit digits:	[REDACTED]
Question Recorded?	Answer Type	Min # of digits	Max Length	Max Silence		
Question 1:	No	Voice	1	30	3	
Question 2:	No	Voice	1	30	3	
Question 3:	No	Voice	1	30	3	
Question 4:	No	Voice	1	30	3	
Question 5:	No	Voice	1	30	3	Old msgs : 0
Question 6:	No	Voice	1	30	3	
Question 7:	No	Voice	1	30	3	New msgs : 0
Question 8:	No	Voice	1	30	3	
Question 9:	No	Voice	1	30	3	
Question 10:	No	Voice	1	30	3	

29.2.15 Routing Box Screen

ROUTING BOX					
Box number :	300	BOX NAME :	Main Greeting		
Greeting recorded :	No	Owner :	70		
Number of times to play the greeting :	1				
Number of seconds to wait for a digit:	1				
If no digits dialed, Go to box ...	- box 321				
If invalid digit dialed, go to box	300				
Route the call based on :	Digit dialed				
When digit received, wait for more digits?	Yes				
Destination for digit 1 :	[REDACTED]	6 :	[REDACTED]	*	9998
2 :	[REDACTED]	7 :	[REDACTED]	#	9992
3 :	[REDACTED]	8 :	[REDACTED]	Voice:	[REDACTED]
4 :	[REDACTED]	9 :	[REDACTED]		
5 :	[REDACTED]	0 :	888		

29.2.16 Telemarketing Box Screen

T E L E M A R K E T I N G B O X			
Box number : 9970	Completed ? No		
BOX NAME: Tmkt 9970	Use lines in group: 1		
Start date: 1- 1-90	Start time 1: 0:00	Stop: 0:00	CALL ON
Stop date: 1- 1-90	Start time 2: 0:00	Stop: 0:00	Sun: No
	Start time 3: 0:00	Stop: 0:00	Mon: No
			Tue: No
			Wed: No
			Thu: No
			Fri: No
			Sat: No
Default path: [REDACTED]	Start col: 1	Max digits: 10	
Source file: [REDACTED]	Start col: 1		
Exclude: [REDACTED]			
Results: [REDACTED]			
CALL-PROCESSING ACTIONS			
Wait for answer 5 rings.	Ans machine greeting : No		
Redial busy number: 5			
Redial no-ans number: 50			
Number of re-tries: 5			
On answer, go to box 9990			

29.3 NT-based VP System System Information Screens

29.3.1 Automatic Mailbox Allocation Screen

Automatic Mailbox allocation
_ □ ×

Allow callers to allocate Mailboxes automatically

Delete existing messages when allocating Mailbox

Digit to use to automatically allocate a Mailbox

Automatically de-allocate Mailbox after days

Restart timer each time Mailbox is opened

If unable to allocate a Mailbox, go to box

29.3.2 Business Hours Screen

The screenshot shows a window titled "Business hours" with a "Cancel" and "Save" button in the top right. The main area contains a table for setting service times for each day of the week. The table is organized into two main sections: "Day service" and "Lunch service". Each section has columns for "begins" and "ends" times. All time fields are currently set to "0:00".

	Day service begins	Day service ends	Lunch service begins	Lunch service ends
Sunday	0:00	0:00	0:00	0:00
Monday	0:00	0:00	0:00	0:00
Tuesday	0:00	0:00	0:00	0:00
Wednesday	0:00	0:00	0:00	0:00
Thursday	0:00	0:00	0:00	0:00
Friday	0:00	0:00	0:00	0:00
Saturday	0:00	0:00	0:00	0:00

29.3.3 Class of Service Screen, Message Tab

The screenshot shows a window titled "Class of service" with "Prev" and "Next" buttons on the left and "Cancel" and "Save" buttons on the right. The main area contains several configuration fields and a list of options.

Class of service number: Class of service name:

Operator box (day): When exiting open Mail box, go to box:

Operator box (night):

Messages | Greetings | Call holding | Call restrictions

- Supervisor status
- Access to Group
- Dial-out allowed
- Callers can page via PA system
- Allowed to receive fax-mail

Maximum number of messages:

Maximum message length: seconds.

- Automatically delete OLD messages after days.
- Automatically delete NEW messages after days.

29.3.4 Class of Service Screen, Greetings Tab

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Messages Greetings Call holding Call restrictions

Supervisor status

Access to Group

Dial-out allowed

Callers can page via PA system

Allowed to receive fax-mail

Maximum number of greetings

Maximum greeting length seconds.

Play system menu after personal greeting

29.3.5 Class of Service Screen, Call Holding Tab

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Messages Greetings Call holding Call restrictions

Supervisor status

Access to Group

Dial-out allowed

Callers can page via PA system

Allowed to receive fax-mail

Maximum number of lines allowed to hold for this Mailbox

Digits caller can dial while holding

Try extension times before going back to caller.

