

VA FILEMAN INSTALLATION GUIDE

Version 22.0 March 1999

Department of Veterans Affairs V/STA Software Development Infrastructure Product Line

Table of Contents

Introduction1
Preliminary Considerations1
Changes in the MUMPS OPERATING SYSTEM File
Review Global Translation/Replication/Journaling
Installation for Sites Running Kernel5
Advance Preparation5
Begin the Installation5
 Log onto the System
Integrated Billing, and HL76
Pre-Install TaskMan Procedures6
Inhibit Logons in VAH for Each Volume Set7
DSM Sites Running Routine Mapping: Disable Routine Mapping for
Library and Production Accounts7
Delete Old VA FileMan Routines (VAH)
Read the Routines into Production (VAH)
• Run the Integrity Routine (VAH)
DSM and MSM Sites: Move Routines into the Manager Account
Caché/OpenM sites: Save Routines as % Routines9
Review Global Translation/Replication/Journaling in MGR 10
• Initialize VA FileMan in the Production Account
• Load the VA FileMan V. 22.0 Distribution (VAH) 12
• Install the VA FileMan 22.0 Package (VAH) 12
• DSM Sites Running Routine Mapping: Map Routines in the Manager and
Production Accounts
Other Central Processing Units 13
• Enable Logons in VAH
Post-Install TaskMan Procedures14

•	In VAH: Start all Background Filers that You Previously Stopped	15
Stand-al	one VA FileMan Installation	17
•	Delete Old VA FileMan Routines in the Production Account	17
•	Load Routines in the Production Account	17
•	Move Routines into the Manager Account	18
•	Run the Routine Integrity Checker	18
•	Run DINZMGR in the Manager Account	19
•	Rename Routines and Set ^%ZOSF Nodes Without DINZMGR in the	
	Manager Account	20
•	Customize %ZIS and %ZISS Routines, Manually Set ^%ZOSF Nodes	20
•	Run DINIT in the Production Account—Initializing VA FileMan	21

Introduction

This guide provides instructions for installing Department of Veterans Affairs (VA) FileMan V. 22.0. VA FileMan is designed to be used either with the Kernel or as a stand-alone application running under a variety of implementations of American National Standards Institute (ANSI) M. Installation instructions are provided for sites running Kernel and for stand-alone sites. VA FileMan V. 22.0 is not integrated with the installation of Kernel. Refer to Kernel's Installation Guide for instructions on installing Kernel.

VA FileMan V. 22.0 uses features that are in the 1995 M Standard. Proceed with this installation only if you are running an M operating system that supports the 1995 M Standard.

VA FileMan consists of approximately 780 M routines; along with the necessary globals, they occupy approximately 3.5 megabytes of disk storage space. These routines, as they are run, set up all the M globals that VA FileMan will require.

Preliminary Considerations

Steps required to perform the installation are listed below. Instructions for performing these functions are provided in vendor-supplied operating system manuals as well as **V***IST***A** publications. DSM for OpenVMS instructions are provided in the Decentralized Hospital Computer Program (DHCP) VAX DSM Systems Guide; and MSM-DOS instructions are provided in the 486 Cookbook and Micronetics Standard MUMPS (MSM) System Managers Guide. Sites running ALPHA systems require knowledge of DSM. Caché/OpenM instructions are provided in the Caché System Manager Guide.

You will need to know how to:

- Log onto the system.
- Shut down and bring up the M configuration or boot the system.
- Restore routines from the distribution medium to your disk drive.
- Enable/disable routine mapping and translate/implicit/replicate globals.
- Run a system status and terminate a process.

- Copy routines: using diskettes, tapes, or Host File System (VMS, NT) files (DSM, Caché).
- Back up the system; enable/disable journaling.
- Switch User Class Identification (UCI) or Namespace between Manager (MGR or %SYS) and Production (VAH).

