



# **MAILMAN**

## **TECHNICAL MANUAL**

Version 8.0  
August 2002  
Revised September 2006

Department of Veterans Affairs  
VistA Health Systems Design & Development (HSD&D)  
Infrastructure and Security Services (ISS)



# Revision History

## Documentation Revisions

The following table displays the revision history for this document. Revisions to the documentation are based on patches and new versions released to the field.

**Table i. Documentation revision history**

Date	Revision	Description	Author
07/23/02	1.0	Initial MailMan V. 8.0 software and documentation release. MailMan V. 8.0 was first released as "DNS-Aware MailMan" in a supplemental document released in August 2002. However, the remaining MailMan documentation set was never updated.	Thom Blom and Gary Beuschel Oakland, CA Office of Information Field Office (OIFO)

## Revision History

Date	Revision	Description	Author
09/28/06	2.0	<p>MailMan V. 8.0 documentation reformatting/revision.</p> <p>Reformatted document to follow the latest ISS styles and guidelines.</p> <p>As of this date, all content updates have been completed for all released MailMan patches.</p> <p>Also, reviewed document and edited for the "Data Scrubbing" and the "PDF 508 Compliance" projects.</p> <p><b>Data Scrubbing</b>—Changed all patient/user TEST data to conform to HSD&amp;D standards and conventions as indicated below:</p> <p>The first three digits (prefix) of any Social Security Numbers (SSN) start with "000" or "666."</p> <p>Patient or user names are formatted as follows: XMPATIENT,[N] or XMUSER,[N] respectively, where the N is a number written out and incremented with each new entry (e.g., XMPATIENT, ONE, XMPATIENT, TWO, etc.).</p> <p>Other personal demographic-related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic.</p> <p><b>PDF 508 Compliance</b>—The final PDF document was recreated and now supports the minimum requirements to be 508 compliant (i.e., accessibility tags, language selection, alternate text for all images/icons, fully functional Web links, successfully passed Adobe Acrobat Quick Check).</p>	<p>MailMan Development Team Oakland, CA Office of Information Field Office (OIFO): Maintenance Project Manager— Jack Schram Project Planner—Laura Rowland Developers—Gary Beuschel Technical Writer—Thom Blom</p>

### Patch Revisions

For a complete list of patches released with this software, please refer to the Patch Module on FORUM.

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# Orientation

This *MailMan Developer's Guide* is intended for use in conjunction with Veterans Health Information Systems and Technology Architecture (VistA) MailMan. It outlines programmer details of the VistA MailMan software (e.g., Application Program Interfaces [APIs] and Direct Mode Utilities) and gives guidelines on how the software is used within VistA.

The intended audience of this manual is all primary (key) stakeholders. The primary stakeholders include:

- VistA Infrastructure and Security Services (ISS) Development Team.
- Other VistA project development teams and programmers.
- Information Resource Management (IRM) personnel responsible for maintaining MailMan.
- Enterprise VistA Support (EVS).

## How to Use this Manual



Throughout this manual, advice and instructions are offered regarding the use of MailMan V. 8.0 and the functionality it provides for Veterans Health Information Systems and Technology Architecture (VistA) software products. This manual discusses the use of MailMan's Application Program Interfaces (APIs) AND Direct Mode Utilities.

There are no special legal requirements involved in the use of MailMan.

This manual uses several methods to highlight different aspects of the material:

- Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

**Table ii. Documentation symbol descriptions**

Symbol	Description
	<b>NOTE/REF:</b> Used to inform the reader of general information including references to additional reading material.
	<b>CAUTION or DISCLAIMER:</b> Used to inform the reader to take special notice of critical information.

- Descriptive text is presented in a proportional font (as represented by this font).
- Conventions for displaying TEST data in this document are as follows:

- Sample HL7 messages, "snapshots" of computer online displays (i.e., roll-and-scroll screen or character-based screen captures/dialogues) and computer source code, if any, are shown in a *non-proportional* font and enclosed within a box.
  - User's responses to online prompts will be boldface.
  - References to "<Enter>" within these snapshots indicate that the user should press the **Enter** key on the keyboard. Other special keys are represented within < > angle brackets. For example, pressing the **PF1** key can be represented as pressing <PF1>.
  - Author's comments, if any, are displayed in italics or as "callout" boxes.



**NOTE:** Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.



**NOTE:** Unless otherwise noted, all sample screen captures/dialogue boxes in this manual are derived from using either MailMan's Detailed or Summary Full Screen message readers.

- This manual refers in many places to the M programming language. Under the 1995 American National Standards Institute (ANSI) standard, M is the primary name of the M programming language, and M will be considered an alternate name. This manual uses the name M.

All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field and file names, and security keys (e.g., the XUPROGMODE key).

### How to Obtain Technical Information Online

Exported file, routine, and global documentation can be generated through the use of Kernel, MailMan, and VA FileMan utilities.



**NOTE:** Methods of obtaining specific technical information online will be indicated where applicable under the appropriate topic.

### Help at Prompts

VistA M Server-based software provides online help and commonly used system default prompts. Users are encouraged to enter question marks at any response prompt. At the end of the help display, you are immediately returned to the point from which you started. This is an easy way to learn about any aspect of the software.

In addition to the "question mark" help, you can use the Help (User/Group Info., etc.) menu option on the main MailMan Menu to access the MailMan Help Frames through the following options:

- New Features in MailMan

- General MailMan Information
- Questions and Answers on MailMan
- Manual for MailMan Users



**REF:** For more information on obtaining MailMan online help, please refer to Chapter 12, "Online Help Information" in the *MailMan User Guide*.

### **Obtaining Data Dictionary Listings**

- Technical information about VistA M Server-based files and the fields in files is stored in data dictionaries (DD). You can use the List File Attributes option on the Data Dictionary Utilities submenu in VA FileMan to print formatted data dictionaries.



**REF:** For details about obtaining data dictionaries and about the formats available, please refer to the "List File Attributes" chapter in the "File Management" topic of the *VA FileMan Advanced User Guide*.

### **Assumptions About the Reader**

This manual is written with the assumption that the reader is familiar with the following:

- VistA computing environment:
  - Kernel—VistA M Server software
  - VA FileMan data structures and terminology—VistA M Server software
- Microsoft Windows environment
- M programming language

This manual provides an overall explanation of MailMan and the changes contained in MailMan V. 8.0. However, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA home pages on the World Wide Web (WWW) and VA Intranet for a general orientation to VistA. For example, go to the Veterans Health Administration (VHA) Office of Information (OI) Health Systems Design & Development (HSD&D) Home Page at the following Intranet Web address:

<http://vista.med.va.gov/>

### **Reference Materials**

Readers who wish to learn more about MailMan should consult the following:

- *MailMan Release Notes*
- *MailMan Installation Guide*

- *MailMan Getting Started Guide*
- *MailMan Developer's Guide (this manual)*
- *MailMan User Guide*
- *MailMan Network Reference Guide*
- *MailMan Package Security Guide*
- *MailMan Systems Management Guide*
- *MailMan Technical Manual*
- MailMan Home Page at the following Web address:

<http://vista.med.va.gov/mailman/index.asp>

This site contains other information and provides links to additional documentation.

VistA documentation is made available online in Microsoft Word format and in Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader (i.e., ACROREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following Web address:

<http://www.adobe.com/>



**REF:** For more information on the use of the Adobe Acrobat Reader, please refer to the "Adobe Acrobat Quick Guide" at the following Web address:

<http://vista.med.va.gov/iss/acrobat/index.asp>

VistA documentation can be downloaded from the Health Systems Design and Development (HSD&D) VistA Documentation Library (VDL) Web site:

<http://www.va.gov/vdl/>

VistA documentation and software can also be downloaded from the Enterprise VistA Support (EVS) anonymous directories:

- Albany OIFO [ftp.fo-albany.med.va.gov](ftp://ftp.fo-albany.med.va.gov)
- Hines OIFO [ftp.fo-hines.med.va.gov](ftp://ftp.fo-hines.med.va.gov)
- Salt Lake City OIFO [ftp.fo-slc.med.va.gov](ftp://ftp.fo-slc.med.va.gov)
- Preferred Method [download.vista.med.va.gov](http://download.vista.med.va.gov)

This method transmits the files from the first available FTP server.



**DISCLAIMER:** The appearance of external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this Web site or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of this VA Intranet Service.



## 1.0 Introduction

This manual provides descriptive information and instructions on the implementation and maintenance of the MailMan software within the VA's Veterans Health Information Systems and Technology Architecture (VistA) environment. This document is intended for systems managers—Information Resource Management (IRM) personnel who are responsible for implementing and maintaining MailMan, application programmers, and developers. It acquaints system managers with the utilities, software structure, and functionality of the MailMan system modules, including information about the routines and files that comprise MailMan. It also has information about MailMan's structure and recommendations regarding MailMan's efficient use (e.g., routine mapping). However, it does *not* describe how MailMan is used nor does it detail its use in software development. Additional information on installation, security, management features, and other requirements is also included specifically related to VistA application Programmers and IRM.

MailMan, the Department of Veterans Affairs (VA) electronic mail system, is a communications tool that provides electronic communication among users sharing computing facilities. A communications link can be made with cables, telephone lines, or satellite connections. In this manner, the networking of electronic mail on a large scale is made possible.

MailMan provides teleconferencing via chained responses. MailMan is the transport vehicle for most Veterans Health Information Systems and Technology Architecture (VistA) applications. MailMan is also used to preserve copies of software and data. MailMan also has the ability to include non-textual data in messages (i.e., Multimedia). Network features allow users to construct dialogues for logging onto remote systems for mail delivery. Message actions allow users great flexibility in managing personal mail. Users can address mail to individuals and groups at local and remote sites, with the tedium of waiting for process completion being reduced by the system's background filer. In addition, the system has extensive online documentation, which can be printed to create a manual.

MailMan is designed to allow users to send and receive mail from individuals or groups. A message can take the form of a personal letter or a formal bulletin extracting data from VA FileMan. The text of messages is not difficult to edit, and the context can be made confidential in several ways. Surrogates can be appointed to read mail. Mail groups can be set up to allow each member to respond to a message and to view the replies, as in an informal committee meeting. Mail can be sorted, deleted, forwarded, queried, copied, revised, or printed. In addition, MailMan cross-references messages by subject and message number.

MailMan allows users to send, receive, copy, respond to, and organize electronic mail. It has entry points to allow other applications to trigger bulletins or send messages without user intervention. There is a communications facility (i.e., TalkMan) to allow users to automatically hook into the VA Wide Area Network(WAN) or modems. This feature connects the user to a remote domain, playing the script to that domain without displaying it to the user. It then informs the user that the connection was successful, and can capture whatever has been displayed to the user's terminal into a message called DIALOGUE CAPTURE.

An extended search for messages can be invoked at the "Message Action" prompt or as a stand-alone option. The extended search includes filters on the subject, sender, recipient, responder, the date sent, and text contents.

MailMan informs users of network delivery failures and their causes. Message characteristics including Closed, Confidential, Confirmation Requests, Information, and Scrambling can be carried across the network. Software security information for PackMan can also be conveyed on the network.

MailMan allows the transfer of any word-processing text from any VA FileMan file or message into a message or response. New documents are placed in a user's "IN" basket or to any other designated basket (e.g., based on mail filters).

This manual provides information on the following topics:

- Implementation and Maintenance
  - MailMan site parameters
  - System manager menus and options
- Routines
- Files
- Exported Options
- Archiving and Purging
- Callable Routines
- External Relations
- Internal Relations
- Software-wide Variables
- Software Product Security

These sections provide pertinent information, along with examples, that allow system managers and programmers to effectively implement, support, and maintain MailMan Version 8.0.



**REF:** For more information on MailMan system management, please refer to the MailMan Systems Management Guide.



## 2.0 Implementation and Maintenance

### 2.1 Implementation

#### 2.1.1 Recommendations for Routine Mapping

Routine mapping is at the discretion of the systems manager. The RTHIST routines provide a method for each site to determine the extent to which certain routines are utilized.

**DSM Sites:** If your site maps routines, then rebuild your map set. As of MailMan V. 8.0, Many routines have become obsolete and should be removed from the map set. The following is the *recommended* list of routines to map, should your site choose to map routines:

**Table 2-1. Routine mapping recommendations for MailMan V. 8.0**

Minimum List	Additional List
XM XMC1 XMJ* XMR XMS	XMC1A,XMC1B XMK* XML XMR1,XMR2,XMR3* XMS1,XMS2,XMS3 XMT* XMVVITAE XMXADDR* XMXSEC* XMXUTIL*

#### 2.1.2 Controlled Procedures

All files, fields, and routines in this software are considered to perform controlled procedures and *cannot* be modified.

#### 2.1.3 Menu Structure

MailMan is accessed from three sets of menus:

- **XMMGR**—The Manage Mailman menu includes options and utilities that are useful for system management. The options for maintaining the local mail system are also contained here.



**REF:** For more information on the XMMGR menu options, please refer to the "Managing MailMan" topic that follows in this section of the manual.

- **XMNET**—This menu includes options that are used for managing the network side of MailMan. While the local system requires only some initial setup, the network side must be periodically monitored. The options for displaying the queues in various fashions on the XMNET menu are useful for this purpose. The network sometimes needs to be flushed; options for polling and queuing are provided for this purpose. Sometimes, non-delivery of network mail requires investigation; the options for testing a network device and playing scripts are useful in these instances.



**REF:** For more information on the XMNET menu options, please refer to the *MailMan Network Management Reference Guide*.

- **XMUSER**—This menu includes the commonly used functions of electronic mail. It also contains some very powerful tools for the individual using MailMan. The most commonly used functions are at the top of the hierarchical structure. Help features are contained in a separate submenu, as are the tools. XMUSER can be used independently and can be installed on menus of other software applications for distribution.



**REF:** For more information on the XMUSER menu options, please refer to the *MailMan Getting Started Guide* and the *MailMan User Guide*.



**REF:** In order to acquire a good idea of the various functions and their power, users should also consult the *MailMan Developer's Guide*. In addition, online Help Frames are also available.

#### 2.1.4 Postmaster

The MailMan installation automatically creates a special user (DUZ=.5) called Postmaster and Postmaster mail baskets. Persons assigned to the management of MailMan and Network mail at a site *must* be entered in the MAILBOX file (#3.7) as surrogates of the Postmaster and given READ and WRITE access privileges.



**REF:** For more information on the management and maintenance of the Postmaster, please refer to the "Postmaster" topic under the "Maintenance" topic that follows in this chapter.

#### 2.1.5 Memory Constraints

There are no special memory constraints, other than sites having sufficient space to allow for normal global growth.

## 2.1.6 Special Operations

MailMan V. 8.0 does not require any special operations other than the normal backup and recovery operations.

## 2.2 Maintenance

### 2.2.1 System Maintenance

There are several ways to keep the amount of messages stored at a minimum. MailMan provides the Disk Space Management menu options for this purpose under the Manage MailMan main menu.

### 2.2.2 Disk Space Management

What areas in MailMan can be investigated to improve disk space management?

1. The tools available to IRM to help manage disk space are located under the Disk Space Management menu option [XMMGR-DISK-SPACE-MANAGEMENT], which is located on the Manage Mailman menu [XMMGR], as shown below:

```
Select Manage Mailman Option: Disk Space Management

AI x-Ref Purge of Received Network Messages
Ask users with many messages to do maintenance
Clean out waste baskets
IN Basket Purge
Large Message Report
Message statistics
Purge a message
Purge Messages by Origination Date
Purge Unreferenced Messages
Recover Messages into User's IN Basket ...
Terminate mail user suggestions
Terminate many mail users
Terminate one mail user

Select Disk Space Management Option:
```

Figure 2-1. Disk Space Management menu options

The following describes the Disk Space Management tools (options).



**REF:** For more information on the following options, please refer to the "Options—Listed Alphabetically by Name" topic in Chapter 5.0, "Exported Options," in this manual or the individual option descriptions in the OPTION file (#19).

- a. **AI x-Ref Purge of Received Network Messages option [XMMGR-PURGE-AI-XREF]**—The AI cross-reference exists to track messages received from remote sites. It is used to attach replies from remote sites to the correct local message. It prevents the receipt of duplicate messages from remote sites. There is one entry per message. As per MailMan Patch XM\*8.0\*38, this option should be run interactively at least once a year to reduce its size; otherwise, it continues to grow.
- b. **Ask users with many messages to do maintenance option [XMMGR-DISK-MANY-MESSAGE-MAINT]**—This option looks for users with lots of messages in their mailbox and sends them a message suggesting that they might want to consider pruning some of them. Some users might not respond to the suggestion, but others might. This option should be scheduled to run every few months, if disk space is a problem.
- c. **Clean out waste baskets option [XMCLEAN]**—This option deletes messages from users' wastebaskets. This option should be scheduled to run every day, before the XMAUTOPURGE option.
- d. **IN Basket Purge option [XMMGR-IN-BASKET-PURGE]**—This option targets for later deletion, messages that have not been read in a while. It targets messages in the "IN" basket or in all baskets, depending on how it's run. Users receive a message with a list of the messages that are targeted for deletion, and what they can do to avoid deletion. This option should be scheduled to run once a month, if disk space is a problem.
- e. **Large Message Report option [XMMGR-LARGE-MESSAGE-REPORT]**—This option reports on large (over a certain number of lines) messages. It does not say who owns them, just says that they exist. This option should be used on an as-needed basis, if disk space is a problem. Its effectiveness depends upon the zeal with which IRM uses the report to investigate and purge large unnecessary messages.
- f. **Message statistics option [XMSTAT]**—This option reports how many messages each user has in his mailbox. This option should be used on an as-needed basis, if disk space is a problem. Its effectiveness depends upon the zeal with which IRM uses the report to confront message hoarders and encourage them to prune their messages.
- g. **Purge a message option [XMMGR-PURGE-MESSAGE]**—This option purges one message. Can be used to purge offensive messages or large messages identified by the 'Large Message Report'. This option should be used on an as-needed basis.
- h. **Purge Messages by Origination Date option [XMPURGE-BY-DATE]**—This option purges messages older than a certain date. This option should be used on an as-needed basis, if disk space is a problem. This option is extremely effective in reducing the size of the MESSAGE file (#3.9).



- i. **Purge Unreferenced Messages option [XMPURGE]**—This option purges messages that are not in anyone's mailbox. This option may be run interactively, but it should not be scheduled.
- j. **Automatic Purge of MailMan Messages option [XMAUTOPURGE]**—This option automatically purges unreferenced MailMan. It deletes from the MESSAGE file (#3.9) any messages that are not in anyone's basket.



**CAUTION: It is strongly recommended that this option be scheduled to run daily, right after option XMCLEAN.**



**NOTE:** This option is not located on any menu.



**REF:** For more information on this option, please refer to the "XMAUTOPURGE" topic in Chapter 5.0, "Exported Options," in this manual.

- k. **Terminate mail user suggestions option [XMMGR-TERMINATE-SUGGEST]**—This option reports on users who *perhaps* should have their mail access terminated. Users are included in the report if they were terminated but allowed to keep their mailbox, or have not signed on in a while. This option should be run at least once a year. This report will probably turn up many users who should not have mailboxes. It is likely that these users have new messages. New messages are only deleted by the 'Purge Messages by Origination Date' option. The report page-breaks on Service/Section. If sites regularly ran this report and gave service/section heads the part of the report applicable to their service/section, it is expected that users (and their many messages) would be identified for deletion.
- l. **Terminate many mail users option [XMMGR-TERMINATE-MANY]**—This option goes through the MAILBOX global and removes any mailbox if the user:
  - Is not in the NEW PERSON file (#200).
  - Has no Access code and was not terminated.
  - Has no Access code and was terminated without mailbox retention.
  - Has an access code, but no primary menu.
  - Has an Access code and primary menu, but no Verify code, AND:
    - Has never signed on or used mail since being added before a cutoff date.

OR

  - Last signed on or used mail before a cutoff date.

However, if the user meets one of the last two conditions above, but has a forwarding address, the user's mailbox will not be removed. The fact will be noted on the report, and the user should be investigated further.

- m. **Terminate one mail user option [XMMGR-TERMINATE-ONE]**—This option manually terminates users suggested by the Terminate mail user suggestions option or otherwise. This option should be used on an as-needed basis.
  - n. **Check MailMan Files for Errors option [XMUT-CHKFIL]**—This option checks both the MAILBOX file (#3.7) and MESSAGE file (#3.9) for errors and fixes most errors that it finds. This option should be scheduled to run once a month, on a weekend, at a time when neither the XMCLEAN nor XMAUTOPURGE options are running.
2. From time-to-time, a Remedy ticket will be entered on MailMan complaining about the number of messages in a server basket. Such complaints are always referred to the VistA software application that "owns" the server. The software that owns the server is responsible for deleting messages from its server basket, because there is no way for MailMan to know when a server message has been processed and is no longer needed. Anyone interested in checking whether a software application is cleaning up after itself should assume the identity of the Postmaster, and list the contents of baskets beginning with "S." By looking at the dates and/or quantity of the messages, one should be able to tell whether the software owning the server is cleaning up after itself.
  3. Are there other areas of MailMan that should be considered when trying to reduce the size of globals? Here are some ideas:
    - a. Perform a VA FileMan search to identify mail groups that have not been used in a while. The DATE 'LAST REFERENCED' field can be used for this purpose. Consider deleting them.
    - b. Messages belonging to SHARED,MAIL are never deleted by MailMan. All of the purges ignore them. It is probably a good idea to go through the messages belonging to SHARED,MAIL once a year to delete the ones which are no longer needed. However, this is easier said than done!

The following tables show mandatory and suggested system management tasks for proper maintenance of MailMan. These tasks increase utilization of software functionality and system response time. They also reduce the amount of disk space used and minimize system errors.

## 2.2.3 Mandatory Task Requirements

**Table 2-2. Task requirements: Mandatory maintenance timetable**

Task	Scheduled Time	Frequency
XMCLEAN	Off Hours	Daily
XMAUTOPURGE	One Hour After XMCLEAN	Daily
XMUT-CHKFIL	Off Hours	Monthly

The XMAUTOPURGE option is generally run after the XMCLEAN option (the "WASTE" basket cleaner) for automatic purging (see the XMAUTOPURGE option). It purges messages that are not pointed to by any message recipients or senders. The XMPURGE-BY-DATE option can also be run to purge messages that have an origination date older than the date used to initiate the process (see the XMAUTOPURGE option). Users are notified by a Postmaster bulletin of the proposed purging date, so that they can save important messages. These are the only options that actually KILL entries in the MESSAGE file (#3.9).

### 2.2.3.1 Suggested Task Requirements

**Table 2-3. Task requirements: Suggested maintenance timetable**

Task	Scheduled Time	Frequency
XMPURGE-BY-DATE	Off Hours	According to Site Policy
XMMGR-LARGE-MESSAGE-REPORT	Off Hours	Monthly
XMMGR-DISK-MANY-MESSAGE-MAINT	Off Hours	Monthly
XMMGR-PURGE-AI-XREF	Off Hours	Quarterly
XMMGR-RESPONSE-TIME-COMPILER	Off Hours	Daily
XMMGR-RESPONSE-TIME-TOGGLER		Daily

### 2.2.3.2 Postmaster

Persons performing Postmaster management tasks should first sign on as themselves and then assume the Postmaster's identity.

- **Mail Baskets**—The Postmaster has mail baskets and can send and receive messages like any other user. In addition to the "IN" and "WASTE" baskets, the "ARRIVING" basket is also automatically created for the Postmaster. All mail for a site automatically comes to the "ARRIVING" basket from which it is then routed to the individual recipients. The Postmaster can examine the header information of messages but *cannot* read the text of the message.

- **Network Transmission Failures**—Network transmission failures are reported to the Postmaster via bulletins to the Postmaster's "IN" basket. These bulletins should be purged once the problems have been resolved.
- **Domain Baskets**—The Postmaster has special Domain baskets (e.g., Birmingham, Oakland, etc.), which are numbered greater than 1000 (1000 + IEN of the Domain in the DOMAIN file [#4.2]) and are used for the transmission of Network Mail. Network Mail to a site goes to the appropriate Domain basket (queue) prior to transmission. Occasionally, the Postmaster may need to stop networked message from going out. This is done by:
  1. Deleting the message number from the Postmaster's Domain basket. If a message is deleted from a basket, it is deleted from a queue.
  2. Using TaskMan to kill the job scheduled to transmit the message to the Domain.
- **Broadcast Messages**—The Postmaster also may need to broadcast messages to users. To do this:
  1. Send the message to the Postmaster.
  2. Assume the identity of the Postmaster.
  3. Copy the message into a new message and edit any information that is not appropriate for broadcasting.
  4. At the "Send to:" prompt, enter an asterisk ("\*").



**NOTE:** The XMSTAR security key gives users the ability to broadcast messages to all local mail users by entering an asterisk ("\*") at the "Send to:" prompt.


The XMSTAR LIMITED security key gives users the ability to broadcast messages to a subset of local mail users by entering an asterisk ("\*") at the "Send to:" prompt.

## 2.2.4 Bulletins

MailMan V. 8.0 generates the following Bulletins.

Bulletin	Description
XM BANNER MESSAGE	This bulletin is a notification message. It might be generated when a user changes his banner.
XM DATE PURGE WARNING	This bulletin is a warning message. It is broadcast to all users whenever the XMPURGE-BY-DATE option is used to purge messages older than a certain date.
XM DOMAIN ADDED	This bulletin is a notification message. It is sent to alert IRM of a new domain.

Bulletin	Description
XM FILTER FWD ADDRESS DELETE	This bulletin is a notification message. It is sent when MailMan notices that a user has an invalid "forward to" address in one of the filters. The "forward to" address is deleted, and the user is notified.
XM FWD ADDRESS CHANGE	This bulletin is a notification message. It is generated when a user's forwarding address changes. It should be sent to IRM or anyone with a need to know about a user's forwarding address.
XM FWD ADDRESS CHECK	This bulletin is a notification message. It is sent when a user's forwarding address changes. It is sent to the forwarding address. If it gets through, fine. If it does not, then the sender of the bulletin is notified. The sender is the Postmaster. Field #7.01 in the MAILMAN SITE PARAMETERS file (#4.3) controls whether the message is also sent to the Postmaster.
XM FWD ADDRESS DELETE	This bulletin is a notification message. It is sent when MailMan notices that a user has an invalid forwarding address. The forwarding address is deleted, and the user is notified.
XM GROUP EDIT NOTIFY	This bulletin is a notification message. It is sent to a mail group's organizer and coordinator whenever someone other than themselves adds users to: A public mail group that does not allow users to self-enroll. Any private mail group. The purpose is to let them know of the change.
XM GROUP ERROR	This bulletin is an error message. It notifies selected users of problems with a mail group. For example, such problems may include: Group contains a circular reference to a group. Local member should not be receiving mail (no access code). Remote member has invalid or ambiguous or closed domain. Distribution list domain is invalid or ambiguous or closed.
XM IN BASKET PURGE REQUEST	This bulletin is a notification message. It is sent by TEST^XMUPIN.
XM IN BASKET PURGE WARNING	This bulletin is a warning message sent by the XMMGR-IN-BASKET-PURGE option.

Bulletin	Description
XM RELAY ATTEMPTED	<p>This bulletin is a warning message sent to the Postmaster any time MailMan refuses to relay a message from one outside site to another outside site. You are encouraged to add a mail group to the bulletin to notify additional responsible persons. The subject of the bulletin is "Potential SPAM or VIRUS stopped." The actual bulletin MESSAGE TEXT is as follows:</p> <p>A site calling itself  1  attempted to relay a message from:  3  to:  2  through this site.</p> <p>This attempt was denied.</p> <p>By far the most important thing that a service provider can do to reduce spam or viruses is to ensure that any mail servers in operation accept only outgoing mail from machines within their own domains. This prohibits SMTP relaying, denying spammers and virus propagators a necessary component of anonymity.</p> <p>PARAMETER: 1—The name of the site attempting to relay the message through this site.</p> <p>PARAMETER: 2—The intended recipient of the message.</p> <p>PARAMETER: 3—The envelope from of the message.</p>
XM SEND ERR MSG	<p>This bulletin is a notification message. It is sent to the message originator when a remote site rejects an entire message for whatever reason (e.g., too many lines).</p>
XM SEND ERR RECIPIENT	<p>This bulletin is an error message. The MailMan network processor issues this bulletin when the remote node rejects a message recipient. The rejection message of the remote node is included in the bulletin.</p>
XM SEND ERR REMOTE MSG ID	<p>This bulletin is an error message. It is sent when a remote message ID node is not in a message (i.e., INCOMING MESSAGE ID field [#9] in the MESSAGE file [#3.9]). For example, while trying to send a response to a message that originated from a remote site, we noticed that the "remote message id" is missing from the original message. Without this ID, we cannot tell the site to which message we are responding.</p>
XM SEND ERR SERVER MSG	<p>This bulletin is an error message. It is fired when a task tries to send a message to a server, but the message is not in the MESSAGE global.</p>
XM SEND ERR TRANSMISSION	<p>This bulletin is an error message. It is sent when MailMan is unable to transmit to a site after it has tried all of the available scripts.</p>
XM SUPER SEARCH	<p>This bulletin is a notification message. Every time a super search is conducted, this bulletin is sent to alert those responsible for ensuring that the capability is <i>not</i> misused.</p> <p> <b>REF:</b> For more information on the Super Search functionality, please refer to the XM SUPER SEARCH option in the "Options—" topic in this chapter.</p>
XM TOO MANY MESSAGES	<p>This bulletin is a notification message. It is sent by the XMMGR-DISK-MANY-MESSAGE-MAINT option to ask users to terminate excess messages.</p>
XMNEWUSER	<p>This bulletin is a notification message. It is sent whenever a new user is added to the NEW PERSON file (#200). This bulletin is used by Kernel, <i>not</i> by MailMan.</p>

Bulletin	Description
XMRDACK	This bulletin is a notification message. It informs the sender of a message that a recipient has read the message. The sender of the message must have set the CONFIRMATION REQUESTED flag to ON when the message was created.
XMVALBAD	This bulletin is a notification message. It is fired whenever a remote MailMan domain attempts to establish a connection with this domain and the validation numbers do not properly match.
XM_TRANSMISSION_ERROR	This bulletin is an error message. It is fired off when the background delivery process detects an error. The message or response it is supposed to deliver does not exist. MailMan just moves on to the next message.

**Table 2-4. Bulletins exported with MailMan V. 8.0**



**NOTE:** Bulletins will be set to vaporize based on the number of retention days indicated in the RETENTION DAYS Field (#5) in the BULLETIN file (#3.6) from the date the bulletin was sent.

## 2.3 Managing MailMan

### 2.3.1 Management Features in MailMan V. 8.0

This topic describes the various maintenance requirements, technical solutions, and the following improvements introduced with MailMan V. 8.0.

This information is directed mainly at the site's Information Resource Management (IRM) personnel.

#### 2.3.1.1 MailMan V. 8.0 is DNS-Aware

MailMan V. 8.0 is now DNS-Aware. It uses Kernel's MAIL^XLFNSLK API to retrieve IP addresses. Thus, it is no longer necessary to manually update the IP addresses in the DOMAIN file (#4.2). The IP address fields still remain in the DOMAIN file (#4.2) and MailMan continues to use them. However, if they do not work, MailMan uses the Kernel API to retrieve a list of valid IP addresses. When MailMan finds one that works, MailMan replaces the non-working IP address with the working one.

In order to activate DNS awareness, the new DNS AWARE field (#8.22) in the MAILMAN SITE PARAMETERS file (#4.3) must be set to Yes.

Also, routine ^XLFNSLK must exist, and the DNS IP field (#51) in the KERNEL SYSTEM PARAMETERS file (#8989.3) must be properly filled in with an IP address.

### 2.3.1.2 Transmission Scripts and TCP/IP Connections

For TCP/IP connections, MailMan can now build transmission scripts on the fly. For transmission scripts whose TYPE is "SMTP," "TCPCHAN," or null, if the transmission script has no records (in the TEXT field [#2], in the TRANSMISSION SCRIPT multiple) in the DOMAIN file (#4.2), MailMan creates the script if the following new fields in the MAILMAN SITE PARAMETERS file (#4.3) are filled in:

- TCP/IP COMMUNICATIONS PROTOCOL (#8.23)—MailMan uses this field to determine which protocol shall be used for TCP/IP. It points to the COMMUNICATIONS PROTOCOL file (#3.4).
- TCP/IP TRANSMISSION SCRIPT (#8.24)—MailMan uses this field to determine which script shall be used for TCP/IP. It points to the TRANSMISSION SCRIPT file (#4.6).

### 2.3.1.3 Transmission Priority Flexibility

Messages in transmit queues can now be designated as low priority, as well as high priority. If a message gets stuck in a transmit queue and is holding up the rest of the queue for whatever reason, MailMan will make that message a low priority message, so that all the other messages are transmitted ahead of it. The Postmaster can also make these priority changes. In the message queue, high-priority messages are now marked with "^", instead of "\$". Low priority messages are marked with "v". The Postmaster can now change the transmit priority at the message level (at the "Message action: Ignore//" prompt). As at the basket level, the command to use is "X".



**CAUTION: In a user basket, the "X" at the message level is a command to unload a PackMan message or KIDS build. In a remote transmit queue, the "X" changes the transmit priority. The difference is the context, and writers of MailMan front-ends should take note**

### 2.3.1.4 Reformatted Date/Times

MailMan date/times are now in a standard format, produced by Kernel's \$FMTE^XLFDT(datetime,"2Z") API. This call is a Supported IA. For example:

Date/Time Data	MailMan V. 7.1 Date/Time Format (Old)	MailMan V. 8.0 Date/Time Format (New)
3020803.153204	03 Aug 02 15:32	08/03/02@15:32

**Table 2-5. MailMan V. 8.0: New date/time format**

This change is also carried through to all MailMan APIs that return date/time in MailMan format.





**REF:** For more information on this Kernel API, please refer to the \$FMTE^XLFDT Home Page at the following Web address:

<http://vista.med.va.gov/kernel/apis/x-fmte^xlfdt.asp>



**REF:** For information on how to obtain a list of Integration Agreements (IAs) related to MailMan, please refer to the "Integration Agreements (IAs)" topic in Chapter 8.0, "External Relations," in this manual.