While queueing, announce position in line

29.3.6 Class of Service Screen, Call Restrictions Tab

Class of service

Prev Next Cancel Save

Class of service number Class of service name

Operator box (day) When exiting open Mail box, go to box

Operator box (night)

Supervisor status
 Access to Group
 Dial-out allowed
 Callers can page via PA system
 Allowed to receive fax-mail

Messages Greetings Call holding **Call restrictions**

Mailbox owner cannot transfer to numbers which begin with these digits:

<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

29.3.7 Custom Flags Screen

Custom flags

Cancel Save

Custom flag Debug flag

Custom flag Debug flag

Custom flag Debug flag

Custom flag Debug flag

29.3.8 Fax Setup Screen, Miscellaneous Tab

29.3.9 Fax Setup Screen, Wiring Tab

29.3.10 Fax Setup Screen, Restricted Numbers Tab

Fax setup

Maximum number of documents to send per call

Fax cover page

- None
- Default
- Custom -- from file

Resolution

- Normal quality
- High quality

Send options

- Offer option
- Callback always
- Same call only

Miscellaneous | Wiring | **Restricted numbers**

Restriction type

- Allow these numbers only
- Block these numbers

Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>
Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>
Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>
Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>
Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>	Digits <input type="text"/>

29.3.11 General Information Screen, Miscellaneous Tab

 minutes, re-route it to box '; a checkbox for 'Automatically update all Message-waiting lamps at o'clock.'; a checkbox for 'Generate log data for reports' with 'Number of boxes to track in log '; and 'Digits that mean 'Yes' in response to a Yes/No question '."/>

General information

Company name

Miscellaneous | Directories | Security | Message options | **Transfer options**

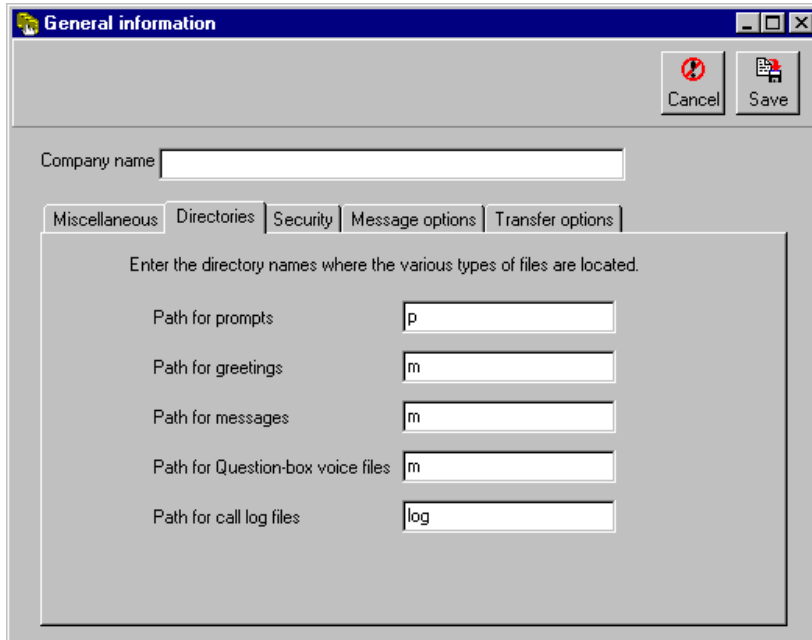
If call lasts more than minutes, re-route it to box

Automatically update all Message-waiting lamps at o'clock.

Generate log data for reports Number of boxes to track in log

Digits that mean 'Yes' in response to a Yes/No question

29.3.12 General Information Screen, Directories Tab



General information

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Enter the directory names where the various types of files are located.

Path for prompts

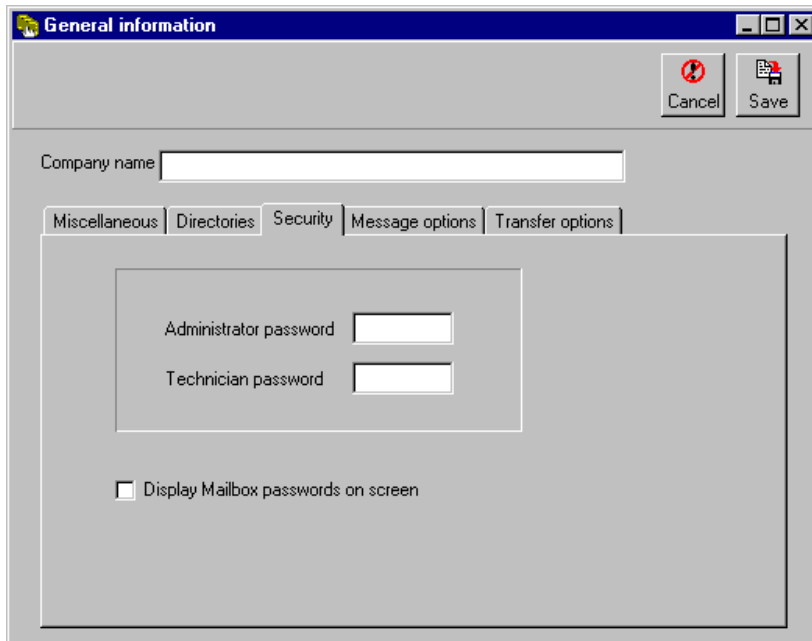
Path for greetings

Path for messages

Path for Question-box voice files

Path for call log files

29.3.13 General Information Screen, Security Tab



General information

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Administrator password

Technician password

Display Mailbox passwords on screen

29.3.14 General Information Screen, Message Options Tab

General information

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Stop recording after seconds of silence.

Disconnect if more than seconds of continuous sound detected.

Fast-forward / rewind should jump by seconds.

Play message date and time

- When caller requests it
- Before each message
- After each message

29.3.15 General Information Screen, Transfer Options Tab

General information

Cancel Save

Company name

Miscellaneous Directories Security Message options Transfer options

Maximum box length when caller is dialing

- When called party answers, play his/her name
- When called party answers, announce the call

Maximum duration of 3-way call, before prompting minutes.

Use enhanced ACD features (requires support from PBX)

29.3.16 Holidays Screen

The screenshot shows a window titled "Holidays" with a "Cancel" and "Save" button at the top right. Below the buttons is a list of 14 lines. Each line has a status of "On", a dropdown menu set to "(None)", a value of "1", and a text field containing "answer calls by routing to box". To the right of each text field is a numeric input field set to "0".

