Kernel 8.0 and Kernel Toolkit 7.3 Technical Manual



December 2019

Department of Veterans Affairs (VA)

Office of Information and Technology (OIT)

Enterprise Program Management Office (EPMO)

Revision History

Date	Revision	Description	Author
12/09/2019	5.6	Tech Edits for Kernel Patches XU*8.0*607 and 608: Kernel Lock Manager Utility: • Added "XULM" routines to Table 9. • Added "XLM" global to Table 12. • Added "XULM" files to Table 15. • Updated XUSITEMGR menu diagram for the Lock Manager options in Figure 10. • Added "XULM" protocols to Table 20. • Added "XULM" options to and updated options for Operations Management [XUSITEMGR] menu in Table 24. • Added "XULM" APIs to Table 27. • Added "XULM" RPCs to Table 29. • Added "XULM" security keys to Table 36. Software Versions: • Kernel 8.0 • Toolkit 7.3	VistA Infrastructure (VI) Development Team
07/24/2019	5.5	Tech Edits for Kernel Patch XU*8.0*711: • Added the XUMVIENU and XUMVINPA routine entries in Table 9. • Added the XUS MVI ENRICH NEW PERSON RPC entry in Table 29. Tech Edits for Kernel Patch XU*8.0*693: • Updated the XUSERDEAC bulletin entry in Table 35. • Added the XUSERDIS bulletin entry in Table 35. Software Versions:	VistA Infrastructure (VI) Development Team

Date	Revision	Description	Author
		Kernel 8.0	
		Toolkit 7.3	
10/11/2018	5.4	Tech Edits for Kernel Patch XU*8.0*690: • Updated the "ALERT CRITICAL TEXT" entry in Table 15. • Updated the "XQAL ALERT LIST FROM DATE," "XQAL CRITICAL ALERT COUNT," and "XQAL USER ALERTS COUNT" entries in Table 24. Software Versions: • Kernel 8.0 • Toolkit 7.3	VistA Infrastructure (VI) Development Team
40/00/2040	F 2		\/iatA Infractructure (\/I)
10/09/2018	5.3	 Tech Edits for Kernel Patch XU*8.0*672: Added the XU8P672E routine to Table 9. Updated the XPDMENU entry in Table 27 for Kernel Patch XU*8.0*672: Added the LOCK and RLOCK tags. Software Versions: 	VistA Infrastructure (VI) Development Team
		Kernel 8.0	
08/22/2018	5.2	 Toolkit 7.3 Updates for Kernel Patch XU*8.0*679: Added Section 15.5.1, "Electronic Signature Restrictions." Added the XU SIG BLOCK DISABLE parameter to Table 5. Added the XUSESIG2 and XUSESIG3 routines to Table 9. Modified the XUSESIG BLOCK option (Type and Routine columns) and added the XUSESIG DEG option in Table 24. Added the XUSIG security key to Table 36. 	Developer: LB Contract Tech Writer: E.W. VA Tech Writer: TB

Date	Revision	Description	Author
		Software Versions:	
		Kernel 8.0	
		• Toolkit 7.3	
08/15/2018	5.1	Tech Edits: Final merge of all remaining content in the Kernel Toolkit Technical Manual into the Kernel 8.0 & Kernel Toolkit 7.3 Technical Manual (this manual): • Added the following sections for	VistA Infrastructure (VI) Tech Writer: TB
		Kernel Toolkit:	
		○ Section <u>1.1,</u> " <u>Kernel</u> ."	
		 Section 1.2, "Kernel Toolkit." 	
		 Section <u>1.2.1</u>, "<u>Multi-Term</u> <u>Look-Up (MTLU)</u>." 	
		 Section <u>1.2.2</u>, "<u>Duplicate</u> 	
		Resolution Utilities." Section 2.11, "Implementing	
		Multi-Term Look-Up."	
		 Section <u>2.12</u>, "<u>Implementing</u> <u>Duplicate Resolution Utilities</u>." 	
		 Section <u>2.13</u>, "<u>Configuring</u> <u>VAX/Alpha Performance</u> <u>Monitor (VPM)</u>." 	
		Software Versions:	
		Kernel 8.0	
		Toolkit 7.3	
01/23/2018	5.0	Tech Edits:	VistA Infrastructure (VI)
		Changed the XUS SIGNON SETUP RPC in Table 29 from "RESTRICTED" to "PUBLIC," as per developer, H. W.	Development Team
		Added an ICR column to <u>Table 29</u> to list any known ICRs associated with RPCs.	
		Updated the XUS GET VISITOR and XUS SET VISITOR RPCs in Table 29.	
		 Updated Section 4 and Table 15; and Section 15.7 and Figure 20 for missing Toolkit files: 15.2, 15.3, and 15.4. 	
		Updated many sections with content extracted from the Assign Person Class to Providers Patch	

Date	Revision	Description	Author
		Supplement document (e.g., routines, files, fields, globals, options, etc.).	
		 Modified/Removed VAH and MGR references (H. W.): 	
		 Retitled and updated Section <u>14.1</u> to "Globals in Production Accounts." 	
		 Removed reference to "VAH and updated Table 34. 	
		 Merged content from Table 34 into Table 34. 	
		 Deleted Section 14.2, "Globals in MGR Account." 	
		Added Caution note regarding modification of Kernel routines in the "Software Disclaimer" section.	
		Added the "System Management Menus" section and sub-sections form the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide into this document.	
		Replaced "Integration Agreement (IA)" with "Integration Control Registration (ICR)" throughout the document.	
		Added <u>Table 10</u> in Section <u>3.2</u> ; added routines exported with the Broker Security Enhancement (BSE) software.	
		Updated the XUS SET VISITOR RPC in <u>Table 29</u> .	
		 Kernel Patch XU*8.0*605: Added the IPV tool options (XLFIPV*) to <u>Figure 10</u> and <u>Table 24</u>. 	
		Added the following parameters to the KERNEL SYSTEM PARAMETERS (#8989.3) File in Table 3:	
		o ORGANIZATION (#200.2)	
		o ORGANIZATION ID (#200.3)	
		o SECURITY TOKEN SERVICE (#200.1)	
		Added the XUEXISTING USER parameter to the KERNEL	

Date	Revision	Description	Author
Date	Revision	PARAMETERS (#8989.2) File in Table 4. Added the following parameters to the PARAMETER DEFINITION (#8989.51) File in Table 5: XU522 XU594 XU645 Added the following routines to Table 9: XLFSHAN XUCERT XUCERT1 XUESSO1 XUESSO2 XUESSO3 XUESSO4 XUSAML Added the REMOTE APPLICATION (#8994.5) file to Table 15. Added the RPC Broker Management Menu [XWB MENU] to Table 24. Changed the XUS GET USER	Author
		 Table 15. Added the RPC Broker Management Menu [XWB MENU] to Table 24. Changed the XUS GET USER INFO RPC in Table 29 from "PUBLIC' to "RESTRICTED." Reformatted document to follow latest documentation standards 	
		 and formatting rules. Also, formatted document for online presentation vs. print presentation (i.e., for double-sided printing). These changes include: Revised section page setup. Removed section headers. Revised document footers. Removed blank pages between sections. Revised all heading style formatting. 	
		 Updated organizational references (e.g., "Product 	

Date	Revision	Description	Author
		Development [PD]" to "Enterprise Program Management Office [EPMO]). Redacted document for the following information: Names (replaced with role and initials). Production IP addresses and ports. VA Intranet websites. Server geographic locations and node names. Software Versions: Kernel 8.0 Toolkit 7.3	
07/19/2017	4.2	Tech Edits Kernel Patch XU*8.0*671: Updated Person Class File #8932.1 in Table 15. Added updated description: Per VHA Directive 2005-044, this file has been "locked down" by Data Standardization (DS). The file definition (i.e., data dictionary) shall not be modified. All additions, changes and deletions to entries in the file shall be done by Enterprise Reference Terminology (ERT) using the Master File Server (MFS), provided by Common Services (CS). Reviewed the updated section for Section 508 compliance. Software Versions: Kernel 8.0 Toolkit 7.3	Developers: JH, DD (ManTech Mission Solutions & Services Group) Technical Writer: SK ManTech Mission Solutions & Services Group)
05/31/2013	4.1	Updates: • Updates for Patch XU*8.0*614 based on feedback from Herlan Westra: • Added the Single User Menu Tree Rebuild [XQBUILDUSER] option to the "XUMAINT" section and menu tree diagram	Developers: HW Technical Writer: TB

Date	Revision	Description	Author
Date	Kevision	in Figure 9 and in Table 24. It was attached to the Menu Rebuild Menu [XQBUILDMAIN] option. Added the XQBUILDMAIN option to Table 24. Added the XQ LIST UNREFERENCED OPTIONS option to Table 24. Added the XQ MENUMANAGER PROMPT parameter to Table 5. Updated menu diagrams in Section 5.2.2 for: XUTIO in Figure 8. XUMAINT in Figure 9. XUSITEMGR in Figure 10. XUPROG in Figure 11. XU-SPL-MGR in Figure 12. XUSPY in Figure 13. XUTM MGR in Figure 14. XUSER in Figure 15. ZTMQUEUABLE OPTIONS in Figure 16. XUCOMMAND in Figure 17. Added the IP SECURITY ON field parameter to Table 3. Reviewed and updated any missing APIs in the "Callable Entry Points" section. Added bookmarks (identifiers) to all tables for Section 508 conformance.	Author
		Software Versions:	
		• Kernel 8.0	
		• Toolkit 7.3	
04/30/2013	4.0	 Updates: Updated the following sections and tables for Kernel Patch XU*8.0*580: Added the new XUEPCS REPORT DEVICE parameter to Table 5. 	Developers: GB, JG, JI, AL, JM, RMen, RMet, and MT Technical Writer: TB

Date	Revision	Desc	ription	Author
		0	Added the following new ePCS routines to "Routines" section in Table 9: - XUEPCSED	
			- XUEPCSRT	
		0	Added the following new ePCS files to the "Files" section in Table 15:	
			 XUEPCS DATA (#8991.6) file 	
			 XUEPCS PSDRPH AUDIT (#8991.7) file 	
		0	Added the new ePCS options to the "Exported Options" section in Table 24.	
		0	Added the following new and modified ePCS APIs to the "Callable Entry Points" section in Table 27:	
			 \$\$DEA^XUSER \$\$DETOX^XUSE	
			\$\$SDEA^XUSER	
			\$\$VDEA^XUSER	
		0	Added the following new and modified RPCs to the "Remote Procedure Calls (RPCs)" section in Table 29:	
			 XU EPCS EDIT 	
			 XUS PKI SET UPN 	
			 XUS PKI GET UPN 	
			XWB GET VARIABLEVALUE	
		0	Added the XUSSPKI SAN bulletin to the "Bulletins" section in Table 35.	
		0	Added the XUEPCSEDIT security key to the "Security Keys" section in Table 36.	
		CL	eformatted document to follow urrent style guides and andards.	
			eplaced references from "VA ileMan Getting Started Manual"	