### 2.3.1.5 Reformatted Remote Message IDs

MailMan remote message IDs now include the message date, to ensure that if you are told that a message is a duplicate of a previously received message, it really is. Sites will no longer have problems sending messages from a production account to a test account that was created by "mirroring" the production account. The remote message ID is now the message number followed by a period, followed by the 7-digit VA FileMan message creation date. For example:

MailMan V. 7.1 Remote Message ID (Old)	MailMan V. 8.0 Remote Message ID (New)
34561234@FORUM.VA.GOV	34561234.3020803@FORUM.VA.GOV

**Table 2-6. MailMan V. 8.0: New remote message ID format**

### 2.3.1.6 Enhanced Routines

The ^XMC\*, ^XMR\*, ^XMS\* suite of routines, which are responsible for scheduling, transmitting to, and receiving messages from remote sites, have been completely overhauled to make them easier to understand and easier to maintain.

### 2.3.1.7 Improved Name Field Display

MailMan will no longer display user names by taking them directly from the .01 field of the NEW PERSON file (#200). The Name Standardization \$\$NAMEFMT^XLFFNAME API is used instead. Thus, the names of people whose last names, for example, contain periods, apostrophes, or spaces, are properly displayed. For example:

MailMan V. 7.1 Name Field Display (Old)	MailMan V. 8.0 Name Field Display (New)
STIVES	ST. IVES
OMALLEY	O'MALLEY
VANDYKE	VAN DYKE

**Table 2-7. MailMan V. 8.0: New name field display format**

### 2.3.1.8 Broadcast Messages with Responses

Messages with responses may no longer be forwarded to broadcast to all users. Such messages may have important information in the responses, and as we all know, responses are not auto-forwarded to remote sites for users with auto-forward addresses. Users who attempt to broadcast messages with responses will be encouraged to copy the message and its responses into a new message, which can be broadcast.

### 2.3.1.9 Message Line Restriction Override

Incoming PackMan and KIDS messages are no longer subject to the restriction of the NETWORK - MAX LINES RECEIVE field (#8.31) in the MAILMAN SITE PARAMETERS file (#4.3). However, other kinds of messages continue to be subject to that restriction.

### 2.3.1.10 Requeued Task Bug Fix

If a task transmitting messages to another site fails and has to be requeued, it really is requeued. Before, that was not true. Previously, the failing task queued up a new task to take its place, and then the failing task stopped.

### 2.3.1.11 Manage MailMan Options

The Manage Mailman menu [XMMGR] contains options that allow the system manager to fully implement and manage the MailMan system by manipulating the BULLETIN (#3.6), MAILBOX (#3.7), MAIL GROUP (#3.8), and MESSAGE (#3.9) files.



**REF:** The Manage Mailman menu options [XMMGR] are briefly described below, for a more detailed description of these options, please refer to the *MailMan Systems Management Guide*. Network Management options reached from this menu are discussed in depth in the *MailMan Network Reference Guide*. User options are discussed in the *MailMan Getting Started Guide* and *MailMan User Guide*.

```
Select Manage Mailman Option:
```

```

Check MailMan Files for Errors      [XMUT-CHKFIL]
  **> Locked with XUPROG
Create a Mailbox for a user [XMMGR-NEW-MAIL-BOX]
Disk Space Management ... [XMMGR-DISK-SPACE-MANAGEMENT]
Group/Distribution Management ... [XMMGR-GROUP-MAINTENANCE]
Local Delivery Management ... [XMMGR-MESSAGE-DELIVERY-MGT]
MailMan Site Parameters [XMKSP]
Network Management ... [XMNET]
New Features for Managing MailMan [XMMGR-HELP]
Remote MailLink Directory Menu ... [XMMGR-DIRECTORY-MAIN]
  **> Locked with XMMGR
Super Search Message File [XM SUPER SEARCH]
```

```
**> Locked with XM SUPER SEARCH
```

Figure 2-2. Manage Mailman menu options

### 2.3.1.11.1 *Check MailMan Files for Errors [XMUT-CHKFIL]*

The XMUT-CHKFIL option is located on the Manage Mailman Menu [XMMGRMGR ]. It is locked with the XUPROG security keys:.

This option checks for and corrects errors in the MAILBOX (#3.7) and MESSAGE (#3.9) files. It checks important fields and cross references.

It is recommended that this option be run monthly or every few months, or whenever there seems to be a database problem.

It produces a report of the errors detected, and what, if anything, it did to fix them. If it did not fix the errors, it tells you what you can do to fix them.

Although the system will not fail because of errors detected, users may inquire about the problems they experience. This utility allows you to detect any errors first and correct them before anyone else encounters an error.

### 2.3.1.11.2 *Create a Mailbox for a user [XMMGR-NEW-MAIL-BOX]*

This option is only meant to be used on systems where Kernel V. 6.0 or later is *not* running or when a repair must be made to the MAILBOX file (#3.7). Since a mailbox is created for each new or reinstated user through the Kernel software, this routine only needs to be run when an error occurs while setting up the user or if there is a file degradation problem. Using this option for a user whose mailbox is wholly or partially set up will not cause data to be lost. A mailbox can be created or repaired using this option.

### 2.3.1.11.3 *Disk Space Management [XMMGR-DISK-SPACE-MANAGEMENT]*

This option provides a submenu under the XMMGR main menu. It contains options for managing disk space. All reports are 80 columns wide.

The following options can be found on the Disk Space Management menu:

```
Select Disk Space Management Option

    AI x-Ref Purge of Received Network Messages      [XMMGR-PURGE-AI-XREF]
    Ask users with many messages to do maintenance
[XMMGR-DISK-MANY-MESSAGE-MAINT]
    Clean out waste baskets                          [XMCLEAN]
    IN Basket Purge[XMMGR-IN-BASKET-PURGE]
    Large Message Report [XMMGR-LARGE-MESSAGE-REPORT]
    Message statistics [XMSTAT]
    Purge a message[XMMGR-PURGE-MESSAGE]
    Purge Messages by Origination Date [XMPURGE-BY-DATE]
    **> Locked with XMMGR
    Purge Unreferenced Messages [XMPURGE]
    Recover Messages into User's IN Basket ...      [XMUT-REC-MENU]
```

```

**> Locked with XUPROG
Terminate mail user suggestions      [XMMGR-TERMINATE-SUGGEST]
Terminate many mail users           [XMMGR-TERMINATE-MANY]
Terminate one mail user              [XMMGR-TERMINATE-ONE]

```

Figure 2-3. Disk space Management menu options

**AI x-Ref Purge of Received Network Messages [XMMGR-PURGE-AI-XREF]**

This option maintains the "AI" cross-reference of mail messages. This is the cross-reference of messages received across the network and it prevents duplicate messages from being received again. The default number of days kept is 730 (2 years is the number of days messages can exist before being purged on FORUM). As per MailMan Patch XM\*8.0\*38, this option should be run interactively at least once a year to reduce its size; otherwise, it continues to grow.

**Ask users with many messages to do maintenance [XMMGR-DISK-MANY-MESSAGE-MAINT]**

This option is used to send out a message to users with many messages and instructs them to eliminate excess messages.

**Clean out waste baskets [XMCLEAN]**

This option deletes all messages in users' WASTE baskets in the MAILBOX file (#3.7). It does *not* delete the messages in the MESSAGE file (#3.9). It is recommended that this option be scheduled to run daily, immediately before the XMAUTOPURGE option.

**IN Basket Purge [XMMGR-IN-BASKET-PURGE]**

This option purges the "IN" mail basket in two steps:

**CAUTION: This option can be run via TaskMan!**

1. In the first step, a message is sent to users.
  - a. The message contains a list of messages to be purged in Step 2.
  - b. The message contains a list of actions that will prevent the purging of the listed messages.
  - c. The message will state the number of days before the listed messages will be purged unless the action is taken on a message by message basis.
  - d. The messages listed will *not* have been referenced for 30 days or the number of days in the MESSAGE RETENTION DAYS field in the MAILMAN SITE PARAMETERS file (#4.3), if it is *not* null.
2. In the second step, the messages listed in the message from Step 1 will be purged (*not* less than 30 days later) unless they:

- a. Have been saved into a basket other than the "IN" basket
- b. Have been referenced (read or printed)
- c. Are marked as NEW

### **Large Message Report [XMMGR-LARGE-MESSAGE-REPORT]**

This option generates a list of messages that are:

- Longer than a specified number of lines (see the LARGE MESSAGE REPORT LINES field [#8.14] in the MAILMAN SITE PARAMETERS file [#4.3]).
- Messages that have no owner or only one owner.
- Messages that have no text or subject.

### **Message statistics [XMSTAT]**

This option displays information about the MESSAGE (#3.9) and MAILBOX (#3.7) files. It displays a history of messages kept and purged by the XMAUTOPURGE option. You can delete unwanted dates through VA FileMan. The XMAUTOPURGE option enters new data when it successfully completes a purge.

The option also displays statistics about the total number of messages in a user's mailbox. This portion of the report can be aborted when displayed on the terminal.

### **Purge a message [XMMGR-PURGE-MESSAGE]**

This option removes a message from users' mail baskets and deletes it, along with any responses chained to it.

### **Purge Messages by Origination Date [XMPURGE-BY-DATE]**

This option removes messages from users' mail baskets then deletes them along with any responses chained to them. It will do this for a range of messages based upon user input. The user enters the range of internal message numbers that will be processed and the date against which they will be checked. This option is locked with the XMMGR security key.

### **Purge Unreferenced Messages [XMPURGE]**

This option purges the mail system of all messages that are no longer needed.

### **Recover Messages into User's IN Basket [XMUT-REC-MENU]**

This option provides a submenu under the XMMGR-DISK-SPACE-MANAGEMENT menu. It contains options for recovering messages for a user. It will recover all messages a user has ever received as long as the user has not terminated from them.

The following options can be found on the Recover Messages into User's IN Basket menu:

Select Recover Messages into User's IN Basket Option:		
DEL	Delete Found Messages from Found Messages List	[XMUT-REC-DELETE]
DRM	Deliver Found Messages into User's IN Basket	[XMUT-REC-DELIVER]
FRM	Find Messages for User	[XMUT-REC-FIND]
LRM	List Messages Found	[XMUT-REC-RPT]

Figure 2-4. Recover Messages into User's IN Basket menu options

- **Delete Found Messages from Found Messages List [XMUT-REC-DELETE]**

This option [synonym DEL] deletes the temporary storage of a list of messages found when the Find Messages for User option [XMUT-REC-FIND] is used by a user.

- **Deliver Found Messages into User's IN Basket [XMUT-REC-DELIVER]**

This option [synonym DRM] delivers messages found with the Find Messages for Users option [XMUT-REC-FIND option]. The messages found will be placed into the user's "IN" basket as long as they are not already in another basket.

- **Find Messages for User [XMUT-REC-FIND]**

This option [synonym FRM] finds all messages that a user has ever had and has not terminated from. This list of messages can be used as input into two other processes:

- Deliver Found Messages into User's IN Basket
- List Messages Found

- **List Messages Found [XMUT-REC-RPT]**

This option [synonym LRM] lists messages found for users with the Find Messages for User option [XMUT-REC-FIND].

**Terminate mail user suggestions [XMMGR-TERMINATE-SUGGEST]**

This option goes through the MAILBOX file (#3.7) and reports on users who perhaps should have their mail access terminated. Users are included in the report if:

- The user was terminated before a manager-supplied cutoff date and allowed to keep a mailbox.
- The user has an Access Code, Verify Code, and primary menu, but last signed on before a manager-supplied cutoff date.

This option does not terminate mail access. The report page breaks on Service/Section and includes the following information:

- User's DUZ and name.
- Whether the user has an Access Code, a Verify Code, and a primary menu.
- When the user last signed on.

- When the user was terminated (if applicable).
- If the user was terminated, then whether the site manager chose to delete the user's mailbox. (Remember, you should usually answer "yes" to this question, unless the user is coming back and needs to have his mail retained.)
- How many new messages the user has. (New messages are never purged, except during purge-by-date purges.)

Finally there are two blank columns:

- "Term User Mbox" (Terminate user mailbox)
- "Deact VISTA Access" (Deactivate VISTA Access).

Besides being of interest to the site manager, this report is also designed to be submitted to other services. The intent is that the other services would check one of the columns for each user in the report and return the report to the site manager for action.

#### **Terminate many mail users [XMMGR-TERMINATE-MANY]**

This option goes through the MAILBOX file (#3.7) and removes any mailbox if the user:

- Is not in the NEW PERSON file (#200).
- Has no Access code and was not terminated.
- Has no Access code and was terminated without mailbox retention.
- Has an access code, but no primary menu.
- Has an Access code and primary menu, but no Verify code, *and*:
  - Has never signed on or used mail since being added before a cutoff date.
 OR
  - Last signed on or used mail before a cutoff date.

However, if the user meets one of the last two conditions above, but has a forwarding address, the user's mailbox will *not* be removed. The fact will be noted on the report, and the user should be investigated further.

Remove means:

- Delete user's private mail groups.
- Remove user from membership in all groups.
- Remove user as an authorized sender from all groups.
- Remove user from anyone's list of surrogates.

- Delete user's latered-messages list.
- Delete user's mailbox.

As a result, the user will not receive any mail.

This option can be run in "test" or "real" mode.

The report lists, in DUZ order:

- The user's DUZ and name.
- Whether the user has an Access code, Verify code, and primary menu.
- When the user was added to the NEW PERSON file (#200).
- When the user last signed on or used mail.
- When the user was terminated (if applicable).
- If the user was terminated, then whether the site manager chose to delete the user's mailbox. (It's generally a good idea to go ahead and delete the mailbox upon termination.)
- If the user has an Access code and a forwarding address, the user is marked with "\*\*\*," and the forwarding address is shown. (Again, the mailbox is not deleted in this case, but the user should be investigated further.)

#### **Terminate one mail user [XMMGR-TERMINATE-ONE]**

This option lets you remove the mailbox of any user who meets the criteria of either the XMMGR-TERMINATE-MANY or the XMMGR-TERMINATE-SUGGEST options. Remove means:

- Delete user's private mail groups.
- Remove user from membership in all groups.
- Remove user as an authorized sender from all groups.
- Remove user from anyone's list of surrogates.
- Delete user's latered-messages list.
- Delete user's mailbox.

As a result, the user will not receive any mail.

Remember:

- Whenever you give a user a new Access code, the system gives the user a mailbox, if he does not already have one.



- Whenever a user logs on, the system gives the user a mailbox if he does not already have one.

#### 2.3.1.11.4 *Group/Distribution Management [XMMGR-GROUP-MAINTENANCE]*

This is a submenu under XMMGR.

The following options can be found on the Group/Distribution Management menu:

```
Select Group/Distribution Management Option:

Bulletin edit [XMEDITBUL]
Edit Distribution List [XMEDITDIST]
Enroll in (or Disenroll from) a Mail Group [XMENROLL]
Mail Group Coordinator's Edit [XMMGR-MAIL-GRP-COORDINATOR]
Mail Group Coordinator's Edit W/Remotes [XMMGR-MAIL-GRP-COORD-
W/REMOTES]
Mail Group Edit [XMEDITMG]
```

Figure 2-5. Group/Distribution Management menu options

- **Bulletin edit [XMEDITBUL]**

This option allows management to enter/edit a MailMan bulletin, change the routing information, and document a bulletin.

- **Edit Distribution List [XMEDITDIST]**

This option is used to edit a Distribution List. The name of a Distribution List is the name of a position such as Postmaster or group name such as G.IRM. A list primarily contains a set of domain names that are concatenated to the Distribution List name to create additional recipients for a message. A recipient with the same name as the list name is presumed to exist at each different domain.

For example, if the Distribution List name is G.SUPPORT and the Domains are FORUM.VA.GOV and ALTOONA.MED.VA.GOV, the message will be sent to:

```
G.SUPPORT@FORUM.VA.GOV
G.SUPPORT@ALTOONA.MED.VA.GOV
```



**NOTE:** A Distribution List can be in more than one mail group. Each mail group can include more than one distribution list.

- **Enroll in (or Disenroll from) a Mail Group [XMENROLL]**

This option allows a MailMan user to join mail groups for which the "SELF ENROLLMENT ALLOWED?" flag is set to "yes". If the user is already a member of a group, then this option allows the user to leave the group. The user will only be able to join or rejoin public groups for which self-enrollment is allowed.

- **Mail Group Coordinator's Edit [XMMGR-MAIL-GRP-COORDINATOR]**

This option allows mail group coordinators to edit the membership of mail groups that he is the coordinator of (and no other). It does not allow editing of remote recipients, but limits the responsibility for problems of delivering to incorrect addresses.

- **Mail Group Coordinator's Edit W/Remotes [XMMGR-MAIL-GRP-COORD-W/REMOTES]**

This option allows mail group coordinators to edit the membership of mail groups that he/she is the coordinator of (and no other). It allows editing of local and remote recipients.

- **Mail Group Edit [XMEDITMG]**

This option edits all fields in the MAIL GROUP file (#3.8).

### 2.3.1.11.5 *Local Delivery Management [XMMGR-MESSAGE-DELIVERY-MGT]*

This submenu contains options for the background filer. All reports are 132 columns wide.

The following options can be found on the Local Delivery Management menu:

```
Select Local Delivery Management Option:

Active Users/Deliveries Report      [XMMGR-BKFILER-ACT]
CHECK background filer              [XMMGR-CHECK-BACKGROUND-FILER]
Compile Response Time Statistics    [XMMGR-RESPONSE-TIME-COMPILER]
Deliveries by Group                 [XMMGR-BKFILER-GROUP]
Delivery Queue Statistics Collection [XMMGR-DELIVERY-STATS-COLL]
Edit numbers to Normalize Reports    [XMMGR-BKFILER-EDIT-NORMALIZED]
Graphics Download (TAB separators)  [XMMGR-BKFILER-TABBED-STATS]
Log Response Time Toggler           [XMMGR-RESPONSE-TIME-TOGGLER]
Mail Delivery Statistics Report      [XMMGR-BKFILER-STAT]
New Messages and Logon Statistics    [XMMGR-NEWMESS/LOGON-STATS]
START background filer              [XMMGR-START-BACKGROUND-FILER]
STOP background filer               [XMMGR-STOP-BACKGROUND-FILER]
```

Figure 2-6. Local Delivery Management [XMMGR-MESSAGE-DELIVERY-MGT] menu options

- **Active Users/Deliveries Report [XMMGR-BKFILER-ACT]**

This option generates a report that lists active users and message deliveries made from previously filed information in half-hour intervals.

- **CHECK background filer [XMMGR-CHECK-BACKGROUND-FILER]**

This option tells you if the background filer is running and tells how many recipients need delivery for each of the messages/responses in the queue.

- **Compile Response Time Statistics [XMMGR-RESPONSE-TIME-COMPILER]**

This option should be used as a background job, scheduled daily to collect statistics on the previous day's response time. The data is put into the MESSAGE DELIVERY STATS file (#4.2998). It will then KILL associated %ZTRL global nodes.

- **Deliveries by Group [XMMGR-BKFILER-GROUP]**

This option produces a list of deliveries made for each distinct delivery queue in half-hour intervals.

- **Delivery Queue Statistics Collection [XMMGR-DELIVERY-STATS-COLL]**

This option collects delivery queue statistics.

- **Edit numbers to Normalize Reports [XMMGR-BKFILER-EDIT-NORMALIZED]**

This option allows the user to customize the Normalized Report.

- **Graphics Download (TAB separators) [XMMGR- BKFILER-TABBED-STATS]**

This option can be used to capture a report and then use the captured file in a graphics software application (e.g., Microsoft Excel). The data has tabs between the fields as delimiters.

- **Log Response Time Toggler [XMMGR-RESPONSE-TIME-TOGGLER]**

This option turns on Kernel's system parameters for response time logging, a little after each half-hour.

It will then schedule another task to turn off the Kernel system parameters for response time logging, unless the time is between 4:00 p.m. and 8:00 a.m. During these hours, response time logging will remain on unless site management interferes, by canceling the tasks associated with this phenomenon and edits the LOG RESPONSE TIME field for the appropriate VOLUME SET to be "OFF."

- **Mail Delivery Statistics Report [XMMGR-BKFILER-STAT]**

This option generates reports showing a list of active users, queue waits, average response time, number of lines displayed to users, etc., in half-hour intervals.

- **New Messages and Logon Statistics [XMMGR-NEWMESS/LOGON-STATS]**

This option prints the number of new messages created and logons with logon minutes for a specified time period.

- **START background filer [XMMGR-START-BACKGROUND-FILER]**

This option reverses the action of the STOP background filer option, if it has been run. It also restarts the background filer, if it disappears from the system status report. In order for this option to be effective, TaskMan (ZTM) must be running.

- **STOP background filer [XMMGR-STOP-BACKGROUND-FILER]**

This option stops the background filer at the *end* of a delivery and *before* it starts to deliver any further messages. This only stops local delivery operations.

*All local mail delivery will stop until the START background filer option is run.*



**NOTE:** This option stops delivery of local mail, gracefully.

### 2.3.1.11.6 MailMan Site Parameters [XMKSP]

This option allows system managers to edit the fields in the MAILMAN SITE PARAMETERS file (#4.3) that do not have to do with christening. To christen a domain, use the Christen a domain option. The Christen a domain option also allows you to change fields set during the original christening, if they are set incorrectly. You can use VA FileMan to edit the TRANSMISSION SCRIPT file (#4.6), if the scripts for Austin or the Mini engine need to be changed.

### 2.3.1.11.7 Network Management [XMNET]

The Network Management menu [XMNET] is the main MailMan network management menu. It contains all of the options that are used for managing the network side of MailMan. This menu contains the following options:

```
Select Network Management Option:

Christen a domain      [XMCHRIS]
Compare Domains in System Against Released List [XMQDOMAINS]
Network Help          [XMNETHELP]
Queue Management ...  [XMNET-QUEUE-MANAGEMENT]
Site Parameters [XMSITE]
Transmission Management ... [XMNET-TRANSMISSION-MANAGEMENT]
```

Figure 2-7. Network Management menu options



**REF:** The options found on the Network Management menu [XMNET] are described in the *MailMan Network Reference Guide*.

### New Features for Managing MailMan [XMMGR-HELP]

This option provides help for site management.

### Remote MailLink Directory Menu [XMMGR-DIRECTORY-MAIN]

This menu provides options that allow the site manager to manage the remote MailLink Directory by loading the VACO, WANG/NOAVA, and REMOTE DOMAIN USER Directories into the REMOTE USER DIRECTORY file, ^XMD(4.2997). This option is locked with the XMMGR security key.

The following options can be found on the Remote MailLink Directory Menu:

```
Select Remote MailLink Directory Menu Option:

Enter/Edit Directory Request Flags by Group      [XMMGR-DIRECTORY-EDITGRP]
Enter/Edit Remote User                          [XMEDIT-REMOTE-USER]
Group eMail Directory Request                  [XMMGR-DIRECTORY-GROUP]
List eMail Directory Request by Groups         [XMMGR-DIRECTORY-LISTGRP]
Load Remote VACO (Wang/Noava) Directory       [XMMGR-DIRECTORY-VACO]
Remote Directory from all Domains             [XMMGR-DIRECTORY-ALL]
Request Mail Directory From a Single Domain Server
[XMMGR-DIRECTORY-SINGLE]
```

Figure 2-8. Remote MailLink Directory Menu options

- **Enter/Edit Directory Request Flags by Group [XMMGR-DIRECTORY-EDITGRP]**  
This option allows site management to control groups of Domains from which directories are requested.
- **Enter/Edit Remote User [XMEDIT-REMOTE-USER]**  
This option allows a single persons remote address to be put into the REMOTE USER DIRECTORY, so messages can be automatically addressed to him.
- **Group eMail Directory Request [XMMGR-DIRECTORY-GROUP]**  
This option allows site management to request directories from all the Domains in a group of Domains as defined in the Enter/Edit Directory Request Flags by Group option [XMMGR-DIRECTORY-EDITGRP].
- **List eMail Directory Request by Groups [XMMGR-DIRECTORY-LISTGRP]**  
This option lists groups created by the Group eMail Directory Request option [XMMGR-DIRECTORY-EDITGRP].
- **Load Remote VACO (Wang/Noava) Directory [XMMGR-DIRECTORY-VACO]**  
This option loads a file from the Host File Server. The user has the choice of whether to run this task interactively or to schedule a batch job to update the MailLink Directory.

- **Remote Directory from all Domains [XMMGR-DIRECTORY-ALL]**  
This option schedules tasks to run in the background to update the MailLink Directory, ^XMD(4.2997).



**CAUTION: Use this option cautiously, because it sends requests to all the Domains for soliciting REMOTE USER Directories.**

- **Request Mail Directory From a Single Domain Server [XMMGR-DIRECTORY-SINGLE]**  
This option schedules a task to run in the background to update the MailLink Directory, ^XMD(4.2997), from a single Domain server.

#### **2.3.1.11.8 MailMan Menu [XMUSER]**

The options located on the MailMan Menu are discussed in depth in the *MailMan Getting Started Guide* and the *MailMan User Guide*.

## 3.0 Routines

All MailMan routines are prefixed with the namespace XM. This section provides information related to all executable XM\* routines exported in MailMan Version 8.0. Do *not* delete any XM\* routines with the exception of any XM initialization routines, which *can* be deleted *after* installation.



**NOTE:** All routines have been modified or are new with MailMan V. 8.0.

The second line of these routines looks like:

```
<tab>;8.0;MailMan;;Jun 28, 2002
```



**NOTE:** Other routine information, such as the Routine Size Histogram, the Routine %Index, etc., can be generated through the use of Kernel Utilities.

Routine	Description
XM	MailMan Main Driver (top level).
XMA	Read Mail Application Program Interface (API).
XMA0	Print Message APIs.
XMA03	Resequence Messages API.
XMA11	Edit Message "Information Only" API.
XMA11A	Send/Answer a Message API.
XMA1B	Save/Delete Message APIs.
XMA1C	Server Basket APIs.
XMA2	Create Message Stub API.
XMA21	Address Lookup APIs.
XMA21C	Input Transform (3.7, .3) Mail Name.
XMA2B	Send Binary Large Object (BLOB).
XMA2R	Reply to/Answer a Message API.
XMA3	Purge Unreferenced Messages (XMCLEAN, XMAUTOPURGE).
XMA30	XMA3 (continued).
XMA32	Purge Messages by Date.
XMA32A	XMA32 (continued).
XMA7	User Information.
XMAD2	Basket Lookup/Create API.
XMADGO	Start Background Message Delivery.
XMAFTP	TCPIP-FTP Options.
XMAH	List Message Responses API.
XMAH1	Reply to a Message API.
XMAI2	Send a Message if too Many Messages.
XMAPBLOB	Display BLOBs.
XMAPHOST	Print to Message (P-MESSAGE).
XMASEC	Secure PackMan Message.

## Routines

<b>Routine</b>	<b>Description</b>
XMB	Send Bulletin APIs.
XMBBLOB	Add BLOBs to Bulletin.
XMBGRP	Mail Group APIs.
XMC	Network Programmer Options Menu.
XMC1	Script Interpreter.
XMC11	DECNET Communications Protocol Tools.
XMC1A	Script Interpreter (Look).
XMC1B	Script Interpreter (Open/Close). This routine is new with MailMan V. 8.0.
XMCB	Batch Message Transmission. This routine is new with MailMan V. 8.0.
XMCD	Communications Diagnostics.
XMCDNT	NT communications diagnostics/testing routine (shareware).
XMCE	Edit Scripts. This routine is new with MailMan V. 8.0.
XMCP	Poll Domains. This routine is new with MailMan V. 8.0.
XMCCQ	Transmit Queue Status Report. This routine is new with MailMan V. 8.0.
XMCCA	Transmit Queue Status Report (others). This routine is new with MailMan V. 8.0.
XMCCQH	Transmit Queue History. This routine is new with MailMan V. 8.0.
XMCSIZE	Message Statistics Tool (shareware).
XMCTLK	TalkMan.
XMCTRAP	Error Trap.
XMCCU1	Encode/Decode String APIs.
XMCCX	Play a Script/Queue Transmit Task. This routine is new with MailMan V. 8.0.
XMCCXT	View Transcripts. This routine is new with MailMan V. 8.0.
XMCCXU	Select Domains/Scripts. This routine is new with MailMan V. 8.0.
XMD	Send/Forward/Add Text to a Message APIs.
XMDIR1	Load Veterans Affairs Central Office (VACO) Directories.
XMDIR1A	Load VACO Directories (WANG).
XMDIR1B	Load VACO Directories (Nationwide Office Automation for Veterans Affairs [NOAVA]).
XMDIRQST	Request Email Directory.
XMDIRRCV	Receive Email Directory.
XMDIRSND	Send Email Directory.
XMFFAX	Fax.
XMGAPI0	This routine provides the APIs to validate/get a message subject (IA #1142).
XMGAPI1	This routine provides the API to get next line of a message (IA #1048).
XMGAPI2	This routine provides the API to get message header information (IA #1144).
XMGAPI3	This routine provides the server API to deliver a broadcast message and mark the message for vaporization (server; no IA #).
XMGAPI4	This routine provides the private API to get new message information (private; IA #1142).
XMHHIG	Mail Group Information.
XMHHIU	User Information.
XMJJBL	List Contents of User's Mailbox.
XMJJBM	Manage Mail in Mailbox.
XMJJBM1	XMJJBM (continued).
XMJJBN	Access New Mail in Mailbox.



<b>Routine</b>	<b>Description</b>
XMJBN1	XMJBN (continued).
XMJBU	Basket Utilities.
XMJDIR	MailMan's DIR.
XMJERR	Error Handling.
XMJMA	Interactive Answer.
XMJMBULL	Manual Bulletin.
XMJMC	Copy Message.
XMJMCODE	Message Encryption/Decryption.
XMJMD	Later Messages.
XMJMF	Find Messages Based on Criteria.
XMJMF1	XMJMF (continued).
XMJMF2	XMJMF (continued).
XMJMFA	Find Message: Subject Starts with.
XMJMFB	Find Message: Multiple Conditions.
XMJMFC	Find message in the MESSAGE file (#3.9).
XMJML	List Messages in Basket (cannot read).
XMJMLN	List/Read New Messages.
XMJMLR	List/Read Messages in Basket.
XMJMLR1	XMJMLR (continued).
XMJMOI	Options at Ignore Prompt.
XMJMOI1	XMJMOI (continued).
XMJMOIE	Edit Message that User has Sent to Self.
XMJMOR	Message Range Actions.
XMJMORX	Message Range Actions for ^TMP Message Lists.
XMJMORX1	XMJMORX (continued).
XMJMP	Print, Back Up Messages.
XMJMP1	XMJMP (continued).
XMJMP2	XMJMP (continued).
XMJMQ	Query Recipients (Q, QD, and QN).
XMJMQ1	XMJMQ (continued).
XMJMR	Interactive Reply.
XMJMR1	XMJMR (continued).
XMJMRO	Options at "reply" Transmit Prompt.
XMJMS	Interactive Send.
XMJMSA	Send Anonymous User Suggestion Message.
XMJMISO	Options at "send" Transmit Prompt.
XMJMT	Interactive Send to Whom.
XMKP	Address and Post Message.
XMKP1	XMKP (continued).
XMKPL	Manage the Local Mail Posting Process.
XMKPLQ	Post Local Messages to Correct Queues.
XMKPO	Post, Other Messages.
XMKPR	Post, Remote-network Messages. This routine is new with MailMan V. 8.0.
XMKPR1	XMKPR (continued). This routine is new with MailMan V. 8.0.
XMKPRD	DNS Interface. This routine is new with MailMan V. 8.0.

<b>Routine</b>	<b>Description</b>
XML	MailMan Physical Link.
XML1CRC	Operating System (OS) Check Sum.
XML4CRC	Block Mode Protocol.
XML4CRC1	XML4CRC (continued).
XMLPC	Protocol for PC Platforms.
XMLSWP	Sliding Window Protocol.
XMLSWP0	XMLSWP (continued).
XMLSWP2	XMLSWP (continued).
XMLTCP	TCP/IP to MailMan.
XMM1	Modem Control for VADIC 3451, MICROCOM PCS.
XMM2	Modem Control for CERMATEK INFO MATE 212A.
XMNTEG	XTSUMBLD KERNEL—Package Checksum Checker.
XMNTEG0	XMNTEG (continued).
XMP	PackMan.
XMP2	PackMan Print/Install/Summarize/Compare.
XMP2A	PackMan Install.
XMP3	PackMan Build Backup Message.
XMPC	PackMan Compare.
XMPG	PackMan Global List/Load.
XMPH	PackMan Load Routines/Print Message.
XMPSEC	PackMan Security.
XMR	Simple Mail Transfer Protocol (SMTP) Receiver (RFC 821).
XMR0BLOB	BLOB Receive.
XMR1	SMTP Receiver HELO/MAIL/RCPT (RFC 821).
XMR2	SMTP Receiver (non-standard).
XMR3	SMTP Receiver (RFC 822).
XMR3A	XMR3 (continued). This routine is new with MailMan V. 8.0.
XMR4	SMTP Help. This routine is new with MailMan V. 8.0.
XMRENT	Message Network Header Information API.
XMRFTP	SMTP Receiver (RFC 821).
XMRFTPUX	SMTP Receiver (RFC 821).
XMRINETD	Process MSM-NT TCP Request.
XMRMSM	MSM TCP/IP Front End.
XMRONT	OpenM-NT TCP/IP INETD and Front End.
XMRPCTS	Steal TWIXs from PCTS Host [RCVR].
XMRPCTS0	Send TWIXs to PCTS Host [XMTR] 2.
XMRPCTS1	Simple PCTS Front End to MailMan.
XMRPCTSA	Steal TWIXs from PCTS Host [RCVR].
XMRPOP	POP3 Server (RFC 1939).
XMRTCP	SMTP Receiver.
XMRTCPGO	Start XMRTCP.
XMRUCX	SMTP Receiver (RFC 821) for UCX.
XMS	SMTP Send.
XMS0BLOB	Send BLOBs (other body parts).
XMS1	SMTP Send (RFC 821).