Changes in the MUMPS OPERATING SYSTEM File

Beginning with Version 21.0, VA FileMan no longer supports the following operating systems:

CCSM DATA GENERAL DSM(V3 & V4) HARRIS LMS-1(IBM SERIES 1) M/11 M/SQL-PDP MICROMUMPS (UC DAVIS) TANDEM UNIX MUMPS(PLUS 5) VAX DSM(V3) VAX DSM(V4 & V5) VISTA(AOS)

VA FileMan will <u>not</u> run properly under these operating systems since they do <u>not</u> support the 1995 M Standard.

NOTE: If you are running under any of these operating systems, you *SHOULD NOT* proceed with the installation of VA FileMan V. 22.0. After updating to an M operating system that supports the 1995 M Standard environment, kill ^DD("OS") in order to proceed with the installation.

In VA FileMan V. 21.0 the VAX DSM(V6) entry was renamed to DSM for OpenVMS and the entry M/SQL-VAX was deleted.

In VA FileMan V. 22.0, the M/SQL operating system is no longer supported. The M/SQL entry in the MUMPS OPERATING SYSTEM file (#.7) is renamed CACHE/OpenM. Caché/OpenM sites should select this entry.

Review Global Translation/Replication/Journaling

An outline of a possible scheme for the management of VA FileMan globals is presented below. You will be able to determine the ideal scheme for your site by using RTHIST or other utilities for monitoring global usage after installation. MSM sites running Kernel should refer to the 486 Cookbook for recommendations concerning global placement, replication, translation, and journaling. Caché/OpenM sites should refer to the site guide for Caché. All other sites should refer to the recommendations that follow:

TRANSLATION

Highly Recommended:	^DDA, ^DIA, ^DIBT, ^DIC, ^DIZ
REPLICATION (MSM only)	
Recommended:	^DD, ^DI, ^DIAR, ^DIE, ^DIPT, ^DIST, ^DMSQ, ^DOPT
JOURNALING	
Recommended:	^DD, ^DI, ^DIBT, ^DIC, ^DIE, ^DIPT, ^DIST, ^DIZ
Do NOT Journal:	^DISV

Introduction

Installation for Sites Running Kernel

VA FileMan V. 22.0 requires a pre-existing Kernel V. 8.0.

NOTE: In the instructions that follow, **VAH** refers to the Production account, and **MGR** refers to the Library or Manager account.

Advance Preparation

• Back up your system as a safeguard before the installation.

Begin the Installation

<u>NOTE</u>: If you are running on any of the following operating systems:

CCSM DATA GENERAL DSM(V3 & V4) HARRIS LMS-1(IBM SERIES 1) M/11 M/SQL-PDP MICROMUMPS (UC DAVIS) TANDEM UNIX MUMPS(PLUS 5) VAX DSM(V3) VAX DSM(V4 & V5) VISTA(AOS)

Do not proceed with the installation. These operating systems do not support the 1995 M Standard and will not run VA FileMan V. 22.0 properly.

Be sure to run the inits in the Production account where TaskMan resides, not in the Manager account.

• Log onto the System:

DSM sites: For speed, log onto the boot node.

All other sites: Log onto the Production account.

• In VAH: Stop All Background Filers, such as those for MailMan, OE/RR, Integrated Billing, and HL7

For example, to stop the MailMan background filer, do the following:

>D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT320
Select OPTION NAME: XMMGR-STOP-BACKGROUND-FILER
 STOP background filer (XMAD)
STOP background filer (XMAD)

Since there is no menu option to shut down the OE/RR background filer (routine ORTSK), this job will need to be stopped via the appropriate M operating system utility.

Pre-Install TaskMan Procedures

MSM, Caché/OpenM & DSM sites running routine mapping: Shut down TaskMan. Make sure you shut down active submanagers.

```
>D STOP^ZTMKU
```

Are you sure you want to stop TaskMan? NO// $\mathbf Y$ Shutting down TaskMan.

Should active submanagers shut down after finishing their current tasks? $\ensuremath{\mathbf{Y}}$ Okay!

