



RESOURCE AND PATIENT MANAGEMENT SYSTEM

FileMan 22 / Kernel 8 Upgrade

Consolidated Release Notes and Install Guide

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Information Technology Support Center
Division of Information Resources
Albuquerque, New Mexico

PREFACE

This manual provides the information and tools needed to install the FileMan 22/ Kernel 8 Upgrade.

The Upgrade consists of the following packages/patches:

VA FileMan Version 22.0

IHS Patch DI*22.0*1001 to VA FileMan

IHS Patch XU*8.0*1007 to Kernel

IHS Patch XT*7.3*1001 to Kernel Toolkit

IHS Patch HL*1.6*1004 to Health Level Seven (HL7)

Special thanks to Dr. Mark Delaney for his contribution in making the IHS routines in this distribution Cache' and NT Windows compatible.

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1.0 Release Notes

1.1 Contents

This distribution contains the following packages and patches:

- VA FileMan V22.0 package
- IHS patch DI*22.0*1001 to VA FileMan which is a consolidation of VA FileMan patches DI*22*1 seq 1 through DI*22*89 seq 88. Patch DI*22.0*1001 also contains IHS modifications to VA FileMan
- IHS patch XU*8.0*1007 to Kernel which is a cumulative patch containing IHS Kernel patches 1001-1006 as well as a consolidation of VA Kernel patches XU*8*40 seq 30 through XU*8*226 SEQ #190. Patches seq 1 through 29 were included in the original VA release of Kernel V8.0. This patch also contains IHS modifications to Kernel. Patch XU*8.0*1007 also includes the following packages and patches:
 - o Remote Procedure Call (RPC) Broker V1.1 package
 - o RPC Broker V1.1 patches XWB*1.1*1 seq 1 through XWB*1.1*29 seq 24
 - o Capacity Management - RUM V1.0 package
 - o Capacity Management - RUM V1.0 patches KMPR*1*1 seq 1 through KMPR*1*2 seq 2
 - o Statistical Analysis of Global Growth (SAGG) Project V1.0 package
 - o SAGG Project V1.8 patch KMPS*1.8*1 seq 1
 - o A4A7 patches A4A7*1.01*9 seq 9 through A4A7*1.01*11 seq 11
 - o AVA patch AVA*93.2*15
- IHS patch XT*7.3*1001 to Kernel Toolkit which is a consolidation of VA Kernel Toolkit patches XT*7.3*1 seq 1 through XT*7.3*62 seq 48
- IHS patch HL*1.6*1004 to Health Level Seven (HL7) V1.6 which is a cumulative patch containing IHS HL7 patches 1-3 as well as a consolidation of VA HL7 patches HL*1.6*1 seq 1 through HL*1.6*87 seq 79

For a detailed list of the patches go to IHS website:
<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

Note: Due to the tight integration between VA FileMan, Kernel, Kernel Toolkit, and HL7, all of these distributions must be installed together.

1.2 IHS Modifications

This distribution contains IHS modifications to FileMan, Kernel, Toolkit and HL7 routines. A list of these modifications is contained in Appendix B: FileMan22/Kernel Upgrade IHS Local Modifications to FileMan/Kernel/Toolkit/ HL7 in file dixuinstallb.pdf.

1.3 New Features and Changes

1.3.1 VA FileMan

See the VA FileMan Release Notes V22.0 manual for new features introduced by VA FileMan Version 22.0.

FileMan Version 22.0 Documentation

A full set of the VA FileMan 22.0 documents can be found on the IHS website: <http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

The documents include:

- FM22_0GS.pdf Getting Started Manual
- FM22_0IG.pdf Install Guide
- FM22_0PM.pdf Programmer Manual
- FM22_0RN.pdf Release Notes
- FM22_0TM.pdf Technical Manual
- FM22_0UM.pdf User Manual

NEW APIs

Patch DI*22*12 introduces two new APIs:

- DELIX^DDMOD - used to delete a Traditional Cross-Reference definition from the data dictionary
- DELIXN^DDMOD - used to delete a New-Style Index definition from the Index file (#.11).

NEW "M" FLAG FOR %DT

Patch DI*22*14 introduces a new "M" flag for %DT. This flag allows input such as "0701", "07/01", "JUL 01", "01 JUL" to be interpreted as July 2001, instead of July 1st.

"^^" OUT

Patch DI*22*4 introduces new functionality where users can type ^^ to escape from DIC lookups where multiple indexes are involved. This will get them clear out of the lookup. Previously, users were able to enter a single "^" but this only took them out of the search through the current index. If there were many indexes being searched, the search could continue for a long time with no way to exit.

"?" HELP

Patch DI*22*4 introduces a new input variable DIC("?N",file#) where N can be set to the number of entries to display at any one time in question mark help in DIC lookups to prevent entries from scrolling off the screen.

New DIC, DQ^DICQ Call Variables

Various new variables are added to the DIC array to provide new functionality during lookups. For descriptions of these new variables, see patch DI*22*3 and the VA FileMan Programmers Manual change pages found at IHS website:
<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

Lookups in Pointed to Files

Introduced by patch DI*22*4. During lookups on files with either indexed pointer or variable pointer fields, FileMan does a lookup on the pointed to file, lookup for a match to the lookup value entered by the user. FileMan always looked on either the "B" index only on the pointed to file (if DIC(0) did not contain "M"), or else on all lookup indexes. A new input array to the interactive lookup for ^DIC or to the silent data base server lookup routine FIND^DIC, allows the developer to specify what indexes are to be used during lookup on a pointed to file.

The array for ^DIC looks like:

DIC("PTRX",from_file#,pointer_field#,to_file#)=list_of_indexes

For the Finder it looks like:

DINDEX(("PTRIX",from_file#,pointer_field#,to_file#)=list_of_indexes

For ^DIE it looks like:

DIE("PTRIX",from_file#,pointer_field#,to_file#)=list_of_indexes

Sorting

Previous to patch DI*22*2 FileMan sorts were limited to 7 levels. Patch DI*22*2 increases the maximum number of sort levels to 15.

1.3.2 Kernel

STRONG Verify Codes

This distribution contains Kernel patch XU*8*180 which implements "strong" verify codes. This means that verify codes must be at least 8 characters in length and must contain three of the following 4 kinds of characters:

- letters (uppercase and/or lowercase);
- numbers; and, characters that are neither letters or
- numbers such as "#", "@", "\$", etc.
- Examples: YRT689\$% 65ghY!@* \$%4qwZU78 oiwe55..?>

This implementation satisfies the NPABQ/ITSC Standard Operating Procedure 02-18 Password Management.

New Person Name Conversion

This distribution contains patch XU*8.0*134 which runs a conversion to standardize the names in the New Person file #200 and places the name components into the new Name Components file #20. The number of entries in your New Person file will affect the length of time it will take to for this conversion run.

New \$\$SENDTO1^%ZISH API

\$\$SENDTO1^%ZISH is a new API that can be used to send files to remote destinations. It works in conjunction with the new ZISH SEND PARAMETERS FILE. Parameters such as the target system address, username, password, etc., can be entered into this file. Then \$\$SENDTO1^%ZISH can be called to use those parameters.

Usage: S=\$\$SENDTO1^%ZISH(ZISH1,ZISH2)

Where: ZISH1 = the parameter name in the ZISH SEND PARAMETERS file
ZISH2 = the filename to be sent

TaskMan

Patch XU*8*136 adds 3 new fields to the TaskMan Site Parameters file:

- Balance Interval - to control how often the manager does the balance code.
- Auto Delete Tasks - to control if the submanager will set ZTREQ to "@" before the task starts to delete the entry from the %ZTSK global after the job completes.
- Manager Startup Delay - to control how long the manager waits when starting. This field is not used for a RESTART.

1.3.3 HL7

Updated HL7 Manuals

Many patches have been released since the original release of HL7 V1.6 and the HL7 standard itself has evolved over the past few years. This release provides a complete refresh of the User and Developer Manuals for the VISTA HL7 package. The new manual is 'VISTA HL7 Site Manager & Developer Manual'. The new VISTA HL7 Site Manager & Developer Manual brings the package's documentation up to date with those changes.