Line	Status	Routing	Value	Action	Box
1.	On	(None)	1	answer calls by routing to box	0
2.	On	(None)	1	answer calls by routing to box	0
3.	On	(None)	1	answer calls by routing to box	0
4.	On	(None)	1	answer calls by routing to box	0
5.	On	(None)	1	answer calls by routing to box	0
6.	On	(None)	1	answer calls by routing to box	0
7.	On	(None)	1	answer calls by routing to box	0
8.	On	(None)	1	answer calls by routing to box	0
9.	On	(None)	1	answer calls by routing to box	0
10.	On	(None)	1	answer calls by routing to box	0
11.	On	(None)	1	answer calls by routing to box	0
12.	On	(None)	1	answer calls by routing to box	0
13.	On	(None)	1	answer calls by routing to box	0
14.	On	(None)	1	answer calls by routing to box	0

29.3.17 Line Information Screen

The screenshot shows a window titled "Line information" with "Prev" and "Next" buttons on the left and "Cancel" and "Save" buttons on the right. The main area contains a table with columns for "Line number", "Day service", "Night service", "Lunch time", "Outgoing calls allowed?", and "Member of line group".

Line number	Day service		Night service		Lunch time		Outgoing calls allowed?	Member of line group			
	Rings to answer	Initial box	Rings to answer	Initial box	Rings to answer	Initial box		A	B	C	D
1	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	1	800	1	800	1	800	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

29.3.18 PBX Information Screen, Miscellaneous Tab

The screenshot shows a window titled "PBX information" with a "Miscellaneous" tab selected. The "Call transfer sequences" section contains the following fields and options:

- Digits to get a line on external call:
- Disconnect digit sequence:
- On answer, pause for seconds, waiting for PBX digits
- Wait for dial tone when making a call
- Hookflash length: ms.
- Pause length: ms.
- Transfer bypass digit arrives:
 - Before extension number
 - After extension number
 - Not used

Buttons for "Cancel" and "Save" are located in the top right corner.

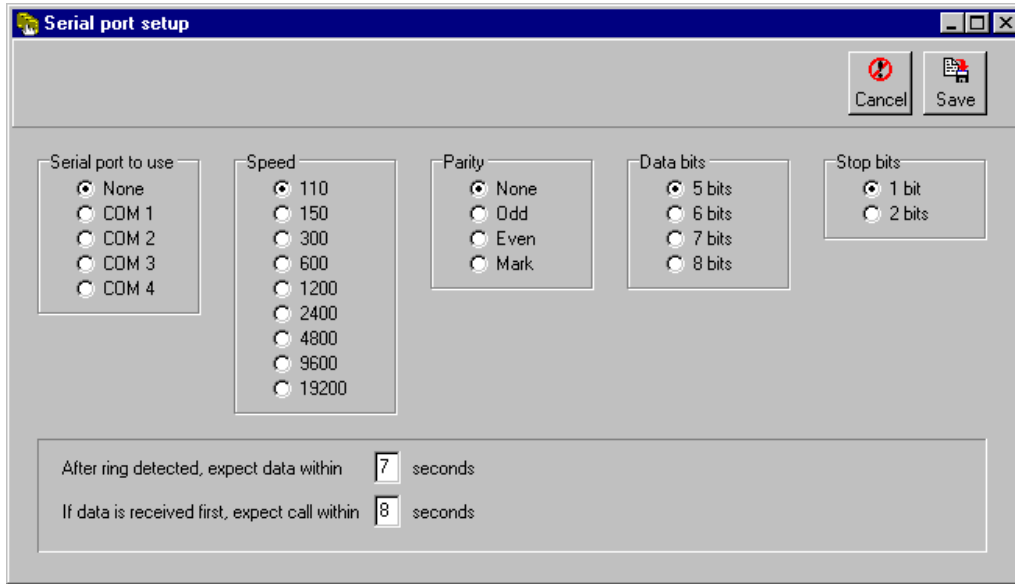
29.3.19 PBX Information Screen, Call Transfer Sequences Tab

The screenshot shows a window titled "PBX information" with the "Call transfer sequences" tab selected. The "Miscellaneous" sub-tab is also visible. The main area contains a table for configuring call transfer sequences:

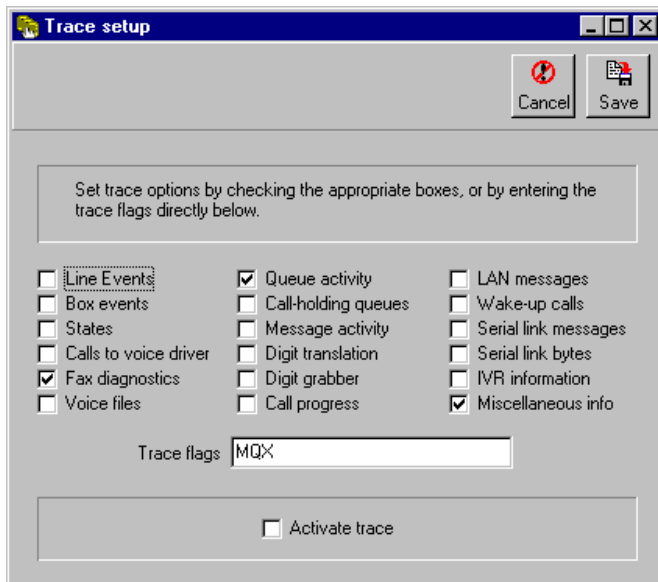
	Internal calls	External calls
Sequence to initiate a call transfer	<input type="text" value="!"/>	<input type="text" value="!9"/>
Sequence to complete a transfer	<input type="text"/>	<input type="text"/>
Sequence to transfer a 3-way call	<input type="text"/>	<input type="text"/>
Sequence to return from busy	<input type="text" value="!!"/>	<input type="text" value="!!"/>
Sequence to return from no-answer	<input type="text" value="!!"/>	<input type="text" value="!!"/>
Sequence to return from call-screening	<input type="text"/>	<input type="text"/>

Buttons for "Cancel" and "Save" are located in the top right corner.