DSM sites <u>not</u> running routine mapping: Place TaskMan in a WAIT state. Make sure you shut down active submanagers. If any jobs are currently running you may want to wait until they complete or you should terminate them prior to proceeding with the installation.

>D ^XUP

Setting up programmer environment Terminal Type set to: C-VT320 Select OPTION NAME: EVE <RET> Systems Manager Menu Select Systems Manager Menu Option: TASK Manager Select Task Manager Option: TASKman Management Utilities Select Taskman Management Utilities Option: PLACE Taskman in a WAIT State TaskMan now in 'WAIT STATE' Should active submanagers shut down after finishing their current tasks? Y Okay!

• Inhibit Logons in VAH for Each Volume Set

Or you may use the operating system (OS) command to prevent logons. Using the OS command will not cause a problem and will allow you to work within the menu system as needed during the installation. Caché/OpenM sites can stop the LAT and TELNET services.

Use VA FileMan to edit the VOLUME SET file (#14.5).

>D Q^DI VA FileMan 21.0 Select OPTION: ENTER OR EDIT FILE ENTRIES INPUT TO WHAT FILE: VOLUME SET// <RET> EDIT WHICH FIELD: ALL// INHIBIT LOGONS ? THEN EDIT FIELD: <RET> Select VOLUME SET: VAH INHIBIT LOGONS?: NO// YES

• DSM Sites Running Routine Mapping: Disable Routine Mapping for Library and Production Accounts

DSM sites: >D ^RMAP

• Delete Old VA FileMan Routines (VAH)

It is recommended that you delete the old VA FileMan routines just before loading in the new ones to ensure that the only routines in FileMan's namespace are those coming in with V. 22.0.

>D ^%ZTRDEL

ROUTINE DELETE
routine(s) ? > DI*
searching directory ...
routine(s) ? > -DIZ* (or 'DIZ* for Caché/OpenM sites)
routine(s) ? > DD*
searching directory ...
routine(s) ? > -DDZ* (or 'DDZ* for Caché/OpenM sites)
routine(s) ? > DM*
routine(s) ? > -DMZ* (or 'DMZ* for Caché/OpenM sites)
routine(s) ? > -DMZ* (or 'DMZ* for Caché/OpenM sites)
routine(s) ? >

• Read the Routines into Production (VAH)

Use your M system's routine loading utility to load the VA FileMan V. 22.0 routines from the distribution file (FM22_0.RTN).

DSM sites: >D ^%RR MSM sites: >D ^%RR Caché/OpenM sites: >D ^%RI or load the routines from the GUI system utilities

NOTE: If your M system checks the syntax of routines as they are loaded, you may see messages indicating that some DINV* routines have syntax errors. These messages can be ignored. The DINV* routines are for stand-alone VA FileMan sites and contain M operating system-specific code.

• Run the Integrity Routine (VAH)

Run DINTEG to check the integrity of the routines you have loaded. DINTEG detects any discrepancies between your copy of VA FileMan and the one distributed by the developers.

>D ^DINTEG

• DSM and MSM Sites: Move Routines into the Manager Account

Caché/OpenM sites can skip this step and go to the next bullet item.

Some of VA FileMan's routines must reside in the Manager (Library) account on your system.

1. In VAH, move routines to a Host file.

DSM sites: >D ^%RS MSM sites: >D ^%RS DIDT DIDTC DIRCR

2. In MGR, delete DIDT, DIDTC, and DIRCR. (These are routines from the previous version of VA FileMan.) Restore routines saved in Step 1 above.

Restore DIDT a	as	% D T
Restore DIDTC a	as	%DTC
Restore DIRCR a	as	%RCR
DSM sites: >d ^%rf	ર	(Use SELECTED restore.)
MSM sites: >D ^%RE	R	(Use SELECTIVE restore.)