This completely revised manual supersedes the following existing manuals that are obsolete and should be discarded:

- DHCP HL7 V1.6 User Manual
- DHCP HL7 V1.6*19 User Manual: TCP/IP Supplement
- DHCP HL7 V1.6 Developer Manual
- DHCP HL7 V1.6*14 Developer Manual: Dynamic Addressing Supplement

This manual can be obtained from the IHS website:

<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

HL7/LAB Interface

This distribution contains IHS modifications for the HL7/Lab interface. If you are using the HL7/Lab interface and are switching from a serial to a TCP connection, please reference document 'TCP/IP Lab Interface Setup Document' for instructions. This document is available on the IHS website:

<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

2.0 Installation Notes

Consolidated Install guide for FileMan22/Kernel 8 Upgrade including Kernel Toolkit and Health Level Seven (HL7).

Due to the tight integration between VA FileMan, Kernel, Kernel Toolkit and HL7, all of these distributions must be installed together. This install guide provides instructions for accomplishing the installation of all these packages at the same time.

Warning: Read entire notes file prior to attempting any installation.

- This install guide provides instructions for both MSM and Cache sites.
- It is estimated that this installation will take from 1 to 2 hours. This distribution runs a conversion to standardize the names in the New Person file #200. The number of entries in your New Person file will affect the length of time it will take to for this conversion to run.
- If this install should abort, please see Appendix A: Aborted FileMan 22/Kernel 8 Upgrade Recovery Procedures in file dixuinstalla.pdf.

2.1 General Information

- 1 Print and review all notes/readme files before beginning installation
- 2 This distribution contains the following packages and patches:
 - VA FileMan V22.0 package
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 - o Capacity Management - RUM V1.0 package

- o Capacity Management - RUM V1.0 patches KMPR*1*1 seq 1 through KMPR*1*2 seq 2
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 - o A4A7 patches A4A7*1.01*9 seq 9 through A4A7*1.01*11 seq 11
 - o AVA patch AVA*93.2*15
- IHS patch XT*7.3*1001 to Kernel Toolkit V7.3 which is a consolidation of VA Kernel Toolkit patches XT*7.3*1 seq 1 through XT*7.3*62 seq 48
 - IHS patch HL*1.6*1004 to Health Level Seven (HL7) V1.6 which is a cumulative patch containing IHS HL7 patches 1-3 as well as a consolidation of VA HL7 patches HL*1.6*1 seq 1 through HL*1.6*87 seq 79.

For a detailed list of the patches go to IHS website:
<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

- 3 IMPORTANT NOTE: This distribution contains Kernel patch XU*8*180 which implements "strong" verify codes. This means that verify codes must be at least 8 characters in length and must contain three of the following 4 kinds of characters: letters (uppercase and/or lowercase); numbers; and, characters that are neither letters or numbers such as "#", "@", "\$", etc. Examples: YRT689\$% 65ghY!@* \$%4qwZU78 oiwe55..?>
- 4 This distribution contains patch XU*8.0*134 which runs a conversion to standardize the names in the New Person file #200 and places the name components into the new Name Components file #20. The number of entries in your New Person file will affect the length of time it will take to for this conversion to run.
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VISTA HL7 Site Manager & Developer Manual brings the package's documentation up to date with those changes.

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- DHCP HL7 V1.6*19 User Manual: TCP/IP Supplement
- DHCP HL7 V1.6 Developer Manual
- DHCP HL7 V1.6*14 Developer Manual: Dynamic Addressing Supplement

This manual can be obtained from the IHS website:

<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

- 7 This distribution contains IHS local modifications to FileMan, Kernel, Toolkit and HL7 routines. A list of these modifications is contained in Appendix B: FileMan22/Kernel Upgrade IHS Local Modifications to FileMan/Kernel/Toolkit/HL7 in file dixuinstallb.pdf.
- 8 This distribution contains IHS modifications for the HL7/Lab interface. If you are using the HL7/Lab interface and are switching from a serial to a TCP connection, please reference document 'TCP/IP Lab Interface Setup Document' for instructions. This document is available on the IHS website:
<http://www.ihs.gov/cio/rpms/appselectdoc.cfm>

2.2 Contents of Distribution

dixuinstall.pdf*	IHS Installation file containing consolidated install guide and release notes for FileMan, Kernel, Toolkit, and HL7 packages and patches, including Appendix A: Aborted FileMan 22/Kernel 8 Upgrade Recovery Procedures and Appendix B: FileMan 22/Kernel 8 Upgrade IHS Local Modifications to FileMan/Kernel/Toolkit/HL7.
FM22_0.RTN	VA File containing FileMan V22.0 routines, from VA
FM22_0.KID	VA FileMan V22.0 KIDS distribution file, from VA
di_220i.pdf	VA FileMan V22.0 Install Guide, from VA
di_2200.1001k	IHS FileMan patch DI*22.0*1001 KIDS distribution file
di_2200.1001n	IHS FileMan patch DI*22.0*1001 Install Notes file
di_2200.1001n1	IHS FileMan patch DI*22.0*1001 Install Notes Appendix A
di_2200.1001o.pdf	IHS FileMan patch DI*22.0*1001 Patch Notes
xu_0800o.pdf	IHS consolidated patch notes for Kernel upgrade, including notes for RPC Broker patches XWB*1.1*1 seq 1 through XWB*1.1*29, Capacity Management patches KMPR*1*1 seq 1 through KMPR*1*2 seq 2, SAGG Prokect patch KMPS*1.8* seq 1, A4A7 patches a4A7*1.01*9 seq 9 through A4A7*1.01*11 seq 11. and AVA patch AVA*93.2*15.

xu__0800.1007k	IHS Kernel patch XU*8.0*1007 KIDS distribution file
xu__0800.1007r	IHS Kernel patch XU*8.0*1007 routine file containing routines to move to MGR UCI
xu__0800.1007r1	IHS Kernel patch XU*8.0*1007 routine file containing routines to install first
xu__0800.1007s	IHS Kernel patch XU*8.0*1007 UNIX script file
xu__0800.1007n	IHS Kernel patch XU*8.0*1007 Install Notes file
xu__0800.1007n1	IHS Kernel patch XU*8.0*1007 Install Notes Appendix A, setting up VA Browser and P-Message
xu__0800.1007n2	IHS Kernel patch XU*8.0*1007 Install Notes Appendix B, setting up Slave printer
xu__0800.1007n3	IHS Kernel patch XU*8.0*1007 Install Notes Appendix C, example of load and install
xt__0730.1001o.pdf	IHS Kernel Toolkit patch notes
xt__0730.1001k	IHS Kernel Toolkit patch XT*7.3*1001 KIDS distribution file
xt__0730.1001n	IHS Kernel Toolkit patch XT*7.3*1001 Install Notes file
xt__0730.1001n1	IHS Kernel Toolkit patch XT*7.3*1001 Install Notes Appendix A
hl__0160.1004o.pdf	IHS HL7 patch notes
hl__0160.1004k	IHS HL7 patch HL*1.6*1004 KIDS distribution file
hl__0160.1004n	IHS HL7 patch HL*1.6*1004 Install Notes file
hl__0160.1004n1	IHS HL7 patch HL*1.6*1004 Notes file Appendix A, sample load/install process

*File dixuinstall.pdf is a consolidation of install notes files:

di__220i.pdf (VA FileMan V22.0 Install Guide)
di__2200.1001n (IHS FileMan patch DI*22.0*1001 Install Notes file)
xu__0800.1007n (IHS Kernel patch XU*8.0*1007 Install Notes file)
xt__0730.1001n (IHS Kernel Toolkit patch XT*7.3*1001 Install Notes file)
hl__0160.1004n (IHS HL7 patch HL*1.6*1004 Install Notes file)

You may choose to use either the consolidated install notes file or each individual notes file when installing this distribution.

2.3 Required RPMS Resources (Minimum Software)

Package	Minimum Version
VA Kernel	8.0
VA FileMan	21.0
Kernel Toolkit	7.3
Health Level Seven (HL7)	1.6

2.4 Other Requirements

If you are running the following packages, then the listed patch or version should be installed to ensure compatibility with FileMan Version 22. These do not have to be installed before the FileMan22/Kernel 8 Upgrade and will not affect installation of the Upgrade. These patches may be installed either before or immediately after installing the FileMan22/Kernel 8 Upgrade.