<b>Routine</b>	<b>Description</b>
XMS2	SMTP Send (non-standard).
XMS3	SMTP Send (RFC 822).
XMSFTP	TCP/IP-FTP Sender.
XMSFTPUX	TCP/IP-FTP Sender.
XMTDF	Filter Message: Multiple Conditions.
XMTDL	Deliver Local Mail to Mailbox.
XMTDL1	XMTDL (continued).
XMTDL2	XMTDL (continued).
XMTDO	Deliver Other (server, device).
XMTDR	Transmit Messages in a Queue. This routine is new with MailMan V. 8.0.
XMTDT	Deliver Latered Messages and Delete Inactive Messages.
XMUCXPOP	POP3 Server for UCX (RFC 1939).
XMUDCHK	Validate DOMAIN file (#4.2)). This routine is new with MailMan V. 8.0.
XMUDCHR	Christen Site. This routine is new with MailMan V. 8.0.
XMUDNC	Domain Name Change.
XMUDTOP	Top-Level Domain Names. This routine is new with MailMan V. 8.0.
XMUPIN	IN Basket Purge.
XMUT1	Recover Messages for a User.
XMUT1A	XMUT1 (continued).
XMUT2	Large Message Report.
XMUT4	Integrity Checker for the MAILBOX file (#3.7) and MESSAGE file (#3.9).
XMUT41	XMUT4 (continued).
XMUT4A	Integrity Checker for the MAILBOX file (#3.7).
XMUT4C	Integrity Checker for the MESSAGE file (#3.9).
XMUT5	Check Background Filer (local delivery queues).
XMUT5B	Gather Delivery Queue Data.
XMUT5C	Response Time Logger/Purge.
XMUT5G	Validate Mail Group Members.
XMUT5Q	Delivery Queue Analysis.
XMUT5Q1	Delivery Queue Analysis (start/init).
XMUT5R1	Mail Statistics Report.
XMUT5R2	Daily Reports on Mail Deliveries.
XMUT6	Check Delivery Queue.
XMUT7	Send Message to Forwarding Address.
XMUTCOM1	XMUSRCNT.COM Count Users (shareware).
XMUTERM	Delete Mailbox/Delete Message.
XMUTERM1	XMUTERM (continued).
XMUTERM2	XMUTERM (continued).
XMUTPUR0	Purge "AI" Cross-reference.
XMVGROUP	Group Creation/Enrollment.
XMVGRP	Group Creation/Enrollment.
XMVSURR	Surrogate Management.
XMVVITA	Edit User's MailMan Variables.
XMVVITAE	Initialize User's MailMan Variables.
MXADDR	Address Checker.

<b>Routine</b>	<b>Description</b>
XMADDR1	XMADDR (continued).
XMADDR2	XMADDR (continued).
XMADDR3	XMADDR (continued).
XMADDR4	XMADDRG (continued).
XMADDRD	Domain Name Lookup.
XMADDRG	Expand Group.
XMANSER	Answer a Message.
XMAPI	Message APIs.
XMAPIB	Mailbox and Mail Basket APIs.
XMAPIG	Mail Group APIs.
XMAPIU	Interactive User APIs.
XMBSKT	Basket APIs.
MXBULL	Send Bulletin.
XMEDIT	Edit Message that User has Sent to Self.
MXGRP	Group Creation/Enrollment.
MXGRP1	MXGRP (continued).
MXLIST	List Message: Multiple Conditions.
MXLIST1	MXLIST (continued).
MXLIST2	MXLIST (continued).
MXMBOX	Mailbox APIs.
MXMSGS	Message APIs.
MXMSGS1	MXMSGS (continued).
MXMSGS2	MXMSGS (continued).
MXPARM	Parameter Check.
MXPARM1	MXPARM (continued).
MXPARMB	Parameter Check for XMAPIB.
MXPRT	Print Messages.
MXREPLY	Reply to a Message.
MXSEC	Message Security and Restrictions.
MXSEC1	MXSEC (continued).
MXSEC2	MXSEC (continued).
MXSEC3	MXSEC (continued).
MXSEND	Send a Message.
MXTO	Address a Message.
MXUTIL	Message & Mailbox Utilities.
MXUTIL1	Date and String Utilities.
MXUTIL2	Message information.
MXUTIL3	List Addressees, Recipients, Message Network Header.
MXUTIL4	MXUTIL3 (continued).
MYYP18	MailMan Patch XM*8.0*18 post init routine.
MYYP24	MailMan Patch XM*8.0*24 post init routine.
MYPRE	Pre- and Post- Initialization.
MYPRE1	Pre- and Post- Initialization.

**Table 3-1. Routines exported with MailMan V. 8.0 and subsequent patches**

## 4.0 Files

This chapter contains information on all files and globals distributed with MailMan and references to some MailMan-related files. The file information includes: file numbers, file names, global location, and brief file descriptions. MailMan file numbers range from #3.4 to #4.6.



**REF:** Files security access is described in the "File Security" topic in Chapter 11.0, "Software Product Security," in this manual.

Other pertinent file information, such as data dictionaries and relations with other files, can be generated online through the use of VA FileMan utilities.



**CAUTION:** All files, fields, and routines in MailMan are considered to perform controlled procedures and cannot be modified.

## 4.1 Globals

The following MailMan namespaced globals are distributed with MailMan:

- ^XMB
- ^XMBPOST
- ^XMBS
- ^XMBX
- ^XMD
- ^XMZ

MailMan also stores data in the following globals:

- ^DIC (VA FileMan)
- ^%ZISL (Kernel)



**CAUTION:** Journaling is highly recommended.



**CAUTION:** Your translation table *must* be set up properly in order to translate the ^XMB\* globals and the ^DIC global in all UCIs.




**REF:** All of these globals are used to store the data contained in the MailMan files referenced in the "Files" topic that follows in this chapter.


## 4.2 Files


The following are files distributed with MailMan:





**NOTE:** None of the files listed below come with any data.


File #	File Name	Global Location	Description
3.4	COMMUNICATIONS PROTOCOL	^DIC(3.4,	<p>This file stores the definitions of all the communications protocols known to Kernel. A protocol has executable M code for sending, receiving, opening, and closing a link.</p> <p> <b>CAUTION:</b> This file should only be edited by someone with intimate knowledge of Network MailMan.</p>
3.51	SPOOL DOCUMENT	^XMB(3.51,	<p>This file stores the name of spool documents created by the Kernel spooler (i.e., %ZIS4) for all operating systems. It does <i>not</i> hold the text of the documents themselves. That text is first spooled to spool space, then moved into the <b>^XMB</b> global as a mail message. This file does, however, provide the mechanism for securing spool space for and during spooling. It is cross-referenced by NAME, USER, OTHER AUTHORIZED USERS, SPOOL DATA, and SPOOL NUMBER.</p>
3.519	SPOOL DATA	^XMBS(3.519,	<p>This is the holding file for spool documents until moved to a mail message or deleted.</p>
3.54	RESOURCE	^%ZISL(3.54,	<p>This file is for internal use by TaskMan and the Device Handler in the sequential processing of tasks. Jobs that have been sent to a resource-type device will be monitored according to fields in this file. To accommodate the Device Handler's need to write to but rarely read from this file, the translated <b>^%ZISL</b> global is used. This file is cross-referenced by NAME and JOB #.</p>


File #	File Name	Global Location	Description
3.6	BULLETIN	^XMB(3.6,	<p>This file stores bulletins. Bulletins are "Super" messages. Each Bulletin has a text and a subject just like a normal message. However, embedded within the subject and/or the text can be variable fields that can be filled in with parameters. There is also a standard set of recipients in the form of a mail group that is associated with the bulletin.</p> <p>MailMan processes bulletins either because of a special cross-reference type of VA FileMan or because of a direct call in a routine. The interface for the direct call is described in the documentation on programmer entry points (APIs). VA FileMan sets up code that will issue a bulletin automatically when the special cross-reference type is created. In either case, the parameters merged into the text and/or the subject normally make each bulletin instance unique.</p>
3.7	MAILBOX	^XMB(3.7,	<p>This file stores pointers to the MESSAGE file (#3.9), according to users. Each MAILBOX file (#3.7) entry corresponds to a user. The Postmaster is a special user who controls the network communications queues. Each user is automatically given two baskets: "IN" and "WASTE." All incoming messages are delivered either to a user's "IN" basket or to another basket based on mail filters established by the user. When the user deletes messages, they are temporarily stored in the "WASTE" basket. Users can create new baskets and filter mail as they wish.</p> <p> <b>NOTE:</b> This file was modified with MailMan V. 8.0 software. The following fields were modified:</p> <p>FORWARDING ADDRESS (#2)—The bulletin cross-reference was changed.</p> <p>NETWORK PRIORITY TRANSMISSION (#6)—Expanded the SET OF CODES to add low priority and changed the cross-reference.</p>
3.73	MESSAGES TO BE NEW AT A LATER DATE	^XMB(3.73,	<p>This file stores pointers to the MESSAGE file (#3.9), pointing to messages to be new at a later date and time. The background filer processes entries in this file. The messages pointed at become new at the date and time requested.</p>


File #	File Name	Global Location	Description
3.8	MAIL GROUP	^XMB(3.8,	<p>This file stores the names of all mail groups known to MailMan and their members.</p> <p> <b>NOTE:</b> This file was modified with MailMan V. 8.0 software. The NAME field (#.01) was modified to add a trigger to populate the COORDINATOR field (#5.1).</p>
3.816	DISTRIBUTION LIST	^XMB(3.816,	<p>This file stores names of Distribution Lists. A Distribution List is interpreted as a name to which the message will be delivered at each of the associated Domains in the list. Each name is associated with one or more Domains. When a Distribution List is entered into a mail group, MailMan delivers a message to all the entities it has linked to it.</p> <p>For example, a Distribution List whose name is G.SUPPORT and whose associated domains are FORUM.VA.GOV, ALTOONA.VA.GOV, and OIFO-OAKLAND.VA.GOV will be sent (in addition to all other entities attached to the mail group) to:</p> <p>G.SUPPORT@FORUM.VA.GOV  G.SUPPORT@ALTOONA.VA.GOV  G.SUPPORT@OIFO-OAKLAND.VA.GOV</p>
3.9	MESSAGE	^XMB(3.9,	This file stores all MailMan messages.



File #	File Name	Global Location	Description
4.2	DOMAIN	^DIC(4.2,	<p>This file stores the names of all nodes to which MailMan messages can be routed (i.e., Domains). Each name in this file corresponds to the right side of a MailMan address following the at-sign ("@").</p> <p>Domains can have synonyms, allowing users to name sites with one name, while MailMan uses the more formal Domain naming conventions. This file also controls whether messages are queued for immediate transmission and into what queue they are dropped.</p> <p>Any Domain can have a Relay Domain, which controls the routing as follows:</p> <p>If a Domain has a named Relay Domain, the message is put in the queue for the Relay Domain.</p> <p>If a Domain does not have a named Relay Domain and the Domain has a TRANSMISSION SCRIPT, the message is put in the queue for that Domain.</p> <p>If a Domain does not have a named Relay Domain and also does not have a TRANSMISSION SCRIPT, the message is put in the queue for the Parent Domain, as defined at MailMan initialization time.</p> <p> <b>NOTE:</b> This file was modified with MailMan V. 8.0.</p> <p> <b>NOTE:</b> If for some reason your site needs a copy of the DOMAIN file (#4.2), it is recommended that you call another site nearby or your supporting OI Field Office.</p>

File #	File Name	Global Location	Description
4.281	INTER-UCI TRANSFER	^%ZISL(4.281,	<p>The file is used by MailMan to do <i>non</i>-interactive transmissions and receptions of messages to and from UCIs that share the %ZISL file either because they are on the same machine or because they are on the same local area network (LAN) and use DDP translation techniques for the %ZISL global.</p> <p> <b>NOTE:</b> This file was modified with the MailMan V. 8.0 software. The following Multiple fields were modified:  FROM DOMAIN (#.01):  Increase length of field from 30 to 64.  Increase length of B cross-reference from 30 to 64.  TO DOMAIN (#1):  Increase length of field from 50 to 64.  Increase length of C cross-reference from 30 to 64.</p>
4.2995	MAILMAN OUTSTANDING FTP TRANSACTIONS	^XMBX(4.2995,	This file stores entries that describe file transfers that will be controlled by the TCP/IP Poller.
4.2996	INTERNET SUFFIX	^DIC(4.2996,	<p>This file stores Internet-reserved names that cannot be used under certain circumstances:  Domain names <i>cannot</i> partially match the Internet-reserved name.  Domain names <i>cannot</i> match the Internet-reserved name.</p>
4.2997	REMOTE USER DIRECTORY	^XMD(4.2997,	This files stores users with known off-system electronic mail addresses.
4.2998	MESSAGE DELIVERY STATS	^XMBX(4.2998,	This file stores statistics about local message deliveries, response time, and numbers of active user processes.

File #	File Name	Global Location	Description
4.2999	MESSAGE STATISTICS	^XMBS(4.2999,	<p>This file is stores <i>non</i>-static information about network mail transmissions.</p> <p> <b>NOTE:</b> This file was modified with the DNS-Aware MailMan V. 8.0 software. The following fields were modified:</p> <p>NAME (#.01)—Changed the title and description.</p> <p>MESSAGE IN TRANSIT (#2)—Changed to a pointer and changed the help prompt.</p> <p>MESSAGES RECEIVED (#103)—Corrected the spelling of "included".</p> <p>CHARACTERS SENT (#104)—Increased the length of this field.</p> <p>CHARACTERS RECEIVED (#105)—Increased the length of this field.</p> <p>LINES SENT (#106)—Increased the length of this field.</p> <p>LINES RECEIVED (#107)—Increased the length of this field.</p> <p>The following fields were added:</p> <p>DIRECTION (#8)—This field is used to report whether, at any given time, we are sending messages to, or receiving messages from, the site.</p> <p>XMIT IP ADDRESSES TRIED (#48)—This is a list of IP addresses, separated by commas, which have already been used in attempting to connect with the site.</p> <p>XMIT AUDIT IP ADDRESS (#60,3)—This is the IP address used for this attempt.</p>

File #	File Name	Global Location	Description
4.3	MAILMAN SITE PARAMETERS	^XMB(1,	<p>This file stores the MailMan site parameters. It has only one entry—the Domain name of the installation site. The system manager defines some parameters during the installation process. These include: TIME ZONE, UCI ASSOCIATION TABLE (VOLUME SET Multiple), and specification of the account where XMB, the MailMan background filer, should run. Other entries can be edited subsequent to installation. The PARENT DOMAIN, set to FORUM during initialization, can be changed. TaskMan, spooling, response time, and audit parameters can also be established. Priorities can be set for interactive users and for TaskMan. Defaults for fields such as: TIMED READ, AUTO MENU, and ASK DEVICE are defined for use when not otherwise specified for a user or device. Cross-references include: TIME ZONE, DOMAIN NAME, PARENT, and LINKED UCI.</p> <p> <b>NOTE:</b> This file was modified with MailMan V. 8.0. The following fields were added:</p> <p>DNS AWARE (#8.22)—MailMan uses this field to determine if it should use DNS to look up IP addresses.</p> <p>If "NO," MailMan will use the IP addresses in the Domain scripts.</p> <p>If "YES," will use the IP addresses in the domain scripts, but if they fail, or do not exist, MailMan will use DNS to ascertain other IP addresses to try. MailMan will replace failed script IP address with the successful DNS IP address.</p> <p>TCP/IP COMMUNICATIONS PROTOCOL (#8.23)—MailMan uses this field to determine which protocol shall be used for TCP/IP. It points to the COMMUNICATIONS PROTOCOL file (#3.4).</p> <p>TCP/IP TRANSMISSION SCRIPT (#8.24)—MailMan uses this field to determine which script shall be used for TCP/IP. It points to the TRANSMISSION SCRIPT file (#4.6).</p>
4.4	MAILMAN TIME ZONE	^XMB(4.4,	<p>This file stores MailMan time zones. MailMan time zones are used to calculate the time in the time zone of the receiving Domain for a message coming in from a different time zone; therefore, times can be expressed in EST (Eastern Standard Time), even if they were originally formed in PST (Pacific Standard Time).</p>
4.5	NETWORK TRANSACTION	^XMBX(4.5,	<p>This file is not currently in use by MailMan. It is still distributed because there may be local sites that have software that uses it.</p>

File #	File Name	Global Location	Description
4.501	NETWORK SENDERS REJECTED	^XMBX(4.501,	This file stores names of network addresses. The system manager can input partial or full matches to network addresses into this file. When Network MailMan receives a message from a sender that contains the string input, that sender will be rejected. This can be used to prevent large messages or large quantities of messages from coming into a system from a remote site.
4.6	TRANSMISSION SCRIPT	^XMB(4.6,	This file stores transmission scripts. Transmission scripts are lists of script commands that are executed by the script processor for Network Mail transmissions, in order, when they are invoked. The command in a script that invokes a transmission script is the CALL (C); therefore, "C KERNEL" invokes a script that interfaces with the Simple Mail Transfer Protocol (SMTP) process using the Simple Communications Protocol (SCP). Transmission scripts are used most often to invoke a portion of a longer script that is used in many different domains.

**Table 4-1. Files distributed with MailMan**

#### **Multimedia MailMan-related Files**

In order for Multimedia MailMan to work properly, sites must also have access to the following files:

File #	File Name	Description
2005	IMAGE	<b>This file stores pointers to files and related data so that they can be displayed.</b>
2005.2	NETWORK LOCATION	This file stores the logical name of the physical location where an image is stored.

**Table 4-2. Multimedia MailMan-related files**

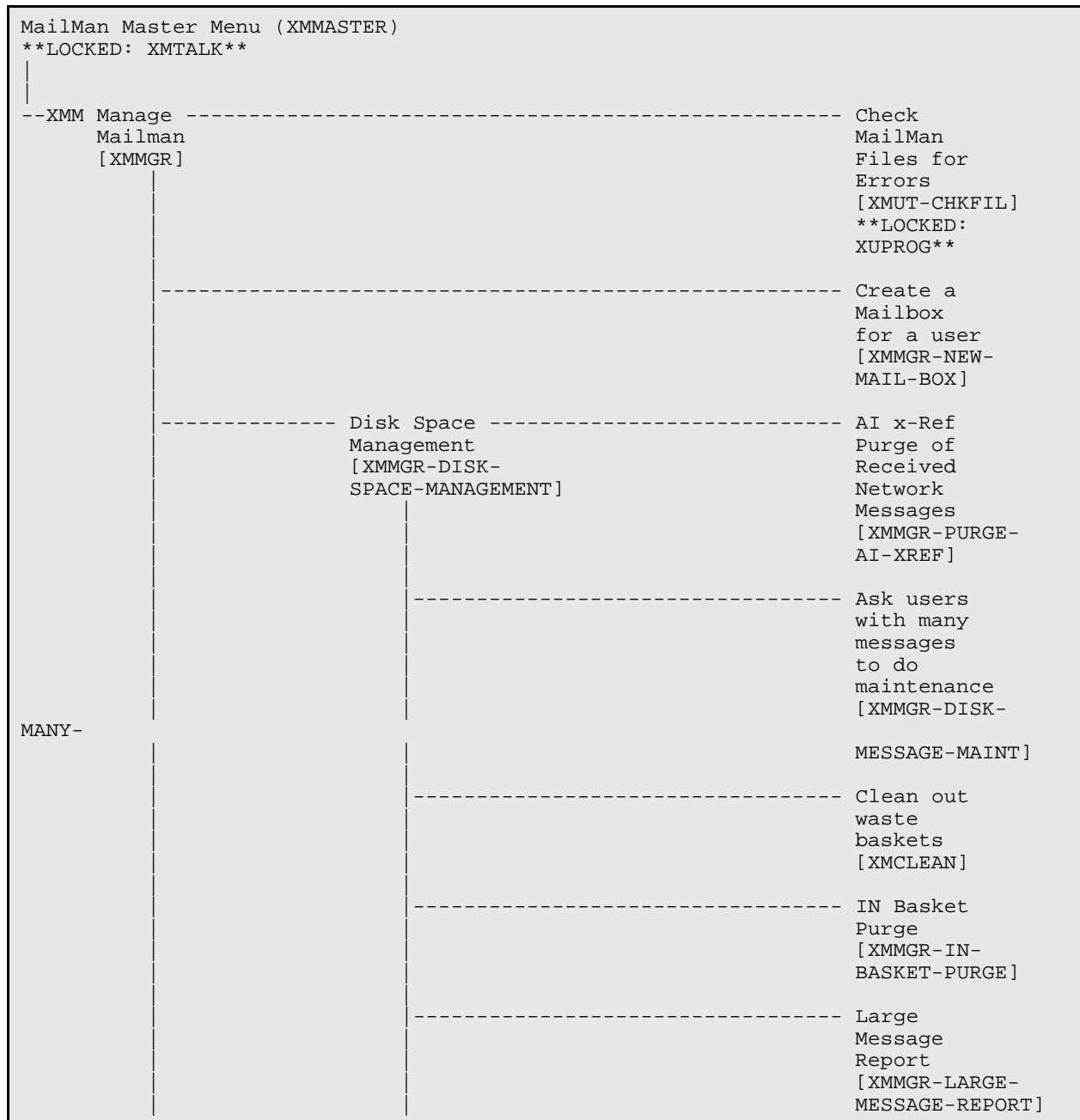


## 5.0 Exported Options

### 5.1 Menu Diagram

#### MailMan Master Menu

The following menu diagram was generated using the Map Pointer Relations option (i.e., DI DDMAP) on the Programmer Options menu (i.e., XUPROG):



# Exported Options

		-----	Message statistics [XMSTAT]
		-----	Purge a message [XMMGR-PURGE-MESSAGE]
		-----	Purge Messages by Origination Date [XMPURGE-BY-DATE] **LOCKED:
XMMGR**		-----	Purge Unreferenced Messages [XMPURGE]
	Recover Messages into User's IN Basket [XMUT-REC-MENU] **LOCKED: XUPROG**	-----DEL	Delete Found Messages from Found Messages List [XMUT-REC-DELETE]
		-----DRM	Deliver Found Messages into User's IN Basket [XMUT-REC-DELIVER]
		-----FRM	Find Messages for User [XMUT-REC-FIND]
		-----LRM	List Messages Found [XMUT-REC-RPT]
		-----	Terminate mail user suggestions [XMMGR-SUGGEST]
TERMINATE-		-----	Terminate many mail users [XMMGR-TERMINATE-MANY]



TERMINATE-	<p>-----          Terminate          one mail user          [XMMGR-            ONE]</p>
	<p>-----          Group/Distribution          Management          [XMMGR-GROUP-          MAINTENANCE]</p>
	<p>-----          Bulletin edit          [XMEDITBUL}</p>
	<p>-----          Edit          Distribution          List          [XMEDITDIST]</p>
	<p>-----          Enroll in (or          Disenroll          from) a          Mail Group          [XMENROLL]</p>
	<p>-----          Mail Group          Coordinator's          Edit          [XMMGR-MAIL-GRP-          COORDINATOR]</p>
	<p>-----          Mail Group          Coordinator's          Edit          W/Remotes          [XMMGR-MAIL-GRP-          COORD-W/REMOTES]</p>
	<p>-----          Mail Group          Edit          [XMEDITMG]</p>
	<p>-----          Local          Delivery          Management          [XMMGR-MESSAGE-          DELIVERY-MGT]</p>
	<p>-----          Active          Users/Deliveries          Report          [XMMGR-BKFILER-          ACT]</p>
FILER ]	<p>-----          CHECK          background filer          [XMMGR-CHECK-          BACKGROUND-</p>
	<p>-----          Compile          Response Time          Statistics          [XMMGR-RESPONSE-          TIME-COMPILER]</p>
	<p>-----          Deliveries          by Group          [XMMGR-BKFILER-          GROUP]</p>
	<p>-----          Delivery          Queue</p>

## Exported Options

		Statistics Collection [XMMGR-DELIVERY- STATS-COLL]
		----- Edit numbers to Normalize Reports [XMMGR-BKFILER- EDIT-NORMALIZED]
		----- Graphics Download (TAB separators) [XMMGR-BKFILER- TABBED-STATS]
		----- Log Response Time Toggler [XMMGR-RESPONSE- TIME-TOGGLER]
		----- Mail Delivery Statistics Report [XMMGR-BKFILER- STAT]
		----- New Messages and Logon Statistics [XMMGR-NEW MESS/LOGON-
STATS ]		----- START background filer [XMMGR-START- BACKGROUND-
FILER ]		----- STOP background filer [XMMGR-STOP- BACKGROUND-
FILER ]		----- MailMan Site Parameters [XMKSP]
	Network Management [XMNET]	----- Christen a domain [XMCHRIS]
		----- Compare Domains in System Against Released List

		[XMQDOMAINS]
		----- Network Help [XMNETHELP]
	Queue Management [XMNET-QUEUE-MANAGEMENT]	----- Actively Transmitting/Receiving Queues Report [XMQACTIVE]
		----- Display Active & Inactive Message Queues [XMQDISP] **LOCKED: XUPROGMODE**
		----- Historical Queue Data/Stats Report [XMQHIST]
		----- List a transcript [XMLIST]
		----- Queues with Messages to Transmit Report [XMQUEUED]
		----- Show a queue [XMQSHOW]
		----- Transmit a Single Queue [XMSTARTQUE]
		----- Transmit All Queues [XMSTARTQUE-ALL]
		----- Site Parameters [XMSITE]
	Transmission Management [XMNET-TRANSMISSION-MANAGEMENT]	----- Edit a script [XMSCRIPTEDIT]
		----- Play a script [XMSCRIPTPLAY]
		----- Receive Messages from Another UCI [XMR-UCI-RCV]

# Exported Options

RECEIVE ]		<p>----- Send Messages to Another UCI [XMR-UCI-SEND]</p> <p>----- Sequential Media Message Reception [XMR-SEQ-</p> <p>----- Sequential Media Queue Transmission [XMS-SEQ-TRANSMIT]</p> <p>----- Subroutine editor [XMSUBEDIT]</p> <p>----- Toggle a script out of service [XMSCRIPTOUT]</p> <p>----- Validation Number Edit [XMEDIT-DOMAIN-VALIDATION#]</p>
DIRECTORY-	<p>----- Remote MailLink Directory Menu [XMMGR-DIRECTORY-MAIN] **LOCKED: XMMGR**</p>	<p>----- New Features for Managing MailMan [XMMGR-HELP]</p> <p>----- Enter/Edit Directory Request Flags by Group [XMMGR-EDITGRP]</p>
DIRECTORY-		<p>----- Enter/Edit Remote User [XMEDIT-REMOTE-USER]</p> <p>----- Group eMail Directory Request [XMMGR-GROUP]</p> <p>----- List eMail</p>

DIRECTORY-		Directory Request by Groups [XMMGR-
		LISTGRP]
DIRECTORY-		Load Remote VACO (Wang/Noava) Directory [XMMGR-
		VACO]
DIRECTORY-		Remote Directory from all Domains [XMMGR-
		ALL]
DIRECTORY-		Request Mail Directory From a Single Domain Server [XMMGR-
		SINGLE]
SEARCH]		Super Search Message File [XM SUPER
SEARCH**		**LOCKED: XM SUPER
--XMN Network Management [XMNET]		
--XMU MailMan Menu [XMUSER]		
	-----NML	New Messages and Responses [XMNEW]
	-----RML	Read/Manage Messages [XMREAD]
	-----SML	Send a Message [XMSEND]
	-----	Query/Search for Messages [XMSEARCH]
	-----AML	Become a Surrogate (SHARED,MAIL or Other) [XMASSUME]

# Exported Options

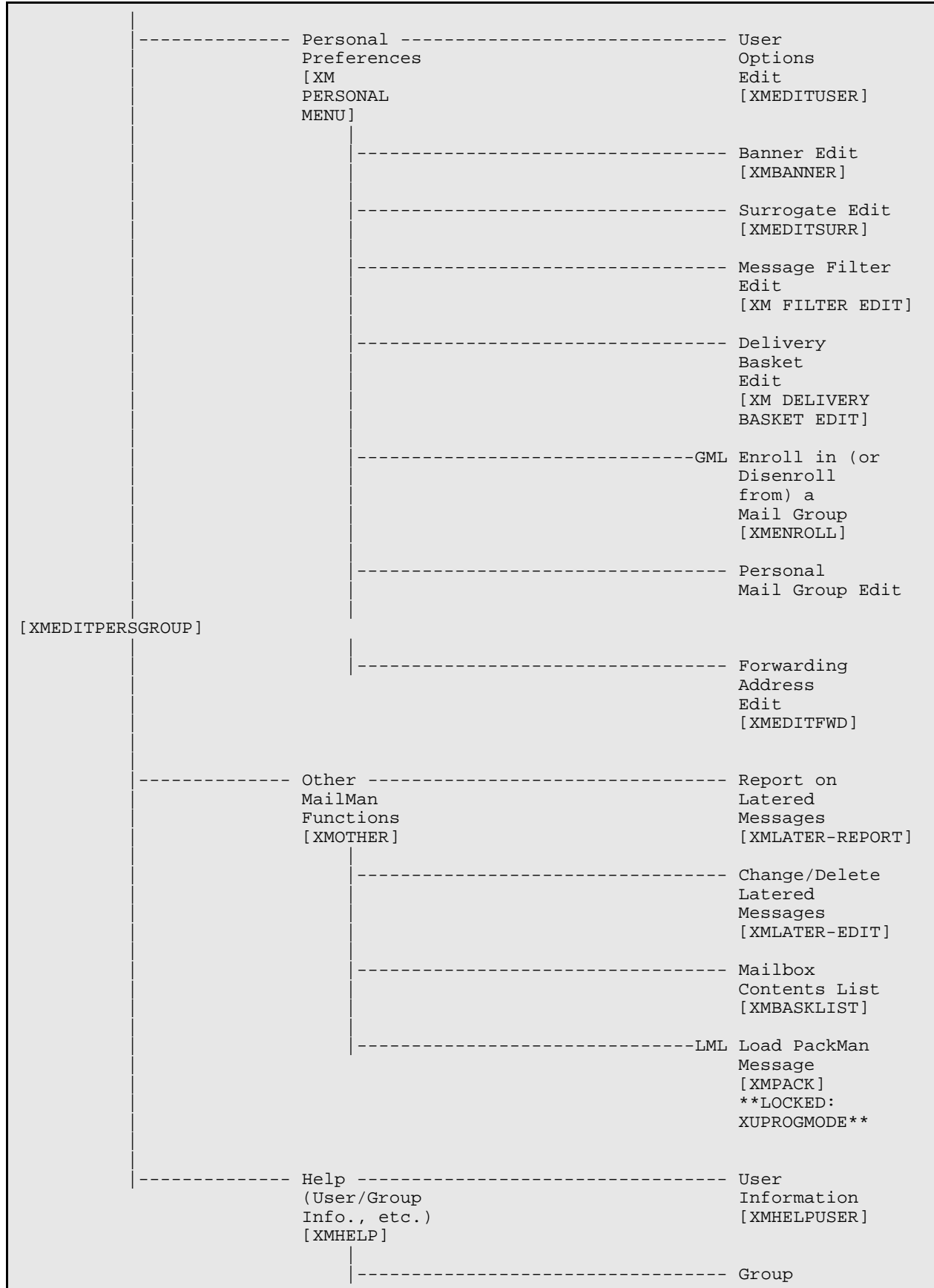




Figure 5-1. MailMan Master Menu (XMMASTER) diagram

## 5.2 Options—*Without Parents*

The following MailMan options are *not* assigned to any menu when the MailMan software is exported. They can be assigned at the discretion of the system manager, if appropriate:



**NOTE:** The XMDX, XMPRECV, and XMPSEND options *cannot* be independently invoked or are for developer/support debugging only. The XMPRECV and XMPSEND menu options are used as PackMan options and are used from the menus executed from ^DOPT("XMP").

Option	Description
XMAUTOPURGE	Purge unreferenced messages.
XMBLOBSEND	Send multimedia messages (Imaging software).
XMDX	Diagnostics menu.
XMMASTER	Master menu.
XMMGR-BACKGROUND-FILER	Background filer submenu.
XMMGR-BKfiler-WAIT	Runs Delivery Queues Wait Report.
XMMGR-DIRECTORY-RECV	Server—Receives a directory.
XMMGR-DIRECTORY-SEND	Server—Sends a directory.
XMMGR-PURGE-MESSAGE	Purge a message.
XMNET-TWIX-SEND	Sends a TWIX via PCTS.
XMNET-TWIX-TRANSMIT	Transmits a TWIX over the network.

Option	Description
XMOTHER-COMMUNICATIONS	Send and receive files.
XMPOLL	Play scripts.
XMPRECV	PackMan menu to print, compare, and load PackMan messages.
XMPSEND	PackMan menu to load routines, files, globals, and data dictionaries.
XMR-BROADCAST-VA-WIDE	Server for messages broadcast to SHARED,MAIL.
XMRONT	TCP/IP Listener for MailMan.
XMSSCRIPTRES	Resume processing a script.
XMSHARE	Assume the identity of SHARED,MAIL.
XMSUGGESTION	Send anonymous mail to the SUGGESTION BOX of SHARED,MAIL.
XMTALK	TalkMan communications tool.
XMYB-BROADCAST-VA-WIDE	Server for message broadcast to all users.

**Table 5-1. MailMan options without parents**

## 5.3 Options—Listed Alphabetically by Name

The following MailMan options are distributed with the MailMan software (listed alphabetically). Each option includes the following information: name, locks (if any), type, routine, entry action, exit action, menu text, and description.



**NOTE:** The XMDX, XMPRECV, and XMPSEND options *cannot* be independently invoked or are for developer/support debugging only. The XMPRECV and XMPSEND menu options are used as PackMan options and are used from the menus executed from ^DOPT("XMP").

### 5.3.1 XM DELIVERY BASKET EDIT

Type: run routine Routine: BASKET^XMVVITA

Menu Text: Delivery Basket Edit

The XM DELIVERY BASKET EDIT option is located on the Personal Preferences menu [XM PERSONAL MENU]. The sender of a message may specify the basket to which the message should be delivered for all recipients. Using the XM DELIVERY BASKET EDIT option, you indicate whether or not you accept such target basket delivery, and if you do, to what degree you accept it.