Caché/OpenM sites: Save Routines as % Routines

>ZL DIDT ZS %DT >ZL DIDTC ZS %DTC >ZL DIRCR ZS %RCR • Review Global Translation/Replication/Journaling in MGR

Caché/OpenM sites can skip this step.

See the recommended scheme in the "Review Global Translation /Replication/ Journaling" section in the beginning of this guide.

 $\mathbf{MSM}\ \mathrm{sites:}\ \mathtt{>d}\ \mathtt{^translat}$

• Initialize VA FileMan in the Production Account

Return to VAH and run the DINIT routine.

>D ^DINIT

The following is an example of the initialization process done at the San Francisco CIO Field Office:

```
>D ^DINIT
VA FileMan V.22.0
Initialize VA FileMan now? NO// Y
SITE NAME: KDEMO// <RET>
SITE NUMBER: 16// <RET>.....
Now loading MUMPS Operating System File ...
Now loading DIALOG and LANGUAGE Files
TYPE OF MUMPS SYSTEM YOU ARE USING: DSM for OpenVMS// ?
Answer with MUMPS OPERATING SYSTEM NAME
Choose from:
  CACHE/OpenM
  DSM for OpenVMS
  DTM-PC
  GT.M(VAX)
  MSM
  OTHER
TYPE OF MUMPS SYSTEM YOU ARE USING: DSM for OpenVMS// <RET>
Now loading other FileMan files--please wait.....
```

The follow:	ing files have been installed:
.11	INDEX
.2	DESTINATION
.31	KEY
.4	PRINT TEMPLATE
.401	SORT TEMPLATE
.402	INPUT TEMPLATE
.403	FORM
.404	BLOCK
.44	FOREIGN FORMAT
.5	FUNCTION
.6	DD AUDIT
.7	MUMPS OPERATING SYSTEM
.81	DATA TYPE
.83	COMPILED ROUTINE
.84	DIALOG
.85	LANGUAGE
1	FILE
1.1	AUDIT
1.11	ARCHIVAL ACTIVITY
1.12	FILEGRAM HISTORY
1.13	FILEGRAM ERROR LOG
1.2	ALTERNATE EDITOR
1.521	SQLI_SCHEMA
1.52101	SQLI_KEY_WORD
1.5211	SQLI_DATA_TYPE
1.5212	SQLI_DOMAIN
1.5213	SQLI_KEY_FORMAT
1.5214	SQLI_OUTPUT_FORMAT
1.5215	SQLI_TABLE
1.5216	SQLI_TABLE_ELEMENT
1.5217	SQLI_COLUMN
1.5218	SQLI_PRIMARY_KEY
1.5219	SQLI_FOREIGN_KEY
1.52191	SQLI_ERROR_TEXT
1.52192	SQLI_ERROR_LOG
Re-indexing	g entries in the DIALOG file
Compiling a	all forms

DICATT	(#.001)
DIPTED	(#.1001)
DIKC EDIT	(#.1101)
DIKC EDIT UI	(#.1102)
DIKK EDIT	(#.3101)
DIBTED	(#.40001)
DIETED	(#.40101)
DIEDIT	(#.40201)
DDGF BLOCK EDIT	(#.40301)
DDGF PAGE ADD	(#.40302)
DDGF PAGE EDIT	(#.40303)
DDGF PAGE SELECT	(#.40304)
DDGF FORM EDIT	(#.40305)
DDGF HEADER BLOCK EDIT	(#.40306)
DDGF FIELD ADD	(#.40401)

. .

DDGF	FIELD CA	APTION ON	LY		(#.40402
DDGF	FIELD DI)			(#.40403
DDGF	FIELD FO	ORM ONLY			(#.40404
DDGF	FIELD CO	MPUTED			(#.40405
DDGF	BLOCK AI	DD			(#.40406
DDGF	BLOCK DE	CLETE			(#.40407
DDGF	HEADER E	BLOCK SEL	ECT		(#.40408
DDXP	FF FORM1	_			(#.441)
DDMP	SPECIFY	IMPORT			(#.461)
•					
INITIAL] >	ZATION (COMPLETED	IN	200	SECONDS.