Package	Minimum Version/Patch
PCC Data Entry:	Patch APCD*2.0*6
IHS Dictionaries (Patient):	Patch AUPN*99.1*8
IHS Dictionaries (Pointers):	Patch AUT*98.1*12
Mental Health/Social Services:	Version 3.0
QMan:	Patch AMQQ*2*17
RCIS - Referred Care Info System:	Version 2.0
CHR - Community Health Record:	Patch BCH*1*14
Third Party Billing:	Patch ABM*2.5*2
AR - Accounts Receivable:	Patch BAR*1.6*2
AICD - IHS ICD/CPT Lookup & Grouper:	Patch AICD*3.51*6
AVA - IHS package of VA File:	Patch AVA*93.2*14

3.0 Installation

1. Before beginning this installation, be sure you have a viable complete system backup.
2. On an AIX or UNIX system you **MUST** be signed in with ROOT access for this installation.
3. It is recommended that you use a terminal that has true VT-100 emulation during this installation (NOT THE CONSOLE ON A RISC MACHINE SINCE IT IS AN IBM 3151). The video display on a terminal which is NOT emulating a VT-100, will not display properly using KIDS (Kernel Installation and Distribution System).
4. If you choose to load this patch remotely (not sitting close to the CPU), then **FIRST** make sure you have an UNTIED terminal (one that is not tied to the ZU command), from which to do the installation. The reason for this is, when you disable user logins, you won't accidentally lock yourself out of the database.
5. It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This will assure a printed audit trail if any problems arise.
6. Get users off the system
7. **IMPORTANT!** Before beginning this installation, check the Package file for duplicate VA FILEMAN entries. If a duplicate is found then one must be deleted. It is recommended that the entry with the lowest version number be deleted. For example, if there is an entry for VA FILEMAN Version 18 and one for VA FILEMAN Version 21, the entry for VA FILEMAN Version 18 should be deleted.
8. If you are running a modified version of the ZU Kernel sign-on routine, you should save a backup copy of this routine for future reference.
9. Stop all background jobs and filers such as those for MailMan, Lab, Pharmacy, HL7, etc., that may be running

Review the system status to determine which background jobs and filers are running and use the appropriate utilities or options to stop them. For example:

- To stop the MailMan filer use option 'Stop Background Filer (XMAD)'
- To stop the TCP Listener use option 'BGU Stop Listener'
- To stop the Lab to PCC transaction Processor use option 'Stop/restart Lab to PCC Transaction Processor'

10. If you are using the HL7 package complete these steps:

- a. Use option 'Purge Message Text File Entries' to remove old HL7 messages. (Depending on your HL7 patch level, the purge option may be named 'Purge Messages [HL PURGE TRANSMISSIONS])

Suggested answers:

Note: Depending on your HL7 patch level, these prompts may not appear exactly in this order

```
Enter cutoff date for all messages REGARDLESS OF STATUS: T-28
Enter last INCLUSIVE date for status SUCCESSFULLY TRANSMITTED: T-2
Purge entries with an ERROR STATUS? YES
Cutoff date for AWAITING ACKNOWLEDGEMENT status: T-7
Would you like to queue this purge? YES// NO
```

Figure 3-1: Suggested answers

- b. Make sure all HL7 messages have been transmitted. Run the option 'Systems Link Monitor' and make sure 'messages to send' is equal to 'messages sent' for all Logical Links.
- c. Create new global ^HLS for HL7. This will be the storage location for HL7 file 774 SUBSCRIPTION CONTROL.

11. Inhibit logins. Failure to inhibit logins will result in numerous warning messages as several of the FileMan patches are installed.

```
>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 <--- Enter your production volume set
INHIBIT LOGONS?: NO// YES
```

Figure 3-2: Inhibiting logins

12. Shut down TaskMan

```
>D STOP^ZTMKU

Are you sure you want to stop TaskMan? NO// YES
Shutting down TaskMan.

Should active submanagers shut down after finishing their
current tasks? YES
Okay!
```

Figure 3-3: Shutting down TaskMan

13. Disable journaling in the installation UCI (Cache sites skip this step)**In Manager UCI:**

```

>D ^UCIEDIT

Select volume group <0>: DHC <--- ENTER YOURS

Enter name of UCI: PRD <--- ENTER YOURS

Enter map number for global data expansion area <0:70>: 0:70

Global Data Expansion Limit <NONE>: NONE

Enter map number for global pointer expansion area <0:70>: 0:70

Global Pointer Expansion Limit <NONE>: NONE

Enter map number for routine expansion area <0:70>: 0:70

Routine Expansion Limit <NONE>: NONE
Journal entire UCI <YES>: NO <--- ENTER NO TO DISABLE
                                JOURNALING

Password <>:
Library UCI <1>:

Switch back to Production UCI

```

*Figure 3-4: Disabling journaling***In production UCI:**

```
>S ^HLS=""
```

*Figure 3-5: Creating a new global***14. Kill the transport global****In production UCI:**

```
>K ^XTMP("XPDI")
```

*Figure 3-6: Killing the transport global***15. Delete old FileMan routines****In MSM:**

```

>D ^%RDEL

                MSM - Routine Delete Utility
                04-DEC-02  9:00 AM

Routine selector: DI*

544 routines Selected

```

```

Routine selector: -DIZ*

  0 routines Deselected
Routine selector: DD*
  135 routines Selected
Routine selector: -DDZ*
  0 routines Deselected
Routine selector: DM*
  17 routines Selected
Routine selector: -DMZ*
  0 routines Deselected
Screen ROUTINES by date last edited? NO//
Delete Selected Routines? <N> Y

Deleting ...

```

Figure 3-7: Deleting old FM routines in MSM

In Cache:

```

>D ^%RDELETE

Delete routines/INCLUDE files.
WARNING: When <rtn>.MAC.0 is deleted, the latest backup is
        moved to <rtn>.MAC.0, UNCOMPILED.

Routine(s): DI*.*
Routine(s): 'DIZ*
Routine(s): DD*.*
Routine(s): 'DDZ*
Routine(s): DM*.*
Routine(s): 'DMZ*
Routine(s):

Output on
Device:      Right margin: 80=>

                Delete Selected Routines/Include Files
                04 Dec 2002 11:06 AM

                Namespace: TAO

DDBR.INT      DDBR0.INT      DDBR1.INT ...

```

Figure 3-8: Deleting old FM routines in Cache

16. Read the routines into the production UCI.

In MSM:

```

D ^%RR

MSM - Routine Restore Utility

Enter input device <HFS>:   Host File Server
File Name >: FM22_0.RTN
Routine(s) saved at Saved by %RS from [VCC,FMA] on 30-MAR-1999
13:22:13.59
Header comment is: VA FileMan V. 22.0 - Routines
Selective restore? (allows rename) <N>: NO
Restoring...

DDBR      DDBR0      DDBR1      DDBR2      DDBR3      DDBR4      ...

776 Routines restored.

```

Figure 3-9: Reading the routines into the production UCI using MSM

In Cache:

```

>D ^%RI

Input routines from Sequential
Device: c:\inetpub\ftproot\FM22_0.RTN   Parameters: "R"=>
%RI has detected a routine written with DSM-VMS mode.
0) Cache
1) DSM-11
2) DTM
3) Ipsum
4) Cobra
5) DSM-VMS
6) DSM-J
7) DTM-J
8) MSM

To change the language mode please enter a number from the
above list: <0>  <--- MAKE SURE THIS IS 0 (ZERO)

File written by DSM-OpenVMS %RS on
with extension INT and with description:
VA FileMan V. 22.0 - Routines

( All Select Enter List Quit )

Routine Input Option: ALL Routines

If a selected routine has the same name as one already on file,
shall it replace the one on file? No => Yes
Recompile? Yes => Yes
Display Syntax Errors? Yes => No

^ indicates routines which will replace those now on file.
@ indicates routines which have been [re]compiled.
- indicates routines which have not been filed.

|NOTE: During the routine input process you may see several
|'Error 1013: Incorrect number of arguments' messages for

```

```
|some 'non-Cache' routines.  This is OK.

DDBR.INT@      DDBR0.INT@      DDBR1.INT@  ...

776 routines processed.
```

Figure 3-10: Read the routines into the production UCI in Cache

17. Run the integrity routine >D ^DINTEG

18. Rename the DIDT, DIDTC and DIRCR routines their % names and in MSM move them to the MGR UCI.

- DIDT to %DT
- DIDTC to %DTC
- DIRCR to %DIRCR

IN MSM:

```
>D ^%RCOPY

                MSM - Routine Copy Utility
                02-JAN-03 11:08 AM

Routine selector: DIDT

    1 routine Selected

Routine selector: DIDTC

    1 routine Selected

Routine selector: DIRCR

    1 routine Selected

Routine selector:

Copy to UCI: MGR
Selective copy (allows rename) <N>: YES

Routine: DIDT      Copy (Y/N/R) <N>? Rename to: %DT
Routine: DIDTC     Copy (Y/N/R) <N>? Rename to: %DTC
Routine: DIRCR     Copy (Y/N/R) <N>? Rename to: %RCR

    ***  DONE  ***
```