Date	Revision	Description	Author
		to "VA FileMan User Manual," since the next VA FileMan 22.n software version will be creating a new "VA FileMan Getting Started Manual."	
		 Added the "Kernel Parameter Definitions (#8989.51) File" section and Table 5. 	
		Added the " <u>Remote Procedure</u> <u>Calls (RPCs)</u> " section and <u>Table</u> <u>29</u> .	
		Added the " <u>Bulletins</u> " section and <u>Table 35</u> .	
		Patch XU*8.0*546: Support for Device Hunt Groups was removed. This includes removal of the *HUNT GROUP (#29) and HUNT GROUP DEVICE (#30) fields in the DEVICE (#3.5) file. Sites had to remove any HUNT GROUP devices before installing this patch using VA FileMan to find any existing Hunt Groups. Chapter 18, "Hunt Groups" was deleted from this manual. Also, any references to "Hunt Groups" were removed.	
		Patches XU*8.0*285: Added the ALERT RECIPIENT TYPE (#8992.2) file to Table 12 and Table 15.	
		Patch XU*8.0*513: Added the ALERT CRITICAL TEXT (#8992.3) file to Table 12 and Table 15.	
		Merging Toolkit Technical Manual content into Kernel 8.0 & Kernel Toolkit 7.3 Technical Manual. The Kernel Toolkit documentation set is being combined with the Kernel documentation set. All Kernel Toolkit content will eventually be moved to the appropriate Kernel manual, section, and chapter.	
		In the <i>Kernel 8.0 & Kernel Toolkit</i> 7.3 <i>Technical Manual</i> , all of the	

Date	Revision	Description	Author
		Kernel Toolkit references for routines, files, options, APIs, Direct Mode Utilities, etc. have been added to the appropriate chapter/section.	
		Updated <u>Table 24</u> option descriptions.	
		Changed Kernel document title references.	
		Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide (previously known as the Kernel Programmer Manual).	
		Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide (previously known as the Kernel Systems Manual).	
		 Updates based on functionality/changes added with Kernel Patch XU*8.0*593: 	
		Added the "XU USER START- UP" entry in <u>Table 19</u> .	
		Added the "XU USER START- UP" entry in <u>Table 24</u> .	
		Updated references to the VDL.	
		Updated all organizational references as needed (e.g., Enterprise Program Management Office [EPMO], removed all HSD&D references)	
		Removed obsolete references to MSM, PDP, 486, VAX Alpha, etc. and changed/updated references to DSM for OpenVMS to Caché where appropriate.	
		Updated "Orientation" section.	
		Updated the overall document for current national documentation standards and style guides. For example:	
		Changed all Heading <i>n</i> styles to use Arial font.	
		Changed all Heading <i>n</i> styles to be left justified.	
		Added blue font highlighting and	

хi

Date	Revision	Description	Author
		underline to signify internal links to figures, tables, or sections for ease of use, similar to what one sees to hyperlinks on a Web page. • Updated document for Section 508 conformance using word's built-in Accessibility check:	
01/24/2006	3.0	 Updates: Reformatted document to follow the latest ISS SOP Guidelines. Updated files, routines, options, APIs, security keys, etc. Software Version: 8.0 	OIFO: • Maintenance Project Manager: JSch • Developer: WF • Technical Writer: TB
02/03/2005	2.0	Reformatted document to follow the latest ISS styles and guidelines. No other content updates have been made in regard to released patches at this time. Reviewed document and edited for the "Data Scrubbing" and the "PDF 508 Compliance" projects. Data Scrubbing—Changed all patient/user TEST data to conform to OIT standards and conventions as indicated below: The first three digits (prefix) of any Social Security Numbers (SSN) start with "000" or "666." Patient or user names are formatted as follows: KRNPATIENT,[N] or KRNUSER,[N] respectively, where the N is a number written	Technical Writer: TB, OIFO

xii

Date	Revision	Description	Author
		out and incremented with each new entry (e.g., KRNPATIENT, ONE, KRNPATIENT, TWO, etc.).	
		Other personal demographic- related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic.	
		PDF 508 Compliance—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).	
		Software Version: 8.0	
07//1995	1.0	Initial Kernel 8.0 software and documentation release	Office of Information Field Office (OIFO):
		Software Version: 8.0	Project Manager: HVB
			Developers: Kernel Development Team
			Technical Writer: KC

Patch Revisions

For the current patch history related to this software, see the Patch Module on FORUM.

Table of Contents

Re	vision	Histo	ory	ii
Lis	t of Fig	gures		xvii
Lis	t of Ta	bles.		xvii
Or	ientatio	on		xix
1	Intr	oduc	ction	1
	1.1	Ker	nel	1
	1.2	Ker	nel Toolkit	1
	1.2	2.1	Multi-Term Look-Up (MTLU)	1
	1.2	2.2	Duplicate Resolution Utilities	2
	1.3	Pur	pose	2
2	Imp	olem	entation and Maintenance	3
	2.1	Inst	allation	3
	2.2	Nan	nespace	3
	2.3	Ker	nel Site Parameters	4
	2.4	Ker	nel 8.0 Site Parameters File Changes	4
	2.5	Ker	nel System Parameters (#8989.3) File	4
	2.6	Ker	nel Parameters (#8989.2) File	10
	2.7	Ker	nel Parameter Definitions (#8989.51) File	11
	2.	7.1	XPAREDIT Routine	15
	2.8	Auc	lit-Related Site Parameters	15
	2.9	Spc	oler Site Parameters	17
	2.10	Tas	kMan Site Parameters	18
	2.11	_	lementing Multi-Term Look-Up	
	2.12	lmp	lementing Duplicate Resolution Utilities	
		12.1	Data Storage	
		12.2	Retention	
		12.3	Resource Requirements	20
		12.4	3	_
		12.5	Merge Process	
	2.13	Cor	nfiguring VAX/Alpha Performance Monitor (VPM)	22
3	Rou	utine	S	23
	3.1		nager Account Routines	
	3.2	Pro	duction Account Routines	26
	3.3	Add	litional Routines Installed by Virgin Install	61
	3.4	Mar	pping Routines	61

4	Files		62
	4.1 Glo	bals	63
	4.1.1	Globals—VA-FileMan-compatible Storage	63
	4.1.2	Globals—Non-VA-FileMan-Compatible Storage	
	4.1.3	Globals—Storage Used for Additional Files during Virgin Install	66
	4.2 File	s	67
	4.2.1	Kernel and Kernel Toolkit Export Files	67
	4.2.2	Additional Files Installed During Virgin Installation	97
	4.3 Fiel	ds	98
	4.3.1	PERSON CLASS (#8932.1) File	98
5	Exporte	d Options	102
	5.1 Mer	nu Tree Roots	102
	5.2 Mer	nu Tree Diagrams	102
	5.2.1	Generating Menu Diagrams	103
	5.2.2	Systems Manager Menu [EVE]	106
	5.2.3	XUCORE	106
	5.2.4	XUTIO	107
	5.2.5	XUMAINT	109
	5.2.6	XUSITEMGR	114
	5.2.7	XUPROG	119
	5.2.8	XU-SPL-MGR	129
	5.2.9	XUSPY	130
	5.2.10	XUTM MGR	_
	5.2.11	XUSER	
	5.2.12	Parent of Queuable Options [ZTMQUEUABLE OPTIONS]	
	5.2.13	SYSTEM COMMAND OPTIONS [XUCOMMAND]	
	5.2.14	Extended-Action Options	
	5.2.15	Protocols	
	5.2.16	Server Options	
	5.2.17	Options Attached to Menus for Other Software	
	5.2.18	DEA ePCS Utility	
	-	ions—Listed Alphabetically by Name	
	5.3.1	Kernel	
_	5.3.2	Toolkit	
6		ng and Purging	
		hiving	
	6.2 Pur	ging	308

7	Cal	able Entry Points	311
8		ect Mode Utilities	
9		note Procedure Calls (RPCs)	
ე 10		ernal Relations	
10	10.1	External Relations with Other VistA Software	
	10.1	External Relations with M Operating Systems	
	10.2	Required Software	
	10.4	DBA Approvals and Integration Control Registration (ICRs)	
	_	.4.1 ICRs—Current List for Kernel or Kernel Toolkit as Custodian	
	10	.4.2 ICRs—Detailed Information	
	10	.4.3 ICRs—Current List for Kernel or Kernel Toolkit as Subscriber	346
11	Inte	rnal Relations	348
	11.1	Independence of Options	348
12	Sof	tware-Wide Variables	
13		CC Exemptions	
14		bal Protection, Translation, and Journaling	
17	14.1	_	
15		curity	
10	15.1	Security Management	
	15.1	Mail Groups, Alerts, and Bulletins	
		.2.1 Mail Groups	
		.2.2 Alerts	
		.2.3 Bulletins	
	15.3	Remote Systems	368
	15.4	Interfaces	368
	15.5	Electronic Signatures	369
	15	.5.1 Electronic Signature Restrictions	369
	15.6	Security Keys	370
	15.7	File Security	
	15.8	Contingency Planning	
٠.	15.9	Official Policies	
	•		
Ind	ex		383

List of Figures

Figure 1: Parameters—Enter/Edit Kernel Site Parameters Menu Option4
Figure 2: Parameters—XPAREDIT Routine: Editing Parameters in the PARAMETER
DEFINITION (#8989.51) File
Figure 3: Parameters—Audit-Related Menu Options15
Figure 4: Spooler Site Parameters Edit Menu Option17
Figure 5: Multi-Term Look-Up—Sample System Prompts and User Entries:
Entering a Cross-Reference on a Field in a File
Figure 6: Menus—Generating Menu Diagrams: Sample from OAKTST "Gold" Account
Figure 7: XUCORE—Menu Tree Diagram: Sample from OAKTST "Gold" Account 106
Figure 8: XUTIO—Menu Tree Diagram: Sample from OAKTST "Gold" Account 107
Figure 9: XUMAINT—Menu Tree Diagram: Sample from OAKTST "Gold" Account 109
Figure 10: XUSITEMGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account
Figure 11: XUPROG—Menu Tree Diagram: Sample from OAKTST "Gold" Account 119
Figure 12: XU-SPL-MGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account
Figure 13: XUSPY—Menu Tree Diagram: Sample from OAKTST "Gold" Account 130
Figure 14: XUTM MGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account
137
Figure 15: XUSER—Menu Tree Diagram: Sample from OAKTST "Gold" Account 140
Figure 16: ZTMQUEUABLE OPTIONS—Menu Tree Diagram: Sample from OAKTST
"Gold" Account145
Figure 17: XUCOMMAND—Menu Tree Diagram: Sample from OAKTST "Gold" Account
Figure 18: Security Keys—Obtaining Security Key Information for Kernel
Figure 19: File Security—Sample User Dialogue to Obtain File Security
Figure 20: File Security—Recommended Kernel File Security Access
List of Tables
List of Tubics
Table 1: Documentation Symbol Descriptionsxx
Table 2: Parameters—Kernel Site Parameter Files4
Table 3: Parameters—KERNEL SYSTEM PARAMETERS (#8989.3) File (Listed
Alphabetically by Field Name)5
Table 4: Parameters—KERNEL PARAMETERS (#8989.2) File (Listed Alphabetically by
Name)
Table 5: Parameters—PARAMETER DEFINITION (#8989.51) File (Listed Alphabetically
by Name)11