• Load the VA FileMan V. 22.0 Distribution (VAH)

You must now do a KIDS install to bring in the Options, Security Keys, and Remote Procedures used by VA FileMan.

1. Use the ^XUP and Q^DI entry points to set your DUZ and set DUZ(0) to "@".

>D [^] XUP	(To set DUZ when responding to the Access Code prompt. Press return at the OPTION prompt.
>D Q^DI	(To set DUZ(0)="@")

2. Invoke the ^XPDKRN menu and select the LOAD A DISTRIBUTION option. Enter the appropriate Host file name to load the VA FileMan V. 22.0 distribution file (FM22 0.KID).

>D ^XPDKRN

Select KIDS OPTION: LOAD A DISTRIBUTION

• Install the VA FileMan 22.0 Package (VAH)

Invoke the ^XPDKRN menu again and select the INSTALL PACKAGE(S) option. Select VA FILEMAN 22.0 as the package you want to install.

>D ^XPDKRN

Select KIDS OPTION: INSTALL PACKAGE(S) Select INSTALL NAME: VA FILEMAN 22.0

Answer "NO" to "Want to DISABLE Scheduled Options, Menu Options, and Protocols?"

(Menu trees are rebuilt automatically at the end of this KIDS installation).

• DSM Sites Running Routine Mapping: Map Routines in the Manager and Production Accounts

In MGR, map:

%DT, %DTC, %RCR

In **VAH**, map the following:

DDBR*, DDIOL, DDS, DDS0*, DDS1*, DDSCOM, DDSR*, DDSU, DDW4, DDW5, DDW6, DDWT1, DIAC, DIALOG*, DIC, DIC0, DIC1*, DIC2, DIC3, DICA, DICA1, DICA2, DICA3, DICD, DICF*, DICL*, DICM*, DICN*, DICQ*, DICR, DICRW, DICU*, DIE, DIE0, DIE1, DIE2, DIE3, DIE9, DIE17, DIED, DIEF*, DIEH*, DIEQ*, DIEV*, DIK, DIK1, DIKC, DIKC1, DIKC2, DIKCU, DIKCU1, DIKCU2, DIL*, DIO*, DIP, DIP0, DIP1*, DIP2, DIP21, DIP22, DIP3*, DIP4, DIP5, DIQG, DIQGQ, DIQGU*, DIW*, DIR0, DIR01, DIR, DIR1, DIR2, DIR3, DIRQ

(**Do NOT map:** DIEZ*, DIKZ*, DIOZ*, DIPZ*, DISZ*, DIFRO*)

>D ^RMAP

Bring the system down and then reboot or restart the configuration. This step will activate the new set of mapped routines.

• Other Central Processing Units

MSM: Review the steps taken on the first CPU and repeat those that apply, e.g., clear the old VA FileMan routines.

In VAH, load the VA FileMan V. 22.0 routines on this CPU, as you did on the first CPU. Move DIDT, DIDTC, and DIRCR to MGR as on the first CPU.

In MGR, restore the three routines as % routines. See previous section, "**DSM and MSM Sites: Move Routines into the Manager Account**," Steps 1 and 2.

• Enable Logons in VAH

Use VA FileMan to edit the Inhibit Logon field in the VOLUME SET file (#14.5) for each volume set. This will allow TaskMan to start tasks.

>D Q^DI
VA FileMan 22.0
Select OPTION: ENTER OR EDIT FILE ENTRIES
INPUT TO WHAT FILE: VOLUME SET
EDIT WHICH FIELD: ALL// INHIBIT LOGONS ?
THEN EDIT FIELD: <RET>
Select VOLUME SET: VAH
INHIBIT LOGONS?: YES// NO

Post-Install TaskMan Procedures

MSM, Caché/OpenM, & DSM sites running routine mapping: TaskMan should have started when you rebooted or restarted the system. If TaskMan is not running, start TaskMan.