Figure 3-11: Read the routines into the production UCI using MSM

In Cache:

```
>ZL DIDT ZS %DT
>ZL DIDTC ZS %DTC
>ZL DIRCR ZS %RCR
```

Figure 3-12: Read the routines into the production UCI using Cache

19. Initialize VA FileMan in the production account

```

D ^DINIT

VA FileMan V.22.0

Initialize VA FileMan now?  NO//Y

SITE NAME: DULCE HL.CTR// <--- YOURS WILL DISPLAY

SITE NUMBER: 1202//..<--- YOURS WILL DISPLAY.....

Now loading MUMPS Operating System File....

Now loading DIALOG and LANGUAGE      Files.....

TYPE OF MUMPS SYSTEM YOU ARE USING: MSM// <--- (Cache/OpenM if
                                              you are a Cache
                                              site)

Now loading other FileMan files--please  wait.....

The following files have been installed:
.11      INDEX
.2       DESTINATION
.31      KEY
...

Re-indexing entries in the DIALOG file....

Compiling all forms ...

DICATT                                     (#.001)
DIPTED                                     (#.1001)
DIKC EDIT                                (#.1101)
...

INITIALIZATION COMPLETED IN 11 SECONDS.

```

*Figure 3-13: Initializing VA FileMan in the production account***20. Use XPDKRN to load the VA FileMan V22.0 distribution**

```

>D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: 1  LOAD A DISTRIBUTION
Enter a Host File: FM22_0.KID

KIDS Distribution saved on Mar 30, 1999@13:22:57
Comment: VA FileMan V. 22.0 - KIDS Build: Options, Security
Keys, Remote Procedures

```

```

This Distribution contains Transport Globals for the following
Package(s):
VA FILEMAN 22.0

Distribution OK!

Want to Continue with Load? YES//
Loading Distribution...

Want to RUN the Environment Check Routine? YES// YES

VA FILEMAN 22.0
Use INSTALL NAME: VA FILEMAN 22.0 to install this Distribution.

```

Figure 3-14: Using XPDKRN to load the VA FileMan V22.0 distribution

21. Use XPDKRN to install the VA FileMan 22.0 package

```

>D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: 2  INSTALL PACKAGE(S)
Select INSTALL NAME: VA FILEMAN 22.0      Loaded from

Answer NO to 'Want KIDS to Rebuild Menu Trees Upon Completion
of Install?' prompt

```

Figure 3-15: Using XPDKRN to install the VA FileMan 22.0 package

22. D ^XPDKRN to enter the KIDS menu to load the DI*22.0*1001 distribution. Select option 1 to load the distribution

```

>D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 1  LOAD A DISTRIBUTION
Enter a Host File: di__2200.1001k
(be sure to include the path of the directory where you placed
the distribution file)

At this point the load process begins.

|NOTE:  If you are a Cache or any other site who may
|have previously installed FileMan 22 or any of the
|FileMan22/Kernel/Toolkit/HL7 patches, you may receive

```

```
| messages similar to the following (Answer YES):  
| Build DI*22.0*32 has been loaded before, here is when:  
|   DI*22.0*32   Install Completed  
|               was loaded on May 30, 2002@18:28:21  
| Want to continue with Load? NO// YES   <--- Answer YES
```

Want to RUN the Environment Check Routine? YES// YES

Figure 3-16: Entering the KIDS menu to load DI*22.0*1001

(See Appendix A in file di__2200.1001n1 for a sample of the entire load and install process)

When the load is completed run routine EN2^XPDDP to print and review components of this distribution.

23. D ^XPKRN again to enter the KIDS menu to install the DI*22.0*1001 distribution. Select option 2 to install the distribution.

```
[PRD,DHC]>D ^XPKRN

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 2  INSTALL PACKAGE(S)
Select INSTALL NAME: DI*22.0*1001
```

Figure 3-17: Entering the KIDS menu to load DI*22.0*1001

At this point, the install process begins.

- Answer NO to 'Want to DISABLE Scheduled Options, Menu Options, and Protocols' prompt.
- Answer NO to 'Want to MOVE routines to other CPUs' prompt.
- (See Appendix A in file di_2200.1001n1 for a sample install session.)

After installation is complete, run routine EN1^XPDDI to print and review the installation process for this patch as well as all patches listed under 1b above.

24. Rename the DIDT, DIDTC and DIRCR routines to their % names and in MSM move them to the MGR UCI

- DIDT to %DT

- DIDTC to %DTC
- DIRCR to %RCR

In MSM:

```
>D ^%RCOPY

      MSM - Routine Copy Utility
      02-JAN-03 11:08 AM

Routine selector: DIDT

  1 routine Selected

Routine selector: DIDTC

  1 routine Selected

Routine selector: DIRCR

  1 routine Selected

Routine selector:

Copy to UCI: MGR
Selective copy (allows rename) <N>: YES

Routine: DIDT      Copy (Y/N/R) <N>? Rename to: %DT
Routine: DIDTC     Copy (Y/N/R) <N>? Rename to: %DTC
Routine: DIRCR     Copy (Y/N/R) <N>? Rename to: %RCR

*** DONE ***
```

Figure 3-18: Renaming the DIDT, DIDTC and DIRCR routines in MSM

In Cache:

```
ZL DIDT ZS %DT
ZL DIDTC ZS %DTC
ZL DIRCR ZS %RCR
```

Figure 3-19: Renaming the DIDT, DIDTC and DIRCR routines in Cache

25. Restore the routines contained in file xu__0800.1007r1**In MSM:**

```
>D ^%RR

      MSM - Routine Restore Utility

Enter input device <HFS>:  Host File Server
File Name >: xu__0800.1007r1
Routine(s) saved at 12:18 PM  4-DEC-02
Header comment is: XPDIJ* routines
```

```
Selective restore? (allows rename) <N>: NO
Restoring...
```

```
XPDIJ      XPDIJ1    XPDT
```

```
3 Routines restored.
```

Figure 3-20: Restoring the routines contained in file xu__0800.1007r1 using MSM

In Cache:

```
>D ^%RI
```

```
Input routines from Sequential
```

```
Device: c:\inetpub\ftproot\xu__0800.1007r1  Parameters: "R"=>
```

```
%RI has detected a routine written with DSM-VMS mode.
```

```
0) Cache
```

```
1) DSM-11
```

```
2) DTM
```

```
3) Ipsum
```

```
4) Cobra
```

```
5) DSM-VMS
```

```
6) DSM-J
```

```
7) DTM-J
```

```
8) MSM
```

```
To change the language mode please enter a number from the
above list: <0>  <--- MAKE SURE THIS IS 0 (ZERO)
```

```
File written by DSM-OpenVMS %RS on
with extension INT and with description:
XPDIJ* ROUTINES - Routines
```

```
( All Select Enter List Quit )
```

```
Routine Input Option: ALL Routines
```

```
If a selected routine has the same name as one already on file,
shall it replace the one on file? No => Yes
```

```
Recompile? Yes => Yes
```

```
Display Syntax Errors? Yes => No
```

```
^ indicates routines which will replace those now on file.
```

```
@ indicates routines which have been [re]compiled.
```

```
- indicates routines which have not been filed.
```

```
XPDIJ.INT@      XPDIJ1.INT@      XPDT.INT@
```

```
3 routines processed.
```

Figure 3-21: Restoring the routines contained in file xu__0800.1007r1 in Cache

26. D ^XPDKRN to enter the KIDS menu to load the XU*8.0*1007 distribution.

- Select option 1 to load the distribution

```
>D ^XPDKRN
```

```

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 1  LOAD A DISTRIBUTION
Enter a Host File: xu__0800.1007k
(be sure to include the path of the directory where you placed
the distribution file)

```

Figure 3-22: Using D ^XPDKRN to enter the KIDS menu to load the XU*8.0*1007 distribution part A

At this point, the load process begins.