29.3.20 Serial Port Setup Screen



29.3.21 Trace Setup Screen



29.4 NT-based VP System Box Setup Screens

29.4.1 Account Box Screen

Account box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Minimum number of digits in account number

Maximum number of digits in account number

Number of seconds to wait for a digit

If account number already collected

- Use existing number
- Ask for new number

Play back the number for confirmation

If invalid account number entered, allow more attempts, and then

If valid account number entered

29.4.2 ACD Box / Customer Service Box Screen, General Tab

Customer Service Box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

General Queuing options Recorded announcements Enhanced

When trying extension

- Always transfer
- Transfer if free
- Transfer if answered within rings

Start hunting from

- First extension
- Next extension
- Longest idle extension

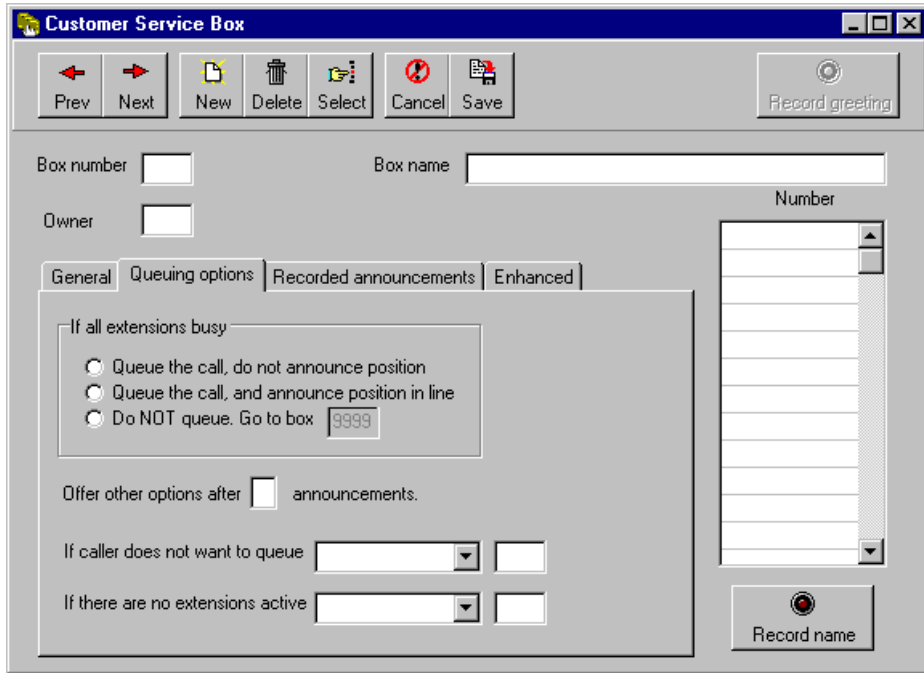
Day operator box

Night operator box

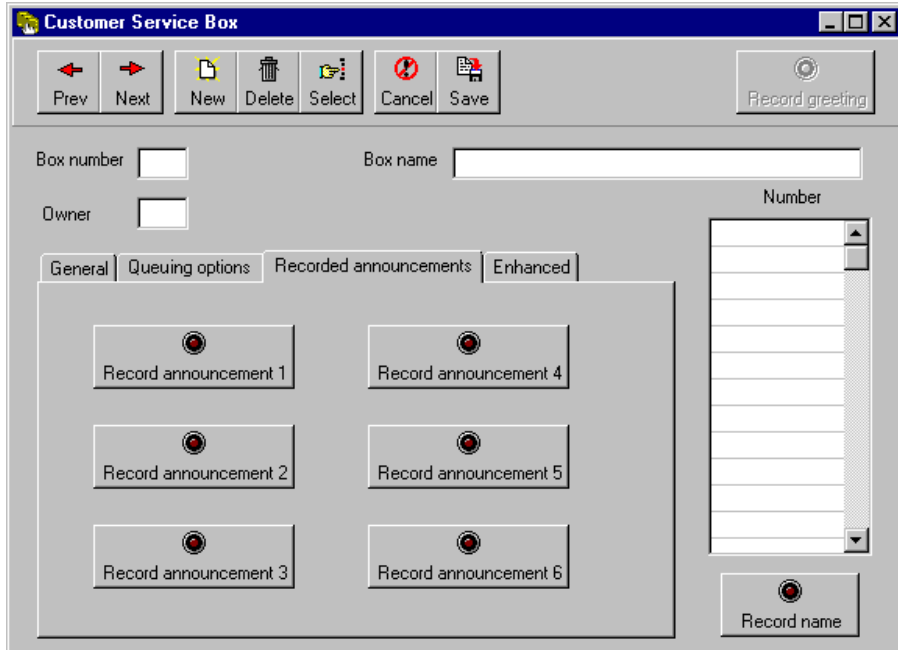
Number

Record name

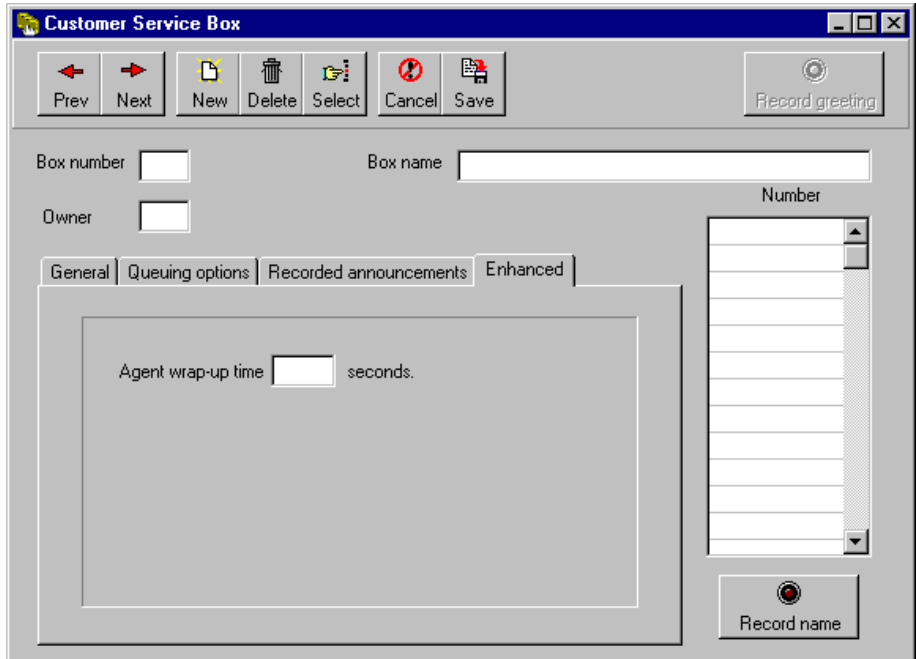
29.4.3 ACD Box / Customer Service Box Screen, Queuing Options Tab



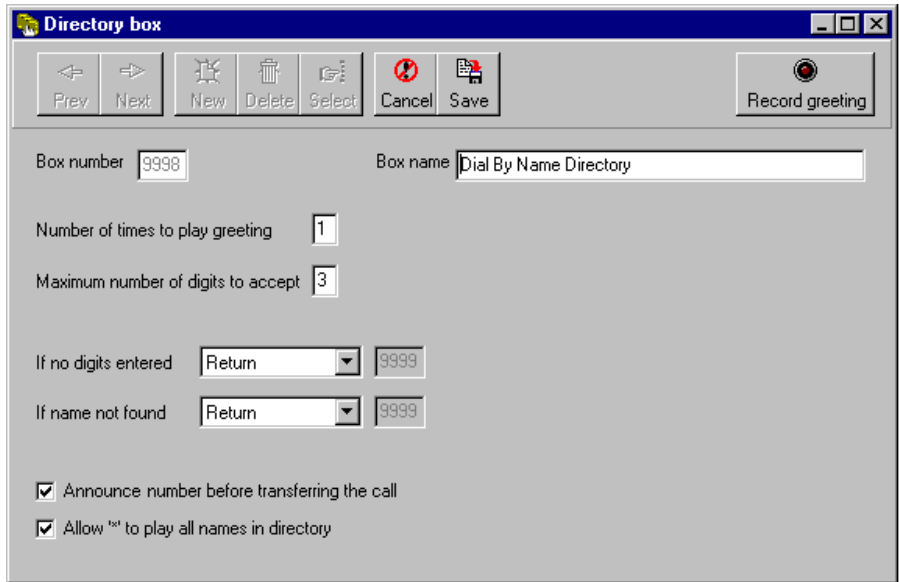
29.4.4 ACD Box / Customer Service Box Screen, Recorded Announcements Tab



29.4.4 ACD Box / Customer Service Box Screen, Enhanced Tab



29.4.5 Directory Box Screen



29.4.6 Fax Box Screen

Fax box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Document filename Document type

Document is password protected Password

Document type

- Text
- Wide text
- Graphics
- IVR response

When exiting this box:

If maximum number of documents ordered

If caller can order more documents

29.4.7 Group Box Screen

Group box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Max message length seconds.

Number of messages currently in box

9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999
9999	9999	9999	9999	9999

29.4.8 IVR Box Screen, Data File Tab

IVR box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Max time to wait between digits seconds