>D ^ZTMB

DSM sites <u>not</u> running routine mapping: Remove TaskMan from WAIT state.

>D ^XUP

Setting up programmer environment Terminal Type set to: C-VT320 Select OPTION NAME: **EVE <RET>** Systems Manager Menu Select Systems Manager Menu Option: **TASK** Manager Select Task Manager Option: **TASK**man Management Utilities Select Taskman Management Utilities Option: **REMOVE** Taskman from WAIT State Done!

• In VAH: Start all Background Filers that You Previously Stopped

For example, if the MailMan background filer, the XMAD0 routine, is not running, start it by invoking the START Background Filer option.

>D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT320
Select OPTION NAME: XMMGR-START-BACKGROUND-FILER
 START background filer (XMAD)
START background filer (XMAD)

**** You have now completed the installation of VA FileMan. ****

Sites Running Kernel

Stand-alone VA FileMan Installation

The following instructions apply to installation of stand-alone VA FileMan (i.e., without Kernel).

NOTE: The VA configuration maps the %Z*, %DT*, %RCR, and %XUCI routines back to the Production (VAH) account. Therefore, when the instructions indicate that a step should be performed in the Manager account, Caché/OpenM sites with this configuration can perform the step in the Production account.

• Delete Old VA FileMan Routines in the Production Account

It is recommended that you delete the old VA FileMan routines just before loading in the new ones to ensure that the only routines in FileMan's namespace are those coming in with V. 22.0. Use your M system routine deletion utility to delete the following routines:

> DD* DI* DM*

• Load Routines in the Production Account

Use your M system's routine loading utility to load the VA FileMan V. 22.0 routines from the distribution file (FM22_0.RTN) into your Production account (of course, if you want, you can initially load the routines into a test account and install there).

• Move Routines into the Manager Account

Caché and OpenM sites that map the %Z*, %DT*, and %RCR routines back to the Production account can skip this step.

Some of VA FileMan's routines must reside in the Manager (Library) account on your system. Using the utilities available with your M system, move the following routines to the Manager account:

DIDT		
DIDTC		
DIRCR		
DIIS		
DIISS		
DINZ*	(includes:	DINZDTM, DINZMGR, DINZMGR1, DINZMSM,
		DINZONT, DINZVXD)
DINV*	(includes:	DINV1DTM, DINV1VXD, DINVDTM, DINVMSM,
		DINVONT, DINVVXD)

• Run the Routine Integrity Checker

One group of the VA FileMan routines is called DINTEG*. DINTEG is important since it contains a list of all the routine names in VA FileMan along with a checksum value computed on the system that created your copy of VA FileMan. If your M system allows use of the ZLOAD command, you can run DINTEG (D ^DINTEG) to check the integrity of the routines you have loaded.

In your Production account:

D ^DINTEG

If DINTEG detects any discrepancy between the number of bits it thinks a routine should contain and the number in the routine on file, it will display a message, which will look something like this:

DI Calculated 385201, off by 194

Such messages indicate that your copy of VA FileMan is not identical to the one distributed by the developer. In this case, your most prudent course of action is to obtain a fresh copy of the routines.

Since DINTEG only checks routines, running it is optional.

• Run DINZMGR in the Manager Account

A routine has been provided to set up your Manager account, DINZMGR. You MUST run this routine in your Manager account; be sure to move there. Online help is provided to aid in running this routine. DINZMGR accomplishes two tasks:

- 1. Renames routines in the Manager account to a new name.
- 2. Sets ^%ZOSF global nodes that are used by the screen-oriented features of VA FileMan.

DINZMGR references M implementation-specific information contained in other DINZ* and DINV* routines. The versions of M currently supported by DINZMGR are:

CACHE/OpenM DSM for OpenVMS DTM-PC MSM

If you are using another version of M or if your version does not support the ZLOAD and ZSAVE commands, you cannot use DINZMGR. The next section describes how to accomplish DINZMGR's tasks manually.