Note: If you are a Cache or any other site who may have previously installed FileMan22 or any of the FileMan22/Kernel/Toolkit/HL7 patches, you may receive messages similar to the following (Answer YES):

Build XU*8.0*65 has been loaded before, here is when:

XU*8.0*65 Install Completed was loaded on May 30,
2002@18:28:21

Want to continue with Load? NO// YES <--- Answer YES

```
Want to RUN the Environment Check Routine? YES// YES
```

Figure 3-23: Using D ^XPDKRN to enter the KIDS menu to load the XU*8.0*1007 distribution part B

(See Appendix C in file xu__0800.1007n3 for a sample of the entire load/install process)

When the load is completed use option run routine EN2^XPDDP to print and review components of this distribution.

27. D ^XPDKRN again to enter the KIDS menu to install the XU*8.0*1007 distribution.

- Select option 2 to install the distribution.

```

>D ^XPDKRN

KIDS 8.0

```

```

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 2  INSTALL PACKAGE(S)
Select INSTALL NAME: XU*8.0*1007

```

Figure 3-24: Using D ^XPDKRN again to enter the KIDS menu to install the XU*8.0*1007 distribution

At this point, the install process begins. (See Appendix C in file xu__0800.1007n3 for a sample install session.)

- Answer YES to all 'Want my data merged with yours?' prompts.
- Answer YES to all 'Want my data to overwrite yours?' prompts.
- Enter a name at the 'Enter Coordinator for MailGroup 'XUMF SERVER' prompt
- Enter a name at the 'Enter Coordinator for MailGroup 'XUMF INSTITUTION' prompt
- Enter a name at the 'Enter Coordinator for MailGroup 'KMP-CAPMAN' prompt
- Enter a name at the 'Enter Coordinator for MailGroup 'KMPS-SAGG' prompt
- Enter your volume set at the 'Specify the Volume Set which will hold the ^XTMP global:' prompt
- Enter your production UCI at the 'Specify the UCI which will hold the ^XTMP global:' prompt
- Answer NO to all 'Want KIDS to Rebuild Menu Trees Upon Completion of Install?' prompts.

After installation is complete, run routine EN1^XPDDI to print and review the installation process for this patch as well as all patches listed under 1b above.

28. Restore the routines contained in file xu__0800.1007r into the MGR UCI. (Cache sites skip this step - these routines are already in your production account and don't need to be moved)

Switch to MGR UCI

```

>D ^%RR

MSM - Routine Restore Utility

Enter input device <HFS>:  Host File Server
File Name >: xu__0800.1007r

```

```

Routine(s) saved at 12:35 PM 2-JAN-03
Header comment is: PATCH XU*8.0*1007 FOR MGR UCI
Selective restore? (allows rename) <N>: NO
Restoring...

XUCIDTM  XUCIMSM  XUCIMSQ  XUCIONT  XUCIVXD  ZIS      ZIS1     ZIS2
ZIS3     ZIS4     ZIS4DTM  ZIS4MSM  ZIS4MSQ  ZIS40NT  ZIS4VXD  ZIS5
ZIS6     ZIS7     ZISC      ZISEDIT  ZISF      ZISFMSM  ZISFONT  ZISFVXD
ZISH      ZISHMNT  ZISHMSM  ZISHMSMD ZISHMSMU  ZISHMSU  ZISHONT  ZISHPW
ZISHUNT  ZISHVXD  ZISP      ZISPL    ZISPL1    ZISPL2    ZISS      ZISS1
ZISS2    ZISTCP   ZISTCPS  ZISUTL   ZISX      ZOSF      ZOSFMSM  ZOSFONT
ZOSFU414 ZOSFVXD  ZOSV1VXD ZOSV2VXD ZOSVDTM   ZOSVKRM   ZOSVKR0  ZOSVKRV
ZOSVKSD  ZOSVKSME ZOSVKSMS ZOSVKS0E ZOSVKS0S  ZOSVKSVE  ZOSVKSVS  ZOSVMNT
ZOSVMSM  ZOSVMSQ  ZOSVONT  ZOSVPC43 ZOSVVXD   ZTEDIT    ZTEDIT1  ZTEDIT2
ZTEDIT3  ZTEDIT4  ZTER      ZTER1    ZTLOAD    ZTLOAD1   ZTLOAD2  ZTLOAD3
ZTLOAD4  ZTLOAD5  ZTLOAD6  ZTLOAD7  ZTM        ZTM0      ZTM1     ZTM2
ZTM4     ZTM5     ZTM6     ZTMB     ZTMCHK    ZTMCHK1   ZTMDCL   ZTMGRSET
ZTMKU    ZTMON    ZTMON1   ZTMS     ZTMS0     ZTMS1     ZTMS2    ZTMS3
ZTMS4    ZTMS7

106 Routines restored.

```

Figure 3-25: Restoring the routines contained in file xu_0800.1007r

29. Run ^ZTMGRSET to rename the routines specific to your operating system (MSM sites must be in MGR UCI)

```

>D ^ZTMGRSET

ZTMGRSET Version 8.0 **1001,1002,1003,1004,1005,1007**
HELLO! I exist to assist you in correctly initializing the MGR
account or to update the current account.
I think you are using MSM for Windows NT
Which MUMPS system should I install?

1 = VAX DSM(V6), VAX DSM(V7)
2 = MSM-PC/PLUS, MSM for NT or UNIX
3 = OpenM for NT, Cache
4 = Datatree, DTM-PC, DT-MAX
5 = MVX, ISM VAX
6 = ISM (UNIX, Open VMS)
System: 2 <--- MSM SITES ENTER 2, CACHE SITES ENTER 3

I will now rename a group of routines specific to your
operating system.
- Use autostart to do ZTMB don't resave as STUSER.
Routine: ZOSVMSM (CACHE: ZOSVONT)      Loaded, Saved as %ZOSV
Routine: ZTBKCMSM                      Loaded, Saved as %ZTBKC1
Routine: ZIS4MSM (CACHE: ZISHONT)      Loaded, Saved as %ZIS4
Routine: ZISFMSM (CACHE: ZISFONT)      Loaded, Saved as %ZISF
Routine: ZISHMSM (CACHE: ZISHONT)      Loaded, Saved as %ZISH
Routine: XUCIMSM (CACHE: XUCIONT)      Loaded, Saved as %XUCI
Routine: ZISETMSM                      Loaded, Saved as ZISETUP
Routine: ZOSV2MSM                      Loaded, Saved as %ZOSV2
Routine: ZOSVKRM (CACHE: ZOSVKR0)      Loaded, Saved as %ZOSVKR
Routine: ZOSVKSME (CACHE: ZOSVKS0E)    Loaded, Saved as %ZOSVKSE
Routine: ZOSVKSMS (CACHE: ZOSVKS0S)    Loaded, Saved as %ZOSVKSS
Routine: ZOSVKSD (CACHE: ZOSVKSD)      Loaded, Saved as %ZOSVKSD

```

```

NAME OF MANAGER'S UIC VOLUME GROUP: MGR,DHC// <--- ENTER YOURS
PRODUCTION (SIGN-ON) UIC,VOLUME GROUP: PRD,DHC// <--- ENTER YOURS
NAME OF THIS VOLUME GROUP: DHC// <--- ENTER YOURS