### 5.3.2 XM FILTER EDIT

Type: run routine Routine: FILTER^XMMVITA

Menu Text: Message Filter Edit

The XM FILTER EDIT option is located on the Personal Preferences menu [XM PERSONAL MENU]. It allows users to edit their message filters. MailMan uses filters to determine into which basket to place a message. Messages can be filtered based on up to three criteria, which all can be considered together as connected by an "and" statement:

- Subject contains
- Message is from
- Message is to

For example, if you specify "subject contains" and "message is from," the filter takes effect only if the subject contains the string you specify *and* the message is from the person you specify. If you wish the filter to take effect upon "subject contains" *or* "message is from" you *must* create two filters, one with "subject contains," and the other with "message is from."

### 5.3.3 XM PERSONAL MENU

Type: menu

Menu Text: Personal Preferences

The XM PERSONAL MENU is a submenu located on the MailMan Menu [XMUSER]. It provides various options that let users configure MailMan to their liking.

### 5.3.4 XM SUPER SEARCH

Type: run routine Routine: SUPER^XMMJMF

Menu Text: Super Search Message File

Lock: XM SUPER SEARCH

The XM SUPER SEARCH option is located on the Manage Mailman Menu [XMMGRMGR ]. It lets the authorized user (i.e., anyone holding the XM SUPER SEARCH security keys:) search the MESSAGE file (#3.9) for messages meeting any number of criteria, no matter who sent the messages.



**CAUTION: This option should not be used lightly. One example in which usage is justified would be the search for evidence in an Equal Employment Opportunity (EEO) harassment case.**

**This option should be audited to track whoever uses it.**

Every search triggers the sending of the XM SUPER SEARCH bulletins: to the XM SUPER SEARCH mail groups:. The bulletin will record who (i.e., DUZ) conducted the search and what criteria were used. It will *not* record the results of the search.

The XM SUPER SEARCH mail groups: *must* have at least two active local users in it who have logged on recently. If it does not, the search will not be performed. Members of this mail group should be anyone whose responsibility it is to ensure that security is maintained and privileges are not abused. The mail group coordinator should be the site's Information Security Officer (ISO) or another responsible individual.

### 5.3.5 XM-FTP-GET

Type: run routine Routine: GET^XMAFTP

Menu Text: GET (Retrieve) File from Remote System

The XM-FTP-GET option allows a user to GET a file from another system using the File Transfer Protocol (FTP) protocol. The user supplies all the information about where the file is located and MailMan creates a file that, when executed, will do the retrieval. The actual process of getting the file is handled in the background. This is the converse procedure to the Send (Put) File to Remote Location (i.e., XM-FTP-PUT).

### 5.3.6 XM-FTP-PUT

Type: run routine Routine: PUT^XMAFTP

Menu Text: Send (Put) File to Remote Location

The XM-FTP-PUT option allows a user to PUT a file on another system using the FTP protocol. The user supplies all the information about where the file should go and MailMan creates a file that when executed will do the sending. The actual process of putting the file is handled in the background. This is the converse procedure to the GET (Retrieve) File from Remote System (i.e., XM-FTP-GET)

### 5.3.7 XM-NEW-FEATURES

Type: action

Menu Text: New Features in MailMan

Entry Action: S XQH="XM-NEW-FEATURES" D EN^XQH

The XM-NEW-FEATURES option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It displays a Help Frame that lists and describes features found in MailMan V. 8.0. Many users do not get MailMan manuals. Therefore, it is very important that this sort of documentation be available online.

### 5.3.8 XMASSUME

Type: run routine Routine: ASSUME^XMVSURR  
 Menu Text: Become a Surrogate (SHARED,MAIL or Other)  
 Synonym: AML  
 Entry Action: D CHECKIN^XM  
 Exit Action: D CHECKOUT^XM

The XMASSUME option is located on the MailMan Menu [XMUSER]. It allows the user to act as a surrogate for another user or for SHARED,MAIL. Before you can act as a surrogate for another user, that user *must* indicate permission by granting you surrogate privileges through his USER OPTIONS EDIT. You will then be able to read, answer, and send mail for that user, depending on the level of access (READ/WRITE) that you were granted.

You may assume the identity of a special user, "SHARED,MAIL," to read messages of general interest. You will be able to read and respond to messages there, but you will not be able to send any. If you have been given the XMNOPRIV key, you will not be able to access "SHARED,MAIL."

SHARED,MAIL is a place to send messages of general interest. Almost all users may access this area. When you send messages to SHARED,MAIL, you *must* indicate a BASKET to deliver the messages to so that helps others find yours. Do not create new BASKETS unless it is really necessary. Try to fit your message into a basket that already exists. SHARED, MAIL is a LIBRARY, *not* a repository for trivial or personal communications. Please respect your privilege to be SHARED,MAIL surrogate. The PRIVILEGE to be a SURROGATE of SHARED,MAIL can be taken away.

### 5.3.9 XMAUTOPURGE

Type: run routine Routine: EN^XMA3

Menu Text: Automatic Purge of MailMan Messages

The XMAUTOPURGE option automatically purges unreferenced MailMan messages, that is, it deletes from the MESSAGE file (#3.9) any messages which are not in anyone's basket.



**CAUTION: It is strongly recommended that this option be scheduled to run daily, right after option XMCLEAN.**

The following messages are considered "referenced" and are not purged:

- Messages in user baskets
- Messages in transit (arriving or being sent)
- Server messages
- Messages being edited (including aborted edits)
- Messages which have been latered

The following fields in the MAILMAN SITE PARAMETERS file (#4.3), influence the behavior of this option:

- NO-PURGE DAYS BUFFER (#4.301)—MailMan does not purge any messages created or received in the last few days. Users choose how many days. The default is 2.
- NO-PURGE DAYS BUFFER (LOCAL) (#142)—MailMan does not purge local messages created in the last few days. Users choose how many days. The default is 7.
- WEEKDAY DAYS TO PURGE (#4.304)—On Saturdays, MailMan goes through the entire MESSAGE file (#3.9) looking for messages to purge. On the other days of the week, however, MailMan has the option of only looking at messages created or received recently. Users choose how many days. The default is to go through the entire MESSAGE file (#3.9).



**CAUTION: It is strongly recommended that you set this field to something reasonable (e.g., 30 to 60 days. But, only if you follow the recommendation to schedule this option to run daily; otherwise, leave this field blank.**

- **AUTOMATIC INTEGRITY CHECK (#4.303)**—MailMan gives users the option of running the MAILBOX file (#3.7) portion of the integrity checker (i.e., XMUT-CHKFIL option) before it actually purges the unreferenced messages. The MUMPS cross-reference on the MAILBOX file (#3.7) is used to determine whether a message is referenced (in someone's basket) or not. If the MUMPS cross-reference is incorrect, then the purge could delete messages it should not, or leave messages that it should delete. The integrity checker ensures that the MUMPS cross-reference is correct. Users choose whether to run it or not. The default is to run it. The recommendation is to run it; however, if you find that it is simply taking too long, you can choose not to run it. If you choose not to run it, then it is recommended that you schedule the XMUT-CHKFIL option to run monthly, because globals can and do become corrupted.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.10 XMBANNER

Type: run routine Routine: BANNER^XMVVITA

Menu Text: Banner Edit

The XMBANNER option is located on the Personal Preferences menu [XM PERSONAL MENU]. It enables a user to edit his "banner" message for MailMan. When messages are addressed to users with banners, their banners may be displayed.

### 5.3.11 XMBASKLIST

Type: run routine Routine: LISTMBOX^XMJBL

Menu Text: Mailbox Contents List

The XMBASKLIST option is located on the Other MailMan Functions menu [XMOTHER]. It prints/displays a list of all messages in all/one of your mail baskets. The list is sorted by basket name, and within basket, by message index number.

### 5.3.12 XMBLOBSEND

Type: run routine Routine: BLOB^XMA2B

Menu Text: Send Multimedia Message

Entry Action: K XMLoad,XMDF S XMMENU(0)="XMUSER" D LOCK^XM

Exit Action: D UNLOCK^XM K XMMENU

Lock: XMBLOB

The XMBLOBSEND option is used to send MailMan multimedia messages (i.e., VistA Imaging software). Messages can be sent to other users or groups of users. The sender of the message may request a confirmation message to be sent when each recipient reads the message. This option is locked with the XMBLOB security key.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.13 XMCHRIS

Type: run routine Routine: CHRISTEN^XMUCHRIS

Menu Text: Christen a domain

The XMCHRIS option is located on the Network Management menu [XMNETNET ]. It is used to christen a domain, which is required before that domain can send or receive networked mail. The subordinate domain *must* first be initialized with the "initialize site" option at the local domain. Then this option *must* be selected in order to establish the network relationship.

### 5.3.14 XMCLEAN

Type: run routine Routine: CLEAN^XMA3

Menu Text: Clean out waste baskets

The XMCLEAN option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It deletes all messages in users' WASTE baskets in the MAILBOX file (#3.7). It does *not* delete the messages in the MESSAGE file (#3.9). It is recommended that this option be scheduled to run daily, immediately before the XMAUTOPURGE options:.

### 5.3.15 XMDX


Type: menu


Menu Text: Diagnostics

The XMDX menu contains diagnostic options, allowing the testing of various components of the MailMan system. It contains the following options:

- XMDXNAME
- XMDXSMTP
- XMDXPROT

- XMDXSCRIPT
- XMPOST
- XMDXMODEM

 **NOTE:** This option is *not* assigned to a menu.

 **NOTE:** The XMDX option *cannot* be independently invoked and is for developer/support debugging only.

### 5.3.16 XMDXMODEM

Type: run routine Routine: DIALER^XMCD

Menu Text: Modem Autodialer test

The XMDXMODEM option is located on the Diagnostics menu [XMDX]. It tests the modem, allowing the user to dial and hang up the modem to insure that the DEVICE and TERMINAL TYPE entries are correct.

### 5.3.17 XMDXNAME

Type: run routine Routine: DX^XMA21

Menu Text: Name Server

The XMDXNAME option is located on the Diagnostics menu [XMDX]. It tests the MailMan Name Server, allowing the user to repeatedly enter recipient names, after which the option will show the resolution of the name.

### 5.3.18 XMDXPROT

Type: action Routine: C^XML

Menu Text: Physical link protocol

Entry Action: Q

The XMDXPROT option is located on the Diagnostics menu [XMDX]. It sends a line of text to the terminal, allowing the user to respond with the appropriate response.

### 5.3.19 XMDXSCRIPT

Type: run routine Routine: TRAN^XMCD

Menu Text: Script processor

The XMDXSCRIPT option is located on the Diagnostics menu [XMDX]. It tests a script by sending a "dummy" message and measuring error rates and transmission speeds.

### 5.3.20 XMDXSMTP

Type: run routine Routine: SMTP^XMCD

Menu Text: Simple Mail Transfer Protocol

The XMDXSMTP option is located on the Diagnostics menu [XMDX]. It allows the user to enter information directly into the Simple Mail Transfer Protocol (SMTP) receiver from the keyboard. See the "ARPA" manual for further description of the protocol, or enter "HELP" during the protocol.

### 5.3.21 XMEDIT-DOMAIN-VALIDATION#

Type: run routine Routine: VAL^XMCE

Menu Text: Validation Number Edit

The XMEDIT-DOMAIN-VALIDATION# option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It allows sites to edit the validation numbers so that they can be synchronized. The sender and the receiver *must* edit the numbers concurrently. At S1.MED.VA.GOV they edit S2.MED.VA.GOV's validation number. At S2.MED.VA.GOV they edit S1.MED.VA.GOV's validation number. The same number is used for input at both sites.

### 5.3.22 XMEDIT-REMOTE-USER

Type: run routine Routine: REMOTES^XMDIR1B

Menu Text: Enter/Edit Remote User

The XMEDIT-REMOTE-USER option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It allows a single person's remote address to be put into the Remote User Directory so messages can be automatically addressed to him or her.



### 5.3.23 XMEDITBUL

Type: edit

Menu Text: Bulletin edit

The XMEDITBUL option is located on the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ]. It allows a user to interactively enter/edit a MailMan bulletin, change the routing information, and document the bulletin.

### 5.3.24 XMEDITDIST

Type: edit

Menu Text: Edit Distribution List

The XMEDITDIST option is located on the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ]. It is used to edit a Distribution list. Distribution lists can be entered as part of the delivery list for messages in mail groups. They consist of a name and a list of domains that are concatenated to the name for delivery of a message to multiple mailboxes, each of which has the same name that exists at different domains.

For example, if the name is G.SUPPORT (it could be Postmaster) and the domains are FORUM.VA.GOV and ALTOONA.MED.VA.GOV, the message will be delivered to:

- G.SUPPORT@FORUM.VA.GOV
- G.SUPPORT@ALTOONA.MED.VA.GOV

Each distribution list can be added to more than one mail group. Each mail group can point at more than one distribution list.

### 5.3.25 XMEDITFWD

Type: run routine Routine: FORWARD^XMMVITA

Menu Text: Forwarding Address Edit

The XMEDITFWD option is located on the Personal Preferences menu [XM PERSONAL MENU]. It enables the user to edit his forwarding address.



**NOTE:** This option may or may not be available to users. It depends on whether or not the site restricts access to this option to users holding the XMNET security key. For example, if the site requires users to hold the XMNET security key and a user does *not* hold that key, they will *not* be able to use this option.

### 5.3.26 XMEDITMG

Type: edit

Menu Text: Mail Group Edit

The XMEDITMG option is located on the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ]. It is used to edit the MAIL GROUP file (#3.8), which controls the distribution of messages to groups of users.

### 5.3.27 XMEDITPERSGROUP

Type: run routine Routine: PERSONAL^XMVGROUP

Menu Text: Personal Mail Group Edit

The XMEDITPERSGROUP option is located on the Personal Preferences menu [XM PERSONAL MENU]. It allows the user to create or edit a personal mail group. A personal mail group is a group that only the user can access, to use in addressing mail. Members *cannot* remove themselves. The difference between a personal mail group and a private mail group is that the personal mail group is restricted in its use and joining.

### 5.3.28 XMEDITSURR

Type: run routine Routine: SURR^XMOVVITA

Menu Text: Surrogate Edit

The XMEDITSURR option is located on the Personal Preferences menu [XM PERSONAL MENU]. It enables you to edit your surrogate list, that is, to choose who may act as a surrogate for you in MailMan, and which privileges (READ and/or SEND) you wish to grant them.

### 5.3.29 XMEDITUSER

Type: run routine Routine: EDIT^XMOVVITA

Menu Text: User Options Edit

The XMEDITUSER option is located on the Personal Preferences menu [XM PERSONAL MENU]. It enables the user to edit various fields, which identify the user and specify their MailMan preferences. The following preference field settings are included:

- Banner
- Message Display Order (Oldest/Newest First)
- Message Reader (Classic/Full Screen)
- Message Reader Prompt (ask/use default)
- Show Message Preview (used in conjunction with the Classic message reader)
- Message Action Default (Ignore/Delete)
- Ask Basket
- Show Titles
- Priority Responses Flag
- Priority Responses Prompt
- P-MESSAGE from
- MailMan Institution
- Network Signature (three lines)
- Introduction
- Preferred Editor
- Address (line one, line two, line three, city, state, and zip code)
- Phone
- Fax
- Pager
- Additional Phones

### 5.3.30 XMENROLL

Type: run routine Routine: ENROLL^XMVGROUP  
Menu Text: Enroll in (or Disenroll from) a Mail Group  
Synonym: GML

The XMENROLL option is located on both the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ] and the Personal Preferences menu [XM PERSONAL MENU].

The Enroll in (or Disenroll from) a Mail Group option [XMENROLL ] allows a MailMan user to enroll in (join) or disenroll from a mail group when the group allows self-enrollment (i.e., the "SELF ENROLLMENT ALLOWED?" flag is set to "Yes"). If the user is already a member of a group, then this option allows the user to leave the group.

If a mail group does *not* allow self-enrollment (i.e., MailMan indicates that "...Self Enrollment Not Allowed." after a mail group name) and the DROP OUT OF RESTRICTED GROUP field (#22) in the MAILMAN SITE PARAMETERS file (#4.3) is set to "No," users *must* contact the Mail Group Coordinator or Organizer for that particular mail group and ask either to be enrolled in or disenrolled from the mail group.



**REF:** For more information on the Mail Group Coordinator, Organizer, and general mail group information, please refer to the "How to Obtain Mail Group Information" topic in Chapter 12, "Online Help/Information," in the *MailMan User Guide*.

The DROP OUT OF RESTRICTED GROUP field (#22) in the MAILMAN SITE PARAMETERS file (#4.3) is a site-configurable parameter and is used to allow users to drop out (disenroll) of non-self-enrolling mail groups:

- YES—Users are warned that this is a non-self-enrolling group, and that they will *not* be allowed to rejoin later; users will be asked to re-confirm the decision to drop out.
- NO (default)—Users will have to contact IRM or the mail group Coordinator or Organizer to ask to be dropped.

### 5.3.31 XMHELP

Type: menu

Menu Text: Help (User/Group Info., etc.)

The XMHELP menu is a submenu located on the MailMan Menu [XMUSER]. It includes the following help options for users:

- XMHELPUSE
- XMHELPGROUP
- XMHELPLNK
- XM-NEW-FEATURES
- XMHELPALL
- XMHELPQUEST
- XMHELP-ON-LINE-USER\_MANUAL

### 5.3.32 XMHELP-ON-LINE-USER\_MANUAL

Type: action

Menu Text: Manual for MailMan Users

Entry Action: S XQH FY="XMHELP-MANUAL" D ACTION^XQH4

The XMHELP-ON-LINE-USER\_MANUAL option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It displays the MailMan online User Guide.

### 5.3.33 XMHELPALL

Type: action

Menu Text: General MailMan Information

Entry Action: S XQH="XMHELP" D EN^XQH

The XMHELPALL option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It is a general Help Frame that provides a brief description about what MailMan is and does. It is a good starting point for the beginner MailMan user.

### 5.3.34 XMHELPGROUP

Type: run routine Routine: HELP^XMHIG

Menu Text: Group Information

The XMHELPGROUP option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It enables the user to get detailed information about mail groups.

### 5.3.35 XMHELPLNK

Type: run routine Routine: R^XMJMT

Menu Text: Remote User Information

The XMHELPLNK option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It enables the user to inquire into the REMOTE USER DIRECTORY file (#4.2997).

### 5.3.36 XMHELPQUEST

Type: action

Menu Text: Questions and Answers on MailMan

Entry Action: S XQH="XM-U-H-QUESTIONS" D EN^XQH

The XMHELPQUEST option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It poses and answers frequently asked questions concerning MailMan.

### 5.3.37 XMHELPUSE

Type: run routine Routine: HELP^XMHIU

Menu Text: User Information

The XMHELPUSE option is located on the Help (User/Group Info., etc.) menu [XMHELP]. It enables the user to get detailed information about other MailMan users.

### 5.3.38 XMKSP

Type: edit

Menu Text: MailMan Site Parameters

The XMKSP option is located on the Manage Mailman Menu [XMMGRMGR ]. It allows a site manager to edit the fields in the MAILMAN SITE PARAMETERS file (#4.3) that do not have to do with christening. To christen a domain, use the Christen a domain option (i.e., XMCHRIS). XMCHRIS also allows you to change fields set during the original christening if they are wrong. You can also use VA FileMan to edit the TRANSMISSION SCRIPT file (#4.6), if the scripts for Austin or the MINI engine need to be changed.

### 5.3.39 XMLATER-EDIT

Type: run routine Routine: EDIT^XMJMD

Menu Text: Change/Delete Latered Messages

The XMLATER-EDIT option is located on the Other MailMan Functions menu [XMOTHER]. It enables the user to delete or change the date/time that a message is scheduled to become new.

### 5.3.40 XMLATER-REPORT

Type: run routine Routine: REPORT^XMJMD

Menu Text: Report on Latered Messages

The XMLATER-REPORT option is located on the Other MailMan Functions menu [XMOTHER]. It prints/displays an overview of all of the user's "latered" messages.

### 5.3.41 XMLIST

Type: run routine Routine: LIST^XMCXT

Menu Text: List a transcript

The XMLIST option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It lists the transcript for a previously played script.

### 5.3.42 XMMASTER

Type: menu

Menu Text: MailMan Master Menu

The XMMASTER menu is the MailMan menu with all the addressable options:

- Manage Mailman (Utilities)—XMMGR
- Network Management—XMNET
- User Options—XMUSER



**NOTE:** This option is *not* assigned to a menu.

### 5.3.43 XMMGR

Type: menu

Menu Text: Manage Mailman

Entry Action: D CHECKIN^XM S XMMENU(0)="XMUSER"

Exit Action: K XMMENU D CHECKOUT^XM

The XMMGR menu is located on the MailMan Master Menu [XMMASTER]. It provides options that allow the site manager to manage the MailMan system, by manipulating the MESSAGE (#3.9), MAIL GROUP (#3.8), BULLETIN (#3.6), and MAILBOX (#3.7) files. It includes the following options:

```
Select Systems Manager Menu Option: Manage Mailman

    Check MailMan Files for Errors      [XMUT-CHKFIL]
    Create a Mailbox for a user [XMMGR-NEW-MAIL-BOX]
    Disk Space Management ... [XMMGR-DISK-SPACE-MANAGEMENT]
    Group/Distribution Management ... [XMMGR-GROUP-MAINTENANCE]
    Local Delivery Management ... [XMMGR-MESSAGE-DELIVERY-MGT]
    MailMan Site Parameters [XMKSP]
    Network Management ... [XMNET]
    New Features for Managing MailMan [XMMGR-HELP]
    Remote MailLink Directory Menu ... [XMMGR-DIRECTORY-MAIN]
    Super Search Message File [XM SUPER SEARCH]
```

Figure 5-2. Manage Mailman menu [XMMGR] options

### 5.3.44 XMMGR-BACKGROUND-FILER

Type: menu

Menu Text: Background Filer (XMAD)

XMMGR-BACKGROUND-FILER option is a submenu of options for the background filer. It includes the following options:

- XMMGR-START-BACKGROUND-FILER
- XMMGR-STOP-BACKGROUND-FILER
- XMMGR-CHECK-BACKGROUND-FILER
- XMSTAT



**NOTE:** This option is *not* assigned to a menu.

### 5.3.45 XMMGR-BKFILER-ACT

Type: run routine Routine: ACT^XMUT5R2

Menu Text: Active Users/Deliveries Report

The XMMGR-BKFILER-ACT option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It generates a report that lists, in half-hour intervals (that is what is in the file), active users and message deliveries made. The information comes from the MESSAGE DELIVERY STATS file (#4.2998).



### 5.3.46 XMMGR-BKFILER-EDIT-NORMALIZED

Type: run routine Routine: ASK^XMUT5R2

Menu Text: Edit numbers to Normalize Reports

The XMMGR-BKFILER-EDIT-NORMALIZED option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It allows the user to customize the normalized report.

### 5.3.47 XMMGR-BKFILER-GROUP

Type: run routine Routine: GROUP^XMUT5R2

Menu Text: Deliveries by Group

The XMMGR-BKFILER-GROUP option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It generates a report that lists, in half-hour intervals, deliveries made for each distinct delivery queue.

### 5.3.48 XMMGR-BKFILER-STAT

Type: run routine Routine: STAT^XMUT5R2

Menu Text: Mail Delivery Statistics Report

The XMMGR-BKFILER-STAT option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It generates a report that lists, in half-hour intervals, active users, queue waits, average response time, number of lines displayed to users, etc.

### 5.3.49 XMMGR-BKFILER-TABBED-STATS

Type: run routine Routine: TAB^XMUT5R2

Menu Text: Graphics Download (TAB separators)

The XMMGR-BKFILER-TABBED-STATS option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It can be used to capture a report and use the captured file in a graphics/spreadsheet software (e.g., Microsoft Excel). The data has tabs between the fields as delimiters.

### 5.3.50 XMMGR-BKFILER-WAIT

Type: run routine Routine: WAIT^XMUT5R2

Menu Text: Delivery Queues Wait Report

The XMMGR-BKFILER-WAIT option produces a report that lists, in half-hour intervals, the seconds that the oldest entry in a particular queue has been there. It is used to check how long it is taking to deliver messages.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.51 XMMGR-CHECK-BACKGROUND-FILER

Type: run routine Routine: CHECK^XMUT5

Menu Text: CHECK background filer

The XMMGR-CHECK-BACKGROUND-FILER option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It tells you if the background filer is running, and it tells how many recipients need delivery for each of the messages/responses in the queue.

### 5.3.52 XMMGR-DELIVERY-STATS-COLL

Type: run routine Routine: OPTION^XMUT5Q1

Menu Text: Delivery Queue Statistics Collection

The XMMGR-DELIVERY-STATS-COLL option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It collects delivery queue statistics. Schedule it through TaskMan, entering the initial time to start. Do *not* enter data in the remainder of the fields. The option will requeue itself automatically every half-hour. All data collected is stored in the MESSAGE DELIVERY STATS file (#4.2998).

### 5.3.53 XMMGR-DIRECTORY-ALL

Type: run routine Routine: ALL^XMDIRQST

Menu Text: Remote Directory from all Domains

The XMMGR-DIRECTORY-ALL option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It schedules tasks to run in the background to update the MailLink Directory, ^XMD(4.2997).



**CAUTION:** Use this option cautiously, because it sends requests to all the domains for soliciting remote user directories.

#### 5.3.54 XMMGR-DIRECTORY-EDITGRP

Type: run routine Routine: EDIT^XMDIRQST

Menu Text: Enter/Edit Directory Request Flags by Group

The XMMGR-DIRECTORY-EDITGRP option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It allows the site management to control groups of Domains from which directories are requested.

#### 5.3.55 XMMGR-DIRECTORY-GROUP

Type: run routine Routine: GROUP^XMDIRQST

Menu Text: Group eMail Directory Request

The XMMGR-DIRECTORY-GROUP option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It allows site management to request directories from all the Domains in a group of Domains as defined in Enter/Edit Directory Request Flags by Group option (i.e., XMMGR-DIRECTORY-EDITGRP).

#### 5.3.56 XMMGR-DIRECTORY-LISTGRP

Type: run routine Routine: LISTGRP^XMDIRQST

Menu Text: List eMail Directory Request by Groups

The XMMGR-DIRECTORY-LISTGRP option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It allows the site manager to list groups created by the Group eMail Directory Request option (i.e., XMMGR-DIRECTORY-EDITGRP).

#### 5.3.57 XMMGR-DIRECTORY-MAIN

Type: menu

Menu Text: Remote MailLink Directory Menu

Lock: XMMGR

The XMMGR-DIRECTORY-MAIN menu is located on the Manage Mailman menu [XMMGR]. It allows the site manager to manage the remote MailLink Directory by loading the WANG/NOAVA and the REMOTE DOMAIN USER Directories into the REMOTE USER DIRECTORY file (#4.2997). This menu is locked with the XMMGR security keys:.

The following options can be found on the Remote MailLink Directory Menu:

```
Select Manage Mailman Option: Remote MailLink Directory Menu

Enter/Edit Directory Request Flags by Group      [XMMGR-DIRECTORY-EDITGRP]
Enter/Edit Remote User [XMEDIT-REMOTE-USER]
Group eMail Directory Request [XMMGR-DIRECTORY-GROUP]
List eMail Directory Request by Groups          [XMMGR-DIRECTORY-LISTGRP]
Load Remote VACO (Wang/Noava) Directory         [XMMGR-DIRECTORY-VACO]
Remote Directory from all Domains               [XMMGR-DIRECTORY-ALL]
Request Mail Directory From a Single Domain Server [XMMGR-DIRECTORY-
SINGLE]
```

Figure 5-3. MailLink Directory Menu [XMMGR-DIRECTORY-MAIN] options


This menu is locked with the XMMGR security key.

### 5.3.58 XMMGR-DIRECTORY-RECV

Type: server      Routine: XMDIRRCV

Text: RECEIVE E-MAIL DIRECTORY FROM OTHER SITE

The XMMGR-DIRECTORY-RECV option is a server that receives a directory from another Domain and puts the entries into the REMOTE USER DIRECTORY file (#4.2997).


 **NOTE:** This option is *not* assigned to a menu.

### 5.3.59 XMMGR-DIRECTORY-SEND

Type: server      Routine: XMDIRSND

Menu Text: Send a Directory to requesting site

The XMMGR-DIRECTORY-SEND option is a server that sends a directory to a requesting site.

 **NOTE:** This option is *not* assigned to a menu.

### 5.3.60 XMMGR-DIRECTORY-SINGLE

Type: run routine Routine: SINGLE^XMDIRQST

Menu Text: Request Mail Directory From a Single Domain Server

The XMMGR-DIRECTORY-SINGLE option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY MAIN]. It schedules a task to run in the background to update the MailLink Directory, ^XMD(4.2997), from a single Domain server.

### 5.3.61 XMMGR-DIRECTORY-VACO

Type: run routine Routine: OPTION^XMDIR1

Menu Text: Load Remote VACO (Wang/Noava) Directory

The XMMGR-DIRECTORY-VACO option is located on the Remote MailLink Directory Menu [XMMGR-DIRECTORY-MAIN]. It loads a file from the Host File Server (HFS). The user has the choice of running this task interactively or scheduling a batch job to update the MailLink Directory, ^XMD(4.2997),.

### 5.3.62 XMMGR-DISK-MANY-MESSAGE-MAINT

Type: run routine Routine: ENTER^XMAI2

Menu Text: Ask users with many messages to do maintenance

The XMMGR-DISK-MANY-MESSAGE-MAINT option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It sends messages asking users to clean out mailboxes, if they have too many messages.

### 5.3.63 XMMGR-DISK-SPACE-MANAGEMENT

Type: menu

Menu Text: Disk Space Management

The XMMGR-DISK-SPACE-MANAGEMENT menu is a submenu located on the Manage Mailman menu (i.e., XMMGR). It contains options for managing disk space. All reports are 80 columns wide.

The following options can be found on the Disk Space Management menu:

```
Select Manage Mailman Option: Disk Space Management

AI x-Ref Purge of Received Network Messages [XMMGR-PURGE-AI-XREF]
Ask users with many messages to do maintenance [XMMGR-DISK-MANY-MESSAGE-
MAINT]
Clean out waste baskets [XMCLEAN]
IN Basket Purge [XMMGR-IN-BASKET-PURGE]
Large Message Report [XMMGR-LARGE-MESSAGE-REPORT]
Message statistics [XMSTAT]
Purge a message [XMMGR-PURGE-MESSAGE]
Purge Messages by Origination Date [XMPURGE-BY-DATE]
Purge Unreferenced Messages [XMPURGE]
Recover Messages into User's IN Basket ... [XMUT-REC-MENU]
Terminate mail user suggestions [XMMGR-TERMINATE-SUGGEST]
Terminate many mail users [XMMGR-TERMINATE-MANY]
Terminate one mail user [XMMGR-TERMINATE-ONE]
```

Figure 5-4. Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT] options

### 5.3.64 XMMGR-GROUP-MAINTENANCE

Type: menu

Menu Text: Group/Distribution Management

The XMMGR-GROUP-MAINTENANCE menu is a submenu located on the Manage Mailman menu [XMMGR].

The following options can be found on the Group/Distribution Management menu:

```
Select Manage Mailman Option: Group/Distribution Management

Bulletin edit [XMEDITBUL]
Edit Distribution List [XMEDITDIST]
Enroll in (or Disenroll from) a Mail Group [XMENROLL]
Mail Group Coordinator's Edit [XMMGR-MAIL-GRP-COORDINATOR]
Mail Group Coordinator's Edit W/Remotes [XMMGR-MAIL-GRP-COORD-
W/REMOTES]
Mail Group Edit [XMEDITMG]

Select Group/Distribution Management Option:
```

Figure 5-5. Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE] options

### 5.3.65 XMMGR-HELP

Type: action

Menu Text: New Features for Managing MailMan

Entry Action: S XQH="XMMG-NEW-FEATURES" D EN^XQH

The XMMGR-HELP option is located on the Manage Mailman Menu [XMMGRMGR ]. It provides help for site management.

### 5.3.66 XMMGR-IN-BASKET-PURGE

Type: run routine Routine: ENTER^XMUPIN

Menu Text: IN Basket Purge

The XMMGR-IN-BASKET-PURGE option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It purges "IN" baskets in two steps:

1. In the first step messages are sent to users
  - a. Message will contain a list of messages to be purged in Step 2.
  - b. Message will contain list of actions that will prevent the purging of the listed messages.
  - c. Message will state how many days later listed messages will be purged unless the action is taken on a message-by-message basis.
  - d. The messages listed will *not* have been referenced for 30 days or the number of days in the MAILMAN SITE PARAMETERS file ("4.3), IN-BASKET-PURGE DAYS field, if it is not null.
2. In the second step, the messages listed in the message from Step 1 will be purged *not* less than 30 days later unless they:
  - a. Have been saved into a basket other than the "IN" basket.
  - b. Have been referenced (read or printed) otherwise.
  - c. Are marked as NEW.



**NOTE:** This option can be run via TaskMan.

### 5.3.67 XMMGR-LARGE-MESSAGE-REPORT

Type: run routine Routine: ENTER^XMUT2

Menu Text: Large Message Report

The XMMGR-LARGE-MESSAGE-REPORT option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It produces a report that lists messages that have any of the following characteristics:

- Message longer than a specified number of lines (see the LARGE MESSAGE REPORT LINES field (#8.14) in the MAILMAN SITE PARAMETERS file [#4.3])
- Message without an owner or only one owner.
- Messages without any text.
- Messages without any subject.

Messages on this list are of interest to site management.

### 5.3.68 XMMGR-MAIL-GRP-COORD-W/REMOTES

Type: run routine Routine: RCOORD^XMOVGROUP

Menu Text: Mail Group Coordinator's Edit W/Remotes

The XMMGR-MAIL-GRP-COORD-W/REMOTES option is located on the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ]. It allows a mail group coordinator to edit the mail groups that he or she is the coordinator of (and no others). It allows edit of remote recipients.

Most mail group coordinators should be given the corresponding XMMGR-MAIL-GRP-COORDINATOR option, which does *not* allow them to edit remote recipients in the mail group to limit the responsibility for problems delivering to incorrect addresses.