Bail-out digits

If account number not yet entered

Continue without one

Go to box

Data file | Recording inputs | Recording outputs | Searching | Playing results

Name of file containing data Review file Delimiter between fields

Field 1 is Field 6 is

Field 2 is Field 7 is

Field 3 is Field 8 is

Field 4 is Field 9 is

Field 5 is Field 10 is

29.4.9 IVR Box Screen, Recording Inputs Tab

IVR box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Max time to wait between digits seconds

Bail-out digits

If account number not yet entered

Continue without one

Go to box

Data file | Recording inputs | Recording outputs | Searching | Playing results

Record input 1 Notes

Record input 2 Notes

Record input 3 Notes

Record input 4 Notes

Record input 5 Notes

29.4.10 IVR Box Screen, Recording Outputs Tab

IVR box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Max time to wait between digits seconds

Bail-out digits

If account number not yet entered

Continue without one

Go to box

Data file | Recording inputs | **Recording outputs** | Searching | Playing results

Record output 1 Notes

Record output 2 Notes

Record output 3 Notes

Record output 4 Notes

Record output 5 Notes

29.4.11 IVR Box Screen, Searching Tab

IVR box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Max time to wait between digits seconds

Bail-out digits

If account number not yet entered

Continue without one

Go to box

Data file | Recording inputs | Recording outputs | **Searching** | Playing results

A record matches if field (dont care)

and field (dont care)

and field (dont care)

and field (dont care)

and field (dont care)

29.4.12 IVR Box Screen, Playing Results Tab

IVR box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Max time to wait between digits seconds

Bail-out digits

If account number not yet entered

Continue without one

Go to box

Data file Recording inputs Recording outputs Searching **Playing results**

If match found, construct a voice response by saying each of the following in turn:

--> --> --> -->

--> --> --> -->

then search for up to more matching records

and then

If no match found

29.4.13 Listing Box Screen

Listing box

Prev Next New Delete Select Cancel Save Record greeting

Box number

Description

Notes

Listing agent

Cross-reference number

Talking-classifieds Gateway box

Category for Question 1

Category for Question 2

Category for Question 3

Category for Question 4

29.4.14 Mailbox Screen, General Tab

The screenshot shows the 'Mail box' window with the 'General' tab selected. At the top, there is a toolbar with icons for 'Prev', 'Next', 'New', 'Delete', 'Select', 'Cancel', 'Save', and 'Record greeting'. Below the toolbar are input fields for 'Box number' and 'Name'. A series of tabs are visible: 'General', 'Call transfer', 'Recording', 'Message delivery', 'Pager', 'Distribution lists', 'Hotel', 'Enhanced', and 'e-Mail'. The 'General' tab contains a 'Password' field, a 'Class of service' dropdown menu with a 'Review Class of service' button, and a 'Record name' button. There are several checkboxes: 'Use language', 'Restricted access', 'Uses VCM', and 'Uses Unified Messaging'. Two input fields are provided for 'Sequence to turn on message-waiting lamp' and 'Sequence to turn off message-waiting lamp', with checkboxes for 'Use lamp for voice messages' and 'Use lamp for email messages'. On the right side, there are two more input fields labeled 'New messages' and 'Old messages'.

29.4.15 Mailbox Screen, Call Transfer Tab

The screenshot shows the 'Mail box' window with the 'Call transfer' tab selected. The toolbar at the top is identical to the previous screen. Below the toolbar are 'Box number' and 'Name' input fields. The tabs are: 'General', 'Call transfer', 'Recording', 'Message delivery', 'Pager', 'Distribution lists', 'Hotel', 'Enhanced', and 'e-Mail'. The 'Call transfer' tab features a 'Transfer to' input field, a 'during this schedule' dropdown menu, and a 'View schedules' button. A 'Transfer type' section contains radio buttons for 'No transfer', 'Blind', 'Wait for ring', 'Wait for answer', and 'Screen the call'. There is a 'Currently enabled' checkbox. Below the transfer type section, it says 'Assume no-answer after 4 rings.' On the right, there are three checkboxes: 'Get caller's name', 'Record every call', and 'Use 3-way calling'.

29.4.16 Mailbox Screen, Recording Tab

The screenshot shows the 'Mailbox' window with the 'Recording' tab selected. At the top, there is a toolbar with icons for 'Prev', 'Next', 'New', 'Delete', 'Select', 'Cancel', 'Save', and 'Record greeting'. Below the toolbar, the 'Box number' is set to '10' and the 'Name' field is empty. A series of tabs at the bottom of the window includes 'General', 'Call transfer', 'Recording', 'Message delivery', 'Pager', 'Distribution lists', 'Hotel', 'Enhanced', and 'e-Mail'. The 'Recording' tab contains the following settings:

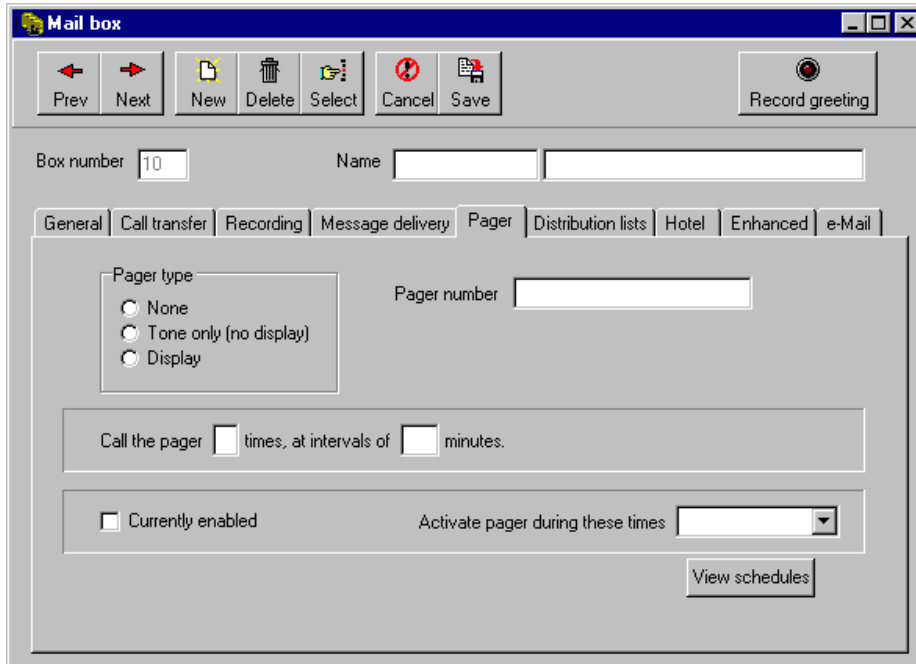
- After playing greeting:**
 - Record message immediately
 - Wait for a digit
 - Page immediately
 - Record message then page
- If caller chooses "other options":** [Dropdown menu]
- After recording message:** [Dropdown menu]
- View schedules:** [Button]
- Automatically forward new messages to box [] after [] hours, during [Dropdown menu]