Routines with the following names will be created in your Manager account by running DINZMGR:

%DT %DTC %RCR %ZIS %ZISS %ZOSV %ZOSV

In addition, DINZMGR will set nodes in the ^%ZOSF global. Note that on some M systems, executing some of these ^%ZOSF nodes also causes ^XUTL global nodes to be set in the Production account.

DINZMGR gives you the chance to select which actions it will perform. So, if you already have routines with these %-names or data in the ^%ZOSF global that you do not want overwritten, you can tell DINZMGR not to change them. Note, however, that if you choose not to replace the %- routines or the data in

^%ZOSF, parts of VA FileMan may not work correctly unless the existing % routines and data in ^%ZOSF provide the functionality required by FileMan.

If your M system supports global protection, the ^%ZOSF global should be able to be read from any account (UCI) that uses the Manager account. Write and Delete access should be limited.

• Rename Routines and Set ^%ZOSF Nodes Without DINZMGR in the Manager Account

If you do not use DINZMGR or do not use it completely, you **must** either rename the following routines or have another version of the resulting %-routines in your Manager account. Otherwise, VA FileMan will not work. Rename, using the commands available with your M implementation.

DIDT	rename to	%DT
DIDTC	rename to	%DTC
DIRCR	rename to	%RCR
DIIS	rename to	%ZIS

Also, in order to use VA FileMan's screen-oriented utilities, you should rename the following routine.

DIISS rename to %ZISS

You must also set executable M code into certain ^%ZOSF nodes in the Manager account. The specific nodes and what they should contain are described in the Device Handling section of the Package Management chapter of the Programmer Manual.

NOTE: The %ZOSV or %ZOSV1 routines are created by DINZMGR to support calls made by the ^%ZOSF nodes it creates. (Appropriate DINV* routines are renamed by DINZMGR.) If you are creating your own ^%ZOSF nodes, these routines are not needed.

Customize %ZIS and %ZISS Routines, Manually Set ^%ZOSF Nodes

If you are not using a VT100 terminal (or a terminal emulating a VT100), you will need to customize the %ZIS and %ZISS routines in the Manager account. The Package Management chapter in the Programmer Manual explains in detail how to change these routines. That chapter also describes how to manually set ^%ZOSF nodes required by VA FileMan's screen-oriented utilities.

• Run DINIT in the Production Account—Initializing VA FileMan

Finally, return to the Production account and run the DINIT routine. DINIT prompts you for a site name and number like this:

SITE NAME:

SITE NUMBER:

NOTE: The site number entered by the installer will be multiplied by 1000 to determine the beginning number of the default file number assignment, when using the Modify File Attributes option to add a new file.

After entering the site number, there will be a slight pause while VA FileMan installs the MUMPS OPERATING SYSTEM file (#.7), DIALOG file (#.84) and the LANGUAGE file (#.85). The installer will then be asked:

TYPE OF MUMPS SYSTEM YOU ARE USING:

Type a question mark ("?") at this point to see your choices. If you do not see your M operating system vendor listed, or you are unsure, enter OTHER in answer to this prompt.

Then the other VA FileMan files will be initialized.

The PACKAGE file (#9.4) will be initialized next. The PACKAGE file is necessary if you want to bundle an application package together for export using DIFROM. (In the Programmer Manual, see the DIFROM section of the Programmer Utilities chapter.) The PACKAGE file will not be updated if you have a File #9.4 with a name other than "PACKAGE."

DIFROM has not been updated and is no longer used by VA developers because it has been replaced by the Kernel Installation and Distribution System (KIDS). DIFROM does not support new VA FileMan V. 22.0 data dictionary structures and will not transport any keys and new-style indexes.

When the initialization has completed, you will see the statement:

INITIALIZATION COMPLETED IN nnnn SECONDS.