Table 6: Parameters—Audit-Related Parameters from the KERNEL SYSTEM	
PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name)16	3
Table 7: Parameters—Spooler-Related Parameters from the KERNEL SYSTEM	
PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name)	
Table 8: Routines—Manager Account Routines	
Table 9: Routines—Kernel and Toolkit Production Account Routines	3
Table 10: Routines—Kernel and Toolkit Production Account Routines Released with	
Broker Security Enhancement (BSE)	
Table 11: Routines—Virgin Installs	
Table 12: Globals—VA FileMan-Compatible Storage	
Table 13: Globals—Not VA FileMan-Compatible Storage	
Table 14: Globals—Storage Used for Additional Files during Virgin Installation 66	
Table 15: Files—Distributed with Kernel and Kernel Toolkit	
Table 16: Files—Kernel Virgin Installation Files	
Table 17: Field List—PERSON CLASS (#8932.1) File (Kernel Patch XU*8.0*27) 98	3
Table 18: Field List—Assigning Person Class to Providers Software (i.e., Kernel	^
Patches XU*8.0*27, 377, and 531)	
Table 19: Protocols—Extended-Action Options	
Table 20: Protocols—Lock Manager Utility	
Table 21: Options—Server Options	
Table 22: Options—Attached to Menus for Other Software	
Table 23: Options—DEA ePCS Utility	
Table 24: Options—Exported Kernel Options	
Table 25: Options—Exported Toolkit Options	
Table 27: Kernel and Kernel Toolkit APIs (Callable Entry Points)—Supported and	ر
Controlled Subscription	1
Table 28: Direct Mode Utilities	
Table 29: Remote Procedure Calls (RPCs)—Kernel and Kernel Toolkit	
Table 30: Variables—Defined at All Times	
Table 31: Variables—Defined While a User is in the Menu System	
Table 32: Variables—Defined While a User is in the Menu System with Alpha-Beta	•
Tracking	J
Table 33: SAC Exemptions	1
Table 34: Globals in Production Account—Protection, Translation and Journaling	
Information354	4
Table 35: Bulletins—Kernel and Kernel Toolkit	3
Table 36: Security Keys—Kernel and Kernel Toolkit371	1
Table 37: Glossary of Terms and Acronyms	

xviii

Orientation

How to Use this Manual

Throughout this manual, advice and instruction are offered about Kernel 8.0 and Kernel Toolkit 7.3 routines, files, options, application program interfaces (APIs), direct mode utilities, and other system-related information provided for overall Veterans Health Information Systems and Technology Architecture (VistA) system management and application developers.

Intended Audience

The intended audience of this manual is the following stakeholders:

- System Administrators—System administrators at Department of Veterans Affairs (VA) sites who are responsible for computer management and system security on the VistA M Servers.
- Enterprise Program Management Office (EPMO)—VistA legacy development teams.
- Information Security Officers (ISOs)—Personnel at VA sites responsible for system security.
- Product Support (PS).

Disclaimers

Software Disclaimer

This software was developed at the Department of Veterans Affairs (VA) by employees of the Federal Government in the course of their official duties. Pursuant to title 17 Section 105 of the United States Code this software is *not* subject to copyright protection and is in the public domain. VA assumes no responsibility whatsoever for its use by other parties, and makes no guarantees, expressed or implied, about its quality, reliability, or any other characteristic. We would appreciate acknowledgement if the software is used. This software can be redistributed freely provided that any derivative works bear some notice that they are derived from it.



CAUTION: Kernel routines should *never* be modified at the site. If there is an immediate national requirement, the changes should be made by emergency Kernel patch. Kernel software is subject to FDA regulations requiring Blood Bank Review, among other limitations. Line 3 of all Kernel routines states:

Per VHA Directive 2004-038, this routine should not be modified.



CAUTION: To protect the security of VistA systems, distribution of this software for use on any other computer system by VistA sites is prohibited. All requests for copies of Kernel for *non*-VistA use should be referred to the VistA site's local Office of Information Field Office (OIFO).

Documentation Disclaimers

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 the VA.

Documentation Conventions

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 1: Documentation Symbol Descriptions

Symbol	Description	
1	NOTE/REF: Used to inform the reader of general information including references to additional reading material.	
Λ	CAUTION/DISCLAIMER: Used to caution 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:
 - o The first three digits (prefix) of any Social Security Numbers (SSN) will begin with either "000" or "666".
 - O Patient and user names are formatted as follows:
 - <Application Name/Abbreviation/Namespace>PATIENT,<N>
 - <Application Name/Abbreviation/Namespace>USER,<N>

Where:

- < Application Name/Abbreviation/Namespace > is defined in the Approved Application Abbreviations document.
- <N> represents the first name as a number spelled out and incremented with each new entry.

For example, in Kernel (XU or KRN) test patient and user names would be documented as follows:

KRNPATIENT,ONE; KRNPATIENT,TWO; KRNPATIENT,THREE; ... KRNPATIENT,14; etc.

KRNUSER,ONE; KRNUSER,TWO; KRNUSER,THREE; ... KRNUSER,14; etc.

- "Snapshots" of computer commands and online displays (i.e., screen captures/dialogues) and computer source code, if any, are shown in a *non*-proportional font and may be enclosed within a box.
 - User's responses to online prompts will be **bold** typeface and highlighted in yellow (e.g., <
 - Emphasis within a dialogue box will be **bold** typeface and highlighted in blue (e.g., STANDARD LISTENER: RUNNING).
 - Some software code reserved/key words will be **bold** typeface with alternate color font
 - 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>.
 - o Author's comments 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.

- This manual refers to the M programming language. Under the 1995 American National Standards Institute (ANSI) standard, M is the primary name of the MUMPS programming language, and MUMPS will be considered an alternate name. This manual uses the name M.
- Descriptions of direct mode utilities are prefaced with the standard M ">" prompt to emphasize that the call is to be used *only in direct mode*. They also include the M command used to invoke the utility. The following is an example:

>D ^XUP

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



NOTE: Other software code (e.g., Delphi/Pascal and Java) variable names and file/folder names can be written in lower or mixed case.

Documentation Navigation

This document uses Microsoft® Word's built-in navigation for internal hyperlinks. To add **Back** and **Forward** navigation buttons to your toolbar, do the following:

- 1. Right-click anywhere on the customizable Toolbar in Word (*not* the Ribbon section).
- 2. Select Customize Quick Access Toolbar from the secondary menu.
- 3. Select the drop-down arrow in the "Choose commands from:" box.
- 4. Select **All Commands** from the displayed list.

- 5. Scroll through the command list in the left column until you see the **Back** command (circle with arrow pointing left).
- 6. Select/Highlight the **Back** command and select **Add** to add it to your customized toolbar.
- 7. Scroll through the command list in the left column until you see the **Forward** command (circle with arrow pointing right).
- 8. Select/Highlight the **Forward** command and select **Add** to add it to the customized toolbar.
- 9. Select **OK**.

You can now use these **Back** and **Forward** command buttons in your Toolbar to navigate back and forth in your Word document when clicking on hyperlinks within the document.



NOTE: This is a one-time setup and is automatically available in any other Word document once you install it on the Toolbar.

How to Obtain Technical Information Online

Exported VistA M Server-based software 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 section.

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 VistA M Server-based software.

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** [DILIST] option on the **Data Dictionary Utilities** [DI DDU] menu in VA FileMan to print formatted data dictionaries.



REF: For details about obtaining data dictionaries and about the formats available, see the "List File Attributes" chapter in the "File Management" section of the *VA FileMan Advanced User Manual*.

Assumptions

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

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

Reference Materials

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

- Kernel Release Notes
- Kernel Installation Guide
- Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
- Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide
- Kernel 8.0 & Kernel Toolkit 7.3 Technical Manual (this manual)
- Kernel Security Tools Manual
- Kernel VA Intranet Website.

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, which is freely distributed by Adobe® Systems Incorporated at the following Website: http://www.adobe.com/

VistA documentation can be downloaded from the VA Software Document Library (VDL) Website: http://www.va.gov/vdl/

VistA documentation and software can also be downloaded from the Product Support (PS) Anonymous Directories.

1 Introduction

1.1 Kernel

Kernel is the intermediary layer between the host operating system and other Veterans Health Information Systems and Technology Architecture (VistA) software applications, so that VistA software can coexist in a standard operating-system-independent computing environment. Kernel provides a standard and consistent user and developer interface between software applications and the underlying M implementation.

It provides the underlying computing environment for all VistA users. VistA system administrators can track users and resolve problems using Kernel options. VistA application developers rely on tools provided by Kernel to perform routine programming tasks.

By offering a computing environment that hides the *non*-standard features of M, Kernel frees VistA users, system administrators, and developers from dependence on any one vendor's M implementation. This allows VistA to shift easily to new hardware and software platforms as information technology (IT) advances.

1.2 Kernel Toolkit

Kernel Toolkit is a robust set of tools developed to aid the VistA development community in analysis, writing, and testing, code. It is a set of generic tools that are used by development teams, software quality assurance (SQA), and system administrators to support distinct tasks.

Kernel Toolkit provides utilities for the management and definition of development projects. Many of these utilities have been used by the San Francisco Information Systems Center (ISC) for internal management and have proven valuable. Kernel Toolkit provides many programming and system management tools and interacts directly with the underlying M (aka MUMPS [Massachusetts General Hospital Utility Multi-Programming System]) environment in many different ways.

It includes the following tools:

- Multi-Term Look-Up (MTLU)
- Duplicate Resolution Utilities

1.2.1 Multi-Term Look-Up (MTLU)

Many medical information systems depend on the standardized encoding of diagnoses and procedures for reports, searches, and statistics. The following files are among some of the more critical files:

- ICD DIAGNOSIS (#80)
- ICD OPERATIONS/PROCEDURE (#80.1)
- CPT (#81)

The Multi-Term Look-Up utility increases the accessibility of the information in these files by associating user-supplied words or phrases with terms found in a more descriptive, FREE TEXT field.

Multi-Term Look-Up enables:

- Local setup of virtually any reference file.
- Developers to modify the behavior of the "special" lookup by defining shortcuts, keywords, or synonyms.

Multi-Term Look-Up integrates with any package that uses a reference file, which has been entered in a sites LOCA L LOOKUP (#8984.4) file.

1.2.2 Duplicate Resolution Utilities

The Duplicate Resolution Utilities give developers a "shell" that allows their users to check their data files for duplicate records and merge the records if any are found. These utilities provide the functionality of combining duplicate records based on conditions established in customized applications. The following two files are used to do this:

- DUPLICATE RECORD (#15)
- DUPLICATE RESOLUTION (#15.1)

The **Merge Shell** was developed by the Indian Health Service (IHS) to support their Multi-Facility Integration project.

1.3 Purpose

The purpose of this manual is to provide information about the structure of the set of software utilities known as Kernel and Kernel Toolkit. Two other major affiliated software applications, VA FileMan and MailMan, are excluded, since they are documented elsewhere. This material is presented for reference by VistA system administrators, application developers, and other Kernel/Kernel Toolkit users.

2 Implementation and Maintenance

Information in this section is meant to help system administrators implement and maintain Kernel and Kernel Toolkit.



REF: For recommendations regarding global mapping, journaling, translation, and replication in Kernel and Kernel Toolkit, see the "<u>Mapping Routines</u>" and "<u>Global Protection</u>, Translation, and Journaling" sections.

For recommendations regarding archiving and purging in Kernel and Kernel Toolkit, see the "Archiving and Purging" section.

2.1 Installation

Follow the appropriate patch installation instructions for Kernel and Kernel Toolkit Patches on FORUM.

Installing Kernel both on a system having a previous version of Kernel present and on a system without Kernel (a "virgin" install) is explained in the *Kernel Installation Guide*. It also contains many requirements and recommendations regarding how Kernel should be configured. Be sure to read it before attempting to install Kernel.