29.4.17 Mailbox Screen, Message Delivery Tab

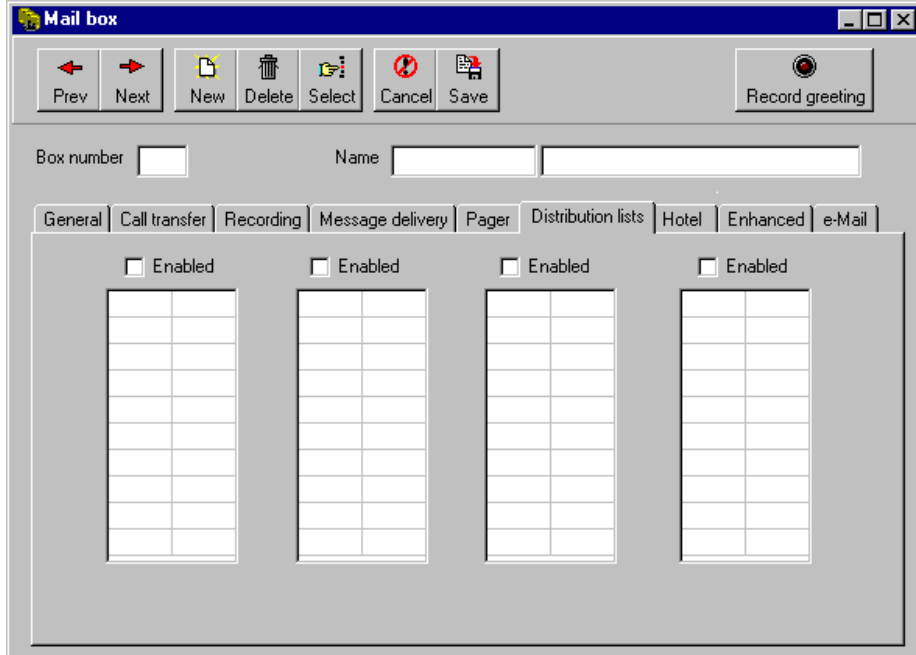
The screenshot shows the 'Mailbox' window with the 'Message delivery' tab selected. The toolbar and 'Box number' (empty) are the same as in the previous screenshot. The 'Message delivery' tab contains the following settings:

- Call Schedules:** Five rows, each with a text input, a numeric input, the text 'times, at intervals of', another numeric input, the text 'minutes, during', and a dropdown menu.
- Run this cycle:** [] times.
- Currently enabled
- Deliver these messages:**
 - Voice messages
 - Email messages
 - Only when marked Urgent
- View schedules:** [Button]

29.4.18 Mailbox Screen, Pager Tab



29.4.19 Mailbox Screen, Distribution Lists Tab



29.4.20 Mailbox Screen, Hotel Tab

Mail box

Prev Next New Delete Select Cancel Save Record greeting

Box number Name

General Call transfer Recording Message delivery Pager Distribution lists **Hotel** Enhanced e-Mail

Hotel guest privileges only

Wake-up time

Currently scheduled

29.4.21 Mailbox Screen, Enhanced Tab

Mail box

Prev Next New Delete Select Cancel Save Record greeting

Box number Name

General Call transfer Recording Message delivery Pager Distribution lists Hotel Enhanced **Enhanced** e-Mail

Allowed to record calls

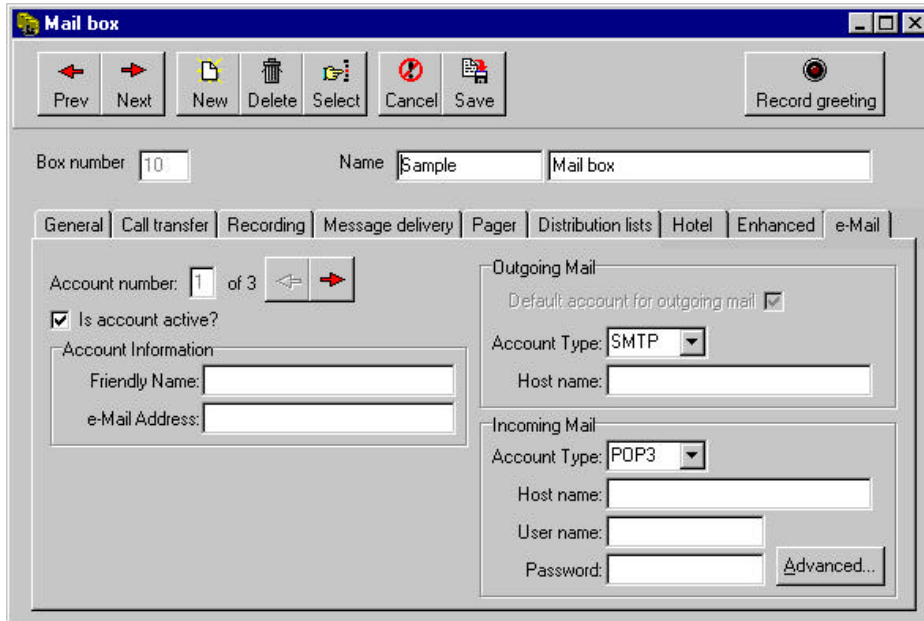
During recording, play beep on line every seconds.

Discard recording if less than seconds.