In your Production account:

>D ^DINIT VA FileMan V.22.0 Initialize VA FileMan now? NO// Y SITE NAME: KDEMO// <----- Enter your site name here SITE NUMBER: 16// <----- Enter your site number here Now loading MUMPS Operating System File .. Now loading DIALOG and LANGUAGE Files TYPE OF MUMPS SYSTEM YOU ARE USING: DSM for OpenVMS// ? Answer with MUMPS OPERATING SYSTEM NAME Choose from: CACHE/OpenM DSM for OpenVMS DTM-PC GT.M(VAX) MSM OTHER TYPE OF MUMPS SYSTEM YOU ARE USING: DSM for OpenVMS//<-----Enter Your **M** operating system here Now loading other FileMan files--please wait..... The following files have been installed: .11 INDEX .2 DESTINATION .31 KEY .4 PRINT TEMPLATE .401 SORT TEMPLATE .402 INPUT TEMPLATE .403 FORM .404 BLOCK .44 FOREIGN FORMAT .5 FUNCTION .6 DD AUDIT MUMPS OPERATING SYSTEM .7 .81 DATA TYPE .83 COMPILED ROUTINE .84 DIALOG .85 LANGUAGE 1 FILE 1.1 AUDIT 1.11 ARCHIVAL ACTIVITY FILEGRAM HISTORY 1.12 1.13 FILEGRAM ERROR LOG 1.2 ALTERNATE FULTOP 1.2 ALTERNATE EDITOR 1.521 SQLI_SCHEMA

1.52101 SQLI_KEY_WORD 1.5211 SQLI DATA TYPE 1.5212 SQLI_DOMAIN 1.5213 SQLI_KEY_FORMAT 1.5214 SQLI OUTPUT FORMAT 1.5215 SQLI_TABLE 1.5216 SQLI_TABLE_ELEMENT 1.5217 SQLI_COLUMN 1.5218 SQLI_PRIMARY_KEY 1.5219 SQLI_FOREIGN_KEY 1.5219 SQLI_FOREIGN_KE 1.52191 SQLI_ERROR_TEXT 1.52192 SQLI_ERROR_LOG Your Package file will now be updated. I AM GOING TO SET UP THE FOLLOWING FILES: 9.4 PACKAGE ...HMMM, I'M WORKING AS FAST AS I CAN..... OK, I'M DONE. NOTE THAT FILE SECURITY-CODE PROTECTION HAS BEEN MADE Re-indexing in the DIALOG file.... Compiling all forms ... • DICATT (#.001) (#.1001) DIPTED DIKC EDIT (#.1101) DIKC EDIT UI (#.1102) DIKK EDIT (#.3101)(#.40001)DIBTED (#.40101) DIETED

 DIEDIT
 (#.40201)

 DDGF BLOCK EDIT
 (#.40301)

 DDGF PAGE ADD
 (#.40302)

 DDGF PAGE EDIT
 (#.40303)

 DDGF PAGE SELECT
 (#.40304)

 DDGF FORM EDIT
 (#.40305)

 DDGF HEADER BLOCK EDIT
 (#.40306)

 DDGF FIELD ADD
 (#.40401)

 DIEDIT (#.40201)DDGF BLOCK EDIT DDGF PAGE ADD DDGF PAGE EDIT DDGF PAGE SELECT DDGF FORM EDIT

 DDGF FIELD ADD
 (#.40401)

 DDGF FIELD CAPTION ONLY
 (#.40402)

 DDGF FIELD DD
 (#.40403)

 DDGF FIELD FORM ONLY
 (#.40404)

 DDGF FIELD COMPUTED
 (#.40405)

 DDGF BLOCK ADD
 (#.40406)

 DDGF BLOCK DELETE
 (#.40407)

 DDGF HEADER BLOCK SELECT
 (#.40408)

 DDXP FF FORM1
 (#.441)

 DDXP FF FORM1 (#.441)DDMP SPECIFY IMPORT (#.461) .

INITIALIZATION COMPLETED IN 100 SECONDS.

>

VA FileMan is now ready to use.