REF: For more detailed information on installing Kernel and Kernel Toolkit, see the *Kernel Installation Guide* located on the VA Software document Library (VDL) at: http://www.va.gov/vdl/application.asp?appid=10

2.2 Namespace

The Kernel and Kernel Toolkit routine namespaces include:

- XDR*
- XG*
- XI*
- XLF*
- XPAR*
- XPD*
- XQ*
- XT*
- XU*
- ZIS*
- ZOS*
- ZTM*
- **ZU***

2.3 Kernel Site Parameters

This section lists the Kernel site parameters that can be set to customize the operation of the various components of Kernel.

2.4 Kernel 8.0 Site Parameters File Changes

Kernel 8.0 exports three central site parameter files:

Table 2: Parameters—Kernel Site Parameter Files

File	Description	
KERNEL SYSTEM PARAMETERS (#8989.3)	Kernel's main site parameters. These parameters were formerly stored in the MAILMAN SITE PARAMETERS (#4.3) file but are now stored in this file.	
	REF: For information on this parameter file, see the "Kernel System Parameters (#8989.3) File" section.	
KERNEL PARAMETERS (#8989.2)	This file holds parameters that Kernel uses, which the site is allowed to change. It is <i>not</i> restricted solely to site parameters. The file makes use of a DEFAULT value field and a REPLACEMENT value field for each parameter. REF: For information on this parameter file, see the "Kernel Parameters (#8989.2) File" section.	
PARAMETER DEFINITION (#8989.51) file	This file holds additional Kernel parameter definitions. REF: For information on this parameter file, see the "Kernel Parameter Definitions (#8989.51) File" section.	

2.5 Kernel System Parameters (#8989.3) File

The Kernel system parameters are stored in the KERNEL SYSTEM PARAMETERS (#8989.3) file.

Figure 1: Parameters—Enter/Edit Kernel Site Parameters Menu Option

Operations Management ... [XUSITEMGR]
Kernel Management Menu... [XUKERNEL]
Enter/Edit Kernel Site Parameters [XUSITEPARM]

Table 3: Parameters—KERNEL SYSTEM PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name)

Field	Description	
AGENCY CODE (#9)	This field defines what agency uses this computer. It sets a flag that can be accessed by applications programs that need to know this information.	
ASK DEVICE TYPE AT SIGN-ON (#205)	This is the default for whether a user/terminal should be asked for their Terminal Type at signon. This is overridden by a similar field in the DEVICE (#3.5) and NEW PERSON (#200) files:	
	• If set to YES , then an ANSI DA is sent to the terminal to collect the terminal's DEVICE ATTRIBUTES message. If it is a known one, then the Terminal Type is set to this; otherwise, the user is prompted.	
	 If set to NO, then the one from the LAST SIGN-ON field or device subtype is used. 	
AUTO-GENERATE ACCESS CODES (#11)	If this field is set to YES , the person assigning access codes <i>must</i> choose one of the automatically generated codes that are presented.	
	If this field is set to NO , other codes are only accepted.	
BYPASS DEVICE LOCK- OUT (#211)	Setting this field to YES causes all device lockout checking to be bypassed. This means that during signon the checks against the DEVICE (#3.5) file for the following fields will be skipped: OUT-OF-SERVICE DATE (#6) SECURITY (#15) PROHIBITED TIMES FOR SIGN-ON (#2009). It can be overridden by the PERFORM DEVICE CHECKING	
	(#51.91) field in the DEVICE (#3.5) file.	
DEFAULT # OF ATTEMPTS (#202)	This is the default number of attempts that a user is allowed when trying to sign on before the device is locked. This field is overridden by the # OF ATTEMPTS (#51.2) field in the DEVICE (#3.5) file. ALL checking for device lockout can be bypassed by setting the BYPASS DEVICE LOCK-OUT (#211) field.	
DEFAULT AUTO-MENU (#206)	This is the default for whether auto-menu is turned ON or OFF . It is overridden by the AUTO MENU (#51.6) field in the DEVICE (#3.5) file.	
DEFAULT INSTITUTION (#217)	This field is used to define a default institution that will be assigned to the user's institution [DUZ(2)] for any user that does <i>not</i> have one.	

Field	Description		
DEFAULT LANGUAGE (#207)	This is the default language used to set the DUZ("LANG") flag for each user. VA FileMan uses this setting to enable the display of language-specific dates and times, numeric formats, and dialogues.		
DEFAULT LOCK-OUT TIME (#203)	This is the default time in seconds that a locked device <i>must</i> be idle before another signon attempt is allowed. This time is overridden by the LOCK-OUT TIME (#51.3) field in the DEVICE (#3.5) file. ALL checking for device lockout is ignored if the BYPASS DEVICE LOCK-OUT (#211) field is set to YES .		
DEFAULT MULTIPLE SIGN-ON (#204)	This is the default value for whether users may sign on at more than one terminal at a time. It is overridden by the following fields: • DEFAULT MULTIPLE SIGN-ON (#204) field in the DEVICE (#3.5) • MULTIPLE SIGN-ON (#200.04) field in the NEW PERSON (#200) file.		
DEFAULT TIMED-READ (SECONDS) (#210)	This is the default time-out for all READ s and is overridden by the TIMED READ (# OF SECONDS) (#51.1) field in the DEVICE (#3.5) file.		
DEFAULT TYPE-AHEAD (#209)	This is the default as to whether or <i>not</i> type-ahead is allowed. It is overridden by the TYPE-AHEAD (#51.9) field in the DEVICE (#3.5) file.		
DEVICE TO AUDIT (#212.1) Multiple	This Multiple (subfile) holds a list of devices that are to be audited when device auditing is activated. The .01 field is referenced when the FAILED ACCESS ATTEMPT AUDIT (#212.5) field is set to D or DR. It is used to specify the logical names of the devices on which to audit failed attempts.		
FAILED ACCESS ATTEMPT AUDIT (#212.5)	This field indicates whether an audit log is to be generated for failed access attempts. Audits can be done for all devices or specified devices only. Recording of what is entered is optional. Entries include: • A—All devices/no text recorded. • D—Specified devices/no text recorded. • AR—All devices/text recorded. • DR—Specified devices/text recorded. • N—No audit.		
INITIATE AUDIT (#19.4)	This field indicates the date when an audit begins. The OPTION AUDIT (#19) field defines the nature of the audit that is performed. Auditing is only done if there is both INITIATE AUDIT (#19.4) and TERMINATE AUDIT (#19.5) field data.		

Field	Description	
INTERACTIVE USER'S PRIORITY (#216)	This field changes the priority of interactive users on the system at signon time. There is a danger that using this field will cause the users to have poor response time from the computer. Valid values range from 1 to 10.	
IP SECURITY ON (#405.1)	This field turns on or off the IP security "Three strikes and you are out" code. This is used to lock an IP address if there are too many failed/invalid signon attempts. It is similar to the device lockout.	
	 Use the Release IP lock [XU IP RELEASE] option to release the lock on an IP address. 	
	Use the Edit Site IP lockout [XU SITE LOCKOUT] option to edit the Kernel System Parameters for IP lockout and/or User lockout and Terminal server list entry.	
LIFETIME OF VERIFY CODE (#214)	This is the number of days that a Verify code remains valid. After this time the user <i>must</i> choose a new Verify code.	
LOG RESOURCE USAGE? (#300)	This YES/NO field is used to indicate whether resource usage data, such as CPU seconds, DIO, BIO, etc., is collected in ^XUCP(. If this field is set to YES , every time a user goes in and out of an option each time is recorded.	
LOG SYSTEM RT? (#41, 6)	A subfield in the VOLUME SET (#41) Multiple. Setting this subfield to YES enables system response time logging, which only takes place if the necessary code exists in the application software.	
MAX SIGNON ALLOWED (#41, 2)	A subfield in the VOLUME SET (#41) Multiple. This subfield defines the maximum number of jobs that XUS or RPC Broker allows to sign on to this VOLUME SET or CPU. It is the number of processes (interactive, background, and system) that can be active on the machine at any one time. When reached, Kernel prohibits logons.	
MAX SPOOL DOCUMENT LIFE-SPAN (#31.3)	This field controls the number of days that a spooled document is allowed to remain in the spooler before deletion by the Purge old spool documents [XU-SPL-PURGE] option, which needs to be set up to run in the background. Valid values range from 1 to 365 ; zero decimals.	
	REF: For more information on spooler site parameters, see the "Spooler Site Parameters" section.	
MAX SPOOL DOCUMENTS PER USER (#31.2)	This field limits the number of spooled documents that any user can have on the system. <i>Recommended</i> values from 10 to 100 .	
	REF: For more information on spooler site parameters, see the "Spooler Site Parameters" section.	

Field	Description		
MAX SPOOL LINES PER USER (#31.1)	This field holds the maximum number of lines of spooled output a user is allowed. If the user has more than this number, then they are <i>not</i> allowed to spool any more until some of their spooled documents are deleted. This only controls the granting of new spool documents and does <i>not</i> terminate the number of lines that are transferred into the spool data file. Valid values range from 1 to 9999999; recommended value 9999. REF: For more information on spooler site parameters, see the "Spooler Site Parameters" section.		
NAMESPACE TO AUDIT (#19.2) Multiple	This Multiple (subfile) holds a list of software namespaces to audit. All options within a namespace are audited if the OPTION AUDIT (#19) Field is set to s (specific options).		
NEW PERSON IDENTIFIERS (#21)	This field holds M code to set the DR variable to the string of fields (<i>not</i> a template) to be used as identifiers when adding entries to the NEW PERSON (#200) file.		
OPTION AUDIT (#19)	This field indicates what should be audited between the INITIATE AUDIT (#19.4) date and TERMINATE AUDIT (#19.5) date fields. Valid values include: • n—No audit. • a—All options audited. • s—Specific options audited. • u—Users audited. The OPTION TO AUDIT (#19.1) Multiple along with the NAMESPACE TO AUDIT (#19.2) Multiple hold the lists of specific options that would be audited (choosing s). The USER TO AUDIT (#19.3) Multiple holds the list of users that would be audited (choosing u).		
OPTION TO AUDIT (#19.1) Multiple	This Multiple (subfile) holds a list of options to audit if the OPTION AUDIT (#19) field is set to s (specific options).		
ORGANIZATION (#200.2)	Use this Identity and Access Management (IAM) field to identify the organization of this VistA instance. For internally authenticated users, this field matches the SUBJECT ORGANIZATION (#205.2) field of the user identified in the NEW PERSON (#200) file. For the VA, this field should always contain the following value: Department Of Veterans Affairs		

Field	Description
ORGANIZATION ID (#200.3)	Use this Identity and Access Management (IAM) field to uniquely identify the organization of this VistA instance. For internally authenticated users, this field matches the SUBJECT ORGANIZATION ID (#205.3) field of the user identified in the NEW PERSON (#200) file. For the VA, this field should always contain the following value: urn:oid:2.16.840.1.113883.4.349
ROUTINE MONITORING	This field supports routine auditing. It controls how the routine
(#9.8)	monitoring program behaves; whether to look at all routines or just selected name spaces.
	REF: For more information, see the Kernel Security Tools Manual.
ROUTINE N-SPACE TO MONITOR (#9.81) Multiple	This Multiple (subfile) supports routine auditing. If the routine monitoring program is to look at namespaces, then this Multiple lists the namespaces that it looks at. For example, an entry of XU * causes it to look at all routines that start with XU .
	REF: For more information, see the Kernel Security Tools Manual.
SECURITY TOKEN SERVICE (#200.1)	When using brokered authentication with a security token issued by a Security Token Service (STS), this field contains the identification of the issuer of the token. The STS is trusted by both the client and the service to provide interoperable security tokens.
	Security Assertion Markup Language (SAML) tokens are standards-based XML tokens that are used to exchange security information, including:
	Attribute statements
	Authentication decision statements
	Authorization decision statements
	They can be used as part of a Single Sign-On (SSO) solution allowing a client to talk to services running on disparate technologies. For the VA, this field should always contain the following value: eauth.va.gov
TEDMINIATE ALIDIT (#40.5)	
TERMINATE AUDIT (#19.5)	This field indicates when the audit ends. The start date is set in the INITIATE AUDIT (\$19.4) field.
USER TO AUDIT (#19.3) Multiple	This Multiple (subfile) holds a list of users to audit their option use, if the OPTION AUDIT (#19) field is set to u (users audited).