### 5.3.69 XMMGR-MAIL-GRP-COORDINATOR

Type: run routine Routine: LCOORD^XMOVGROUP

Menu Text: Mail Group Coordinator's Edit

The XMMGR-MAIL-GRP-COORDINATOR option is located on the Group/Distribution Management menu [XMMGR-GROUP-MAINTENANCE ]. It allows a mail group coordinator to edit the mail groups that he or she is the coordinator of (and no others). It does *not* allow edit of remote recipients.

Some mail group coordinators might be given the corresponding option, XMMGR-MAIL-GRP-COORD-W/REMOTES.

### 5.3.70 XMMGR-MESSAGE-DELIVERY-MGT

Type: menu



Menu Text: Local Delivery Management

The XMMGR-MESSAGE-DELIVERY-MGT menu is a submenu located on the Manage Mailman menu (i.e., XMMGR). It includes options for the background filer. All reports are 132 columns wide.

The following options can be found on the Local Delivery Management menu:

```
Select Manage Mailman Option: Local Delivery Management

Active Users/Deliveries Report      [XMMGR-BKFILER-ACT]
CHECK background filer              [XMMGR-CHECK-BACKGROUND-FILER]
Compile Response Time Statistics    [XMMGR-RESPONSE-TIME-COMPILER]
Deliveries by Group                 [XMMGR-BKFILER-GROUP]
Delivery Queue Statistics Collection [XMMGR-DELIVERY-STATS-COLL]
Edit numbers to Normalize Reports    [XMMGR-BKFILER-EDIT-NORMALIZED]
Graphics Download (TAB separators)  [XMMGR-BKFILER-TABBED-STATS]
Log Response Time Toggler           [XMMGR-RESPONSE-TIME-TOGGLER]
Mail Delivery Statistics Report      [XMMGR-BKFILER-STAT]
New Messages and Logon Statistics    [XMMGR-NEWMESS/LOGON-STATS]
START background filer              [XMMGR-START-BACKGROUND-FILER]
STOP background filer               [XMMGR-STOP-BACKGROUND-FILER]
```

Figure 5-6. Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT] options

### 5.3.71 XMMGR-NEW-MAIL-BOX

Type: run routine Routine: NEWMBOX^XM

Menu Text: Create a Mailbox for a user

The XMMGR-NEW-MAIL-BOX option is located on the Manage Mailman Menu [XMMGRMGR ]. It is only meant to be used on systems where Kernel V. 6.0 or later is *not* running (or when a repair must be made to the MAILBOX file [#3.7]). A mailbox is created for each new or reinstated user from Kernel V. 6.0 or later so there should be no need to use this routine unless there was an error setting up the user or there was a file degradation problem. Using this option for a user whose mailbox is partially or wholly set up will *not* cause data to be lost.

*A mailbox can be created or repaired using this option.*

### 5.3.72 XMMGR-NEWMESS/LOGON-STATS

Type: run routine Routine: XMUT5R1

Menu Text: New Messages and Logon Statistics

The XMMGR-NEWMESS/LOGON-STATS option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It prints the number of new messages created, logons, and logon minutes for a specified time period.

### 5.3.73 XMMGR-PURGE-AI-XREF

Type: run routine Routine: XMUTPUR0

Menu Text: AI x-Ref Purge of Received Network Messages

The XMMGR-PURGE-AI-XREF option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It maintains the "AI" cross-reference of mail messages. This is the cross-reference of messages received across the network and it prevents duplicate messages from being received again. The default number of days kept is 730 (2 years—the amount of days messages can exist before being purged on FORUM). As per MailMan Patch XM\*8.0\*38, this option should be run interactively at least once a year to reduce its size; otherwise, it continues to grow.

### 5.3.74 XMMGR-PURGE-MESSAGE

Type: run routine Routine: MESSAGE^XMUTERM

Menu Text: Purge a message

The MMGR-PURGE-MESSAGE option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It enables you to purge any message. Purge means:

- Delete the message from all user mailboxes.
- Delete the message from the MESSAGE file, ^XMB(3.9,.
- Delete all responses from the MESSAGE file, ^XMB(3.9,.
- Delete the message from the MESSAGES TO BE NEW AT A LATER DATE file (#3.73).



**CAUTION: Purge is not reversible. The message is gone forever.**



**NOTE:** This option is *not* assigned to a menu.

### 5.3.75 XMMGR-RESPONSE-TIME-COMPILER

Type: run routine Routine: GO^XMUT5C

Menu Text: Compile Response Time Statistics

The XMMGR-RESPONSE-TIME-COMPILER option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It is used as a background job scheduled every day to collect statistics on the previous day's response time and put the data into the MESSAGE DELIVERY STATS file (#4.2998). It will then KILL off the associated %ZRTL global nodes.

### 5.3.76 XMMGR-RESPONSE-TIME-TOGGLER

Type: run routine Routine: LOGON^XMUT5C

Menu Text: Log Response Time Toggler

The XMMGR-RESPONSE-TIME-TOGGLER option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It does the following:

1. Turns *on* the Kernel system parameter for response time logging shortly after each half-hour.
2. Schedules another task to turn *off* the Kernel system parameter for response time logging, unless the time is between 4:00 p.m. and 8:00 a.m. During these hours, response time logging remains "on" unless site management intercedes by canceling the tasks associated with this phenomenon and edits the LOG RESPONSE TIME field for the appropriate VOLUME SET to be "off."

### 5.3.77 XMMGR-START-BACKGROUND-FILER

Type: run routine Routine: START^XMKPL

Menu Text: START background filer

The XMMGR-START-BACKGROUND-FILER option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It reverses the action that was taken when the converse procedure (i.e., XMMGR-STOP-BACKGROUND-FILER option) has been run. It also will restart the background filer, if it disappears from the system status report. In order for this option to be effective, TaskMan (ZTM) *must* be running.

### 5.3.78 XMMGR-STOP-BACKGROUND-FILER

Type: run routine Routine: STOP^XMKPL

Menu Text: STOP background filer

The XMMGR-STOP-BACKGROUND-FILER option is located on the Local Delivery Management menu [XMMGR-MESSAGE-DELIVERY-MGT ]. It is used to *stop* the background filer "gently" at the *end* of a delivery *before* it starts to deliver any further messages. This only stops local delivery operations. This is the converse procedure to the START background filer option (i.e., XMMGR-START-BACKGROUND-FILER).



**CAUTION: All local mail delivery will stop until the XMMGR-START-BACKGROUND-FILER option is run. This option stops delivery of local mail gracefully.**

### 5.3.79 XMMGR-TERMINATE-MANY

Type: run routine Routine: ALL1^XMUTERM

Menu Text: Terminate many mail users

The XMMGR-TERMINATE-MANY option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It goes through the MAILBOX file (#3.7) and removes any mailbox if the user:

- Is not in the NEW PERSON file (#200).
  - Has no Access code and was *not* terminated.
  - Has no Access code and was terminated without mailbox retention.
  - Has an Access code, but no primary menu.
  - Has an Access code and primary menu, but no Verify code, *and*:
    - Has never signed on or used mail since being added before a cutoff date.
- OR
- Last signed on or used mail before a cutoff date.

However, if the user meets one of the last two conditions above, but has a forwarding address, the user's mailbox will *not* be removed. The fact will be noted on the report, and the user should be investigated further.

Remove means:

- Delete user's private mail groups.
- Remove user from membership in all groups.
- Remove user as an authorized sender from all groups.
- Remove user from anyone's list of surrogates.

- Delete user's latered-messages list.
- Delete user's mailbox.

As a result, the user will not receive any mail.

This option can be run in "test" or "real" mode.

The report lists, in DUZ order:

- The user's DUZ and name.
- Whether the user has an Access code, Verify code, and primary menu.
- When the user was added to the NEW PERSON file (#200).
- When the user last signed on or used mail.
- When the user was terminated (if applicable).
- If the user was terminated, then whether the site manager chose to delete the user's mailbox. (It's generally a good idea to go ahead and delete the mailbox upon termination.)
- If the user has an access code and a forwarding address, the user is marked with "\*\*\*," and the forwarding address is shown. (Again, the mailbox is not deleted in this case, but the user should be investigated further.)

### 5.3.80 XMMGR-TERMINATE-ONE

Type: run routine Routine: CHOOSE^XMUTERM

Menu Text: Terminate one mail user

The XMMGR-TERMINATE-ONE option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It lets you remove the mailbox of any user who meets the criteria of either the XMMGR-TERMINATE-MANY option or the XMMGR-TERMINATE-SUGGEST option.

Remove means:

- Delete user's private mail groups.
- Remove user from membership in all groups.
- Remove user as an authorized sender from all groups.
- Remove user from anyone's list of surrogates.
- Delete user's "latered"-messages list.
- Delete user's mailbox.

As a result, the user will not receive any mail.

Remember:

- Whenever you give a user a new Access code, the system gives the user a mailbox, if he does not already have one.
- Whenever a user logs on, the system gives the user a mailbox, if he does not already have one.

### 5.3.81 XMMGR-TERMINATE-SUGGEST

Type: run routine Routine: ALL2^XMUTERM

Menu Text: Terminate mail user suggestions

The XMMGR-TERMINATE-SUGGEST option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It goes through the MAILBOX file (#3.7) and reports on users who *perhaps* should have their mail access terminated.

Users are included in the report if:

- The user was terminated before a manager-supplied cutoff date and allowed to keep a mailbox.
- The user has an access code, verify code, and primary menu, but last signed on before a manager-supplied cutoff date.

This option does *not* terminate mail access.

The report page breaks on Service/Section and includes the following information:

- User's DUZ and name.
- Whether the user has an Access code, a Verify code, and a primary menu.
- When the user last signed on or used mail.
- When the user was terminated (if applicable).
- If the user was terminated, then whether the site manager chose to delete the user's mailbox. (Remember, you should usually answer "Yes" to this question, unless the user is coming back and needs to have his mail retained.)
- Whether the user was DISUSER'd.
- How many new messages the user has. (New messages are never purged, except during purge-by-date purges.)
- If the user has any surrogates, the first surrogate is shown.

- If the user has an access code and a forwarding address, the forwarding address is shown.

Besides being of interest to the site manager, this report is also designed to be submitted to other services. The intent is that the other services would check each of their users listed in the report, annotate whether MailMan or VistA access should be terminated, and return the report to the site manager for action.

### 5.3.82 XMNET

Type: menu

Menu Text: Network Management

Entry Action: D CHECKIN^XM

Exit Action: D CHECKOUT^XM

The XMNET menu is a submenu located on the MailMan Master Menu [XMMMASTER] and Manage Mailman Menu [XMMGRMGR ]. It allows the user to control the network: editing/playing/listing scripts, managing domains, christening subordinate domains, and controlling pollers.

The following options can be found on the Network Management menu:

```
Select Manage Mailman Option: Network Management

Christen a domain      [XMCHRIS]
Compare Domains in System Against Released List [XMQDOMAINS]
Network Help          [XMNETHELP]
Queue Management ...  [XMNET-QUEUE-MANAGEMENT]
Site Parameters[XMSITE]
Transmission Management ... [XMNET-TRANSMISSION-MANAGEMENT]
```

Figure 5-7. Network Management menu [XMNET] options



**REF:** The options located on the Network Management menu are discussed in depth in the *MailMan Network Reference Guide*.

### 5.3.83 XMNET-QUEUE-MANAGEMENT

Type: menu

Menu Text: Queue Management

The XMNET-QUEUE-MANAGEMENT menu is a submenu located on the Network Management menu [XMNET]. It is used for queue management. It includes the following options:

```
Select Queue Management Option:

    Actively Transmitting/Receiving Queues Report      [XMQACTIVE]
    Display Active & Inactive Message Queues [XMQDISP]
    **> Locked with XUPROGMODE
    Historical Queue Data/Stats Report [XMQHIST]
    List a transcript          [XMLIST]
    Queues with Messages to Transmit Report  [XMQUEUED]
    Show a queue              [XMQSHOW]
    Transmit a Single Queue      [XMSTARTQUE]
    Transmit All Queues         [XMSTARTQUE-ALL]
```

Figure 5-8. Queue Management menu [XMNET-QUEUE-MANAGEMENT] options

### 5.3.84 XMNET-TRANSMISSION-MANAGEMENT

Type: menu

Menu Text: Transmission Management

The XMNET-TRANSMISSION-MANAGEMENT menu is a submenu located on the Network Management menu [XMNETNET ]. It includes the following options having to do with network transmissions:

```
Select Transmission Management Option:

    Edit a script      [XMSCRIPTEDIT]
    Play a script     [XMSCRIPTPLAY]
    Receive Messages from Another UCI [XMR-UCI-RCV]
    Send Messages to Another UCI [XMR-UCI-SEND]
    Sequential Media Message Reception [XMR-SEQ-RECEIVE]
    Sequential Media Queue Transmission [XMS-SEQ-TRANSMIT]
    Subroutine editor  [XMSUBEDIT]
    Toggle a script out of service [XMSCRIPTOUT]
    Validation Number Edit [XMEDIT-DOMAIN-VALIDATION#]
```

Figure 5-9. Transmission Management menu [XMNET-TRANSMISSION-MANAGEMENT] options

### 5.3.85 XMNET-TWIX-SEND

Type: run routine Routine: XMRPCTS

Menu Text: Send a TWIX via PCTS

The XMNET-TWIX-SEND option is to be used to send messages formatted especially as TWIXs to be sent via the PCTS system.



**NOTE:** This option is *not* assigned to a menu.



### 5.3.86 XMNET-TWIX-TRANSMIT

Type: run routine Routine: RQ^XMRPCTS0

Menu Text: Transmit TWIX's

The XMNET-TWIX-TRANSMIT option can be run interactively or scheduled as a task to run in the background to transmit TWIXs (PCTS messages) over the network.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.87 XMNETHELP

Type: action

Menu Text: Network Help

Entry Action: S XQH="XMNETWORK\*" D EN^XQH

The XMNETHELP option is located on the Network Management menu [XMNETNET ]. It displays all network-related help frames.

### 5.3.88 XMNEW

Type: run routine Routine: NEW^XMJBN

Menu Text: New Messages and Responses

Synonym: NML

Entry Action: D CHECKIN^XM

Exit Action: D CHECKOUT^XM

The XMNEW option is located on the MailMan Menu [XMUSER]. It enables you to scan your mailbox for messages which are either new, or have had some unseen response.

### 5.3.89 XMOTHER

Type: menu

Menu Text: Other MailMan Functions

The XMOTHER menu is a submenu located on the MailMan Menu [XMUSER]. It contains other MailMan functions for special user activities. It includes the following options:

```
Select Other MailMan Functions Option:

      Report on Latered Messages  [XMLATER-REPORT]
      Change/Delete Latered Messages  [XMLATER-EDIT]
      Mailbox Contents List [XMBASKLIST]
LML   Load PackMan Message  [XMPACK]
      **> Locked with XUPROGMODE
```

Figure 5-10. Other MailMan Functions menu [XMOTHER] options

### 5.3.90 XMOTHER-COMMUNICATIONS

Type: Menu

Menu Text: Communications

Lock: XMNET

The XMOTHER-COMMUNICATIONS menu is a submenu that contains options that allow users to send and receive data that is not necessarily in an electronic mail message form. FTP options to get and put files are here. It includes the following options:

- XM-FTP-GET
- XM-FTP-PUT

This option is locked with the XMNET security key.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.91 XMPACK

Type: run routine Routine: PAKMAN^XMJMS

Menu Text: Load PackMan Message

Synonym: LML

Entry Action: D CHECKIN^XM

Exit Action: D CHECKOUT^XM

Lock: XUPROGMODE

The XMPACK option is located on the Other MailMan Functions menu [XMOTHER]. It enables the user to create a PackMan message. This option is locked with the XUPROGMODE security key. It provides the following functions:

- ROUTINE LOAD
- GLOBAL LOAD
- PACKAGE LOAD

- SUMMARIZE MESSAGE
- PRINT MESSAGE
- INSTALL/CHECK MESSAGE
- INSTALL SELECTED ROUTINE(S)
- TEXT PRINT/DISPLAY
- COMPARE MESSAGE

### 5.3.92 XMPCOM

Type: run routine Routine: XC^XMP2

Menu Text: Compare message

The XMPCOM option compares the message with the currently installed version of the software, informing the user of the differences on a line-by-line basis.

### 5.3.93 XMPGLO

Type: run routine Routine: LOAD^XMPG

Menu Text: Global load

The XMPGLO option loads data into the message from the global subtree indicated.

### 5.3.94 XMPINS

Type: run routine Routine: XI^XMP2

Menu Text: Install Package & Run Inits


The XMPINS option installs the software (package) contained in the message into the active area. It permanently updates the routines, globals, and files in doing so.

### 5.3.95 XMPOLL

Type: run routine Routine: POLL^XMCP

Menu Text: POLL REMOTE NODES

The XMPOLL option plays the scripts to Domains whose flags contain a "P."

 **NOTE:** This option is *not* assigned to a menu.

### 5.3.96 XMPOST

Type: run routine Routine: BULLETIN^XMJMBULL

Menu Text: Post a bulletin

The XMPOST option is located on the Diagnostics menu [XMDX]. It allows a user to manually post a bulletin to test its operation.

### 5.3.97 XMPprt

Type: run routine Routine: XP^XMP2

Menu Text: Print message (formatted)

The XMPprt option prints the message in a neatly formatted form. Global data is preceded by its subscript; routines are wrapped around and fitted one per page.


### 5.3.98 XMPRECV


Type: menu

Menu Text: Package received

The XMPRECV menu lets users print, compare, and load a PackMan message. It includes the following options (listed alphabetically):

- XMPCOM
- XMPINS
- XMPprt
- XMPSUM

 **NOTE:** This option is *not* assigned to a menu.

 **NOTE:** The XMPRECV option *cannot* be independently invoked. These menu options are used as PackMan options and are used from the menus executed from ^DOPT("XMP").

### 5.3.99 XMPROU

Type: run routine Routine: LOAD^XMPH

Menu Text: Routine load

The XMPROU option loads routines from the routine library to the message. Routines can be named individually, or with the traditional asterisk ("\*") notation.

### 5.3.100 XMPSEND

Type: menu

Menu Text: Send Package transfer (PackMan)

Lock: XUPROG

The XMPSEND menu option allows the user to use PackMan functions: load routines, globals, files, and data dictionaries. It includes the following options:

- XMPROU
- XMPGLO
- XMPSUM
- XMPPRT
- XMPCOM

It is locked with the XUPROG security key.



**NOTE:** This option is *not* assigned to a menu.



**NOTE:** The XMPSEND option *cannot* be independently invoked. These menu options are used as PackMan options and are used from the menus executed from ^DOPT("XMP").

### 5.3.101 XMPSUM

Type: run routine Routine: XS^XMP2

Menu Text: Summarize message

The XMPSUM option summarizes the message, listing each packet in the software, along with its line number. It does not list the contents in each packet; the Print option does that.

### 5.3.102 XMPURGE

Type: action

Menu Text: Purge Unreferenced Messages

Entry Action: D SCAN^XMA3

The XMPURGE option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It behaves as follows depending on how it is run:

- **Scheduled**—This option, if scheduled, does exactly what the XMAUTOPURGE option does, and then stops.
- **Interactive**—This option, if run interactively, does exactly what the XMAUTOPURGE option does, and then it does exactly what the XMSTAT option does, and then it stops.



**CAUTION: You should not schedule this option.**

### 5.3.103 XMPURGE-BY-DATE

Type: run routine Routine: XMA32

Menu Text: Purge Messages by Origination Date

Lock: XMMGR

The XMPURGE-BY-DATE option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. It removes messages from users' mail baskets then deletes them along with any responses chained to them. It will do this for a range of messages based upon user input. The user enters the range of internal message numbers that will be processed and the date against which they will be checked. This option is locked with the XMMGR security key.



**NOTE:** Any messages in the Transmit queues or the Server baskets are exempt from the date purge (i.e., XMPURGE-BY-DATE option).

### 5.3.104 XMQACTIVE

Type: run routine Routine: ACTIVE^XMCQA

Menu Text: Actively Transmitting/Receiving Queues Report

The XMQACTIVE option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It runs a report that shows only those queues that are currently (right now) transmitting or receiving messages. It states the message numbers and the approximate line number in progress and the characters per second.

### 5.3.105 XMQDISP

Type: run routine Routine: STATUS^XMCQ

Menu Text: Display Active & Inactive Message Queues

The XMQDISP option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It reports on every active queue and every queue with messages. This option is locked with the XUPROGMODE security keys:.

For active queues, it shows much the same information as option XMQACTIVE (Actively transmitting queues), except that instead of the task number, it shows the date/time that the information was last updated.

For inactive queues that have messages, it shows whether or not there's a task scheduled. If there is, it tells you what time it's scheduled for. If there is not, it shows you the FLAGS field for that domain in the DOMAIN file (#4.2). By looking at the FLAGS field, you should be able to tell whether a task needs to be created to transmit the queue. Generally, if the FLAGS field contains an "S" (for SEND), and there is no task scheduled, you probably ought to schedule one, using either the XMSTARTQUE-ALL (for all queues) or XMSTARTQUE (for a queue of your choice) options.

### 5.3.106 XMQDOMAINS

Type: run routine Routine: VALID8^XMUDCHK

Menu Text: Compare Domains in System Against Released List

The XMQDOMAINS option is located on the Network Management menu [XMNETNET ]. It compares the domains in the DOMAIN file (#4.2) with the list of domains in the XMUDCHK routine, and generates a report of domains in XMUDCHK that are not in the DOMAIN file (#4.2). Site managers should consider whether the missing domains should be added to the DOMAIN file (#4.2).

### 5.3.107 XMQHIST

Type: run routine Routine: ENTER^XMCQH

Menu Text: Historical Queue Data/Stats Report

The XMQHIST option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It reports on network transmission queues. It includes every domain in the DOMAIN file (#4.2) that has ever had any activity. It includes the total number of messages ever received from or sent to each domain, as well as the number of messages that are currently queued to be transmitted to each domain.

### 5.3.108 XMQSHOW

Type: run routine Routine: SHOWQ^XMCQ

Menu Text: Show a queue

The XMQSHOW option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It shows all of the messages awaiting transmission for a given queue.

### 5.3.109 XMQUEUED

Type: run routine Routine: ALL^XMCQA

Menu Text: Queues with Messages to Transmit Report

The XMQUEUED option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It produces a report of all those queues that have messages to go out. The list does *not* say whether there is or is not a task scheduled to send them. Requeuing them is okay, even if there is already a task to go out.

### 5.3.110 XMR-BROADCAST-VA-WIDE

Type: Server Routine: ENT^XMGAPI3(.6)

Menu Text: Server / not for a menu

The XMR-BROADCAST-VA-WIDE option is set up as a server. When a message is addressed to this server (i.e., S.XMR-BROADCAST-VA-WIDE), it runs routine ENT^XMGAPI3 to send the message to SHARED,MAIL. The message is marked "closed" (*cannot forward*) and "information only" (*cannot reply*). The message is marked with a vaporization date of 30 days from date of receipt.



**NOTE:** The XMYB-BROADCAST-VA-WIDE server option is similar to this option, except that it sends the message to all users.





**NOTE:** This option is *not* assigned to a menu.

### 5.3.111 XMR-SEQ-RECEIVE

Type: run routine Routine: TAPEIN^XMCB

Menu Text: Sequential Media Message Reception

Entry Action: D EN^XM

Exit Action: D CHECKOUT^XM

The XMR-SEQ-RECEIVE option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It allows the receipt of a queue of messages onto sequential media. The messages are "read" into the VistA MailMan system. This is the converse procedure to the Sequential Media Queue Transmission option [XMS-SEQ-TRANSMIT].

### 5.3.112 XMR-UCI-RCV

Type: run routine Routine: GLBIN^XMCB

Menu Text: Receive Messages from Another UCI

The XMR-UCI-RCV option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It reads messages from the %ZTSK global. This is the converse procedure to the Send Messages to Another UCI option [XMR-UCI-SEND].

To use:

1. Log onto the UCI from which you wish to transmit messages.
2. Use the SEND option. It will load all the messages for a particular Domain into ^%ZTSK.
3. Log onto the UCI into which you wish to receive messages.
4. Use this option. It will read through the %ZTSK global looking for a message to receive (do not worry, it only checks the first line of each potential message/task) and creates a message for them.

Requirements:

1. The RECEIVE side needs to have been set up as a Domain.

2. You *must* execute the RECEIVE option before the %ZTSK global gets cleaned out.

### 5.3.113 XMR-UCI-SEND

Type: run routine Routine: GLBOUT^XMCB

Menu Text: Send Messages to Another UCI

The XMR-UCI-SEND option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It loads messages into the %ZTSK global. This is the converse procedure to the Receive Messages from Another UCI option [XMR-UCI-RCV].

### 5.3.114 XMREAD

Type: run routine Routine: MANAGE^XMJBM

Menu Text: Read/Manage Messages

Synonym: RML

Entry Action: D CHECKIN^XM

Exit Action: D CHECKOUT^XM

The XMREAD option is located on the MailMan Menu [XMUSER]. It is used to read and manage MailMan messages. The user will be asked for a mail basket, which is normally the "IN" basket. You can see deleted messages by reading the "WASTE" basket. Once read, messages can be deleted, saved into other mail baskets, forwarded to other users, edited, or queried for information regarding other recipients of the message.

### 5.3.115 XMRONT

Type: run routine Routine: XMRONT

Menu Text: Start XMRONT TCP Listener

The XMRONT option is the TCP/IP Listener for MailMan. This option should *not* be on any Menu and should *not* be run directly. It *must* be scheduled to start every time the system is rebooted. You can schedule this option by using the Schedule/Unschedule Options option located on the Taskman Management menu. You *must* specify the XMRONT option and then enter "STARTUP" in the SPECIAL QUEUING field.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.116 XMS-SEQ-TRANSMIT

Type: run routine Routine: TAPEOUT^XMCE  
Menu Text: Sequential Media Queue Transmission  
Entry Action: D EN^XM  
Exit Action: D CHECKOUT^XM

The XMS-SEQ-TRANSMIT option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It allows the recording of a queue of messages onto sequential media. The messages so recorded can be "read" into another VistA MailMan system. This is the converse procedure to the Sequential Media Message Reception option [XMR-SEQ-RECEIVE].

This option has been developed specifically for emergency transmission of messages when the wide area network is not available. It can also be used for archiving.

For example, say a bulldozer knocked out your T1 line to the Wide Area Network (WAN) in front of your computer room. It will be three weeks until the system is reconnected to the network. You know that a sister installation 10 miles down the road is still on line. You must get your payroll information to Austin. The messages are ready to be sent (in the queue to FOC-AUSTIN.VA.GOV). Quick, mount a tape! Use this procedure to "transmit" the queue onto the tape. Have the tape delivered to your sister site (keeping it away from all magnetic fields—those messages are no longer in the queue). At your sister site the tape is delivered. They mount it and read in the messages. The messages are queued up for FOC-AUSTIN.VA.GOV and delivered as though they were "relayed" through this site. You could also have sent the tape directly to FOC-AUSTIN.VA.GOV where they could have been received.

### 5.3.117 XMSCRIPTEDIT

Type: run routine Routine: EDITSCR^XMCE  
Menu Text: Edit a script

The XMSCRIPTEDIT option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It allows the creation of a script for a given Domain.

### 5.3.118 XMSCRIPTOUT

Type: run routine Routine: OUT^XMCE

Menu Text: Toggle a script out of service

The XMSCRIPTOUT option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It lets you edit the OUT OF SERVICE field for a Transmission Script in the DOMAIN file (#4.2). You can also requeue the Domain for transmission from this option.

### 5.3.119 XMSCRIPTPLAY

Type: run routine Routine: PLAY^XMCX

Menu Text: Play a script

The XMSCRIPTPLAY option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It interprets the chosen script.

### 5.3.120 XMSCRIPTRES

Type: run routine Routine: RESUME^XMC1

Menu Text: Resume processing a script

The XMSCRIPTRES option allows the user to resume the interpretation of a script, with manual intervention.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.121 XMSEARCH

Type: run routine Routine: FIND^XMJMF

Menu Text: Query/Search for Messages

Entry Action: D CHECKIN^XM

Exit Action: D CHECKOUT^XM

The XMSEARCH option is located on the MailMan Menu [XMUSER]. It enables you to find messages sent by you or sent to you, based on various criteria. You may search the entire database of existing messages, regardless of whether they are in one of your baskets or not, or whether you have terminated them or not. Such a search may only be made based upon "Subject start with" a string. Your search options vastly increase if you confine your search to messages existing in one (or all) of your baskets. Such a search may be based upon any combination of the following:

- "Subject contains"
- "Sender is"

- "Message sent on or after a certain date"
- "Message sent on or before' a certain date"
- "Message sent to a certain user"

### 5.3.122 XMSEND

Type: run routine Routine: SEND^XMJMS  
 Menu Text: Send a Message  
 Synonym: SML  
 Entry Action: D CHECKIN^XM  
 Exit Action: D CHECKOUT^XM

The XMSEND option is located on the MailMan Menu [XMUSER]. It enables users to send MailMan messages. Messages can be sent to other users or groups of users. The message sender can request a confirmation message to be sent to him or her when each recipient reads the message.

### 5.3.123 XMSHARE

Type: run routine Routine: SHARE^XMVSURR  
 Menu Text: Assume the Identity of SHARED,MAIL  
 Entry Action: D CHECKIN^XM  
 Exit Action: D CHECKOUT^XM  
 Reverse/Negative Lock: XMNOPRIV

Use the XMSHARE option to assume the identity of a special user, SHARED,MAIL, so that you can read mail sent to the general public. Users who hold the XMNOPRIV security key cannot do this. SHARED,MAIL is a place to send messages of general interest. Almost all users may access this area. You *must* indicate a basket to deliver the messages to so that it helps others find your message. Do *not* create new baskets unless it is really necessary. Try to fit your message into a basket that already exists. SHARED, MAIL is a Library, *not* a repository for trivial or personal communications. Please respect your privilege to be a SHARED,MAIL surrogate. The privilege of being a surrogate of SHARED,MAIL can be taken away.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.124 XMSITE

Type: action

Menu Text: Site Parameters

```
Entry Action: S DR=".01;1;3;5;5.11:5.13;7;8.2",DIE="^XMB(1,",DA=1 D ^DIE W
!!,"Editing Postmaster information" S DR="4;4.5;8",DIE="^XMB(3.7,",DA=.5 D
^DIE K DIE,DR,DA
```

The XMSITE option is located on the Network Management menu [XMNETNET ]. It allows the network manager to control local site parameters, names, time zone, etc.

### 5.3.125 XMSTARTQUE

Type: run routine Routine: Q1^XMCX

Menu Text: Transmit a Single Queue

The XMSTARTQUE option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It attempts to send queued messages in the Postmaster's mailbox for a given Domain by creating a TaskMan job that will deliver the messages for the Domain requested. Messages can be sitting in a queue for a variety of reasons (e.g., transmission failure, waiting for Poller to run, etc.).

### 5.3.126 XMSTARTQUE-ALL

Type: run routine Routine: QALL^XMCX

Menu Text: Transmit All Queues

The XMSTARTQUE-ALL option is located on the Queue Management menu [XMNET-QUEUE-MANAGEMENT]. It creates TaskMan jobs that will transmit queued messages in the Postmaster's baskets for a number of Domains throughout the network. A Domain's queue will *not* be requeued, however, if it is already set up as a scheduled TaskMan job. Nor will it be requeued if it is empty or in the process of transmitting.

### 5.3.127 XMSTAT

Type: run routine Routine: STAT^XMA3

Menu Text: Message statistics

The XMSTAT option is located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT ]. This interactive option displays information about past purges. It displays the following information:

1. Types and results of the last 20 purges of the MESSAGE file (#3.9). It provides the following details:

- If the purge was an unreferenced message purge (XMPURGE or XMAUTOPURGE options) or a date purge (XMPURGE-BY-DATE option)
  - When it started
  - When it ended
  - How long it took
  - How many messages were purged
  - How many were left
2. Information about each user in the MAILBOX file (#3.7). It provides the following details:
- How many messages they have in their mailboxes
  - When the user last logged on
  - When the user last used MailMan

### 5.3.128 XMSUBEDIT

Type: run routine Routine: EDITSUB^XMCE  
 Menu Text: Subroutine editor  
 Entry Action: D EDITSC^XMC11

The XMSUBEDIT option is located on the Transmission Management Menu [XMNET-TRANSMISSION-MANAGEMENT ]. It edits transmission script subroutines.

#### 5.3.128.1.1 XMSUGGESTION

Type: run routine Routine: SEND^XMJMSA

Menu Text: Suggestion Box

The XMSUGGESTION option enables a user to send an anonymous message to the SUGGESTION BOX basket of SHARED,MAIL. If the basket does not exist, it will be created. MailMan carefully fails to record the actual identity of the sender. The option allows users to voice complaints and concerns anonymously.

To use this option, put the XMSUGGESTION option onto the appropriate menu. To stop a particular user from using it, put a "Reverse/negative Lock" onto the XMSUGGESTION option and assign that key to the user.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.129 XMTALK

Type: run routine Routine: TALK^XMCTLK

Menu Text: TalkMan

Lock: XMTALK

The XMTALK option allows the user to communicate with another Domain through the script processing ability of VistA MailMan. Since the Script Processing mode is transparent, the user need not know any security passwords. He only needs to know the name of the Domain and have access to the option. In addition, the script for the Domain *must* have a "T" command and the FLAGS field *must* also contain a "T". This option is locked with the XMTALK security key.



**NOTE:** This option is *not* assigned to a menu.

### 5.3.130 XMUSER

Type: menu

Menu Text: MailMan Menu

Entry Action: S XMMENU(0)="XMUSER" D EN^XM

Exit Action: K XMMENU D CHECKOUT^XM

The XMUSER menu is located on the MailMan Master Menu [XMMASTER]. It is the main MailMan menu for normal user interaction. It allows the user to send and receive messages, as well as manage his/her baskets.