```

ALL SET UP

Now to load routines common to all systems.

```

Routine: ZTLOAD          Loaded, Saved as %ZTLOAD
Routine: ZTLOAD1         Loaded, Saved as %ZTLOAD1
Routine: ZTLOAD2         Loaded, Saved as %ZTLOAD2
Routine: ZTLOAD3         Loaded, Saved as %ZTLOAD3
Routine: ZTLOAD4         Loaded, Saved as %ZTLOAD4
Routine: ZTLOAD5         Loaded, Saved as %ZTLOAD5
Routine: ZTLOAD6         Loaded, Saved as %ZTLOAD6
Routine: ZTLOAD7         Loaded, Saved as %ZTLOAD7
Routine: ZTM             Loaded, Saved as %ZTM
Routine: ZTM0            Loaded, Saved as %ZTM0
Routine: ZTM1            Loaded, Saved as %ZTM1
Routine: ZTM2            Loaded, Saved as %ZTM2
Routine: ZTM3            Loaded, Saved as %ZTM3
Routine: ZTM4            Loaded, Saved as %ZTM4
Routine: ZTM5            Loaded, Saved as %ZTM5
Routine: ZTM6            Loaded, Saved as %ZTM6
Routine: ZTMS            Loaded, Saved as %ZTMS
Routine: ZTMS0           Loaded, Saved as %ZTMS0
Routine: ZTMS1           Loaded, Saved as %ZTMS1
Routine: ZTMS2           Loaded, Saved as %ZTMS2
Routine: ZTMS3           Loaded, Saved as %ZTMS3
Routine: ZTMS4           Loaded, Saved as %ZTMS4
Routine: ZTMS7           Loaded, Saved as %ZTMS7
Routine: ZTMSH           Loaded, Saved as %ZTMSH
Routine: ZTER            Loaded, Saved as %ZTER
Routine: ZTER1           Loaded, Saved as %ZTER1
Routine: ZIS             Loaded, Saved as %ZIS
Routine: ZIS1            Loaded, Saved as %ZIS1
Routine: ZIS2            Loaded, Saved as %ZIS2
Routine: ZIS3            Loaded, Saved as %ZIS3
Routine: ZIS5            Loaded, Saved as %ZIS5
Routine: ZIS6            Loaded, Saved as %ZIS6
Routine: ZIS7            Loaded, Saved as %ZIS7
Routine: ZISC            Loaded, Saved as %ZISC
Routine: ZISP            Loaded, Saved as %ZISP
Routine: ZISS            Loaded, Saved as %ZISS
Routine: ZISS1           Loaded, Saved as %ZISS1
Routine: ZISS2           Loaded, Saved as %ZISS2
Routine: ZISTCP          Loaded, Saved as %ZISTCP
Routine: ZISUTL          Loaded, Saved as %ZISUTL
Routine: ZTPP            Loaded, Saved as %ZTPP
Routine: ZTP1            Loaded, Saved as %ZTP1
Routine: ZTPCH           Loaded, Saved as %ZTPCH
Routine: ZTRDEL          Loaded, Saved as %ZTRDEL
Routine: ZTMOVE          Loaded, Saved as %ZTMOVE
Installing ^%Z editor
Setting ^%ZIS('C')

```

```

Now, I will check your % globals.....
ALL DONE

```

Figure 3-26: Running ^ZTMGRSET to rename the routines specific to your operating system

- 30.** Run ^ZUSET to rename the correct ZU routine (MSM sites switch back to production UCI)

```
>D ^ZUSET

This routine will rename the correct routine to ZU for you.

Rename ZUMSM to ZU, OK? No//Y (WILL BE ZUONT FOR CACHE)

Routine ZUMSM was renamed to ZU
```

Figure 3-27: Running ^ZUSET to rename the correct ZU routine

- 31.** D ^XPDKRN to enter the KIDS menu to load the XT*7.3*1001 distribution.

- Select option 1 to load the distribution

```
D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 1  LOAD A DISTRIBUTION
Enter a Host File: xt__0730.1001k
(be sure to include the path of the directory where you placed
the distribution file)
```

Figure 3-28

At this point, the load process begins.

(See Appendix A in file xt__0730.1001n1 for a sample of the entire load and install process)

When the load is completed run routine EN2^XPDDP to print and review components of this distribution.

- 32.** D ^XPDKRN again to enter the KIDS menu to install the distribution. Select option 2 to install the distribution.

```
[PRD,DHC]>D ^XPDKRN

KIDS 8.0
```

```

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 2  INSTALL PACKAGE(S)
Select INSTALL NAME: XT*7.3*1001

```

Figure 3-29: Using D ^XPDKRN again to enter the KIDS menu to install the distribution. Select option 2 to install the distribution.

At this point, the install process begins.

- Answer NO to all 'Want KIDS to Rebuild Menu Trees Upon Completion of Install?' prompts.
- Answer NO to 'Want KIDS to INHIBIT LOGINS during the install?' prompt.

(See Appendix A in file xt__0730.1001n1 for a sample install session.)

After installation is complete, run routine EN1^XPDDI to print and review the installation process for this patch as well as all patches listed in 1b.

33. After installing this patch you need to move the following routines from your production account into your manager UCI: (Cache sites skip this step)
 - ZTEDIT2
 - ZTP1
 - ZTPP

In production UCI:

```

>D ^%RCOPY

          MSM - Routine Copy Utility
          08-JAN-03  3:01 PM

Routine selector: ZTEDIT2

    1 routine Selected

Routine selector: ZTP1

    1 routine Selected

Routine selector: ZTPP

    1 routine Selected

```

```

Routine selector:

Copy to UCI: MGR
Selective copy (allows rename) <N>: NO

Routine: ZTEDIT2
Routine: ZTP1
Routine: ZTPP

*** DONE ***

```

Figure 3-30: Moving the following routines from your production account into your manager UCI

34. Rename the ZTP1 and ZTPP routines to their % names:

(MSM sites switch to MGR UCI)

```

>ZL ZTP1 ZS %ZTP1
>ZL ZTPP ZS %ZTPP

```

35. Run ^ZTEDIT to build the fixed nodes into the %Z global:

(MSM sites must be in the MGR UCI)

```
D ^ZTEDIT
```

36. D ^XPDKRN to enter the KIDS menu to load the HL*1.6*1004 distribution.

MSM sites switch back to production UCI

Select option 1 to load the distribution

```

>D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(S)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 1  LOAD A DISTRIBUTION
Enter a Host File: hl__0160.1004k
(Be sure to include the path of the directory where you placed
the distribution file.)

```

Figure 3-31: Using D ^XPDKRN to enter the KIDS menu to load the HL*1.6*1004 distribution

At this point, the load process begins.

Note: If you are a Cache or any other site who may have previously installed FileMan 22 or any of the

FileMan22/Kernel/Toolkit/HL7 patches, you may receive messages similar to the following (Answer YES):

Build HL*1.6*32 has been loaded before, here is when:

HL*1.6*32 Install Completed was loaded on:
May 30, 2002@18:28:21

Want to continue with Load? NO// YES <--- Answer YES

Want to RUN the Environment Check Routine? YES// YES

Figure 3-32: D ^XPDKRN to enter the KIDS menu to load the HL*1.6*1004 distribution (continued)

(See Appendix A in file hl__0160.1004n1 for a sample of the entire load and install process.)

When the load is completed run routine EN2^XPDDP to print and review components of this distribution.

37. Use the KIDS option to install the distribution

```
>D ^XPDKRN

KIDS 8.0

Select KIDS OPTION: ?
Answer with KIDS OPTION NUMBER, or NAME
Choose from:
1          LOAD A DISTRIBUTION
2          INSTALL PACKAGE(S)
3          RESTART INSTALL OF PACKAGE(2)
4          UNLOAD A DISTRIBUTION
5          VERIFY CHECKSUMS IN TRANSPORT GLOBAL

Select KIDS OPTION: 2  INSTALL PACKAGE(S)
Select INSTALL NAME: HL*1.6*1004
```

Figure 3-33: Using the KIDS option to install the distribution

At this point, the install process begins.

- Answer YES to all 'Want my data merged with yours?' prompts
- Answer NO to all 'Want KIDS to Rebuild Menu Trees Upon Completion of Install?' prompts
- Answer NO to 'Want KIDS to INHIBIT LOGONS during the install' prompt

(See Appendix A in file hl__0160.1004n1 for a sample install session.)

After installation is complete run routine EN1^XPDDI to print and review the installation process for this patch as well as all patches listed in 1b above.

38. Enable journaling (Cache sites skip this step)

In Manager UCI:

```
>D ^UCIEDIT

Select volume group <0>: DHC <--- ENTER YOURS

Enter name of UCI: PRD <--- ENTER YOURS

Enter map number for global data expansion area <0:70>: 0:70

Global Data Expansion Limit <NONE>: NONE

Enter map number for global pointer expansion area <0:70>:
0:70

Global Pointer Expansion Limit <NONE>: NONE

Enter map number for routine expansion area <0:70>: 0:70

Routine Expansion Limit <NONE>: NONE
Journal entire UCI <NO>: YES <--- ENTER YES TO ENABLE
                                JOURNALING

Password <>:
Library UCI <1>:
```

Figure 3-34: Enabling journaling (Cache sites skip this step)

Switch back to Production UCI

39. Restart TaskMan (You must be logged in as root on an AIX or UNIX system to start TaskMan.)

```
>D RESTART^ZTMB
```

40. Enable logins

```
D Q^DI

Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: VOLUME SET//
EDIT WHICH FIELD: ALL// INHIBIT LOGONS?
THEN EDIT FIELD:

Select VOLUME SET: DHC
INHIBIT LOGONS?: YES// NO
```

Figure 3-35: Enabling logins

41. Restart background jobs and filers that were stopped for this install. For example:

- To start the MailMan filer use option 'START background filer (XMAD)'

- To start the TCP Listener use option 'BGU Start Listener'
- To start the Lab to PCC transaction Processor use option 'Stop/restart Lab to PCC Transaction Processor'

42. If you are running HL7 complete the following steps:

- a. Start up all HL7 Logical Links and incoming and outgoing filers using option 'Restart/Start All Links and Filers'. (Note that links that do not have "autostart" enabled will need to be restarted manually.)
- b. Use option 'TCP Link Manager Start/Stop' to start the HL7 Link Manager.