Field	Description
VOLUME SET (#41) Multiple	This is the name of each CPU or Volume Set in the domain. Within each Volume Set, you can set:
	MAX SIGN-ON ALLOWED (#41, 2)
	• LOG SYSTEM RT? (#41, 6).

2.6 Kernel Parameters (#8989.2) File

Kernel does *not* export an option to edit these parameters. The KERNEL PARAMETERS (#8989.2) file holds parameters that Kernel uses and the site is allowed to change. It is *not* restricted solely to site parameters. The file makes use of a DEFAULT (#3) value field and a REPLACEMENT (#4) value field for each parameter. Rather than having a specific field for each parameter, one Multiple holds all parameters.

Kernel currently stores the following active parameters in this file:

Table 4: Parameters—KERNEL PARAMETERS (#8989.2) File (Listed Alphabetically by Name)

Parameters	Description
XUEDIT CHARACTERISTICS	You can enter the name of a replacement for the standard Edit User Characteristics template in the REPLACEMENT (#4) field. Kernel will then use the replacement for the Edit User Characteristics [XUSEREDITSELF] option.
XUEXISTING USER	You can enter the name of a template to use in the Edit an Existing User [XUSEREDIT] option in the REPLACEMENT (#4) field. Kernel uses the replacement template for the Edit an Existing User [XUSEREDIT] option.
XUNEW USER	You can enter the name of a template to use in the Add a New User to the System [XUSERNEW] option in the REPLACEMENT (#4) field. Kernel will then use the replacement template for the Add a New User to the System [XUSERNEW] option.
XUREACT USER	You can enter the name of a template to use in the Reactivate a User [XUSERREACT] option in the REPLACEMENT (#4) field. Kernel will then use the replacement template for the Reactivate a User [XUSERREACT] option.
XUSER COMPUTER ACCOUNT	You can enter the name of a help frame in the REPLACEMENT (#4) field. Kernel will then use the replacement help frame instead of the standard one when printing the computer access letter from the Add a New User to the System [XUSERNEW] option.

2.7 Kernel Parameter Definitions (#8989.51) File

Additional Kernel parameters are stored in the PARAMETER DEFINITION (#8989.51) file.

Table 5: Parameters—PARAMETER DEFINITION (#8989.51) File (Listed Alphabetically by Name)

Parameters	Description
XPAR ALL ENTITIES	All Entities: This is a "dummy" parameter definition that is used by XPARLIST to get a list of all entities. The ALLOWABLE ENTITIES (#51, 30) Multiple field for this parameter should list all entities defined in PARAMETERS.
XPAR MY NEW PARAM	Test MY new parameters.
XPAR TEST DATE/TIME	Test Date/Time: Test parameter entry for a single valued date.
XPAR TEST FREE TEXT	Test Free Text: Test parameter entry for single valued free text.
XPAR TEST M CODE	Test XPAR entry with a value of M code.
XPAR TEST ME	TEST ME.
XPAR TEST MULT FREE TEXT	Test entry for showing how to add to a Free Text with multiple instances. Enter a string of 5-15 characters.
XPAR TEST MULTIPLE	Test Everything: This is a test of a parameter that allows multiple instances and multiple entities. • PRECEDENCE: 1 ENTITY FILE: SYSTEM • PRECEDENCE: 2 ENTITY FILE: DIVISION • PRECEDENCE: 3 ENTITY FILE: SERVICE • PRECEDENCE: 4 ENTITY FILE: LOCATION • PRECEDENCE: 5 ENTITY FILE: PACKAGE • PRECEDENCE: 6 ENTITY FILE: CLASS • PRECEDENCE: 7 ENTITY FILE: TEAM • PRECEDENCE: 8 ENTITY FILE: USER
XPAR TEST MULTIPTR	Test Multiple Pointer.
XPAR TEST NUMERIC	Test Numeric: Test parameter entry for numeric data.
XPAR TEST POINTER	Test Pointer: Test parameter entry for pointer types.
XPAR TEST PWP	Test Multiple WP with Pointer Instance

Parameters	Description
XPAR TEST SET OF CODES	Test Set of Codes: Test parameter entry of a set of codes.
XPAR TEST WP	Test WP: Test parameter entry for word-processing (WP) values.
XPAR TEST YES/NO	Test Yes/No.
XPD PATCH HFS SERVER	Patch module HFS server: This parameter holds the name of the server to send email to when a KIDS Host File Server (HFS) file is made.
XQ MENUMANAGER PROMPT	This parameter allows sites to change the default < TEST ACCOUNT> prompt to another value, such as <legacy system=""> in menu prompts of non-production VistA systems. The text defined by this parameter is inserted in the MenuMan (Menu Manager) prompts. If no text is defined, the hard-coded default is " < TEST ACCOUNT>". Alternatives could be:</legacy>
XQAL BACKUP REVIEWER	Backup Reviewer for Unprocessed Alerts: This parameter contains information about the Backup Reviewer for unprocessed alerts. This person is sent the alerts for the specified entity that remain unprocessed by the original recipients. • PRECEDENCE: 50 ENTITY FILE: SYSTEM • PRECEDENCE: 40 ENTITY FILE: DIVISION • PRECEDENCE: 35 ENTITY FILE: SERVICE • PRECEDENCE: 1 ENTITY FILE: USER

Parameters	Description
XU SIG BLOCK DISABLE	 Determines whether restrictions are active: If the parameter is set to ON (1), then restrictions are active and Electronic Signature Block edits are disabled for users without the XUSIG security key. If the parameter is set to OFF (0), then restrictions are not active and Electronic Signature Block edits are enabled for all users. NOTE: This parameter was released with Kernel Patch XU*8.0*679.
XU522	 Determines whether old-style (less secure) Compensation and Pension Record Interchange (CAPRI) logins are permitted and logged. Enter any of the following values: Y (YES)—To disable old-style CAPRI logins (default). E (ERROR)—To disable old-style CAPRI logins and trap attempts. N (NO)—To leave old-style CAPRI logins enabled. L (DEBUG)—To leave old-style CAPRI logins enabled but trap attempts. NOTE: This parameter was released with Kernel Patch XU*8.0*522.
XU594	This parameter skips the code that Kernel Patch XU*8.0*543 uses. If XU*8.0*543 broke the iMedConsent application, this parameter should be set to YES . The default is NO . NOTE: This parameter was released with Kernel Patch XU*8.0*594.
XU645	 This parameter determines if a terminated user's information should be deleted: A NO value means you do <i>not</i> want to purge the terminated user information. This was requested by the Office of Inspector General (OIG) when they want all user information preserved. A YES value means to purge the information, which is normal operating procedure. NOTE: This parameter was released with Kernel Patch XU*8.0*645.

Parameters	Description
XUEPCS REPORT DEVICE	ePCS Device Definition for Reports: Enter a device from the DEVICE (#3.5) file for the ePCS report output. NOTE: This parameter was released with Kernel Patch XU*8.0*580.
XUS CCOW VAULT PARAM	CCOW Vault Parameter: This parameter holds the application passcode for the CCOW vault.
XUS-XUP SET ERROR TRAP	Set Error Trap in XUP : This parameter controls if XUP will set up an ERROR trap for the user: • PRECEDENCE: 1 ENTITY FILE: USER • PRECEDENCE: 2 ENTITY FILE: SYSTEM
XUS-XUP VPE	Drop into VPE: This parameter controls if a user when exiting XUP is dropped into VPE or right to the ">" prompt: PRECEDENCE: 1 ENTITY FILE: USER PRECEDENCE: 2 ENTITY FILE: SYSTEM
XUSC1 DEBUG	Set Debug mode for XUSC1: This parameter controls if the XUSC1 client code records debug information into the ^TMP global.
XUSNPI QUALIFIED IDENTIFIER	NPI QUALIFIED IDENTIFIER: This is a mapping of NPI ID name to the files that hold the data.

2.7.1 XPAREDIT Routine

Use the **XPAREDIT** routine to update the parameters in the PARAMETER DEFINITION (#8989.51) file.

To edit the DEA ePCS Utility parameter, perform the following procedure:

- 1. From the programmer prompt, enter the following code:
 - D ^XPAREDIT
- 2. At the "Select PARAMETER DEFINITION NAME:" prompt, enter the parameter you want to edit.

Figure 2: Parameters—XPAREDIT Routine: Editing Parameters in the PARAMETER DEFINITION (#8989.51) File

```
>D ^XPAREDIT

--- Edit Parameter Values ---

Select PARAMETER DEFINITION NAME:
```

2.8 Audit-Related Site Parameters

Figure 3: Parameters—Audit-Related Menu Options

```
System Security... [XUSPY]
Audit Features ... [XUAUDIT MENU]
Maintain System Audit Options... [XUAUDIT MAINT]
Establish System Audit Parameters [XUAUDIT]
```

You can edit audit-related site parameters located in the KERNEL SYSTEM PARAMETERS (#8989.3) file using the **Establish System Audit Parameters** [XUAUDIT] option (the fields are also reachable from the **Enter/Edit Kernel Site Parameters** [XUSITEPARM] option).



REF: For more information on auditing, see the *Kernel Security Tools Manual*.

Table 6: Parameters—Audit-Related Parameters from the KERNEL SYSTEM PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name)

Parameters (Fields)	Description
DEVICE TO AUDIT (#212.1) Multiple	This Multiple (subfile) holds a list of devices that are to be audited when device auditing is activated.
	The .01 field is referenced when the FAILED ACCESS ATTEMPT AUDIT (#212.5) field is set to D or DR . It is used to specify the logical names of the devices on which to audit failed attempts.
FAILED ACCESS ATTEMPT AUDIT (#212.5)	This field indicates whether an audit log is to be generated for failed access attempts. Audits can be done for all devices or specified devices only. Recording of what is entered is optional:
	Entries include:
	A—All devices/no text recorded.
	D—Specified devices/no text recorded.
	AR—All devices/text recorded.
	DR—Specified devices/text recorded.
	N—No audit.
INITIATE AUDIT (#19.4)	This field indicates the date when an audit begins. The OPTION AUDIT (#19) field defines the nature of the audit that is performed. Auditing is only done if there is both INITIATE AUDIT (#19.4) and TERMINATE AUDIT (#19.5) field data.
NAMESPACE TO AUDIT (#19.2) Multiple	This Multiple (subfile) holds a list of software namespaces to audit. All options within a namespace are audited if the OPTION AUDIT (#19) Field is set to s (specific options).
OPTION AUDIT (#19)	This field indicates what should be audited between the INITIATE AUDIT (#19.4) date and TERMINATE AUDIT (#19.5) date fields.
	Valid values include:
	• n—No audit.
	a—All options audited.
	s—Specific options audited
	• u—Users audited.
	The OPTION TO AUDIT (#19.1) Multiple along with the NAMESPACE TO AUDIT (#19.2) Multiple hold the lists of specific options that would be audited (choosing s). The USER TO AUDIT (#19.3) Multiple holds the list of users that would be audited (choosing u).
OPTION TO AUDIT (#19.1) Multiple))	This Multiple (subfile) holds a list of options to audit if the OPTION AUDIT (#19) field is set to s (specific options).