The following options can be found on the MailMan Menu:

```

NML  New Messages and Responses  [XMNEW]
RML  Read/Manage Messages  [XMREAD]
SML  Send a Message  [XMSEND]
      Query/Search for Messages  [XMSEARCH]
AML  Become a Surrogate (SHARED,MAIL or Other) [XMASSUME]
      Personal Preferences ...  [XM PERSONAL MENU]
      Other MailMan Functions ... [XMOTHER]
      Help (User/Group Info., etc.) ... [XMHELP]

Select MailMan Menu Option:
    
```

Figure 5-11. Mailman Menu [XMUSER] options



**REF:** The options located on the MailMan Menu are discussed in depth in the *MailMan Getting Started Guide* and the *MailMan User Guide* and will *not* be discussed here.



### 5.3.131 XMUT-CHKFIL

Type: run routine Routine: CHKFILES^XMUT4  
 Menu Text: Check MailMan Files for Errors  
 Lock: XUPROG

The XMUT-CHKFIL option is located on the Manage Mailman Menu [XMMGRMGR ]. It is locked with the XUPROG security keys:.

This option checks for and corrects errors in the MAILBOX (#3.7) and MESSAGE (#3.9) files. It checks important fields and cross references.

It is recommended that this option be run monthly or every few months, or whenever there seems to be a database problem.

It produces a report of the errors detected, and what, if anything, it did to fix them. If it did not fix the errors, it tells you what you can do to fix them.

Although the system will not fail because of errors detected, users may inquire about the problems they experience. This utility allows you to detect any errors first and correct them before anyone else encounters an error.

### 5.3.132 XMUT-REC-DELETE

Type: run routine Routine: DEL^XMUT1A

Menu Text: Delete Found Messages from Found Messages List

Synonym: DEL

The XMUT-REC-DELETE option is located on the Recover Messages into User's IN Basket menu [XMUT-REC-MENU]. It deletes the temporary storage of a list of messages found when the user uses the Find Messages for User option [XMUT-REC-FIND].

### 5.3.133 XMUT-REC-DELIVER

Type: run routine Routine: G^XMUT1  
 Menu Text: Deliver Found Messages into User's IN Basket  
 Synonym: DRM

The XMUT-REC-DELIVER option is located on the Recover Messages into User's IN Basket menu [XMUT-REC-MENU]. It is used to deliver the messages found with the Find Messages for User option [XMUT-REC-FIND]. The messages found with that option will be placed into the user's "IN" basket, but only if they are not already in another basket.

### 5.3.134 XMUT-REC-FIND

Type: run routine Routine: A^XMUT1

Menu Text: Find Messages for User

Synonym: FRM

The XMUT-REC-FIND option is located on the Recover Messages into User's IN Basket menu [XMUT-REC-MENU]. It is used to find all the messages that a user has ever had and has not terminated from.

This list of messages can be used as input into two other processes:

- Deliver Found Messages into User's IN Basket option [XMUT-REC-DELIVER].
- List Messages Found option [XMUT-REC-RPT].

### 5.3.135 XMUT-REC-MENU

Type: menu

Menu Text: Recover Messages into User's IN Basket

The XMUT-REC-MENU option is a submenu located on the Disk Space Management menu [XMMGR-DISK-SPACE-MANAGEMENT]. It lets you recover messages that have inadvertently been lost. It recovers all the messages a user has ever received and is not terminated from. The steps are reviewed in the Help documentation. (Enter **"?HELP"** to see the HELP documentation.).

The following options can be found on the Recover Messages into User's IN Basket menu:

```
Select Disk Space Management Option: Recover Messages into User's IN Basket

DEL   Delete Found Messages from Found Messages List  [XMUT-REC-DELETE]
DRM   Deliver Found Messages into User's IN Basket    [XMUT-REC-DELIVER]
FRM   Find Messages for User                          [XMUT-REC-FIND]
LRM   List Messages Found                             [XMUT-REC-RPT]
```

Figure 5-12. Recover Messages into User's IN Basket menu [XMUT-REC-MENU] options

### 5.3.136 XMUT-REC-RPT

Type: run routine Routine: LIST^XMUT1A

Menu Text: List Messages Found

Synonym: LRM

The XMUT-REC-RPT option is located on the Recover Messages into User's IN Basket menu [XMUT-REC-MENU]. It is used to list the messages found for users with the Find Messages for User option [XMUT-REC-FIND].

### 5.3.137 XMYB-BROADCAST-VA-WIDE

Type: Server      Routine: ENT^XMGAPI3("\*")

Menu Text: Server / not for a menu

The XMYB-BROADCAST-VA-WIDE option is set up as a server. When a message is addressed to this server (i.e., S.XMYB-BROADCAST-VA-WIDE), it runs the ENT^XMGAPI3 routine to send the message to all users. The message is marked "closed" (*cannot forward*) and "information only" (*cannot reply*). To prevent broadcast messages from being delivered to a user, assign the user the XM NO BROADCASTS security key.

The message is marked with a vaporization date of seven days from the date of receipt.



**NOTE:** The XMR-BROADCAST-VA-WIDE server option is similar to this option, except that it sends the message to SHARED,MAIL.



**NOTE:** This option is *not* assigned to a menu.



## 6.0 Archiving and Purging

### 6.1 Archiving

There are no application-specific archiving procedures or recommendations for MailMan V. 8.0.

### 6.2 Purging

The MESSAGE file (#3.9) has the potential to grow in size over time.

The Disk Space Management menu) located under the Manage Mailman menu facilitates purging of MailMan files and the cleanup of MailMan globals.



**REF:** For more information on these options, please refer to the "Manage MailMan Options" topic under the "Managing MailMan" topic in Chapter 2.0, "Implementation and Maintenance," in this manual.


















## 7.0 Callable Routines

The following table lists the MailMan APIs. It includes the Routine name, tag entry point, Integration Agreement (IA) number, if any, and a brief description.





















**NOTE:** Those APIs released prior to MailMan Version 7.0 Patch XM\*7.1\*50 are notated with the word "Classic" for reference purposes only.






Routine	Entry	DBIA	Description
XM		10064	(Classic) Programmer entry point into MailMan.
XM	CHECKIN	10064	Meant to be the entry action of any subordinate MailMan option.
XM	CHECKOUT	10064	Meant to be the exit action of every MailMan option.
XM	EN	10064	(Classic) Meant to be the entry action of the primary MailMan option. It sets up the user's MailMan environment and calls the HEADER^XM API to greet the user.
XM	HEADER	10064	Meant to be part of the entry action of the primary MailMan option, whether called by itself or as part of another call (e.g., EN^XM). It displays a greeting to the user.
XM	KILL	10064	(Classic) KILLS any MailMan variables that may be left over from previous calls.
XM	N1	10064	(Classic) Creates a mailbox for a user.  <b>REF:</b> See also: CRE8MBOX^XM APIB.
XM	NEW	10064	(Classic) Creates a mailbox for a user.  <b>REF:</b> See also: CRE8MBOX^XM APIB.
XM	\$\$NU	10064	(Classic) Returns the number of new messages the user has, and it may display a message to the user telling how many.  <b>REF:</b> See also: QMBOX^XM APIB, QBSKT^XM APIB, \$\$BNMSGCT^XMUTIL, \$\$TNMSGCT^XMUTIL, \$\$NEWS^XMUTIL.
XMA	REC	1284	(Classic) Interactive: Read/Manage messages.  <b>NOTE:</b> Identical to the Read/Manage Messages option [XMREAD].  <b>REF:</b> See also: READ^XM APIU.
XMA0	ENTPRT	1230	(Classic) Interactive: Print a message.
XMA0	HDR	1230	(Classic) Headerless print a message.












Routine	Entry	DBIA	Description
XMA0	PR2	1230	(Classic) Print a message.  <b>REF:</b> See also: PRTMSG^XMXAPI.
XMA03	\$\$REN	1150	(Classic) Performs an integrity check on a user's basket, resequences messages in a user's basket, and returns a string.  <b>REF:</b> See also: RSEQBSKT^XMXAPIB.
XMA11	\$\$INFO		(Classic) Interactive: Allows the user to edit the message "Information Only" field.
XMA11A	WRITE	1233	(Classic) Interactive: Sends/Answers a message.  <b>NOTE:</b> Identical to the Send a Message option (XMSSEND). It is similar to ENT^XMD; however, it does not display the MailMan greeting.
XMA1B	KL	10065	(Classic) Delete a message from a basket.
XMA1B	KLQ	10065	(Classic) Delete a message from a basket and put it in the "WASTE" basket.  <b>REF:</b> See also: DELMSG^XMXAPI.
XMA1B	S2	10065	(Classic) Put a message in a basket.  <b>REF:</b> See also: MOVEMSG^XMXAPI.
XMA1C	REMSBMSG	10072	(Classic) Delete a message from a Postmaster server basket.  <b>REF:</b> See also: ZAPSERV^XMXAPI.
XMA1C	SETSB	10072	(Classic) Put a message into a Postmaster server basket.  <b>REF:</b> See also: PUTSERV^XMXAPI.
XMA2	GET	10066	(Classic) Creates a new message stub in the MESSAGE file (#3.9). Unlike XMZ^XMA2, however, if the stub creation fails, your process will halt.  <b>NOTE:</b> Recommend you use XMZ^XMA2 or CRE8XMZ^XMXAPI.
XMA2	XMZ	10066	(Classic) Creates a new message stub in the MESSAGE file (#3.9).  <b>REF:</b> See also: CRE8XMZ^XMXAPI.
XMA21	CHK	10067	(Classic) Checks to see if a user is a member of a mail group.
XMA21	DES	10067	(Classic) Interactive: Addressing with the <i>next</i> default recipient set.  <b>REF:</b> See also: TOWHOM^XMXAPI (interactive).








Routine	Entry	DBIA	Description
XMA21	DEST	10067	(Classic) Interactive: Addressing with the <i>first</i> default recipient set.  <b>REF:</b> See also: TOWHOM^XMXAPI (interactive).
XMA21	INST	10067	(Classic) Non-interactive: Addressing.  <b>REF:</b> See also: TOWHOM^XMXAPI.
XMA21	WHO	10067	(Classic) Non-interactive: Addressing.  <b>REF:</b> See also: TOWHOM^XMXAPI.
XMA2R	\$\$ENT	1145	(Classic) Creates and sends a reply to a message and returns the message number of the reply.  <b>REF:</b> See also: REPLYMSG^XMXAPI.
XMA2R	\$\$ENTA	1145	(Classic) Creates and sends an answer to a message and returns the message number of the answer.  <b>REF:</b> See also: ANSRMSG^XMXAPI.
XMAD2	\$\$BSKT	1147	(Classic) Given a basket name and a user's DUZ, look up the basket. If it does not exist, create it and return its IEN. If it does exist, return its IEN. If there is an error, return an error message.  <b>REF:</b> See also: CRE8BSKT^XMXAPIB, QBSKT^XMXAPIB.
XMADGO	ZTSK	10068	(Classic) Starts tasks to deliver messages in local delivery queues.
XMAH	ENT8	1040	(Classic) Interactive: Display a list of all responses to a message.
XMAH1		1232	(Classic) Interactive create and send a reply to a message.
XMAH1	ENTA	1232	(Classic) Interactive create and send a reply to a message.  <b>NOTE:</b> Identical to ^XMAH1.
XMB		10069	(Classic) Create and send a bulletin in the background.  <b>REF:</b> See also: TASKBULL^XMXAPI.
XMB	BULL	10069	(Classic) Interactive: Create and send a bulletin.
XMB	EN	10069	(Classic) Create and send a bulletin in the foreground.  <b>REF:</b> See also: SENDBULL^XMXAPI.
XMBGRP	\$\$DM	1146	(Classic) Deletes local members from a mail group.
XMBGRP	\$\$MG	1146	(Classic) Creates a new mail group or adds members to an existing mail group.
XMCTLK	GO	1148	(Classic) Interactive use device.


Routine	Entry	DBIA	Description
XMCU1	\$\$DECODEUP	1136	(Classic) Takes a string, converts ~U~ to ^, and returns the result.  <b>REF:</b> See also: \$\$DECODEUP^XMXUTIL1.
XMCU1	\$\$ENCODEUP	1136	(Classic) Takes a string, converts ^ to ~U~, and returns the result.  <b>REF:</b> See also: \$\$ENCODEUP^XMXUTIL1.
XMCU1	\$\$RTRAN	1136	(Classic) Undoes the conversion of a string previously converted by \$\$STRAN^XMCU1 and returns the result.
XMCU1	\$\$STRAN	1136	(Classic) Takes a string, converts any control characters to printable characters, and returns the result.
XMD		10070	(Classic) Creates and sends a message.  <b>REF:</b> See also: SENDMSG^XMXAPI.
XMD	EN1	10070	(Classic) Adds text to a message, addresses it, and sends it.
XMD	ENL	10070	(Classic) Adds text to a message.
XMD	ENT	10070	(Classic) Interactive: Sends a message.  <b>NOTE:</b> Identical to the Send a Message option (XMSEND).  <b>REF:</b> See also: SEND^XMXAPIU.
XMD	ENT1	10070	(Classic) Forwards a message. Addressing restrictions are waived.  <b>REF:</b> See also: FWDMSG^XMXAPI.
XMD	ENT2	10070	(Classic) Forward a message. If *\$D(ZTQUEUED), prompt for additional recipients, whether or not any are already defined.
XMGAPI0	\$\$SUBCHK	1142	(Classic) Validates the message subject and returns the valid subject or an error message.  <b>REF:</b> See also: VSUBJ^XMXAPI.
XMGAPI0	\$\$SUBGET	1142	(Classic) Returns the subject of a message.  <b>REF:</b> See also: \$\$SUBJ^XMXUTIL2.
XMGAPI1	\$\$READ	1048	(Classic) Returns a line of text from a message.
XMGAPI2	\$\$HDR	1144	(Classic) Sets up an array of information about a message.  <b>REF:</b> See also: INMSG^XMXUTIL2, INMSG1^XMXUTIL2, INMSG2^XMXUTIL2, INRESPS^XMXUTIL2.

Routine	Entry	DBIA	Description
XML	GET	1283	(Classic) Set up an executable variable, which, when executed, retrieves the next line of text from a message.
XMPG	ENT	10071	(Classic) Creates and sends a PackMan message with globals in it.
XMRENT	\$\$NET	1143	(Classic) Returns an ^-delimited string of information about a message.
XMS1	\$\$SRVTIME	1151	(Classic) Sets the LAST READ DATE/TIME (#2) and STATUS (#5) fields of a (server) message recipient in the RECIPIENT Multiple field of a message in the MESSAGE file (#3.9).
XMS1	\$\$STATUS	1151	(Classic) Returns the STATUS field (#5) of a (server) message recipient from the RECIPIENT Multiple field of a message in the MESSAGE file (#3.9).
XMS3	REC	10073	(Classic) Get a line of text from a message.
XMUT7	ENT	1132	(Classic) Sends a test message to a user's forwarding address and the Postmaster.
XMVVITAE	INIT	2728	Sets up vital user information and should <i>not</i> be used for any other purpose.
XMVVITAE	OTHER	2728	Change certain MailMan settings when the user becomes a surrogate.
XMVVITAE	SELF	2728	Restore certain MailMan settings when the user becomes himself or herself again, after having been a surrogate.
MXAPI	ADDRNSND	2729	Address and send a message (does <i>not</i> handle message body).
MXAPI	ANSRMSG	2729	Answer a message (Send a new message, with a copy of the original message to the sender of the original message).  REF: See also: \$\$ENTA^XMA2R.
MXAPI	CRE8XMZ	2729	Create a new message stub in the MESSAGE file (#3.9).  REF: See also: GET^XMA2, XMZ^XMA2.
MXAPI	DELMSG	2729	Delete messages from a basket.  REF: See also: KLQ^XMA1B.
MXAPI	FLTRMSG	2729	Filter messages in a basket.
MXAPI	FWDMSG	2729	Forward messages from a basket.  REF: See also: ENT1^XMD.
MXAPI	LATERMSG	2729	"Later" messages in a basket.
MXAPI	MOVEMSG	2729	Move messages (from one basket) to another basket.  REF: See also: S2^XMA1B.



Routine	Entry	DBIA	Description
XMXAPI	PRTMSG	2729	Print messages.  REF: See also: PR2^XMA0.
XMXAPI	PUTSERV	2729	Put a message in a server basket.  REF: See also: SETSB^XMA1C.
XMXAPI	REPLYMSG	2729	Reply to message (attach reply to original message).  REF: See also: \$\$ENT^XMA2R.
XMXAPI	SENBULL	2729	Send a bulletin (returns XMZ).  REF: See also: EN^XMB.
XMXAPI	SENDMSG	2729	Send a message.  REF: See also: ^XMD.
XMXAPI	TASKBULL	2729	Send a bulletin (quicker than SENDBULL, but does <i>not</i> return XMZ).  REF: See also: ^XMB.
XMXAPI	TERMMSG	2729	Terminate messages, possibly from a basket.
XMXAPI	TOWHOM	2729	Check one message addressee.  REF: See also: INST^XMA21, WHO^XMA21.
XMXAPI	VAPORMSG	2729	Set vaporize date for a message.
XMXAPI	VSUBJ	2729	Validate a subject.  REF: See also: \$\$SUBCHK^XMGAPI0.
XMXAPI	ZAPSERV	2729	Delete a message from a server basket.  REF: See also: REMSBMSG^XMA1C.
XMXAPIB	CRE8BSKT	2723	Create a basket.  REF: See also: \$\$BSKT^XMAD2.
XMXAPIB	CRE8MBOX	2723	Create a mailbox for a user.  REF: See also: N1^XM, NEW^XM.
XMXAPIB	DELBSKT	2723	Delete a user's basket.
XMXAPIB	FLTRBSKT	2723	Filter messages in a basket.
XMXAPIB	FLTRMBOX	2723	Filter all messages in a user's mailbox.
XMXAPIB	LISTBSKT	2723	Get a list of baskets in a mailbox.
XMXAPIB	LISTMSGS	2723	Get a list of messages in one or all baskets in a mailbox; search criteria can be used.
XMXAPIB	NAMEBSKT	2723	Change the name of a basket.
XMXAPIB	QBSKT	2723	Get information on a basket.

Routine	Entry	DBIA	Description
XMXAIB	QMBOX	2723	Query a mailbox for new messages.  REF: See also: \$\$NU^XM, \$\$NU^XMGAPI4.
XMXAIB	RSEQBSKT	2723	Resequence messages in a basket.  REF: See also: \$\$REN^XMA03.
XMXAIB	TERMMBOX	2723	Remove all traces of a user from MailMan globals.
XMXAIG	ADDMBRS	3006	Add members to mail groups. Optionally, forward past mail group messages.
XMXAIG	DROP	3006	Enable user to drop from a mail group.
XMXAIG	\$\$GOTLOCAL	3006	Determine if a mail group has <i>active</i> local members.
XMXAIG	JOIN	3006	Enable user to enroll in (join) a mail group. Optionally, forward past mail group messages.
XMXAUI	READ	2774	Read/Manage messages in your mailbox.  REF: See also: REC^XMA.
XMXAUI	READNEW	2774	Read new messages in your mailbox.
XMXAUI	SEND	2774	Send a message.  REF: See also: ENT^XMD.
XMXAUI	TOWHOM	2774	Ask user for message addressees.  REF: See also: DES^XMA21, DEST^XMA21.
MXEDIT	CLOSED	2730	Toggle the message's "closed" flag.
MXEDIT	CONFID	2730	Toggle the message's "confidential" flag.
MXEDIT	CONFIRM	2730	Toggle the message's "confirm receipt requested" flag.
MXEDIT	DELIVER	2730	Set/Delete the message delivery basket for all users.
MXEDIT	INFO	2730	Toggle the message's "information only" flag.
MXEDIT	PRIORITY	2730	Toggle the message's "priority" flag.
MXEDIT	SUBJ	2730	Change the message subject.
MXEDIT	TEXT	2730	Replace the message text.
MXEDIT	VAPOR	2730	Set/Delete the message vaporize date.
MXSEC	\$\$ACCESS	2731	Returns a value that indicates if the user can access a message.
MXSEC	\$\$ANSWER	2731	Returns a value that indicates if the user can answer a message.
MXSEC	\$\$BCAST	2731	Returns a value that indicates if a message was broadcast.
MXSEC	\$\$CLOSED	2731	Returns a value that indicates if a message is closed.
MXSEC	\$\$CONFID	2731	Returns a value that indicates if a message is confidential.
MXSEC	\$\$CONFIRM	2731	Returns a value that indicates if a message is confirm receipt requested.
MXSEC	\$\$COPY	2731	Returns a value that indicates if the user can copy a message.










<b>Routine</b>	<b>Entry</b>	<b>DBIA</b>	<b>Description</b>
XXMSEC	\$\$DELETE	2731	Returns a value that indicates if the user can delete or terminate a message.
XXMSEC	\$\$FORWARD	2731	Returns a value that indicates if the user can forward a message.
XXMSEC	\$\$INFO	2731	Returns a value that indicates if a message is information only.
XXMSEC	\$\$LATER	2731	Returns a value that indicates if a user can later a message.
XXMSEC	\$\$MOVE	2731	Returns a value that indicates if the user can save or filter a message.
XXMSEC	\$\$ORIGIN8R	2731	Returns a value that indicates if the user (XMDUZ or DUZ) sent the message (sender or surrogate).
XXMSEC	\$\$POSTPRIV	2731	Returns a value that indicates if the user has Postmaster privileges, including if the user can perform group message actions in SHARED,MAIL.
XXMSEC	\$\$PRIORITY	2731	Returns a value that indicates if a message is priority.
XXMSEC	\$\$READ	2731	Returns a value that indicates if the user can read a message.
XXMSEC	\$\$REPLY	2731	Returns a value that indicates if the user can reply to a message.
XXMSEC	\$\$RPRIV	2731	Returns a value that indicates if the surrogate has READ privileges.
XXMSEC	\$\$RWPRIV	2731	Returns a value that indicates if the surrogate has READ or WRITE privileges.
XXMSEC	\$\$SEND	2731	Returns a value that indicates if the user can send a message.
XXMSEC	\$\$SURRACC	2731	Returns a value that indicates if the surrogate can access a message.
XXMSEC	\$\$SURRCONF	2731	Returns a value that indicates if a message is confidential, and if it is, whether the surrogate can access it.
XXMSEC	\$\$WPRIV	2731	Returns a value that indicates if the surrogate has WRITE privileges.
XXMSEC	\$\$ZCLOSED	2731	Returns a value that indicates if a message is closed.
XXMSEC	\$\$ZCONFID	2731	Returns a value that indicates if a message is confidential.
XXMSEC	\$\$ZCONFIRM	2731	Returns a value that indicates if a message is confirm receipt requested.
XXMSEC	\$\$ZINFO	2731	Returns a value that indicates if a message is information only.
XXMSEC	\$\$ZORIGIN8	2731	Returns a value that indicates if the user (XMDUZ or DUZ) sent the message (sender or surrogate).
XXMSEC	\$\$ZPOSTPRV	2731	Returns a value that indicates if the user has Postmaster privileges, including whether the user can perform group message actions in SHARED,MAIL.
XXMSEC	\$\$ZPRI	2731	Returns a value that indicates if a message is priority.
XXMSEC1	CHKLINES	2732	Checks a value that indicates if the message is too long to be sent to a remote site.

Routine	Entry	DBIA	Description
XXMSEC1	CHKMSG	2732	Checks if a message is located where the calling routine says it is and if the user can access it.
XXMSEC1	\$\$COPYAMT	2732	When copying a message, this function checks the total number of lines and responses to be copied.
XXMSEC1	\$\$COPYLIMS	2732	When copying a message, this function returns the sites message copy limits.
XXMSEC1	\$\$COPYRECP	2732	When copying a message, this function checks the total number of recipients on the message to see if it's "OK" to list them in the copy text and also send the copy to them.
XXMSEC1	GETRESTR	2732	Returns assorted restrictions, if any, on sending or forwarding the message.
XXMSEC1	OPTGRP	2732	Determines what the user may do at the basket or message group level.
XXMSEC1	\$\$PAKMAN	2732	Returns a value that indicates if a message is a PackMan message.
XXMSEC1	\$\$SSPRIV	2732	Returns a value that indicates if a user is authorized to conduct a Super Search. If not, it also sets XMERR and ^TMP("XMERR", \$J).
XXMSEC1	\$\$ZSSPRIV	2732	Returns a value that indicates if a user is authorized to conduct a Super Search. If not, it does <i>not</i> set XMERR and ^TMP("XMERR", \$J).
XXMSEC2	\$\$EDIT	2733	Returns a value that indicates if the user can edit a message.
XXMSEC2	OPTEDIT	2733	If OPTMSG^XXMSEC2 determines that the user may edit the message, then this routine details what exactly the user may and may not edit.
XXMSEC2	OPTMSG	2733	Determines what the user may do with the message.
XXMUTIL	\$\$BMSGCT	2734	Returns the number of messages in a user's basket.
XXMUTIL	\$\$BNMSGCT	2734	Returns the number of new messages in a user's basket.
XXMUTIL	\$\$BPMSGCT	2734	Returns the number of new priority messages in a user's basket.
XXMUTIL	\$\$BSKTNAME	2734	Returns the name of a user's basket.
XXMUTIL	KVAPOR	2734	Sets/Removes a message vaporize date in a user's basket.
XXMUTIL	LASTACC	2734	Records that the user has read the message.
XXMUTIL	MAKENEW	2734	Makes a message new and updates the new message counts.
XXMUTIL	\$\$NAME	2734	Returns the name of the user by looking up XMDUZ in the NEW PERSON file (#200). Optionally, it may also return the user's title and/or institution.
XXMUTIL	\$\$NETNAME	2734	Returns the network name of a user, including the @site name.
XXMUTIL	\$\$NEWS	2734	Returns the information on new messages in a user's mailbox.
			 <b>REF:</b> See also: \$\$NU^XMGAPI4, \$\$NU^XM.



Routine	Entry	DBIA	Description
XXUTIL	NONEW	2734	Makes a message <i>not</i> new and updates the new message counts.
XXUTIL	PAGE	2734	Displays to the user: "Enter RETURN to continue or '^' to exit:" and waits until the user presses a key.
XXUTIL	\$\$MSGCT	2734	Returns the total number of messages in a user's mailbox.
XXUTIL	\$\$NMSGCT	2734	Returns the total number of new messages in a user's mailbox.
XXUTIL	\$\$PMSGCT	2734	Returns the total number of new priority messages in a user's mailbox.
XXUTIL	WAIT	2734	Displays to the user: "Press RETURN to continue:" and waits until the user presses a key.
XXUTIL1	\$\$CONVERT	2735	Given the Internet date/time string, it returns the VA FileMan date/time.
XXUTIL1	\$\$CTRL	2735	Strips the control characters from a string.
XXUTIL1	\$\$DECODEUP	2735	Change all ~U~ to ^ in a string.  REF: See also: \$\$DECODEUP^XMCU1.
XXUTIL1	\$\$ENCODEUP	2735	Change all ^ to ~U~ in a string.  REF: See also: \$\$ENCODEUP^XMCU1.
XXUTIL1	\$\$GMTDIFF	2735	Given the time zone, it returns +-hhmm difference from Greenwich Mean Time (GMT).
XXUTIL1	\$\$INDT	2735	Given the VA FileMan date/time, it returns the Internet date/time string: <b>dd mm yyy hh:mm:ss +-hhmm (time zone)</b> .
XXUTIL1	\$\$MAXBLANK	2735	Reduce all three or more consecutive spaces in a string to two.
XXUTIL1	\$\$MELD	2735	Combine a string and a number to form a new string of a given length.
XXUTIL1	\$\$MMDT	2735	Given the VA FileMan date/time, it returns the string: <b>dd mmm yy hh:mm</b> .
XXUTIL1	\$\$SCRUB	2735	Strips the control characters and leading/trailing spaces from a string.
XXUTIL1	\$\$STRIP	2735	Strips the leading/trailing spaces from a string.
XXUTIL1	\$\$TIMEDIFF	2735	Given the decimal time difference, it returns +-hhmm (e.g. -2.5 equates to -0230).
XXUTIL1	\$\$TSTAMP	2735	Returns a timestamp (\$H expressed in seconds).
XXUTIL1	ZONEDIFF	2735	Given the time zone (or time difference +-hhmm from GMT), it returns the number of hours and minutes difference between that and the local time zone.
XXUTIL2	\$\$BSKT	2736	Returns in which basket a message is located for a user.
XXUTIL2	\$\$DATE	2736	Returns the message sent date in external format: <b>DD MMM YY HHJ:MM</b> .
XXUTIL2	\$\$FROM	2736	Returns the message from in external format.



Routine	Entry	DBIA	Description
XXUTIL2	INMSG	2736	Message information.  <b>NOTE:</b> Should only be called for messages, not for responses.  <b>REF:</b> See also: \$\$HDR^XMGAPI2.
XXUTIL2	INMSG1	2736	Message information, Part 1.  <b>NOTE:</b> Should only be called for messages, not for responses.  <b>REF:</b> See also: \$\$HDR^XMGAPI2.
XXUTIL2	INMSG2	2736	Message information, Part 2.  <b>NOTE:</b> Should only be called for messages, not for responses.  <b>REF:</b> See also: \$\$HDR^XMGAPI2.
XXUTIL2	INRESP	2736	Response information.  <b>NOTE:</b> Should only be called for responses, not for messages.  <b>REF:</b> See also: \$\$HDR^XMGAPI2.
XXUTIL2	INRESPS	2736	Get the message response count and responses read information.  <b>REF:</b> See also: \$\$HDR^XMGAPI2.
XXUTIL2	\$\$KSEQN	2736	Returns the sequence number for a message in this user's basket.
XXUTIL2	\$\$LINE	2736	How many lines are in the message?
XXUTIL2	\$\$NEW	2736	Returns a value that indicates if the message is new for this user in this basket.
XXUTIL2	\$\$PRI	2736	Returns a value that indicates if the message is priority.
XXUTIL2	\$\$QRESP	2736	Returns a value that indicates if a message is a response.
XXUTIL2	\$\$RESP	2736	Returns the number of responses to a message.
XXUTIL2	\$\$SUBJ	2736	Returns the message subject in external format.
XXUTIL2	\$\$ZDATE	2736	Returns the message sent date in external format: <b>DD MMM YY HHJ:MM.</b>
XXUTIL2	\$\$ZFROM	2736	Returns the message from in external format.
XXUTIL2	\$\$ZNODE	2736	Returns the message zero node: <b>^XMB(3.9,XMZ,0).</b>
XXUTIL2	\$\$ZPRI	2736	Returns a value that indicates if the message is priority.
XXUTIL2	\$\$ZREAD	2736	Returns the number of responses to a message this user has read.
XXUTIL2	\$\$ZSUBJ	2736	Returns the message subject in external format.

Routine	Entry	DBIA	Description
XXUTIL3	Q	2737	Lists/Finds message addressees.
XXUTIL3	QD	2737	Lists/Finds message recipients.
XXUTIL3	QL	2737	Lists/Finds "latered" message addressees.
XXUTIL3	QN	2737	Get the network header records from a message that originated at a remote site.
XXUTIL3	QX	2737	This API performs the following actions: Show all users who are current on a message (i.e., read all responses). Show all users who are <i>not</i> current on a message (i.e., have <i>not</i> read all responses). Show all users who have terminated from a message.

**Table 7-1. MailMan APIs (with cross-references to either Classic or New/Replacement APIs)**



**REF:** For a complete list and description of all MailMan V. 8.0 APIs, please refer to the *MailMan Developer's Guide*.

## 8.0 External Relations

Only users of MailMan with TCP/IP and Multimedia MailMan need mandatory resources available in order for these features to be properly implemented, used, and maintained. Check the appropriate appendices in this manual for prerequisites.

In order for Multimedia MailMan to work properly, sites must also have access to the IMAGE file (#2005), the NETWORK LOCATION file (#2005.2), and the VistA Radiology software.

### 8.1 Integration Agreements (IAs)

#### Supported References

MailMan V. 8.0 software has a Supported Integration Agreement (IA) with Kernel to use the DNS Lookup API (MAIL^XLFNLSLK). It is recorded as Supported in the IA database on FORUM (IA #3056). Permission to use it is granted by the custodian software (Kernel).



For more information on the Kernel DNS Lookup API, please refer to the MAIL^XLFNLSLK Home Page at the following Web address:

<http://vista.med.va.gov/kernel/apis/mail^xfnslk.htm>

#### General Instructions for Obtaining Integration Agreements

The Database Administrator (DBA) maintains a list of Integration Agreements (IAs) or mutual agreements between software developers allowing the use of internal entry points or other software-specific features that are not available to the general programming public.

#### To obtain the current list of IAs to which MailMan is a custodian:

1. Sign on to the FORUM system (forum.va.gov).
2. Go to the DBA menu [DBA].
3. Select the Integration Agreements Menu option [DBA IA ISC].
4. Select the Custodial Package Menu option [DBA IA CUSTODIAL MENU].
5. Choose the ACTIVE by Custodial Package option [DBA IA CUSTODIAL].
6. When this option prompts you for a package, enter **XXXX**—Where **XXXX** equals: **XM** or **MailMan**.
7. All current IAs to which the software is a custodian are listed.

**To obtain detailed information on a specific integration agreement:**

1. Sign on to the FORUM system (forum.va.gov).
2. Go to the DBA menu [DBA].
3. Select the Integration Agreements Menu option [DBA IA ISC].
4. Select the Inquire option [DBA IA INQUIRY].
5. When prompted for "INTEGRATION REFERENCES," enter the specific integration agreement number of the IA you would like to display.
6. The option then lists the full text of the IA you requested.

**To obtain the current list of IAs to which MailMan is a subscriber:**

1. Sign on to the FORUM system (forum.va.gov).
2. Go to the DBA menu [DBA].
3. Select the Integration Agreements Menu option [DBA IA ISC].
4. Select the Subscriber Package Menu option [DBA IA SUBSCRIBER MENU].
5. Choose the Print ACTIVE by Subscribing Package option [DBA IA SUBSCRIBER].
6. When prompted with "START WITH SUBSCRIBING PACKAGE," enter **XXXX** (in uppercase). When prompted with "GO TO SUBSCRIBING PACKAGE," enter **XXXX** (in uppercase)—Where "**XXXX**" equals: **XM**.
7. All current IAs to which the software is a subscriber are listed.