43. Use option BUILD PRIMARY MENU TREES to rebuild the menu trees.

```
This option will build menu trees for each primary and secondary menu. You may
build all the trees, or build them selectively, using 'verify'. Note that the
'compiled menus' will only be built into ^XUTL on this CPU.
Do you wish to verify each primary menu? NO//
Would you like to build secondary menu trees too? YES//
Would you like to queue this job? YES//
Requested Start Time: NOW// (JAN 29, 2003@17:38:02)
```

Figure 3-36: Rebuilding menu trees

44. Allow users back on the system.

4.0 Post-Installation

1. Edit the DEFAULT DIRECTORY FOR HFS field in the KERNEL SYSTEM PARAMETERS and enter the default directory for host files.
2. AIX/UNIX SYSTEMS ONLY: (skip this step if you are an NT system)
 - You must move the xu__0800.1007s script to the /bin directory and rename it *sendto1*
 - You must be logged in as ROOT Drop down to the UNIX prompt and issue the commands:
 - o \$cp xu__0800.1007s /bin/sendto1 (be sure to include the path where you put the xu__0800.1007s file)
 - Change to the /bin directory and issue the following command:
 - o \$chmod 755 sendto1
3. Patch DI*22.0*27 fixes a problem with compiled cross references. After installation of patch DI*22.0*1001 which contains patch DI*22.0*27, the cross references on the Pharmacy Patient file #55 should be recompiled using the following instructions:

Suggested time to recompile: non-peak requirement hours

- a. Check node ^DD(55,0,"DIK"). If it is NOT defined or it is set to null stop here. Cross references on file #55 are not compiled and don't need to be recompiled. Otherwise, go to step 3b.

```
>D ^%G

      MSM - Global Lister Utility
      29-NOV-02 10:27 AM

Global selector: ^DD(55,0,"DIK")

Enter output device <0>:
Do you want to page output? <N>
^DD(55,0,"DIK")="PSJXR5"

Global selector: ^
```

Figure 4-1: Recompiling (step 3a)

- b. Do ^DIKZ to recompile the crossreferences on file #55:

```
>D ^DIKZ <RET>

Maximum routine size on this computer (in bytes).: (2400-
8000): default// <RET>
Select FILE: 55 <RET>
Cross-Reference(s) current compiled under namespace PSJXR5.
```

```
UNCOMPILE the Cross-Reference(s)? NO// <RET>

Routine name: PSJXR5// <RET>

Note that ^PSJXR5 is already in the routine directory.

Should the compilation run now? YES <RET>

Compiling Cross-Reference(s) 55 of file 55.

...HMMM, JUST A MOMENT PLEASE...

'PSJXR51' ROUTINE FILED.
...
```

Figure 4-2: Recompiling (step 3b)

4. Add a MAIL GROUP to the bulletin "XUTM PROBLEM DEVICE"
5. Schedule the option "XUTM QPROBLEM DEVICE" to run once a day
6. Please note that the new TaskMan namespace is XUTM. So, all of the old options that were ZTM (such as ZTMQCLEAN) have been removed from system and you must schedule the appropriately named XUTM namespace tasks to run (such as XUTM QCLEAN). On your main site management menu (EVE or AKMOEVE) the TaskMan Option should be XUTM MGR. If it is not on your main menu, please go to Menu Management and add it as an option.
7. With patch XU*8.0*106 the Person Class file has been mapped in accordance with the Health Care Financing Administration (HCFA) provider taxonomy. To comply with this requirement, all providers will need to be updated in the Person Class file as identified by the approved X12N taxonomy. This patch attempts to automatically map these associations. However, some entries may be missed because some Person Class entries may no longer exist. The manual routine MANUAL^XUINPCH2 can be run to remap those entries. See the patch XU*8.0*106 and XU*8.0*159 descriptions for complete details
8. Patch XU*8.0*134 runs a conversion to standardize the names in the New Person file #200 and places the name components into the Name Components file #20. After this conversion has been run you may want to review the information stored by the conversion for accuracy and make any necessary changes. See the patch XU*8.0*134 description for complete details.
9. If you are using HL7 complete the following steps:
 - a. Using FileMan, edit the AUTOSTART field of HL7 file 870. Set this to '1' if you want your logical links to automatically restart after a system reboot.

- b. Using the TaskMan option, 'Schedule/Unschedule options', select the new HL7 option, 'Restart/Start All Links and Filers', and place an 'S' in the SPECIAL QUEUEING field.
- c. It is highly recommended sites establish a mail group for HL7 related alerts. The Link Manager will use this mail group to send an alert whenever it finds a configuration problem between the links and TaskMan. This mail group should be entered into the Communication Servers Parameters using option 'HL EDIT COMM SERVER PARAMETERS' (see below).
- d. HL7 patches HL*1.6*40 seq 35 and HL*1.6*47 seq 44 introduced new site parameters. Use ScreenMan option 'HL EDIT COMM SERVER PARAMETERS' and complete entries for the new site parameters provided. The screen will appear as follows:

```
Select OPTION NAME:  HL EDIT COMM SERVER PARAMETERS

Edit HL7 Site Parameters

Current Domain: <enter your domain name>
Current Institution: <enter your institution>
Is this a Production or Test Account? <enter 'P' or 'T'>

Default Number of Incoming Filers: 1
Default Number of Outgoing Filers: 1

Mail Group for Alerts: <enter mail group
                        established above>

Days to Keep Completed Messages: 7
Days to Keep Awaiting ACK Messages: 30
Days Before Purging ALL Messages: 90
```

Figure 4-3: Sample screen for step 9d

- e. It is recommended that only the following HL7 globals be journaled:
 - ^HL ^HLMA

5.0 Appendix A: Aborted FileMan 22/Kernel 8 Upgrade Recovery Procedures

What to do in the event of an aborted FileMan 22/Kernel 8 Upgrade install:

The FileMan 22/Kernel 8 Upgrade installation is designed so that each separate package or patch is installed individually in consecutive order. There are five individual packages/patches included in this distribution:

1. FileMan V22.0 package
2. FileMan patch DI*22.0*1001
3. Kernel patch XU*8.0*1007
4. Toolkit patch XT*7.3*1001
5. HL7 patch HL*2.6*1004

The installation guide will guide you through each installation. In the event that one of the packages/patches fails to install or aborts, the design of the distribution will allow you to pick back up with the package/patch that aborted once the problem is corrected.

The most likely cause of an aborted FileMan 22/Kernel 8 Upgrade installation is improper shutdown of TaskMan or extraneous data in the ^XTMP("XPDI") global.

When shutting down TaskMan it is important to use either the menu options provided for this or do the routine STOP^ZTMKU. The installation guide instructs the installer to do STOP^ZTMKU. This will ensure that all TaskMan jobs are properly shut down and that the TaskMan "RUN" node is killed. The environment check routines for the distribution will check for the existence of the "RUN" node, and if detected, abort the install.

Before starting the installation the ^XTMP("XPDI") global should be killed to eliminate any extraneous data that may interfere with the install.

If the install aborts for any reason, you must first try to determine why it aborted and correct the situation. Then, if possible, use the 'Unload a Distribution' option on the KIDS menu to unload the distribution before trying again. If it is not possible to unload the distribution via the 'Unload a Distribution' option, then you may need to follow the procedures below.

If you are loading a distribution and receive the message:

```
**Transport Global already exists**  
**NOTHING LOADED**
```

This means that the distribution either has already been loaded or that there is extraneous data in the ^XTMP("XPDI") global. In this case you may be able to

simply use the KIDS option 'Unload a Distribution' to unload the distribution. This should clear out the distribution from the ^XTMP("XPDI") global as well as remove the distribution from the Install file. If you have unloaded the distribution and still receive the message, then try killing the ^XTMP("XPDI") global to eliminate the message.

If an error occurs during the installation process, the process will most likely abort. In this case, the ^XTMP("XPDI") global is left in place and may be corrupted and entries are left in the Install file. These must be cleaned up before redoing the install. In this case it may not be possible to use the 'Unload a Distribution' option to unload the distribution. You will most likely need to perform these steps:

Note: Use EXTREME caution in performing steps 2 and 3.