Parameters (Fields)	Description
TERMINATE AUDIT (#19.5)	This field indicates when audit ends. The start date is set in the INITIATE AUDIT (#19.4) field.
USER TO AUDIT (Multiple; #19.3)	This Multiple (subfile) holds a list of users to audit their option use, if the OPTION AUDIT (#19) field is set to u (users audited).

2.9 Spooler Site Parameters

Figure 4: Spooler Site Parameters Edit Menu Option

Consol Management	[VII CDI MCD]
Spool Management	[XU-SPL-MGR]
Spooler Site Parameters Edit	[XU-SPL-SITE]

You can edit spooler-related site parameters located in the KERNEL SYSTEM PARAMETERS (#8989.3) file with the **Spooler Site Parameters Edit** [XU-SPL-SITE] option (the fields are also reachable from the **Enter/Edit Kernel Site Parameters** [XUSITEPARM] option).



REF: For more information on the Spooler, see the "Spooling" chapter in the *Kernel Security Tools Manual*.

Table 7: Parameters—Spooler-Related Parameters from the KERNEL SYSTEM PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name)

Fields	Description
MAX SPOOL LINES PER USER (#31.1)	This field holds the maximum number of lines of spooled output a user is allowed. If the user has more than this number, then they are <i>not</i> allowed to spool any more until some of their spooled documents are deleted. This only controls the granting of new spool documents and does <i>not</i> terminate the number of lines that are transferred into the spool data file. Valid values range from 1 to 9999999; <i>recommended</i> value 9999.
MAX SPOOL DOCUMENT LIFE-SPAN (#31.3)	This field controls the number of days that a spooled document is allowed to remain in the spooler before deletion by the Purge old spool documents [XU-SPL-PURGE] option, which needs to be set up to run in the background. Valid values range from 1 to 365 ; zero decimals.
MAX SPOOL DOCUMENTS PER USER (#31.2)	This field limits the number of spooled documents that any user can have on the system. <i>Recommended</i> value from 10 to 100 .

2.10 TaskMan Site Parameters

There are three separate groups of site parameters for TaskMan. They are stored in the following files:

- TASKMAN SITE PARAMETERS (#14.7)
- UCI ASSOCIATION (#14.6)
- VOLUME SET (#14.5)



REF: For information about configuring TaskMan's site parameters, see the "TaskMan System Management: Configuration" section in the *Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide*.

2.11 Implementing Multi-Term Look-Up

Implementing Multi-Term Look-Up requires:

- Central Processing Unit (CPU) capacity: 3%.
- Disk Space: **20,000** bytes. However, this depends on the number of entries in the following files:
 - o LOCAL KEYWORD (#8984.1)
 - o LOCAL SHORTCUT (#8984.2)
 - o LOCAL SYNONYM (#8984.3)

The Multi-Term Look-Up utility has one parameter, which can be adjusted to meet the needs of an individual site. Whenever a new file is entered through the **Add Entries To Look-Up File** [XTLKMODPARS] option, an additional MUMPS cross-reference is necessary on a FREE TEXT field of the new file. This reference converts the FREE TEXT field into keywords to be used in the search. In order to use the full functionality of the package, the cross-reference entry on the FREE TEXT field should match the INDEX (#.03) field in the LOCAL LOOKUP (#8984.4) file. Figure 5 is an example for the ICD DIAGNOSIS (#80) file **AIHS** is entered on the FREE TEXT field as a cross-reference. **AIHS**, therefore, *must* match the entry made at the Local Look-up INDEX prompt in the **Add Entries To Look-Up File** [XTLKMODPARS] option.

Figure 5: Multi-Term Look-Up—Sample System Prompts and User Entries: Entering a

Cross-Reference on a Field in a File

```
Select OPTION: UTILITY FUNCTIONS
Select UTILITY OPTION: CROSS-REFERENCE A FIELD
MODIFY WHAT FILE: ICD DIAGNOSIS// ICD DIAGNOSIS <Enter> (12535 entries)
Select FIELD: DESCRIPTION
CURRENT CROSS-REFERENCE IS MUMPS 'D' INDEX OF FILE
CHOOSE E (EDIT)/D (DELETE)/C (CREATE): C
WANT TO CREATE A NEW CROSS-REFERENCE FOR THIS FIELD? NO// Y <Enter> (YES)
CROSS-REFERENCE NUMBER: 2// <Enter>
Select TYPE OF INDEXING: REGULAR// MUMPS
WANT CROSS-REFERENCE TO BE USED FOR LOOKUP AS WELL AS FOR SORTING? YES// N <Enter>
SET STATEMENT: S %="^ICD9(""AIHS"",I,DA)" D S^XTLKWIC
KILL STATEMENT: S %="^ICD9(""AIHS"",I,DA)" D K^XTLKWIC
INDEX: AC// AIHS
DO YOU WANT TO CROSS-REFERENCE EXISTING DATA NOW? YES// Y <Enter> (YES)
...EXCUSE ME, LET ME THINK ABOUT THAT A MOMENT.....
>D ^XUP
Setting up programmer environment
Terminal Type set to: C-VT100
Select OPTION NAME: APPLI < Enter> CATION UTILITIES XTMENU Application Utilities
          Multi-Term Lookup Main Menu ...
Select Application Utilities Option: MULTI <Enter>-Term Lookup Main Menu
         Multi-Term Lookup (MTLU)
          Print Utility
         Utilities for MTLU ...
Select Multi-Term Lookup Main Menu Option: UTIL <Enter> ities for MTLU
         Delete Entries From Look-up
   KT.
   ST
         Add Entries To Look-Up File
         Add/Modify Utility ...
Select Utilities for MTLU Option: ST <Enter> Add Entries To Look-Up File Select LOCAL LOOKUP NAME: ICD DIAGNOSIS
 ARE YOU ADDING 'ICD DIAGNOSIS' AS A NEW LOCAL LOOKUP (THE 3RD)? Y <Enter> (YES)
   LOCAL LOOKUP NAME: ICD DIAGNOSIS// <Enter>
   LOCAL LOOKUP DISPLAY PROTOCOL: <Enter>
INDEX: AIHS
...Ok, will now setup KEYWORD and SHORTCUT file DD's
   to allow terms for 'ICD DIAGNOSIS' entries...
PREFIX: M// ?
     Answer must be a unique prefix, 1-10 characters in length
 Enter the VARIABLE POINTER prefix.
PREFIX: M// D
 <REMINDER> Using 'Edit File', set the lookup routine, XTLKDICL, in 'ICD DIAGNOSIS
Select LOCAL LOOKUP NAME: <Enter>
```



NOTE: Using the **VA FileMan Edit File** [DIEDIT] option, enter **XTLKDICL** at the "Look-Up Program" prompt. Data should be cross-referenced when installing the cross-reference. If *not*, data should be re-indexed after hours, since this can be CPU intensive.

2.12 Implementing Duplicate Resolution Utilities

Implementing Duplicate Resolution Utilities requires the following resources and familiarity with the following processes:

- <u>Data Storage</u>
- Retention
- Resource Requirements
- Programmer Notes
- Merge Process

2.12.1 Data Storage

Each entry in the DUPLICATE RECORD (#15) file takes approximately **500** bytes, depending on the number of tests that are used and the number of packages that are affected by the record merge.

Each entry in the DUPLICATE RESOLUTION (#15.1) file takes approximately **28K**, depending on the number of tests that need to be run.

2.12.2 Retention

The data in the duplicate record is *not* meant to be purged or archived. If one chose to they could purge the verified *non*-duplicates, but this means that when the duplicate checking utilities are run these entries are put back in the DUPLICATE RECORD (#15) file and requires somebody to verify it again.

2.12.3 Resource Requirements

One terminal and one printer are required. A slave printer to the terminal would be very beneficial.

2.12.4 Programmer Notes

Developers need to determine if the merging of two file entries affects their package in such a way that they need to have their own unique merge that deals with only their package's files.

The following conditions usually mean that a developer has to write their own unique merge:

- 1. The patient pointer field is defined as a NUMERIC or FREE TEXT field rather than a POINTER.
- 2. The developer wants their end-users to complete some task prior to the merge occurring.
- 3. There are compound cross-references that include the patient pointer on another field, but the cross-reference is *not* triggered by the changing of the patient pointer.

4. The Merge (Duplicate Resolution Utilities) does *not* do what the package developer desires.

2.12.5 Merge Process

This section provides a description of what occurs during the merge:

- 1. Checks the base file (e.g., PATIENT [#2] file) to see if it exists.
- 2. Check the **PT** nodes [e.g., ^**DD(2,0,"PT",**] and any false positives are removed.
- 3. Creates a list of files and fields within those files that point to the file being merged (e.g., in this example the file being merged is the PATIENT [#2] file).
 - If a file is pointing to the file being merged by its .01 field, and if that .01 field is **DINUM**, then all files/fields that point to that file are also gathered. The **DINUM** rule also applies to that file and any files pointing to it, to any depth.
- 4. Checks each file/field and re-points/merges as follows:
 - If the field pointing is *not* a .01 field, the "from entry" is changed to the "to entry".
 - If the field pointing is the .01 field but *not* **DINUM**, the "from entry" is changed to the "to entry".
 - Each pointing .01 DINUM field is handled as follows:
 - o If the .01 DINUM field is at the file level, ^DIT0 is called to merge the "from entry" to the "to entry" and then the "from entry" is deleted. ^DIT0 merges field by field but does *not* change any value in the "to entry". That means that NULL fields in the "to entry" get the value from the same field in the "from entry" if it is *not* NULL, and valued fields in the "to entry" remain the same. ^DIT0 also merges Multiples:
 - If a Multiple entry in the "from entry" *cannot* be found in the "to entry", it is added to the "to entry".
 - If a Multiple entry in the "from entry" can be found in the "to entry", then that Multiple entry is merged field by field.
 - o If the .01 DINUM field is at the subfile level (in a Multiple), it is handled as follows:
 - If there is a "from entry" but no "to entry", the "from entry" is added to the "to entry", changing the .01 field value in the process, and the "from entry" is deleted.
 - If there is a "from entry" and also a "to entry", the "from entry" is deleted and the "to entry" remains unchanged.

If it is determined that a developer *must* have their own unique merge that deals with their files, they *must* make the appropriate entries in the PACKAGE (#9.4) file. If they have to have some sort of action taken by end-users prior to the merging of the records, they *must* update the MERGE PACKAGES Multiple in the DUPLICATE RECORD (#15) file for that pair of records.