## 9.0 Internal Relations

### 9.1 Namespace

The namespace for VistA MailMan is **XM**. All routines and globals used in MailMan V. 8.0 start with **XM**, except for some that are shared and located in the **DI** and **XU** namespaces.

#### 9.1.1 File Numbers

This topic contains a list of all VistA MailMan files (data dictionaries) that are exported with MailMan V. 8.0. The list includes file numbers, global locations, and file names as follows:

File #	Global	Name
3.4	^DIC(3.4,	COMMUNICATIONS PROTOCOL
3.51	^XMB(3.51,	SPOOL DOCUMENT
3.519	^XMB(3.519,	SPOOL DATA
3.54	^XMB(3.54,	RESOURCE
3.6	^XMB(3.6,	BULLETIN
3.7	^XMB(3.7,	MAILBOX
3.73	^XMB(3.73,	MESSAGES TO BE NEW AT A LATER DATE
3.8	^XMB(3.8,	MAIL GROUP
3.816	^XMB(3.816,	DISTRIBUTION LIST
3.9	^XMB(3.9,	MESSAGE
4.2	^DIC(4.2,	DOMAIN
4.281	^%ZISL(4.281,	INTER-UCI TRANSFER
4.2995	^XMBX(4.2995,	MAILMAN OUTSTANDING FTP TRANSACTIONS
4.2996	^DIC(4.2996,	INTERNET SUFFIX
4.2997	^XMD(4.2997,	REMOTE USER DIRECTORY
4.2998	^XMBX(4.2998,	MESSAGE DELIVERY STATS
4.2999	^XMB(4.2999,	MESSAGE STATISTICS
4.3	^XMB(1,	MAILMAN SITE PARAMETERS
4.4	^XMB(4.4,	MAILMAN TIME ZONE
4.5	^XMB(4.5,	NETWORK TRANSACTION
4.501	^XMBX(4.501,	NETWORK SENDERS REJECTED
4.6	^XMB(4.6,	TRANSMISSION SCRIPT

**Table 9-1. Files and globals exported with MailMan V. 8.0**

## 9.2 Pointer Relationships

The Pointer Relationship Map is a diagram of the pointer relationships between fields in MailMan V. 8.0 files. As files are added to a system, new pointer relationships can be created; thus, the actual map for an operational system may differ.

The following diagram was created using the Map Pointer Relations option [DI DDMAP] on the VA FileMan Data Dictionary Utilities menu [DI DDU].



**REF:** For a list of MailMan files included in this diagram, please refer to Chapter 4.0, "Files," in this manual.

FILE (#) POINTER FIELD	POINTER TYPE	(#) FILE POINTER FIELD	FILE POINTED TO
File/Package: MAILMAN Date: JUL 13,2006 L=Laygo S=File not in set N=Normal Ref. C=Xref. *=Truncated m=Multiple v=Variable Pointer			
MAILMAN SITE PARAMET (#4.3) TCP/IP COMMUNICATIONS * (N )->		3.4 COMMUNICATI*	
OPTION (#19) SERVER BULLETIN ..... (N S L)->		3.6 BULLETIN m MAIL G:MAIL G*	-> MAIL GROUP
		3.7 MAILBOX NAME LAST MAILMAN A* MESSAGE BEING * MESSAGE BEING * BASK:MESS:MESS* m SURROG:SURROG*	-> NEW PERSON -> NEW PERSON -> MESSAGE -> MESSAGE -> MESSAGE -> NEW PERSON
		3.73 MESSAGES T* USER MESSAGE	-> NEW PERSON -> MESSAGE
BULLETIN (#3.62) MAIL GROUP ..... (N L)-> MAIL GROUP (#3.811) MEMBER GR:MEMBER GROU* (N C )-> MASTER FILE PARAMETE (#4.001) MAIL GROUP ..... (N S L)-> PACKAGE (#9.4) MAIL GROUP ..... (N S )-> VAPU SITE PARAMETERS (#9.72) INFORMATIONAL MAIL GRO* (N S )-> PATCH MONITOR PARAME (#9.951) MAIL GROUPS ..... (N S C )-> DUPLICATE RESOLUTION (#15.1) DUPLICATE MANAGER MAIL* (N S )-> VERIFIED DUPLICATE MAI* (N S )-> MERGE MAIL GROUP ..... (N S )-> ANCILLARY:MAIL GROUP* (N S )-> OPTION (#19)		3.8 MAIL GROUP  ORGANIZER  COORDINATOR  m AUTHOR:AUTHOR*  m MEMBER:MEMBER  m MEMBER:MEMBER*  m DISTRI:DISTRI* m FAX RE:FAX RE* m FAX GR:FAX GR*	-> NEW PERSON  -> NEW PERSON  -> NEW PERSON  -> NEW PERSON  -> MAIL GROUP  -> DISTRIBUTION LI* -> *** NONEXISTENT* -> *** NONEXISTENT*

<p>SERVER MAIL GROUP .... (N S L)-&gt;  MCCR SITE BUNDLING P (#466.1)  MAIL GROUP REC'G MM BU* (N S L)-&gt;  QUALITY ASSURANCE SI (#740)  EWS LOCAL MAIL GROUP . (N S )-&gt;  MAILGROUP (QAN) ..... (N S )-&gt;  HL7 NON-DHCP APPLICA (#770)  MAIL GROUP ..... (N S )-&gt;  HL7 APPLICATION PARA (#771)  MAIL GROUP ..... (N S )-&gt;  HL7 MONITOR (#776.106)  MAIL GROUPS ..... (N S C )-&gt;  HL LOWER LEVEL PROTO (#869.2)  MAIL GROUP ..... (N S )-&gt;  HL COMMUNICATION SER (#869.3)  MAIL GROUP ..... (N S L)-&gt;  HL LOGICAL LINK (#870)  MAIL GROUP ..... (N S L)-&gt;  FS TRACKMAN PARAMETE (#7000.1)  TOP PRIORITY NOTIFICAT* (N S )-&gt;  CM SITE PARAMETERS (#8986.095)  MAILGROUP FOR REPORTS/* (N S L)-&gt;  MAILGROUP FOR REMOTE X* (N S L)-&gt;  RPC BROKER SITE PARA (#8994.1)  MAIL GROUP FOR ALERTS (N S )-&gt;  (#177100.71)  MAIL GROUPS ..... (N S )-&gt;  VISTA AUTOPATCH SITE (#619066)  INFORMATIONAL MAIL GRO* (N S )-&gt;  TWX ROUTER (#11000100.02)  MAIL GROUP(S) ..... (N S )-&gt;  SERVICE:MAIL GROUP ... (N S )-&gt;</p>		
<p>MAIL GROUP (#3.813)  DISTRIBUTION LIST .... (N C L)-&gt;</p>	<p>3.816 DISTRIBUT*  m DOMAIN:DOMAIN</p>	<p>-&gt; DOMAIN</p>
<p>(#1.12)  MESSAGE ..... (N S )-&gt;  MAILBOX (#3.7)  MESSAGE BEING EDITED . (N C L)-&gt;  MESSAGE BEING RESPONDE* (N L)-&gt;  BASKET:MESSAGE ..... (N )-&gt;  MESSAGES TO BE NEW A (#3.73)  MESSAGE ..... (N )-&gt;  MESSAGE (#3.9)  ORIGINAL MESSAGE ..... (N )-&gt;  RESPONSE ..... (N )-&gt;  MESSAGE STATISTICS (#4.2999)  MESSAGE IN TRANSIT ... (N )-&gt;  VAPU INSTALL MODIFIE (#9.74)  KIDS MailMan Distribut* (N S )-&gt;  XPD PATCHING (#9.76)  NAME v .....(N S L)-&gt;  A6AJIM (#16100)  NAME ..... (N S C )-&gt;  AAK PATCHING (#405850)  NAME v .....(N S C L)-&gt;  VISTA AUTOPATCH INST (#619070)  KIDS MailMan Distribut* (N S )-&gt;</p>	<p>3.9 MESSAGE  ORIGINAL MESSA*  m RESPON:RESPON*  RECIPIENT:PATH  RECIPI:FORWAR*  RECIPI:FAX RE*  LATER :BY WHO*  m OBJECT:OBJECT*</p>	<p>-&gt; MESSAGE  -&gt; MESSAGE  -&gt; DOMAIN  -&gt; NEW PERSON  -&gt; *** NONEXISTENT*  -&gt; NEW PERSON  -&gt; *** NONEXISTENT*</p>
<p>DISTRIBUTION LIST (#3.8161)  DOMAIN ..... (N C )-&gt;  MESSAGE (#3.91)</p>	<p>4.2 DOMAIN</p>	

# Internal Relations

	RELAY DOMAIN	-> DOMAIN
RECIPIENT:PATH ..... (N )->		
INSTITUTION (#4)		
DOMAIN ..... (N S )->		
DOMAIN (#4.2)		
RELAY DOMAIN ..... (N L)->		
MESSAGE STATISTICS (#4.2999)		
NAME ..... (N C )->		
MAILMAN SITE PARAMET (#4.3)		
DOMAIN NAME ..... (N C )->		
PARENT ..... (N C )->		
SUBORDINATE DOMAIN ... (N )->		
XPD PATCHING (#9.7602)		
COMMUNICA:TO SERVANT* (N S C )->		
COMMUNICA:FROM SERVAN* (N S C )->		
XPD PATCHING SERVITU (#9.77)		
SERVANT OF WHICH DOMAI* (N S )->		
MASTERSHIP:DOMAIN? ... (N S )->		
FOUNDATIONS SITE PAR (#18.01)		
DOMAIN NAME ..... (N S )->		
SUBSCRIPTION CONTROL (#774.01)		
DESTINATION:DOMAIN ... (N S C )->		
HL7 MONITOR EVENT TY (#776.32)		
SERVER LOCATIONS:DOMAIN (N S )->		
HL COMMUNICATION SER (#869.3)		
DOMAIN ..... (N S )->		
HL LOGICAL LINK (#870)		
MAILMAN DOMAIN ..... (N S C )->		
FS TRACKMAN PARAMETE (#7000.1)		
SITE ..... (N S C )->		
FS TRACKMAN SITE/SER (#7006)		
DOMAIN ..... (N S C )->		
PACKAGE INSTALLATION (#8982)		
DOMAIN ..... (N S C L)->		
KERNEL SYSTEM PARAME (#8989.3)		
DOMAIN NAME ..... (N S C )->		
PARAMETERS (#8989.5)		
ENTITY v ..... (N S C L)->		
RPC BROKER SITE PARA (#8994.1)		
DOMAIN NAME ..... (N S C )->		
NVS SYS MONITOR PARA (#18000)		
SITE ..... (N S C )->		
AAK PATCHING (#405850.02)		
COMMUNICA:TO SERVANT* (N S )->		
COMMUNICA:FROM SERVAN* (N S )->		
AAK PATCHING SERVITU (#405851)		
SERVANT OF WHICH DOMAI* (N S )->		
MASTERSHIP:DOMAIN? ... (N S )->		
TWX ROUTER (#11000100.04)		
REMOTE MA:DOMAIN* .... (N S )->		
REMOTE USERS:DOMAIN .. (N S )->		
-----		
4.2995 MAILMAN *		
USER		-> NEW PERSON
IMAGE		-> *** NONEXISTENT*
-----		
4.2999 MESSAGE *		
NAME		-> DOMAIN
MESSAGE IN TRA*		-> MESSAGE
-----		
4.3 MAILMAN SIT*		
DOMAIN NAME		-> DOMAIN
TIME ZONE		-> MAILMAN TIME ZO*
PARENT		-> DOMAIN
TCP/IP COMMUNI*		-> COMMUNICATIONS *



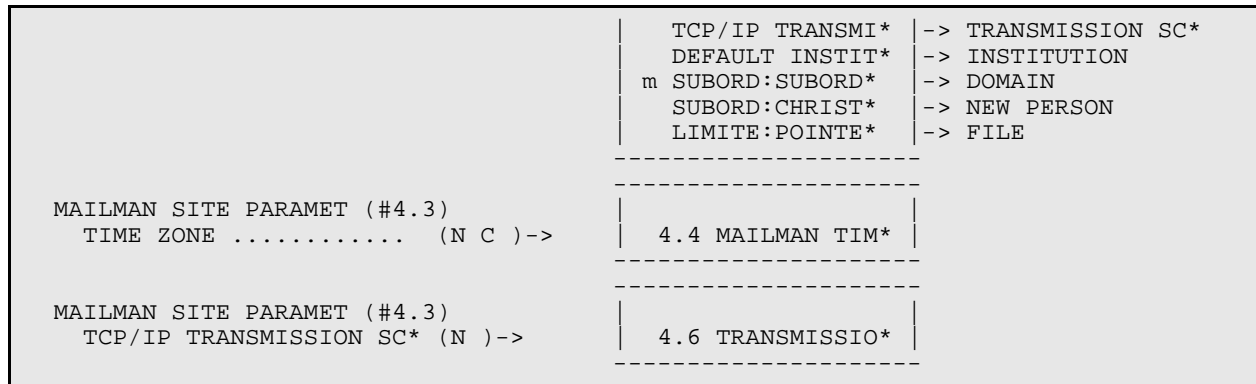


Figure 9-1. MailMan V. 8.0 Pointer Relationship Map



**REF:** For more information about creating and reading this map, please refer to the "Map Pointer Relations option" topic in the "List File Attributes" chapter in the "File Management" section of the *VA FileMan Advanced Users Manual*.

## 9.3 Templates

### 9.3.1 SORT Templates

The following SORT templates are distributed with MailMan V. 8.0:

SORT Template Name	File (Name & Number)
XMMGR-BKFILER-DAY@23:30	MESSAGE DELIVERY STATS (#4.2998)
XMMGR-BKFILER-TIME_PER_DATE	

**Table 9-2. SORT templates distributed with MailMan V. 8.0**

#### XMMGR-BKFILER-DAY@23:30

NAME: XMMGR-BKFILER-DAY@23:30	DATE CREATED: FEB 14, 1992@12:12
FILE: MESSAGE DELIVERY STATS	
DESCRIPTION: This template is used to produce a report that lists the number of messages that were created in a month, a day at a time.	
SORT BY: DATE/TIME// (User is asked range)	
WITHIN DATE/TIME, SORT BY: '\$E(\$P(INTERNAL(DATE/TIME),".",2),1,3)=233;L1//	
From '0' To '1'	COMPILED (c): NO

**Table 9-3. SORT Templates: XMMGR-BKFILER-DAY@23\:30 (File #4.2998)**

#### XMMGR-BKFILER-TIME\_PER\_DATE

NAME: XMMGR-BKFILER-TIME_PER_DATE	DATE CREATED: JUN 11, 1992@09:10
FILE: MESSAGE DELIVERY STATS	
DESCRIPTION: This template allows information in a time-oriented file to be output from a beginning time to an ending time.	
SORT BY: @DATE/TIME// (User is asked range)	

```

WITHIN DATE/TIME, SORT BY: @$E($P(INTERNAL(DATE/TIME),".",2),1,3)//      (User is
asked range)                                COMPILED (c): NO

```

Figure 9-2. SORT Templates: XMMGR-BKFILER-TIME\_PER\_DATE (File #4.2998)

### 9.3.2 PRINT Templates

The following PRINT templates are distributed with MailMan V. 8.0:

PRINT Template Name	File (Name & Number)
XMHOSTLIST	DOMAIN (#4.2)
XMMGR-BKFILER-ACTIVE_USERS/DEL	MESSAGE DELIVERY STATS (#4.2998)
XMMGR-BKFILER-DEL_BY_GROUP	
XMMGR-BKFILER-LENGTH_OF_QUEUES	
XMMGR-BKFILER-LONGTERM-STATS	
XMMGR-BKFILER-OLD_STATS/TABBED	
XMMGR-BKFILER-QUEUE-WAIT	
XMMGR-BKFILER-STATS-PLUS	
XMMGR-BKFILER-STATS/TABBED	
XMMGR-BKFILER-TABBED-RT	

Table 9-4. PRINT templates distributed with MailMan V. 8.0

#### XMHOSTLIST

```

NAME: XMHOSTLIST                                DATE CREATED: APR 09, 1987
FILE: DOMAIN
DESCRIPTION: This template may be used to produce a list of domains with
pertinent network routing information.
HEADER (c): DOMAIN HOST LIST
FIRST PRINT FIELD: NAME;L10//
THEN PRINT FIELD: STATION;"STATION";R5//
THEN PRINT FIELD: DHCP ROUTING INDICATOR;"DHCP";L6//
THEN PRINT FIELD: MAILMAN HOST;"HOST";R8//
THEN PRINT FIELD: MCTS ROUTING INDICATOR;"MCST";L6//
COMPILED (c): NO

```

Figure 9-3. PRINT Templates: XMHOSTLIST (File #4.2)

#### XMMGR-BKFILER-ACTIVE\_USERS/DEL

```

NAME: XMMGR-BKFILER-ACTIVE_USERS/DEL          DATE CREATED: OCT 17, 1993@18:30
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template is used to display active users and message
delivery information.
HEADER (c): ACTIVE USERS VERSES DELIVERIES
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: ACTIVE USERS#//
THEN PRINT FIELD: TOTAL QUEUE LENGTH#//
THEN PRINT FIELD: MESSAGE DELIVERIES MADE#//
THEN PRINT FIELD: RESPONSE DELIVERIES MADE#//
THEN PRINT FIELD: MESSAGE DELIVERIES IN QUEUE#//
THEN PRINT FIELD: RESPONSE DELIVERIES IN QUEUE#//

```

```
COMPILED (c): NO
```

Figure 9-4. PRINT Templates: XMMGR-BKFILER-ACTIVE\_USERS/DEL (File #4.2998)

### **XMMGR-BKFILER-DEL\_BY\_GROUP**

```
NAME: XMMGR-BKFILER-DEL_BY_GROUP      DATE CREATED: OCT 17, 1993@18:30
FILE: MESSAGE DELIVERY STATS          DATE LAST USED: NOV 18, 1997
DESCRIPTION: This template is used to output mail deliveries by delivery
group. It will output two message delivery groups and three response delivery
groups.
HEADER (c): DELIVERIES BY GROUP
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: QUEUED DELIVERIES MESSAGE G1#//
THEN PRINT FIELD: QUEUED DELIVERIES MESSAGE G2#//
THEN PRINT FIELD: QUEUED DELIVERIES RESPONSE G1#//
THEN PRINT FIELD: QUEUED DELIVERIES RESPONSE G2#//
THEN PRINT FIELD: QUEUED DELIVERIES RESPONSE G3#//
COMPILED (c): NO
```

Figure 9-5. PRINT Templates: XMMGR-BKFILER-DEL\_BY\_GROUP (File #4.2998)

### **XMMGR-BKFILER-LENGTH\_OF\_QUEUES**

```
NAME: XMMGR-BKFILER-LENGTH_OF_QUEUES  DATE CREATED: OCT 17, 1993@18:31
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template is used to output the length of mail delivery
queues. Each queue is a column and two message and three response columns are
displayed.
HEADER (c): QUEUE LENGTH REPORT
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: TOTAL QUEUE LENGTH#//
THEN PRINT FIELD: MESSAGE NUMBER GROUP1#//
THEN PRINT FIELD: MESSAGE NUMBER GROUP2#//
THEN PRINT FIELD: RESPONSE NUMBER GROUP1#//
THEN PRINT FIELD: RESPONSE NUMBER GROUP2#//
THEN PRINT FIELD: RESPONSE NUMBER GROUP3#//
COMPILED (c): NO
```

Figure 9-6. PRINT Templates: XMMGR-BKFILER-LENGTH\_OF\_QUEUES (File #4.2998)

### **XMMGR-BKFILER-LONGTERM-STATS**

```
NAME: XMMGR-BKFILER-LONGTERM-STATS    DATE CREATED: MAY 06, 1994@14:10
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template is used to output statistics of mail deliveries
by month.
HEADER (c): MESSAGE & RESPONSE CREATION HISTORY
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: MESSAGE NUMBER LAST ASSIGNED//
THEN PRINT FIELD: W:$S('$D(XMLAST):0,$P(X,U,11)-XMLAST>999999:0,$P(X,U,11)-XMLAS
T>0:1,1:0) $P(X,U,11)-XMLAST S XMLAST=$P(X,U,11);"New Messages"//
COMPILED (c): NO
```

Figure 9-7. PRINT Templates: XMMGR-BKFILER-LONGTERM-STATS (File #4.2998)

**XMMGR-BKFILER-OLD\_STATS/TABBED**

```

NAME: XMMGR-BKFILER-OLD_STATS/TABBED      DATE CREATED: OCT 17, 1993@18:32
FILE: MESSAGE DELIVERY STATS
DESCRIPTION:  This template will produce a report just like the
XMMGR-BKFILER-STATS-PLUS template, except that the output is formatted for
capture into a file that can then easily be converted into a graphical
display.
HEADER (c): TABBED STATISTICS
FIRST PRINT FIELD: DATE(#.01);L12//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: TIME(#.01)//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: S %XMNORMAL=$S($D(^XMB(1,1,120001)):^(120001),1:"");X//
THEN PRINT FIELD: ACTIVE USERS;L6//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: W $J($S('$D(X):.1,X=0:.1,1:X)/%XMNORMAL,4,2);X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: LINES OUTPUT;R6//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: W $J($S('$D(X):.1,X=0:.1,1:X)/$P(%XMNORMAL,"",2),8,2);X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: MESSAGE DELIVERIES MADE;R10//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: S XMTEMP=X;X//
THEN PRINT FIELD: RESPONSE DELIVERIES MADE;R10//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: S Y=X+XMTEMP W $J($S('$D(Y):.1,Y=0:.1,1:Y)/$P(%XMNORMAL,"",3)
,7,2);X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: MESSAGE DELIVERIES IN QUEUE;R10//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: S XMTEMP=X;X//
THEN PRINT FIELD: RESPONSE DELIVERIES IN QUEUE;R10//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: S Y=X+XMTEMP W $J($S('$D(Y):.1,Y=0:.1,1:Y)/$P(%XMNORMAL,"",4)
,7,2);X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: RESPONSE TIME - AVERAGE;R8//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: W $J($S('$D(X):.1,X=0:.1,1:X)/$P(%XMNORMAL,"",5),4,2);X//
THEN PRINT FIELD: K %XMNORMAL;X//
COMPILED (c): NO

```

Figure 9-8. PRINT Templates: XMMGR-BKFILER-OLD\_STATS/TABBED (File #4.2998)

**XMMGR-BKFILER-QUEUE-WAIT**

```

NAME: XMMGR-BKFILER-QUEUE-WAIT          DATE CREATED: OCT 17, 1993@18:33
FILE: MESSAGE DELIVERY STATS
DESCRIPTION:  This template is used to output the time messages are waiting
to be delivered in the mail delivery queues.  Each queue is a column and two
message and three response columns are displayed.
HEADER (c): DELIVERY WAIT BY QUEUE
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: TOTAL QUEUE LENGTH#//
THEN PRINT FIELD: MESSAGE AGE GROUP1#//
THEN PRINT FIELD: MESSAGE AGE GROUP2#//
THEN PRINT FIELD: RESPONSE AGE GROUP1#//
THEN PRINT FIELD: RESPONSE AGE GROUP2#//
THEN PRINT FIELD: RESPONSE AGE GROUP3#//
COMPILED (c): NO

```

Figure 9-9. PRINT Templates: XMMGR-BKFILER-QUEUE-WAIT (File #4.2998)

**XMMGR-BKFILER-STATS-PLUS**

```

NAME: XMMGR-BKFILER-STATS-PLUS          DATE CREATED: OCT 17, 1993@18:33
FILE: MESSAGE DELIVERY STATS           DATE LAST USED: SEP 25, 2004
DESCRIPTION: This template gives important daily delivery statistics.
HEADER (c): MESSAGE DELIVERY STATS LIST
FIRST PRINT FIELD: DATE/TIME//
THEN PRINT FIELD: ACTIVE USERS#//
THEN PRINT FIELD: LINES OUTPUT#//
THEN PRINT FIELD: MESSAGE DELIVERIES MADE#//
THEN PRINT FIELD: RESPONSE DELIVERIES MADE#//
THEN PRINT FIELD: MESSAGE AGE GROUP1#//
THEN PRINT FIELD: RESPONSE AGE GROUP1#//
THEN PRINT FIELD: MESSAGE DELIVERIES IN QUEUE#//
THEN PRINT FIELD: RESPONSE DELIVERIES IN QUEUE#//
THEN PRINT FIELD: RESPONSE TIME - AVERAGE#//
COMPILED (c): NO

```

Figure 9-10. PRINT Templates: XMMGR-BKFILER-STATS-PLUS (File #4.2998)

**XMMGR-BKFILER-STATS/TABBED**

```

NAME: XMMGR-BKFILER-STATS/TABBED       DATE CREATED: FEB 11, 1994@15:22
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template will produce a report just like the
XMMGR-BKFILER-STATS-PLUS template, except that the output is formatted for
capture into a file that can then easily be converted into a graphical
display.
HEADER (c): TABBED STATISTICS
FIRST PRINT FIELD: DATE(#.01);L12//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: TIME(#.01)//
THEN PRINT FIELD: S XMTEMP=$P(X,U,21) W $C(9);X//
THEN PRINT FIELD: S %XMNORMAL=$S($D(^XMB(1,1,120001)):^(120001),1:"");X//
THEN PRINT FIELD: ACTIVE USERS;L6//
THEN PRINT FIELD: S Y=$P(X,U,21) W "A"_$C(9)_$S(+%XMNORMAL=0:0,1:$J($S('SD(Y):.1
,Y=0:.1,1:Y)/%XMNORMAL,4,2));X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: LINES OUTPUT;R6//
THEN PRINT FIELD: W "L"_$C(9)_$S(+P(%XMNORMAL,"",2)=0:0,1:$J($S('SD(Y):.1,Y=0:
.1,1:Y)/$P(%XMNORMAL,"",2),8,2));X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: MESSAGE DELIVERIES MADE;R10//
THEN PRINT FIELD: S XMTEMP=Y;X//
THEN PRINT FIELD: RESPONSE DELIVERIES MADE;R10//
THEN PRINT FIELD: S Y=Y+XMTEMP W "R"_$C(9)_$S(+P(%XMNORMAL,"",3)=0:0,1:$J($S('
SD(Y):.1,Y=0:.1,1:Y)/$P(%XMNORMAL,"",3),7,2));X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: MESSAGE DELIVERIES IN QUEUE;R10//
THEN PRINT FIELD: S XMTEMP=Y;X//
THEN PRINT FIELD: RESPONSE DELIVERIES IN QUEUE;R10//
THEN PRINT FIELD: S Y=Y+XMTEMP W "Q"_$C(9)_$S(+P(%XMNORMAL,"",4)=0:0,1:$J($S('
SD(Y):.1,Y=0:.1,1:Y)/$P(%XMNORMAL,"",4),7,2));X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: RESPONSE TIME - AVERAGE;R8//
THEN PRINT FIELD: W "T"_$C(9)_$S(+P(%XMNORMAL,"",5)=0:0,1:$J($S('SD(Y):.1,Y=0:
.1,1:Y)/$P(%XMNORMAL,"",5),4,2));X//
THEN PRINT FIELD: K %XMNORMAL;X//
COMPILED (c): NO

NAME: XMMGR-BKFILER-TABBED-RT          DATE CREATED: OCT 17, 1993@18:35

```

```
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template provides information about daily response time.
HEADER (c): MESSAGE DELIVERY STATS LIST
FIRST PRINT FIELD: DATE/TIME;X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: RESPONSE TIME - AVERAGE//
COMPILED (c): NO
```

Figure 9-11. PRINT Templates: XMMGR-BKFILER-STATS/TABBED (File #4.2998)

### **XMMGR-BKFILER-TABBED-RT**

```
NAME: XMMGR-BKFILER-TABBED-RT          DATE CREATED: OCT 17, 1993@18:35
FILE: MESSAGE DELIVERY STATS
DESCRIPTION: This template provides information about daily response time.
HEADER (c): MESSAGE DELIVERY STATS LIST
FIRST PRINT FIELD: DATE/TIME;X//
THEN PRINT FIELD: $C(9);X//
THEN PRINT FIELD: RESPONSE TIME - AVERAGE//
COMPILED (c): NO
```

Figure 9-12. PRINT Templates: XMMGR-BKFILER-TABBED-RT (File #4.2998)

## 9.4 Help Frames

An extensive set of MailMan Help Frames have been created and updated for MailMan V. 8.0.




**REF:** For a complete list of Help Frames, please refer to "Appendix A—Help Frames" in this manual.

## 10.0 Software-wide Variables

### 10.1 Standards and Conventions (SAC) Exemptions

The following software-wide variables have received Standards and Conventions Committee (SACC) exemptions.

SAC Standard Section	Variables	Description
2A	B,J,V,Z,\$V,\$Z	Beginning December 14, 1989, MailMan, by virtue of being defined as part of Kernel, can use non-standard <b>\$Z</b> functions and non-standard <b>\$Z</b> special variables. Beginning April 27, 1995, MailMan has an exemption to use <b>\$ZV</b> in the <b>XML*</b> series of routines that are used for reading and writing data across the network for Patch XM*7.1*8.
	OPEN, CLOSE device	Beginning October 25, 1990, MailMan is exempted from using the device handler to open and close synchronous communications channels to support electronic communications until such time that the VA device handler provides the needed functionality. Also involved are scripts distributed in the DOMAIN file (#4.2) or the TRANSMISSION SCRIPT file (#4.6). This exemption allows MailMan to set the appropriate IO* variables as needed.
2D2	* & # READs	Beginning March 26, 1990, the following MailMan routines can use * or # READs: XMC1, XMCTLK, XLM, XML1CRC, and XML4CRC*.
4B	Package-wide variables	Beginning February 9, 1989, XMDUN, XMDUNO, XMDUZ, and XMPRIV are package-wide variables for use in MailMan.
6D	FM compatibility	Beginning February 3, 1993, the global ^XMBPOST is exempted from VA FileMan compatibility in Version 7.1 of MailMan and later. This global will be used to store information concerning mail messages to be posted by MailMan's background filer. It will also temporarily store statistical data concerning mail messages.  <b>NOTE:</b> MailMan no longer uses the following globals referenced in this exemption: The global XMB("NOP", is exempted from VA FileMan compatibility. It is a temporary list of messages that should <i>not</i> be purged. The global XMB("POST", is exempted from VA FileMan compatibility. It is a temporary list of messages to be posted by MailMan's background filer. This exemption is for Version 7.0 or earlier of MailMan. Beginning August 10, 1989, the global XMB("PURGE" is exempt from VA FileMan compatibility.

**Table 10-1. SAC Exemption for software-wide variables**





## 11.0 Software Product Security

### 11.1 Mail Groups and Alerts

MailMan V. 8.0 provides the capability to create and use mail groups. MailMan does *not* generate alerts.

MailMan distributes the following mail group:

Mail Group Name	Description
XM SUPER SEARCH	<p>This mail group is sent a bulletin whenever someone conducts a Super Search using the XM SUPER SEARCH menu. The bulletin tells who conducted the search and what search criteria were used.</p> <p>Members of this mail group should be anyone who ought to be notified whenever a Super Search is conducted. At an absolute minimum, the site Information Security Officer (ISO) and alternate ISO(s) should be members. There should be enough responsible members of the group so that a certain level of comfort is achieved that the Super Searches will only be conducted for just cause. The more people there are, who are aware that a Super Search has been conducted, the less likely it is that the capability will be abused.</p> <p>The site ISO should be the coordinator of this mail group.</p>

**Table 11-1. Mail groups**



**REF:** For more information on the Super Search functionality, please refer to the XM SUPER SEARCH option in the "Exported Options" topic in Chapter 5.0, "Exported Options," in this manual.

### 11.2 Remote Systems

The VistA MailMan software itself transmits data and provides the capability to transmit data to remote systems, facilities, and databases. Numerous routines have been modified and modularized with MailMan V. 8.0. This modularization was necessary for maintainability.



**REF:** For a list of all routines distributed with MailMan V. 8.0, please refer to the Chapter 3.0, "Routines," in this manual.

### 11.2.1 Archiving and Purging

There are no application-specific archiving procedures or recommendations for MailMan V. 8.0.

The MESSAGE file (#3.9) has the potential to grow in size over time.

### 11.3 Interfacing

No non-VA products are embedded in or required by MailMan V. 8.0, other than those provided by the underlying operating systems.

### 11.4 Electronic Signatures

Electronic signatures are *not* used within MailMan V. 8.0.

### 11.5 Menus/Options

The following is a list of all VistA MailMan menu options exported with MailMan V. 8.0 of particular interest to Information Security Officers (ISOs):



- XM SUPER SEARCH



**REF:** For a description of this option and to view a more detailed list of all options exported with MailMan V. 8.0, please refer to the "Options—Listed Alphabetically by Name" topic in Chapter 5.0, "Exported Options," in this manual.