- 1 Kill the ^XTMP("XPDI") global.
- 2 Set the STATUS field in the Install file to 'Install Completed' for each package/patch involved in the aborted installation. For example: If you are installing the third installation, Kernel patch XU*8.0*1007, then you will need to edit the Install file for each patch included in that install. A simple way to do this is by using the FileMan loop feature to loop through each patch entry and stuff 'Install Completed' into the STATUS field. (In step 3 you will delete all these entries, but before you can delete them, you must set the STATUS field to 'Install Completed'.

Example:

```
[PRD,DHC]>
[PRD,DHC]>D P^DI

VA FileMan 22.0

Select OPTION: ENTER OR EDIT FILE ENTRIES

INPUT TO WHAT FILE: INSTALL//
EDIT WHICH FIELD: ALL// STATUS///"Install Completed"
DO YOU MEAN '"Install Completed"' AS A VARIABLE? Yes// (Yes)
THEN EDIT FIELD:
STORE THESE FIELDS IN TEMPLATE:

Select INSTALL NAME: ^LOOP
EDIT ENTRIES BY: NAME//
START WITH NAME: FIRST// XU <--- *See NOTE below
GO TO NAME: LAST// XUZ
WITHIN NAME, EDIT ENTRIES BY: (After hitting return here all
```

the entries being edited will
scroll down your screen)

Note: You will need to repeat this procedure for each namespace contained in the Kernel distribution. They are XU, XWB, KMPR, KMPS, and A4A7. Additionally, you will need to set this field for the RPC Broker, Capacity Management - RUM, and Sagg Project packages.

If you are cleaning up after a FileMan abort, use namespace DI.

The Toolkit namespace is XT and the HL7 namespace is HL.

- 3 Delete each package/patch entry involved in the aborted install from the Install file. Use the same namespaces that you used in step 2 above.

Example:

```
[PRD,DHC]>D P^DI
```

```
VA FileMan 22.0
```

```
Select OPTION: ENTER OR EDIT FILE ENTRIES
```

```
INPUT TO WHAT FILE: INSTALL//
```

```
EDIT WHICH FIELD: ALL// .01///@
```

```
WARNING: THIS MEANS AUTOMATIC DELETION!! NAME  
THEN EDIT FIELD:
```

```
Select INSTALL NAME: ^LOOP
```

```
EDIT ENTRIES BY: NAME//
```

```
START WITH NAME: FIRST// XU
```

```
GO TO NAME: LAST// XUZ
```

```
WITHIN NAME, EDIT ENTRIES BY: <--- (after hitting return here  
all the entries being  
deleted will scroll down  
your screen)
```

If you have performed the appropriate recovery procedures and are still unable to complete the entire FileMan22/Kernel Update installation, please call the ITSC Customer Support Center at (505)248-4371 or (888)830-7280.

Do not allow users back on the system until the entire FileMan 22/Kernel 8 Upgrade is completely installed.

6.0 Appendix B: FileMan 22/Kernel 8 Upgrade IHS Local Modifications to FileMan/Kernel/Toolkit/HL7

FILEMAN (PATCH DI*22.0*1001):

	Modification
DDBRZIS	to avoid "blank screen syndrome" on null-output reports
DICN1	check for ZTQUEUED before writing output allow use of "soft" global references
DIFG0A	prevent subscript errors in FileGram installs when 2nd piece of DIFGMO(DIFGMULT) is null
DIFG7	pass back an array DIFGYFE(FILE,DA) of all entries that were either added or edited during a FileGram install
DIFROM1	correct typo in DIFROM1+2
DIK1	check for ZTQUEUED before writing "." when reindexing file
DIRCR	check for Cache operating system to determine which code to execute
DITMGM2A	prevent merge from being tasked to background
DITMGMRG	prevent repointing of "MERGED TO PATIENT" field #.082 of Patient file #2 during patient merge
DIVR	prevent a <LINER> error in MSM by replacing reference to +0^%ZISC with ^%ZISC

KERNEL (PATCH XU*8.0*1007):

Routine	Modification
VASITE	allow a 4 digit primary medical center division
XPDIL	change zeros to 1 in read syntax to prevent timing problem in Cache
XQ	allow menu headers to print on IHS menus
XQ1	prevent IHS menu headers from printing when exiting a menu
XQ6	to warn that the Provider key must be given under the "ADD PROVIDER" option
XQ82	prevent error trap from being killed
XQALERT	show the number of pending alerts a user has
XTER1A	display option name rather than UCI,VOL when listing errors in error trap
XUCIONT	prevent using 'X ^%ZOSF("PROGMODE")' in Cache
XUINOK	to make sure variables DUZ and DUZ(0) are defined to prevent install from aborting
XUS	prevent setting of GUI variables
XUS1	ensure default division is set during sign-on and display the

Routine	Modification
	division
XUS911	lookup a single user to determine if signed on
XUSCLEAN	check for existence of XBDBQUE before killing the ^TMP global for double queued jobs
XUTMPCH	prevent postinit for patch 170 from running during installation of XU*8.0*1007 to prevent redundant running of ^ZUSET
XUTMRJD1	correct typo to display the task data when displaying a list of running tasks
ZIS3	allow for a slaved device with a \$I of 0
ZIS4	workaround to MSM NO-REWIND problem
ZIS4MSM	workaround to MSM NO-REWIND problem on NT
ZISFONT	check operating system to determine which slash to check for before calling \$\$DEFDIR^%ZISH to get the current directory
ZISH1U	new routine used in conjunction with the new sentto1 script
ZISHMNT	NT version of %ZISH; remove file name length restriction for NT
ZISHMSM	MSM version of %ZISH
ZISHMSMD	host commands for DOS
ZISHMSMU	host commands for UNIX
ZISHMSU	UNIX version of %ZISH
ZISHONT	Cache on NT or UNIX version of %ZISH
ZISHPW	MSM (PW) version of %ZISH
ZOSFMSM	to fix ^%ZOSF("TEST") node for MSM
ZOSFONT	to fix ^%ZOSF("RESJOB") node for Cache
ZOSF7414	to fix ^%ZOSF("TEST") node for MSM
ZOSVMNT	NT version of %ZOSV
ZOSVMSM	MSM-PC/PLUS version of %ZOSV
ZOSVONT	OPEN M/NT version of %ZOSV
ZTLOAD1	code added to check which operating system before using the \$INCREMENT function. \$INCREMENT does not work on MSM
ZTM	added code to update the ^%zmu global with max number of active users and jobs
ZTM5	to change TaskMan startup delay to 10 seconds to work on Cache
ZTMB	added check for OS to startup TaskMan for Cache
ZTMGRSET	code added to rename IHS routine ZISH1U to %ZISH1 set ^%ZTRL nodes

TOOLKIT (PATCH XT*7.3*1001):

Routine	Modification
XDRMVFY	uncommented line DITC+5
XINDX1	change routine size from 10K to 15K
XINDX11	check for existence of ^XPD(9.6 node when checking Build file

Routine	Modification
XINDX6	change max routine size to 15k
XTLKDICL	add 'D DO^DIC1' before calling ASK^DIC and RTN^DIC to make FileMan22 compatible add XTLKAY (Verbose/Silent) flag check to write statement when doing FileMan lookup
XTLKKWL	patch for doubly-indirect AMQQ global roots being passed in DIC correct syntax error in line INIT

HL7 (HEALTH LEVEL SEVEN) (PATCH HL*1.6*1004):

Routine	Modification
HLCSDL	removed references to DSM and \$ETRAP
HLCSDR	removed references to DSM and \$ETRAP prevent wrapping of long lines
HLCSDR1	halt LLP on timeout error reset message waiting flag to avoid false timeout errors
HLCSMM	replace call to ^VASITE with call to ^HLZFUNC
HLFNC	fix parameter return bug
HLZFUNC	new routine to replace ^VASITE
HLLP	checks to see if network device and if so does new routine HLCZTCP
HLCHK	checks for TCP and does SEND^HLZTCP instead of SEND^HLLP
HLZTCP	new TCP connection Lab interface routine

7.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the ITSC Customer Support Center:

Phone: (505) 248-4371 or
(888) 830-7280

Fax: (505) 248-4199

Web: <http://www.rpms.ihs.gov/TechSupp.asp>

Email: RPMSHelp@mail.ihs.gov