The following explains the entries that need to be made in the PACKAGE (#9.4) file:

- In your PACKAGE (#9.4) file make an entry in the AFFECTS RECORD MERGE (#20) field.
- In the .01 field, enter the file affected (e.g., PATIENT [#2] file).
- In the NAME OF MERGE ROUTINE (#9.402,3) field enter the name of your merge routine, which is executed via indirection by Duplicate Resolution Utilities. If you leave this field blank but still place an entry in the PACKAGE (#9.4) file, Duplicate Resolution Utilities assumes that you have some sort of interactive merge process that your end users must complete prior to the main merge occurring. It also assumes that this interactive merge process is on a separate option within the developer's package options. The values of the two records being merged are placed in:

^TMP("XDRMRGFR",\$J,XDRMRG("FR")
And

^TMP("XDRMRGTO",\$J,XDRMRG("TO")

These should be referenced by the developer if they need any certain field values since the values may have been changed prior to the execution of their merge routine.

• In the RECORD HAS PACKAGE DATA (#9.402,4) field you would enter a string of M executable code that is passed the **XDRMRG("FR")** variable (the "from record" IEN) and set **XDRZ** to **0**. The code should **SET XDRZ=1** if **XDRMRG("FR")** has data within your package files.

Remember to only make these entries in the PACKAGE (#9.4) file if the normal merge does *not* suffice for your package. If you have an entry in the PACKAGE (#9.4) file the repointing and merging as described above does *not* take place for those files within your package entry.

If you leave the NAME OF MERGE ROUTINE (#9.402,3) field blank, it is assumed that you have some sort of interactive merge process that must occur prior to the main merging of the two records. At the completion of your interactive merge process the developer *must* set the STATUS (#15.01101,.02) field of the MERGE PACKAGES (#15,1101) Multiple field for their package in the DUPLICATE RECORD (#15) file entry to **Ready**. This *must* be done using VA FileMan, because of the trigger that is on the STATUS (#15.01101,.02) field. Once all of the MERGE PACKAGE entries have a STATUS of **Ready**, the main merging of the two records can occur.

2.13 Configuring VAX/Alpha Performance Monitor (VPM)

Data from the VAX/Alpha Performance Monitor is stored in the ^XUCM global. This global grows at a rate of approximately 80k/day/node. A task can be queued to automatically keep this global purged. Raw data occupies most of this growth rate and can be retained a shorter period (1-3 months), while the daily averages in the CM DAILY STATISTICS (#8986.6) file should be retained considerably longer. This ensures its usefulness for trend analysis and other computations.

VAX/Alpha Performance Monitor (VPM) requires that TaskMan be set to run with a **DCL** context *prior* to configuring the performance monitor's site files. To configure the CM SITE

PARAMETERS (#8986.095) and CM SITE NODENAMES (#8986.3) files, run the Setup Performance Monitor option.

After editing these files, the host directory and **DCL** command files (**XUCMVPM.COM** and **XUCMMONITOR.COM**) are created by TaskMan. An alert is sent to you once this is complete. Re-run this option whenever CPUs are added/removed from your configuration.

Using the TaskMan Schedule/Unschedule Options [XUTM SCHEDULE] option queue XUCM TASK VPM to run *hourly*. This option is the data collection driver for the VMS Monitor and checks for and loads new data into the CM DISK DRIVE RAW DATA (#8986.5) and CM NODENAME RAW DATA (#8986.51) files. Each data collection runs for 15 minutes using 10 second sample intervals (rather than the default 3 second interval). Queue the option XUCM TASK NIT to run in the early a.m., (e.g., 0001 hours). This option compiles workday averages, mails server messages, and collects "static" information (e.g., node and hardware types). Finally, this option files selected RTHIST data and restarts RTHIST data collections for the next 24 hours.

3 Routines

This chapter provides information related to all executable routines exported with Kernel and Kernel Toolkit. Do *not* delete any routines with the exception of any initialization routines, which *can* be deleted *after* installation.



NOTE: This chapter lists the routines alphabetically and by category. Other routine information, such as the Routine Description, Size Histogram, Routine %Index, etc., can be generated through the use of Kernel Utilities.

3.1 Manager Account Routines

<u>Table 8</u> lists the Manager Account routines:

Table 8: Routines—Manager Account Routines

Routine	Description
%ZIS	Device Handler.
%ZIS1	Device Handler: Device input.
%ZIS2	Device Handler: Checks.
%ZIS3	Device Handler: Device types and parameters.
%ZIS5	Device lookup.
%ZIS6	Device Handler: Resources.
%ZIS7	Device Handler: Help.
%ZISC	Close logic for devices.
%ZISP	Collect screen parameters: Graphic set.
%ZISS	Collect screen parameters.

Routine	Description
%ZISS1	Collect screen parameters (continued).
%ZISS2	Collect screen parameters: Graphic set.
%ZISUTL	Device Handler: Utility routine.
%ZTER	Kernel Error Trap to log errors.
%ZTER1	Kernel Error Trap to log errors (continued).
%ZTLOAD	TaskMan: Application Program Interface: Entry Points.
%ZTLOAD1	TaskMan: Application Program Interface: Part 1: Queue.
%ZTLOAD2	TaskMan: Application Program Interface: Part 2: Queue.
%ZTLOAD3	TaskMan: Task Requeue.
%ZTLOAD4	TaskMan: Application Program Interface: Is Queued?
%ZTLOAD5	TaskMan: Application Program Interface: Task status.
%ZTLOAD6	TaskMan: Application Program Interface: Dequeue.
%ZTLOAD7	TaskMan: Utilities.
%ZTM	TaskMan: Manager: Part 1: Main Loop.
%ZTM0	TaskMan: Manager: Part 2 : Begin.
%ZTM1	TaskMan: Manager: Part 3 : Validate Task.
%ZTM2	TaskMan: Manager: Part 4 : Link Handling 1 .
%ZTM3	TaskMan: Manager: Part 5 : Link Handling 2 .
%ZTM4	TaskMan: Manager: Part 6 : Waiting List.
%ZTM5	TaskMan: Manager: Part 7 : Short Subroutines.
%ZTM6	TaskMan: Manager: Part 8 : Load Balancing.
%ZTMOVE	Easier multi-CPU routine transfers.
%ZTMS	TaskMan: Submanager: Part 1: Entry and Trap functions.
%ZTMS0	TaskMan: Submanager: Part 2 : Trap functions.
%ZTMS1	TaskMan: Submanager: Part 3 : Loop and Get Task.
%ZTMS2	TaskMan: Submanager: Part 4 : Unload, Get Device.
%ZTMS3	TaskMan: Submanager: Part 5 : Run Task.
%ZTMS4	TaskMan: Submanager: Part 6 : Setup, Cleanup.
%ZTMS7	TaskMan: Submanager: GetNext.
%ZTMSH	TaskMan: Submanager: Utility: Header Page.
XUCIDTM	Swap UCIs DSM-11.
XUCIMSM	Swap UCIS for MSM-UNIX.

Routine	Description
XUCIMSQ	Swap UCIs M/SQL.
XUCIVXD	Swap UCIs VAX/DSM.
ZIS4VXD	Device Handler: Spool specific code (VAX DSM).
ZISETDTM	Initialize DEVICE (#3.5) file for D7 . This routine initializes the DEVICE (#3.5) file with the current port number or updates the device file if new hardware has been added.
ZISETMSM	Initialize DEVICE (#3.5) file for MSM-68. This routine initializes the DEVICE (#3.5) file with the current port number.
ZISETVXD	Initialize DEVICE (#3.5) file. This routine initializes the DEVICE (#3.5) file with the current port number.
ZISFMSM	HOST files: Code for MSM.
ZISFVXD	HOST files: Code for VAX DSM.
ZISHMSM	Host files: Control for MSM.
ZISHVXD	VAX DSM Host file control.
ZISX	Executes nodes in the ^%ZIS global.
ZOSFMSM	Sets up ^%ZOSF for MSM-UNIX systems.
ZOSFVXD	ZOSF table for VAX DSM 3.3, 4, and 6.
ZOSV2VXD	Capacity Management: Performance Data.
ZOSVMSM	MSM-PC/PLUS: \$View commands.
ZOSVVXD	View commands and special functions.
ZTBKCDTM	DTM: Block count.
ZTBKCMSM	MSM: Block count.
ZTBKCVXD	VAX DSM: Block count.
ZTMB	TaskMan: Manager: Boot/ Option: ZTMRESTART .
ZTMCHK	TaskMan: Option: ZTMCHECK : Part 1 .
ZTMCHK1	TaskMan: Option: ZTMCHECK : Part 2 .
ZTMDCL	TaskMan: Run TaskMan with a DCL context.
ZTMGRSET	Set up the Production account for the system.
ZTMKU	TaskMan: Option: ZTMWAIT/RUN/STOP .
ZTMON	TaskMan: Option: ZTMON : Part 1 : Main Loop.
ZTMON1	TaskMan: Option: ZTMON : Part 2 : Main Loop.
ZUA	Audit access.

3.2 Production Account Routines

Table 9 lists the Production account routines for Kernel and Toolkit:



NOTE: The Kernel and Kernel Toolkit routine namespaces include: "XDR*," "XG*," "XI*," "XLF*," "XPAR*," "XPD*," "XQ*," "XT*," "XU*," "ZIS*," "ZOS*," "ZTM*," and "ZU*."

Table 9: Routines—Kernel and Toolkit Production Account Routines

Routine	Description
XDR2NULL	TBD
XDRCNT	Tally records by STATUS and MERGE STATUS fields.
XDRDADD	This routine makes the entries in the DUPLICATE RECORD (#15) file. Called by: XDRDUP Calls: FILE^DICN, DIE, EN^XDRMAIN
XDRDADDS	TBD
XDRDADJ	This routine is executed by a MUMPS cross-reference on the MERGE STATUS field of the DUPLICATE RECORD (#15) file only when the STATUS is set to Merged. This routine checks for entries in the file that are affected by the merging of this entry and adjusts their .01 and .02 fields accordingly. The problem being addressed is as follows: • 1 to 5
XDRDCOMP	This routine compares two file records via the Duplicate Checker algorithm. Calls: %ZIS, %ZISC, %ZTLOAD, DIC, DIR, EN^DITC, FILE^XDRDQUE, XDRDSCOR, XDRDUP
XDRDDATA	TBD
XDRDEDT	TBD
XDRDEFLG	TBD
XDRDFPD	Find all potential duplicates for an entry in a file.