### 11.6 Security Keys

The following security keys are exported/distributed with MailMan V. 8.0:

Security Key	Description
XM AUTO-FORWARD WAIVER	<p>As of MailMan Patch XM*8.0*18, if the AUTO-FORWARD LIMITED? field (#31) in the MAILMAN SITE PARAMETERS file (#4.3) is set to YES, auto-forward addresses are limited to sites in the AUTO-FORWARD APPROVED SITE Multiple field (#31.1) in the MAILMAN SITE PARAMETERS file (#4.3). Any user who has been assigned this security key, however, can also auto-forward to the sites that are listed in the AUTO-FORWARD WAIVER SITE Multiple field (#31.2) in the MAILMAN SITE PARAMETERS file (#4.3).</p> <p>To obtain this security key, the user <i>must</i> submit a request for a waiver through the site Information Security Officer (ISO). Only after the waiver has been granted may the user be assigned this key.</p> <p> <b>NOTE:</b> Check with the ISO for details on the requirements for the waiver.</p>
XM CAC ADPAC	<p>This key allows users, such as Clinical Application Coordinators (CACs) and Automated Data Processing Application Coordinators (ADPACs) to edit other users' mail groups. Users holding this key can edit any mail group, except personal mail groups. (Personal mail groups are those mail groups that only the organizer may edit or use.)</p> <p> <b>NOTE:</b> Holders of the XMMGR security key should <i>not</i> be given this key, because they already possess the privilege this key grants.</p>
XM GROUP EDIT MASTER	<p>This key allows users to edit other users' mail groups. Users holding this key can edit and add new users to any other users' mail groups except personal mail groups. (Personal mail groups are those mail groups that only the organizer may edit or use.)</p> <p>The following users should <i>not</i> be given this key, because they already possess the privilege this key grants:</p> <p>Holders of the XMMGR security key. Clinical Application Coordinators, as identified in File #8930, USR Class, belonging to the Text Integration Utility (TIU) software.</p>
XM GROUP PRIORITY	<p>This key allows users to forward priority mail to groups. Without this key, only the sender of a priority message can forward it to groups.</p>
XM NO BROADCASTS	<p>This key is used to prevent broadcast messages from being delivered to the user.</p>


Security Key	Description
XM SUPER SEARCH	<p>This key allows users to run the Super Search Message File option [XM SUPER SEARCH], which performs a search for messages in the MESSAGE file (#3.9) based on multiple criteria. This key should be given, on a time-limited basis, to trusted individuals who have a valid need to research messages in the MESSAGE file (#3.9). For example, in sexual or other harassment cases, in which the harassment is in the form of MailMan messages.</p> <p> <b>REF:</b> For more information on the Super Search functionality, please refer to the XM SUPER SEARCH option in the "<b>Options—</b>" topic in this chapter.</p>
XMMGR	This key is required for options that can remove data from the MailMan system or for options that require most trusted employee status and are used for managing MailMan. This key is also used to control privileges in SHARED,MAIL.
XMNET	This key is used to control options that require special privileges for use of network mail. Also, this key can be used to control the ability for users to have and change their forwarding address.
XMNOPRIV	This key is used to control privileges in SHARED,MAIL. Without this key, users <i>cannot</i> assume the identity of SHARED,MAIL.
XMQ- (DOMAIN file Keys)	There are domains in the DOMAIN file (#4.2) whose names begin with "Q-". These are referred to as "Queue Domains." Each has a security key. Each security key begins with "XMQ-". For example, if the Domain name is Q-CLM.VA.GOV, the corresponding security key is named "XMQ-CLM". Since these domains are used to send data to central collection points, this security key prevents users from sending personal messages. Any domain containing FOC-AUSTIN.VA.GOV or Q- should have keys.
XMSTAR	This key gives users the ability to broadcast messages to <i>all</i> local mail users by entering an asterisk/star ("*") at the "Send to:" prompt.
XMSTAR LIMITED	This key gives users the ability to broadcast messages to a <i>subset</i> of local mail users by entering an asterisk/star ("*") at the "Send to:" prompt.
XMTALK	This key is used to control access to the TalkMan options, which allow users to connect to remote computers via Network Mail scripts.

Table 11-2. Security keys distributed with MailMan V. 8.0

The following security keys are not exported/distributed with MailMan V. 8.0 but are required for certain functionality:

Security Key	Description
XUPROG	This key is used to allow access to the PackMan options.
XUPROGMODE	This key is used to allow access to the PackMan options.

**Table 11-3. Security keys required for certain functionality within MailMan V. 8.0**

## 11.7 File Security

MailMan has two levels of VA FileMan file security. MailMan files contain data that are prepared according to VA policy and procedures and therefore require a high level of protection regarding WRITE, DELETE, and LAYGO access.

The following file security is established with MailMan V. 8.0 files. The definitions for each security key attached to these files are AS FOLLOWS:

- #—System Manager access
- @—Programmer access
- ^—No access
- Null—Full access

File #	File Name	DD	RD	WR	DEL	LAYGO	AUDIT
3.4	COMMUNICATIONS PROTOCOL	#	@	#	#	#	#
3.51	SPOOL DOCUMENT	@	@	@	@	@	@
3.519	SPOOL DATA						
3.54							
3.6	BULLETIN	#		#	#		#
3.7	MAILBOX	#		#	#	#	#
3.73	MESSAGES TO BE NEW AT A LATER DATE	@	#	#	#	#	@
3.8	MAIL GROUP	#		#	#		#
3.816	DISTRIBUTION LIST						
3.9	MESSAGE	^	^	^	^	#	^
4.2	DOMAIN	#	#	#	#	#	#
4.281	INTER-UCI TRANSFER						
4.2995	MAILMAN OUTSTANDING FTP TRANSACTIONS						
4.2996	INTERNET SUFFIX						
4.2997	REMOTE USER DIRECTORY						
4.2998	MESSAGE DELIVERY STATS						

File #	File Name	DD	RD	WR	DEL	LAYGO	AUDIT
4.2999	MESSAGE STATISTICS						
4.3	MAILMAN SITE PARAMETERS	@	#	#	#	#	@
4.4	MAILMAN TIME ZONE						
4.5	NETWORK TRANSACTION						
4.501	NETWORK SENDERS REJECTED						
4.6	TRANSMISSION SCRIPT						

**Table 11-4. File security for MailMan V. 8.0 software**



**REF:** For more information on the files exported with MailMan V. 8.0, please refer to the "Files" topic in Chapter 5.0, "Exported Options," in this manual.



**NOTE:** Site-specific parameters can be set in the MAILMAN SITE PARAMETERS file (#4.3).

## 11.8 References

MailMan V. 8.0 has been developed in accordance with all VA regulations. The following directive specifies the data archiving and purging process with MailMan:

VHA Directive 10-95-094

## 11.9 Official Policies

No additional legal requirements are imposed by MailMan V. 8.0 on VistA users, nor does MailMan V. 8.0 relieve users of any previously established requirements.

Distribution of the MailMan software is unrestricted.

## 12.0 Glossary

BANNER	A line of text with a user's name and domain, which is displayed to everyone who sends mail to the user.
BSCP	Block Mode Simple Communications Protocol, a procedure used for message transmission with error checking.
BULLETIN DEVICE	A form letter often triggered by a VA FileMan field.
DOMAIN	A terminal, printer, modem, or other type of hardware or equipment associated with a computer. A host file of an underlying operating system may be treated like a device in that it may be written to (e.g., for spooling).
INITIALIZATION	A site for sending and receiving mail.
INPUT TRANSFORM	The process of setting variables in a program to their starting value.
KEYWORD	An executable string of M code that is used to check the validity of input and converts it into an internal form for storage.
LINE EDITOR	A reference name that calls a help frame when entered at a message prompt.
LOCAL	This is VA FileMan's special line-oriented text editor. This editor is used for the word-processing data type.
LOG IN/ON	The system that a user is currently signed on to.
LOG OUT/OFF	The process of gaining access to a computer system.
MAIL BASKET	The process of exiting from a computer system.
MESSAGE-ID	Mail baskets provide a way of saving messages in a sorted fashion similar to a filing system. Mail baskets are created at the "Message action" prompt by typing in "S" to save, then the name you wish to call the basket. If the basket already exists, the message will be sent to it. If the basket does <i>not</i> exist, you will be asked if you want it created. Placing a message in a mail basket other than the IN or Waste baskets protects the message from being automatically purged when the IN BASKET PURGE is run.
MULTIMEDIA MAIL	A message identifier that shows the time of transmission, the message number and the domain name of the message.
PHYSICAL LINK DEVICE "PLAYING A SCRIPT"	Multimedia Mail gives the capability of attaching Binary Large Objects (BLOBs) to electronic messages so that images, spreadsheets, graphs, and other operating system files that are not pure ASCII text, may be sent and received either locally or across the network.
POLLER	Hardware used to establish outgoing communication.
POSTMASTER	A method of opening a transmission link for a message, used to force message transmission of message and testing.
PROTOCOL	An option that opens the transmission line to all domains with "P" in the Flags field.
PURGE	The basket where message queues are stored. Also, the person who manages this basket for a particular site.
QUEUE	Code containing logic for opening and closing links, and for sending/receiving transmissions.
REMOTE	A procedure used to delete messages or message pointers.
	A list that stores messages destined for a given domain.
	Any system that a user is not signed on to.

## Glossary

SCRIPT	A set of MailMan commands and transmission scripts to a remote domain in the DOMAIN file (#4.2).
SERVER	An automatic mail reader for internal messages.
SMTP	Simple Mail Transport Protocol. The primary transport protocol for MailMan.
SWP	<b>Sliding Window Protocol.</b>
TRANSMISSION SCRIPT	List of commands for directing a message stored in the TRANSMISSION SCRIPT field.
VALIDATION NUMBER	A security check number that must be in the domains of both the sending and receiving sites.
WRAP-AROUND MODE	Text that is fit into available column positions and automatically wraps to the next line, sometimes by splitting at word boundaries (spaces).



**REF:** For a comprehensive list of commonly used infrastructure- and security-related terms and definitions, please visit the ISS Glossary Web page at the following Web address:

<http://vaww.vista.med.va.gov/iss/glossary.asp>

For a comprehensive list of acronyms, please visit the ISS Acronyms Web site at the following Web address:

<http://vaww.vista.med.va.gov/iss/acronyms/index.asp>



## 13.0 Appendix A—Help Frames

This appendix contains the Help Frames available with MailMan Version 8.0.

The following Help Frame prefix naming conventions are used in MailMan V. 8.0 (listed alphabetically):

Help Frame Prefix	Description
XM-I	IRM-related Help Frames
XM-I-C	Communicate
XM-I-D	Disk
XM-I-N	Network
XM-I-S-	Site Parameters
XM-U-	User-related Help Frames
XM-U-A-	Address-related Help Frames.
XM-U-B-	Basket-related Help Frames.
XM-U-BO-	Basket Options-related Help Frames
XM-U-H-	Help Option-related Help Frames.
XM-U-H-Q	Frequently Asked Questions-related Help Frames.
XM-U-I-	Information-related Help Frames.
XM-U-K-	KIDS/PackMan-related Help Frames.
XM-U-M-	Message-related Help Frames.
XM-U-MO-	Message Options-related Help Frames.
XM-U-NEW-	New features in MailMan Version 8.0-related Help Frames
XM-U-P-	Personal Preferences-related Help Frames.
XM-U-Q-	Query/Searching/Lookup-related Help Frames.
XM-U-R-	Reading and Managing Mail-related Help Frames (including New Mail).

**Table A-1. MailMan help frame prefixes**

The following Help Frames are distributed with MailMan Version 8.0 (listed alphabetically):

Help Frame Name	Help Frame Title
XMHELP	USING MAILMAN
XMHELP-MANUAL	THE ONLINE MAILMAN USER GUIDE
XM-I-C-TALKMAN	TALKMAN
XM-I-C-TALKMAN CAPTURE	CAPTURING A TALKMAN SESSION
XM-I-C-TALKMAN END	ENDING A TALKMAN SESSION
XM-I-D-RECOVER MSGS	RECOVER MESSAGES FOR A USER
XM-I-D-RECOVER MSGS-FIND	RECOVER MESSAGES FOR A USER - FIND THEM
XM-I-D-RECOVER MSGS-LIST	RECOVER MESSAGES FOR A USER - LIST THEM

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-I-D-RECOVER MSGS-PUT	RECOVER MESSAGES FOR A USER - PUT IN USER'S MAILBOX
XM-I-N-BULLETINS	BULLETINS SIGNALING TROUBLE IN NETWORK TRANSMISSION
XM-I-N-DOMAIN FILE	DOMAIN FILE
XM-I-N-DOMAIN FILE-ADDRESSING	DOMAIN FILE FIELDS INVOLVED IN ADDRESSING
XM-I-N-DOMAIN FILE-CONNECT	DOMAIN FILE FIELDS USED TO CONNECT TO A SITE
XM-I-N-DOMAIN FILE-CONNECT-2	DOMAIN FILE FIELDS USED TO CONNECT TO A SITE (CONTINUED)
XM-I-N-DOMAIN FILE-FLAGS	DOMAIN FILE - FLAGS FIELD
XM-I-N-DOMAIN FILE-SESSION	DOMAIN FILE FIELDS USED WHILE TRANSMITTING
XM-I-N-DOMAIN FILE-TURN	DOMAIN FILE - DISABLE TURN COMMAND FIELD
XM-I-N-DOMAIN FILE-VALIDATE	DOMAIN FILE - VALIDATION NUMBER FIELD
XM-I-NEW FEATURES	NEW FEATURES FOR SITE MANAGERS
XM-I-N-NETWORK	NETWORK OVERVIEW
XM-I-N-XMIT PLAY	TRANSMIT - PLAY A SCRIPT
XM-I-N-XMIT POLL	POLL A SITE
XM-I-N-XMIT QUEUES	TRANSMIT QUEUES
XM-I-N-XMIT SCHEDULE TASK	TRANSMIT - SCHEDULE A TASK
XM-I-N-XMIT TAPE	TRANSMIT VIA TAPE
XM-I-N-XMIT TASK	TRANSMIT TASK
XM-I-N-XMIT TASK-2	TRANSMIT TASK (CONTINUED)
XM-I-N-XMIT UCI	TRANSMIT BETWEEN UCI'S VIA A GLOBAL
XM-I-S-BIG GROUP SIZE	BIG GROUP SIZE FIELD
XM-I-S-MAX DIGITS FOR MSG NUM	MAX DIGITS FOR MESSAGE NUMBER FD
XM-I-S-MESSAGE LINE LIMIT	P-MESSAGE LINE LIMIT FIELD
XM-I-S-SITE PARAMETERS	MAILMAN SITE PARAMETERS FILE
XM-I-S-SITE PARAMETERS-DISK	SITE PARAMETERS AFFECTING DISK SPACE MANAGEMENT
XM-I-S-SITE PARAMETERS-ID	SITE PARAMETERS AFFECTING THE SITE
XM-I-S-SITE PARAMETERS-LOCAL	SITE PARAMETERS AFFECTING LOCAL MESSAGES
XM-I-S-SITE PARAMETERS-REMOTE	SITE PARAMETERS AFFECTING REMOTE MESSAGING
XM-I-S-SITE PARAMETERS-USER	SITE PARAMETERS AFFECTING USERS
XM-I-S-SITE PARAMETERS-USER-2	SITE PARAMETERS AFFECTING USERS (CONTINUED)
XM-MASTER	VA ELECTRONIC MAIL SYSTEM
XMNET-BLOB-HARDWARE	BLOBs (Binary Large Objects) Message
XMNET-BLOB-NETWORK	Sending and Receiving BLOBs across a Network
XMNET-FTP-COMPONENTS	Basic components in setting up the Multimedia MailMan
XMNET-FTP-REC-NETWORK-LOCATION	FTP Receive Network Location
XMNET-MULTIMEDIA	HOW MULTIMEDIA MAILMAN WORKS
XMNET-MULTIMEDIA-HARDWARE	The relationships of Multimedia hardware
XMNET-MULTIMEDIA-OVERVIEW	Multimedia Technical Overview
XM-U-A-ADDRESS	SENDING A MESSAGE - ADDRESSING

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-A-CC	ADDRESSING A RECIPIENT AS 'CARBON COPY'
XM-U-A-GROUP LARGE	ADDRESSING MAIL TO LARGE MAIL GROUPS
XM-U-A-GROUP LARGE-2	ADDRESSING MAIL TO LARGE MAIL GROUPS (CONTINUED)
XM-U-A-INFO ONLY	ADDRESSING A RECIPIENT AS INFORMATION ONLY
XM-U-A-LOCAL USER NAME	ENTERING A LOCAL USER'S NAME IN MAILMAN
XM-U-A-LOCAL USER NAME-2	ENTERING A LOCAL USER'S NAME (CONTINUED)
XM-U-A-STAGGER DELIVERY	STAGGER DELIVERY OF A MESSAGE
XM-U-A-STAGGER DELIVERY-2	STAGGER DELIVERY OF A MESSAGE (CONTINUED)
XM-U-B-BASKET CONTENTS LIST	DIRECTORY OF BASKETS
XM-U-B-BASKET NAME	NAMING BASKETS
XM-U-B-BASKET NAME CHANGE	CHANGE A MAIL BASKET NAME
XM-U-B-BASKET SELECT	RESPONDING TO THE 'MAIL BASKET' PROMPT
XM-U-B-CHANGE DETAIL	CHANGE DETAIL
XM-U-B-FILTER	FILTERING MESSAGES - BASKET ACTION
XM-U-B-NAVIGATE CLASSIC	READING A MESSAGE AND NAVIGATING IN THE CLASSIC READER
XM-U-B-NAVIGATE FULL SCREEN	READING A MESSAGE AND NAVIGATING IN THE FULL SCREEN READER
XM-U-B-NEW MAIL LIST	LIST OF NEW MESSAGES IN A BASKET
XM-U-BO-CLASSIC	CLASSIC READER BASKET MESSAGE ACTIONS
XM-U-BO-CLASSIC-2	CLASSIC READER BASKET MESSAGE ACTIONS (CONTINUED)
XM-U-BO-FULL SCREEN	FULL SCREEN READER BASKET MESSAGE ACTIONS
XM-U-BO-FULL SCREEN LIST	FULL SCREEN READER MESSAGE LIST ACTIONS
XM-U-BO-FULL SCREEN-2	FULL SCREEN READER BASKET MESSAGE ACTIONS (CONTINUED)
XM-U-B-OPPOSITE TOGGLE	OPPOSITE SELECTION TOGGLE
XM-U-B-READER	MAILMAN MESSAGE READERS
XM-U-B-READER CLASSIC	CLASSIC MESSAGE READER
XM-U-B-READER DETAILED	DETAILED MESSAGE INFORMATION
XM-U-B-READER DETAILED LIST	DETAILED INFORMATION DISPLAYED WITH MESSAGE LISTS
XM-U-B-READER DIFF	BASKET ACTION CODES
XM-U-B-READER DIFF-2	BASKET ACTION CODES (CONTINUED)
XM-U-B-READER DIFF-3	BASKET ACTION CODES (CONTINUED)
XM-U-B-READER FULL SCREEN	FULL SCREEN MESSAGE READER
XM-U-B-READER SUMMARY	SUMMARY MESSAGE INFORMATION
XM-U-B-RESEQUENCE MESSAGES	RESEQUENCING MESSAGE NUMBERS
XM-U-B-XMIT PRIORITY TOGGLE	TOGGLING MESSAGE TRANSMISSION PRIORITY
XM-U-B-XMIT PRIORITY TOGGLE-2	TOGGLING MESSAGE TRANSMISSION PRIORITY (CONTINUED)
XM-U-B-ZOOM TOGGLE	ZOOM SELECTION TOGGLE
XM-U-H-GROUP	MAIL GROUP INFORMATION
XM-U-H-GROUP-2	MAIL GROUP INFORMATION (CONTINUED)

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-H-GROUP-3	MAIL GROUP INFORMATION (CONTINUED)
XM-U-H-GROUP-4	MAIL GROUP INFORMATION (CONTINUED)
XM-U-H-Q DELETE	DELETED MESSAGES
XM-U-H-Q DISAPPEARED	'DISAPPEARED' MESSAGES WHICH HAVE NOT BEEN DELETED
XM-U-H-Q INTERRUPT	INTERRUPTED MESSAGES
XM-U-H-Q LOOKUP	LOOKING UP A MESSAGE TO BE READ
XM-U-H-Q RECALL	RECALLING OR EDITING A MESSAGE AFTER TRANSMISSION
XM-U-H-Q REMOVE	REMOVING A RECIPIENT FROM THE LIST
XM-U-H-Q REPLIES	REPLIES TO A MESSAGE FROM AN UNKNOWN RECIPIENT
XM-U-H-QUESTIONS	FREQUENTLY ASKED QUESTIONS ABOUT MAILMAN
XM-U-H-USER	USER INFORMATION
XM-U-I-EDITOR FM LINE	VA FILEMAN LINE EDITOR
XM-U-I-EDITOR FM SCREEN	VA FILEMAN SCREEN EDITOR
XM-U-I-GROUP	MAIL GROUPS
XM-U-I-GROUP COORDINATOR	MAILMAN MAIL GROUP COORDINATORS
XM-U-I-GROUP MEMBER	MEMBERS OF MAIL GROUPS
XM-U-I-GROUP-2	MAIL GROUPS (CONTINUED)
XM-U-I-SHARED MAIL	SHARED,MAIL - A LIBRARY OF MESSAGES
XM-U-I-SURROGATE	MAILMAN SURROGATES
XM-U-I-SURROGATE BECOME	BECOMING A SURROGATE
XM-U-I-SURROGATE-2	MAILMAN SURROGATES (CONTINUED)
XM-U-I-SURROGATE-3	MAILMAN SURROGATES (CONTINUED)
XM-U-I-SURROGATE-4	MAILMAN SURROGATES (CONTINUED)
XM-U-K-PACKMAN	PACKMAN - MOVING ROUTINES AND DATA IN MESSAGES
XM-U-K-PACKMAN COMPARE	COMPARE PACKMAN MESSAGE ROUTINES AGAINST THOSE INSTALLED NOW
XM-U-K-PACKMAN INSTALL	INSTALLING A PACKMAN MESSAGE
XM-U-K-PACKMAN LOAD GLOBALS	LOADING GLOBAL DATA INTO A PACKMAN MESSAGE
XM-U-K-PACKMAN LOAD PACKAGE	LOADING AN ENTIRE PACKAGE INTO A PACKMAN MESSAGE
XM-U-K-PACKMAN LOAD ROUTINES	LOADING ROUTINES INTO PACKMAN MESSAGES
XM-U-K-PACKMAN PRINT	PRINTING PACKMAN MESSAGES
XM-U-K-PACKMAN SUMMARIZE	SUMMARIZE PACKMAN MESSAGE
XM-U-M-ANSWER	ANSWERING A MESSAGE (INTERNET STYLE)
XM-U-M-BACKUP	BACKING UP THE MESSAGE DISPLAY
XM-U-M-BACKUP BEFORE SENDING	BACKUP A MESSAGE TO REVIEW BEFORE SENDING
XM-U-M-BROWSER	PRINTING TO THE BROWSER
XM-U-M-CHOOSE RANGE	SPECIFYING A LIST OR RANGE OF MESSAGES
XM-U-M-CHOOSE RESPONSES	SPECIFYING A LIST OR RANGE OF RESPONSES
XM-U-M-CHOOSE SELECT	SELECTING MESSAGES
XM-U-M-CHOOSE SELECT-2	SELECTING MESSAGES (CONTINUED)

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-M-CLOSED	CLOSED MESSAGES
XM-U-M-CONFIDENTIAL	MAKING A MESSAGE CONFIDENTIAL
XM-U-M-CONFIRM RECEIPT	REQUESTING CONFIRMATION BEFORE SENDING A MESSAGE
XM-U-M-COPY	COPYING A MESSAGE INTO A NEW MESSAGE
XM-U-M-COPY-2	RESPONSES TO THE COPY OPTION PROMPTS
XM-U-M-DELETE	DELETING MESSAGES
XM-U-M-DELETE-2	DELETING MESSAGES (CONTINUED)
XM-U-M-DELETE-3	DELETING MESSAGES (CONTINUED)
XM-U-M-DELIVERY BASKET SET	DELIVERY BASKET SET OPTION
XM-U-M-EDIT RECIPIENTS	EDIT RECIPIENTS
XM-U-M-EDIT SUBJECT	EDIT THE SUBJECT OF A MESSAGE
XM-U-M-EDIT TEXT	EDIT THE TEXT OF A MESSAGE
XM-U-M-FORWARD	FORWARDING MESSAGES
XM-U-M-FORWARD-2	FORWARDING MESSAGES (CONTINUED)
XM-U-M-INCLUDE MESSAGE	INCLUDING A MESSAGE
XM-U-M-INFO ONLY	MESSAGES MARKED AS INFORMATION ONLY
XM-U-M-LATER	MAKE MESSAGES NEW LATER
XM-U-M-LATER-2	MAKE MESSAGES NEW LATER (CONTINUED)
XM-U-M-LATER-3	MAKE MESSAGES NEW LATER (CONTINUED)
XM-U-M-LATERED MESSAGE CHANGE	CHANGE/DELETE LATERED MESSAGES
XM-U-M-LATERED MESSAGE REPORT	REPORT ON LATERED MESSAGES
XM-U-M-MESSAGE HEADER	WHAT APPEARS IN THE MESSAGE HEADER
XM-U-M-NETWORK SIGNATURE	ADD YOUR NETWORK SIGNATURE TO A MESSAGE
XM-U-M-NEW	FORCING A MESSAGE TO APPEAR AS NEW
XM-U-M-NEW-2	MAKE NEW MESSAGES NOT NEW AND VICE VERSA (CONTINUED)
XM-U-MO-EDIT	EDITING A MESSAGE
XM-U-MO-READ	READING A MESSAGE - OPTIONS
XM-U-MO-READ-2	READING A MESSAGE - OPTIONS (CONTINUED)
XM-U-MO-REPLY	REPLYING TO A MESSAGE - OPTIONS AT THE 'Transmit' PROMPT
XM-U-MO-SEND	SENDING A MESSAGE - OPTIONS AT THE 'Transmit' PROMPT
XM-U-MO-SEND-2	MORE MESSAGE OPTIONS
XM-U-M-PRINT	PRINTING MESSAGES
XM-U-M-PRINT DEVICE P-MESSAGE	P-MESSAGE DEVICE
XM-U-M-PRINT HEADER	IDENTIFYING YOUR MESSAGE PRINTOUT
XM-U-M-PRINT NO HEADER	HEADERLESS PRINTING
XM-U-M-PRINT NO HEADER-2	HEADERLESS PRINTING (CONTINUED)
XM-U-M-PRINT-2	PRINTING MESSAGES (CONTINUED)
XM-U-M-PRIORITY SEND	SENDING MESSAGES WITH A PRIORITY STATUS
XM-U-M-PRIORITY TOGGLE	PRIORITY REPLIES TOGGLE
XM-U-M-QUERY	QUERYING A MESSAGE FOR ITS STATUS

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-M-QUERY DETAILED	DETAILED QUERY ON A MESSAGE
XM-U-M-QUERY GENERAL	GENERAL QUERY ON A MESSAGE
XM-U-M-QUERY INFO BASIC	BASIC QUERY INFORMATION
XM-U-M-QUERY INFO LOCAL	LOCAL USER QUERY INFORMATION
XM-U-M-QUERY INFO REMOTE	REMOTE USER QUERY INFORMATION
XM-U-M-QUERY NETWORK	NETWORK QUERY ON A MESSAGE
XM-U-M-QUERY NETWORK-2	NETWORK QUERY ON A MESSAGE (CONTINUED)
XM-U-M-QUERY SPECIFIC	SPECIFIC QUERY ON A MESSAGE
XM-U-M-QUERY-2	QUERYING A MESSAGE FOR ITS STATUS (CONTINUED)
XM-U-M-REPLY	REPLYING TO A MESSAGE
XM-U-M-REPLY INCLUDE	INCLUDE PREVIOUS RESPONSES IN YOUR REPLY
XM-U-M-REPLY-2	REPLYING TO A MESSAGE (CONTINUED)
XM-U-M-SAVE	SAVING MESSAGES
XM-U-M-SCRAMBLE	SCRAMBLING A MESSAGE BEFORE SENDING
XM-U-M-SCRAMBLE HINT	RESPONDING TO 'Enter Scramble Hint'
XM-U-M-SCRAMBLE PASSWORD	RESPONDING TO 'Enter Scramble Password'
XM-U-M-SEND	USING THE 'Send a message' OPTION
XM-U-M-TERMINATE	TERMINATING MESSAGES
XM-U-M-TERMINATE-2	TERMINATING MESSAGES (CONTINUED)
XM-U-M-TRANSMIT LATER	SEND A MESSAGE LATER (DEFER)
XM-U-M-TRANSMIT NOW	SEND A MESSAGE NOW ('Transmit Now')
XM-U-M-VAPORIZE DATE EDIT	VAPORIZE MESSAGE WITH AUTOMATIC DELETION DATE
XM-U-M-VAPORIZE DATE EDIT-2	VAPORIZE DATES (CONTINUED)
XM-U-M-VAPORIZE DATE SEND	SET A VAPORIZE DATE WHEN SENDING A MESSAGE
XM-U-M-WRITE	SENDING A NEW MESSAGE INSTEAD OF A REPLY
XM-U-M-WRITE-2	SENDING A NEW MESSAGE INSTEAD OF A REPLY (CONTINUED)
XM-U-NEW FEATURES	NEW FEATURES AND FUNCTIONALITY
XM-U-P-ASK BASKET	THE 'ASK BASKET' PROMPT
XM-U-P-BANNER	THE MAILMAN BANNER
XM-U-P-DELIVERY BASKET PRIV	DELIVERY BASKET PRIVILEGES
XM-U-P-EDITOR	PREFERRED EDITOR
XM-U-P-FILTER	FILTERING MAIL
XM-U-P-FILTER ACTIONS	FILTERING MAIL ACTIONS
XM-U-P-FILTER CRITERIA	FILTERING MAIL CRITERIA
XM-U-P-FILTER CRITERIA-2	FILTERING MAIL CRITERIA (CONTINUED)
XM-U-P-FILTER ORDER	FILTERING MAIL - ORDER FIELD
XM-U-P-FILTER-2	FILTERING MAIL (CONTINUED)
XM-U-P-FILTER-3	FILTERING MAIL (CONTINUED)
XM-U-P-FORWARDING ADDRESS	HOW TO USE THE FORWARDING ADDRESS
XM-U-P-GROUP ENROLL	PUBLIC MAIL GROUPS
XM-U-P-GROUP ENROLL-2	PUBLIC MAIL GROUPS (CONTINUED)

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-P-GROUP PERSONAL	PERSONAL MAIL GROUPS
XM-U-P-GROUP PERSONAL-2	PERSONAL MAIL GROUPS (CONTINUED)
XM-U-P-INSTITUTION	MAILMAN INSTITUTION
XM-U-P-INTRODUCTION	INTRODUCING YOURSELF IN MAILMAN
XM-U-P-MESSAGE ACTION DEFAULT	MESSAGE ACTION DEFAULT
XM-U-P-MESSAGE ORDER	MESSAGE LIST ORDER
XM-U-P-NETWORK SIGNATURE	NETWORK SIGNATURE
XM-U-P-NEW MESSAGES OPTION	NEW MESSAGES DEFAULT OPTION
XM-U-P-NEW MESSAGES READ ORDER	NEW MESSAGES READ ORDER
XM-U-P-OFFICE INFO	CONTACT INFORMATION
XM-U-P-OPTIONS	PERSONAL PREFERENCES
XM-U-P-OPTIONS-2	PERSONAL PREFERENCES (CONTINUED)
XM-U-P-OPTIONS-3	PERSONAL PREFERENCES (CONTINUED)
XM-U-P-OPTIONS-4	PERSONAL PREFERENCES (CONTINUED)
XM-U-P-PERSONAL PREFERENCES	PERSONAL PREFERENCES MENU
XM-U-P-P-MESSAGE FROM	P-MESSAGE FROM
XM-U-P-PRIORITY FLAG	PRIORITY RESPONSES FLAG
XM-U-P-PRIORITY PROMPT	PRIORITY RESPONSES PROMPT
XM-U-P-PRIORITY PROMPT-2	PRIORITY RESPONSES PROMPT (CONTINUED)
XM-U-P-READ NEW MSGS BSKT	READ NEW MESSAGES BASKET PRIORITY
XM-U-P-READER DEFAULT	DEFAULT MESSAGE READER
XM-U-P-READER PROMPT	MESSAGE READER PROMPT
XM-U-P-SHOW MESSAGE PREVIEW	SHOW MESSAGE PREVIEW
XM-U-P-SHOW TITLES	SHOW TITLES
XM-U-P-SURROGATE EDIT	SURROGATES - DESIGNATING SURROGATES
XM-U-P-SURROGATE READ PRIV	SURROGATES - READ PRIVILEGES
XM-U-P-SURROGATE WRITE PRIV	SURROGATES - WRITE PRIVILEGES
XM-U-Q-CLASSIC LOOKUP ?	LOOKING FOR MESSAGES WHOSE SUBJECT CONTAINS A SPECIFIC STRING
XM-U-Q-CLASSIC LOOKUP ??	LOOKING FOR MESSAGES WHOSE SUBJECT BEGINS WITH A SPECIFIC STRING
XM-U-Q-REMOTE USER NAME	ENTERING A REMOTE USER'S NAME WHEN FILTERING OR SEARCHING MAIL
XM-U-Q-SEARCH	SEARCHING FOR MESSAGES
XM-U-Q-SEARCH CRITERIA	SEARCHING FOR MESSAGES - SEARCH CRITERIA
XM-U-Q-SEARCH CRITERIA DATE	SEARCH CRITERIA - DATE SENT
XM-U-Q-SEARCH CRITERIA TEXT	SEARCH CRITERIA - TEXT CONTENTS
XM-U-Q-SEARCH CRITERIA USERS	SEARCH CRITERIA - SENDERS AND ADDRESSEES
XM-U-Q-SEARCH CRITERIA-2	SEARCH CRITERIA (CONTINUED)
XM-U-Q-SEARCH MAILBOX	SEARCHING FOR MESSAGES - SEARCHING YOUR MAILBOX
XM-U-Q-SEARCH SYSTEM	SEARCHING FOR MESSAGES - ANYWHERE ON THE SYSTEM
XM-U-R-NEW LIST ALL	LIST ALL NEW MESSAGES

<b>Help Frame Name</b>	<b>Help Frame Title</b>
XM-U-R-NEW LIST BASKETS	LIST BASKETS WITH NEW MAIL
XM-U-R-NEW LIST PRIORITY	LIST ALL PRIORITY MESSAGES
XM-U-R-NEW PRINT	PRINT ALL NEW MESSAGES
XM-U-R-NEW READ	READ NEW MAIL BY BASKET
XM-U-R-NEW SCAN	SCAN ALL NEW MESSAGES
XM-U-R-READ	READING AND MANAGING YOUR MAIL
XM-U-R-READ NEW	PROCESSING NEW MAIL
XM-U-R-READ NEW-2	PROCESSING NEW MAIL (CONTINUED)
XM-U-R-READ-2	READING AND MANAGING YOUR MAIL (CONTINUED)
XM-U-R-READ-3	READING AND MANAGING YOUR MAIL (CONTINUED)

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