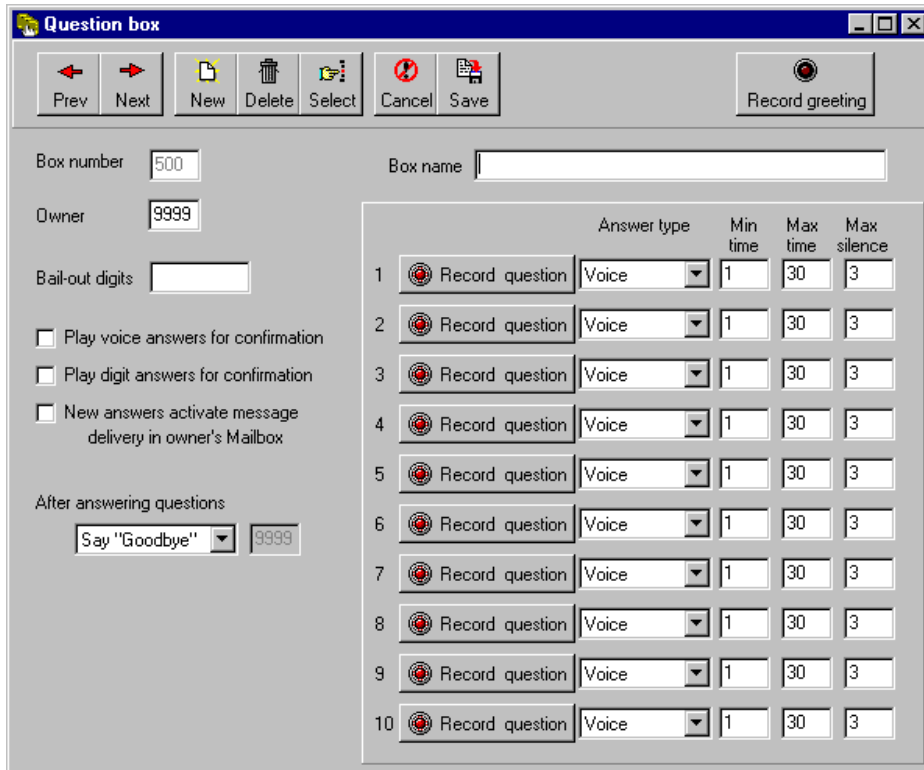
Max time to record minutes.

Play ringburst when caller begins to leave a message

29.4.22 Mailbox Screen, E-mail Tab



29.4.23 Question Box Screen



	Answer type	Min time	Max time	Max silence
1	Record question Voice	1	30	3
2	Record question Voice	1	30	3
3	Record question Voice	1	30	3
4	Record question Voice	1	30	3
5	Record question Voice	1	30	3
6	Record question Voice	1	30	3
7	Record question Voice	1	30	3
8	Record question Voice	1	30	3
9	Record question Voice	1	30	3
10	Record question Voice	1	30	3

29.4.24 Routing Box Screen

Routing box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Owner

Play greeting times, then wait seconds for a digit.

If digit received, wait for more digits before routing the call

If no digit dialed

If invalid digit dialed, go to box

Route call based on

- Digit dialed
- Call sequence number
- Day of week
- Database lookup
- Day / Night service

Destination for dialed digits

Digit 1 <input type="text" value="9999"/>	Digit 7 <input type="text" value="9999"/>
Digit 2 <input type="text" value="9999"/>	Digit 8 <input type="text" value="9999"/>
Digit 3 <input type="text" value="9999"/>	Digit 9 <input type="text" value="800"/>
Digit 4 <input type="text" value="9999"/>	Digit 0 <input type="text" value="9999"/>
Digit 5 <input type="text" value="9999"/>	Digit * <input type="text" value="9998"/>
Digit 6 <input type="text" value="9999"/>	Digit # <input type="text" value="9992"/>

Voice

29.4.25 Talking Classifieds Gateway Box Screen

Talking-classifieds Gateway box

Prev Next New Delete Select Cancel Save Record greeting

Box number Box name

Record question 1 Record question 3

Record question 2 Record question 4

On exit

29.4.26 Telemarketing Box Screen, When to Call Tab

Telemarketing box

Box number Box name

Use lines in

- Line group A
- Line group B
- Line group C
- Line group D

Job complete

Answering machine
Play this greeting if call is answered by an answering machine.

When to call | Call control | File names

Start calling on this date

Stop calling on this date

Each day, start calling at o'clock, then stop at o'clock

Resume calling at o'clock, then stop at o'clock

Resume calling at o'clock, then stop at o'clock

Make calls on

- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday

29.4.27 Telemarketing Box Screen, Call Control Tab

Telemarketing box

Box number Box name

Use lines in

- Line group A
- Line group B
- Line group C
- Line group D

Job complete

Answering machine
Play this greeting if call is answered by an answering machine.

When to call **Call control** File names

Assume no answer after rings

If called number does not answer, try again after minutes

If called number is busy, try again after minutes

Number of times to re-try busy / no-answer numbers

When answer detected, go to box

29.4.28 Telemarketing Box Screen, File Names Tab

The screenshot shows a software window titled "Telemarketing box" with a menu bar containing: Prev, Next, New, Delete, Select, Cancel, Save, and Record greeting. Below the menu bar, the "File names" tab is selected. The interface includes the following elements:

- Box number:** 9970
- Box name:** Tmkt 9970
- Use lines in:** Radio buttons for Line group A (selected), Line group B, Line group C, and Line group D.
- Job complete:** A checkbox that is currently unchecked.
- Restart:** A button with a circular arrow icon.
- Answering machine:** A section with the text "Play this greeting if call is answered by an answering machine." and a "Record" button with a microphone icon.
- When to call | Call control | File names:** A tabbed interface where "File names" is active.
- Directory containing telemarketing files:** A text field containing the path "\vm".
- Name of file containing telephone numbers:** An empty text field.
- On each line of file, telephone numbers start at position:** A text field containing "1".
- Maximum number of digits to dial:** A text field containing "10".
- Review file:** A button with a document icon, located next to the file name and start position fields.
- Name of file containing 'Do not call' numbers:** An empty text field.
- On each line of file, telephone numbers start at position:** A text field containing "1".
- Review file:** A button with a document icon, located next to the file name and start position fields.
- Name of file to log telemarketing call results:** A text field containing "RSLT9970.OUT".

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