Routine	Description
XDRDLIST	This routine is responsible for the printing of various reports from the DUPLICATE RECORD (#15) file. It prints listings of potential duplicates, ready, and not ready to merge verified duplicates. Calls: EN1^DIP, DIR, FILE^XDRDQUE
XDRDMAIN	This is the main driver for the duplicate checking routines. Calls: NOW^%DTC, DIE, DIK, XDRDPDTI, XDRDUP, XDREMSG, XDRMAINI
XDRDOC	Additional routine documentation.
XDRDOC1	XDRDOC continued.
XDRDOC2	XDRDOC continued.
XDRDPDTI	This routine is called by XDRDMAIN when the Potential Duplicate threshold has been raised. This routine \$ORDER s through the " APOT " cross-reference on the DUPLICATE RECORD (#15) file, and deletes all entries that have a DC Dupe Match Score that does <i>not</i> meet the Potential Duplicate Threshold value. It also updates the DC POTENTIAL DUPE THRESHOLD%. It should be noted that if a person changes the weights of the Duplicate Tests, they should delete all Potential Duplicates, Unverified and rerun the Duplicate Resolution search. Called by: XDRDMAIN Calls: DIE , DIK , EN^XDRDUP
XDRDPICK	TBD
XDRDPRE1	TBD
XDRDPREL	TBD
XDRDPRG2	TBD
XDRDPRGE	This routine enables the Duplicate Resolution Manager to purge the DUPLICATE RECORD (#15) file. They can purge Potential Duplicates, Verified Non-Duplicates, or both. Verified Duplicates cannot be purged until FileMan institutes some sort of archival or merged node. Calls: %ZTLOAD, DIC, DIR, DIK
XDRDQUE	This routine starts and stops the Duplicate Checking software when it is running in the background. If no search is running, it allows the user to queue a search to start up. If a search has been halted they may continue the search starting at the point they halted. Called by: XDRDCOMP, XDRDLIST, XDRDSCOR, XDRMADD (All these calls by above are if XDRFL is undefined) Calls: %ZTLOAD, DIC, Y^DIQ, DIR, CHECK^XDRU1, XDRCNT, XDRDFPD

Routine	Description
XDRDSCOR	This routine sets the scores for the Duplicate Checking algorithm. Called by: XDRDCOMP, XDRDFPD, XDRDUP, XDRMADD, XDRMAINI Calls: FILE^XDRDQUE, XDREMSG
XDRDSHOW	TBD
XDRDSTAT	This routine displays the status of a particular search for duplicates. Calls: DIC , Y^DIQ
XDRDUP	This routine does the actual checking of two records and makes the determination if they are potential duplicates. Called by: XDRDADJ, XDRDCOMP, XDRDMAIN, XDRMADD Calls: EN^DIQ1, XDRDADD, XDRDSCOR, XDREMSG
XDRDVAL	TBD
XDRDVAL1	TBD
XDRDVAL2	TBD
XDREMSG	This routine is responsible for either sending error messages to the user, or if the calling routine is running in the background, it sends a bulletin to the people in the duplicate manager mail group if one is defined. The meanings of XDRERR are as follows: 1—The candidate collection routine is undefined. 2—The candidate collection routine is not present. 3—The potential duplicate threshold is undefined. 4—There are no duplicate tests entered for this duplicate resolution entry. 5—The global root node in DIC is undefined. 6—No entry in DUPLICATE RESOLUTION (#15.1) file for this file. 7—The From and To records are undefined. 8—The test routine is not present. 9—The routine defined as the pre-merge routine is not present. 11—The routine defined as the verified msg routine is not present. 11—The routine defined as the merged msg routine is not present. 12—The routine defined as the merged msg routine is not present. 13—Non-interactive merge style not allowed with DINUM files for merge entries. Called by: XDRDMAIN, XDRDSCOR, XDRDUP, XDRMAINI, XDRU1 Calls: XMB
XDRHLP	Contains code for executable help from the DUPLICATE RECORD (#15) and DUPLICATE RESOLUTION (#15.1) files.

Routine	Description
XDRLRFIX	TBD
XDRMADD	Adds entries to the DUPLICATE RECORD (#15) file with a status of Verified Duplicates. Calls: DIC, FILE^DICN, DIE, FILE^XDRDQUE, XDRDSCOR, XDRDUP, EN^XDRMAIN
XDRMAIN	 Main Driver for the merge portion of the Duplicate Merge Utilities. Called by: XDRDADD, XDRMADD Calls: DIC, DIE, DIR, XDRMAINI, XDRMPACK, XDRMRG, XDRMSG, XDRMVFY EN—Entry point for automatic merge. EN1—Entry point for looping through verified ready to merge duplicates. EN2—Entry point to select verified ready to merge duplicate pair. EN3—Entry point to select unverified potential duplicate pair.
XDRMAINI	Initialization routine for XDRMAIN and XDRDMAIN. Called by: XDRDMAIN, XDRMAIN Calls: DIC, XDRDSCOR, XDREMSG
XDRMERG	TBD
XDRMERG0	TBD
XDRMERG1	TBD
XDRMERG2	TBD
XDRMERGA	TBD
XDRMERGB	TBD
XDRMERGC	TBD
XDRMPACK	This routine is responsible for checking PACKAGE (#9.4) file for unique package merges and for checking these package's files to see if they have data for the merged "from" record. Called by: XDRMAIN Calls: DIE
XDRMRG	This is the routine that does the actual merging of the duplicate records. Called by: XDRMAIN Calls: DIE, DIK, EN^DITO, DITM2, EN^DITMGMRG, LOCK^XDRU1
XDRMRG1	This routine is the error trap for XDRMRG . Calls: %ET , DIE

Routine	Description
XDRMSG	This routine is responsible for the sending of the verified and merged messages. Called by: XDRMAIN Calls: XMB
XDRMVFY	This routine is responsible for verifying potential duplicates. Called by: XDRMAIN Calls: DIE, DIR, EN^DITC
XDRPREL1	TBD
XDRPREI	This is a pre-init routine for the XDR package that deletes the DUPLICATE RECORD (#15) and DUPLICATE RESOLUTION (#15.1) files' dictionaries.
XDRPTCAN	TBD
XDRPTCLN	TBD
XDRPTDOB	TBD
XDRPTDOD	TBD
XDRPTLSD	TBD
XDRPTMMN	TBD
XDRPTN	TBD
XDRPTSSN	TBD
XDRPTSX	TBD
XDRRMRG0	TBD
XDRRMRG1	TBD
XDRRMRG2	TBD
XDRU	This routine is a utility routine for the merge software; it does some testing for the merge software and provides the locking subroutines for the merge. Called by: XDRDQUE, XDRMRG Calls: XDREMSG
XDRUTL	TBD
XDRVCHEK	TBD
XGF	Graphics functions.
XGFDEMO	Demonstrate graphics functions.
XGFDEMO1	Demonstrate graphics functions (continued).
XGKB	Read with escape processing.

Routine	Description
XGKB1	Read with escape processing (continued).
XGS	Screen primitives.
XGSA	Screen attribute primitives.
XGSBOX	Screen rectangular region primitives.
XGSETUP	Set up KWAPI environment.
XGSW	Screen window primitives.
XINDEX	The XIND* series of routines is the VA Cross-referencer. These routines are saved in the Manager's account as %IND* routines.
XINDX1	%INDEX continued.
XINDX10	%INDEX continued.
XINDX11	%INDEX continued.
XINDX2	%INDEX continued.
XINDX3	%INDEX continued.
XINDX4	%INDEX continued.
XINDX5	%INDEX continued.
XINDX51	%INDEX continued.
XINDX52	%INDEX continued.
XINDX53	%INDEX continued.
XINDX6	%INDEX continued.
XINDX7	%INDEX continued.
XINDX8	%INDEX continued.
XINDX9	%INDEX continued.
XIPENV	TBD
XIPMAIL	TBD
XIPMAILA	TBD
XIPMAILB	TBD
XIPPOST	TBD
XIPSRVR	TBD
XIPSYNC	TBD
XIPUTIL	TBD
XIPUTIL1	TBD
XIPXREF	TBD

Routine	Description
XLFCRC	TBD
XLFDT	Date/Time functions.
XLFDT1	Date/Time functions (continued).
XLFDT2	Date/Time functions: Schedule.
XLFDT3	Date/Time functions: Schedule (continued).
XLFDT4	Date/Time functions: Exclude time.
XLFHYPER	Hyperbolic math functions.
XLFIPV	TBD
XLFLTR	Print big letters.
XLFLTR1	Set up letters.
XLFMSMT	Measurement functions.
XLFMSMT2	Measurement functions (continued).
XLFMTH	Math functions.
XLFMTH1	Math functions (continued).
XLFNAME	TBD
XLFNAME1	TBD
XLFNAME2	TBD
XLFNAME3	TBD
XLFNAME4	TBD
XLFNAME5	TBD
XLFNAME6	TBD
XLFNAME7	TBD
XLFNAME8	TBD
XLFNENV	TBD
XLFNP152	TBD
XLFNP176	TBD
XLFNSLK	TBD
XLFSHAN	Secure Hash Algorithm (SHA) APIs.
XLFSTR	String functions.
XLFUTL	Utility functions: Check digit.
XPAR	TBD

Routine	Description
XPAR1	TBD
XPAR2	TBD
XPAR3	TBD
XPARDD	TBD
XPARDD1	TBD
XPARDD2	TBD
XPARDDAC	TBD
XPAREDIT	TBD
XPAREDT1	TBD
XPAREDT2	TBD
XPAREDT3	TBD
XPARLIST	TBD
XPARTPV	TBD
XPARTPV1	TBD
XPARY26	TBD
XPARZUTL	TBD
XPDB1	TBD
XPDCOM	Compare transport global.
XPDCOMF	TBD
XPDCOMG	Compare globals.
XPDCOML	TBD
XPDCPU	Code that updates each CPU.
XPDDCS	Display checksum for a package.
XPDDI	KIDS: Display an installation.
XPDDP	KIDS: Display a package.
XPDDP1	KIDS: Display a package.
XPDDPCK	TBD
XPDE	KIDS: Package edit.
XPDER	TBD
XPDET	KIDS: Input transforms and help for the BUILD (#9.6) file and INSTALL (#9.7) file.
XPDGCDEL	KIDS: Delete specified objects, if <i>not</i> required.

33

Routine	Description
XPDH	KIDS: Help for answering installation questions.
XPDI	KIDS: Installation process.
XPDI1	KIDS: Installation process (continued).
XPDIA	KIDS: Install pre/post actions for Kernel Files.
XPDIA0	KIDS: Install pre/post actions for Kernel Files (continued).
XPDIA1	KIDS: Install pre/post actions for Kernel Files (continued).
XPDIA2	KIDS: Delete options and clean up pointers.
XPDIA3	KIDS: Delete options and clean up pointers.
XPDIB	TBD
XPDID	KIDS: Display installation progress.
XPDIGP	KIDS: Load global distribution.
XPDIJ	KIDS: Installation job.
XPDIJ1	KIDS: Installation job.
XPDIK	KIDS: Install Kernel files and VA FileMan files.
XPDIL	KIDS: Load distribution global.
XPDIL1	KIDS: Load distribution global (continued).
XPDIN001	KIDS: Init routine.
XPDIN002	KIDS: Init routine.
XPDIN003	KIDS: Init routine.
XPDIN004	KIDS: Init routine.
XPDIN005	KIDS: Init routine.
XPDIN006	KIDS: Init routine.
XPDIN007	KIDS: Init routine.
XPDIN008	KIDS: Init routine.
XPDIN009	KIDS: Init routine.
XPDIN00A	KIDS: Init routine.
XPDIN00B	KIDS: Init routine.
XPDIN00C	KIDS: Init routine.
XPDIN00D	KIDS: Init routine.
XPDIN00E	KIDS: Init routine.
XPDIN00F	KIDS: Init routine.

Routine	Description
XPDIN00G	KIDS: Init routine.
XPDIN00H	KIDS: Init routine.
XPDIN00I	KIDS: Init routine.
XPDIN00J	KIDS: Init routine.
XPDIN00K	KIDS: Init routine.
XPDIN00L	KIDS: Init routine.
XPDIN00M	KIDS: Init routine.
XPDIN00N	KIDS: Init routine.
XPDIN00O	KIDS: Init routine.
XPDIN00P	KIDS: Init routine.
XPDIN00Q	KIDS: Init routine.
XPDIN00R	KIDS: Init routine.
XPDIN00S	KIDS: Init routine.
XPDIN00T	KIDS: Init routine.
XPDINIT	KIDS: Init routine.
XPDINIT1	KIDS: Init routine.
XPDINIT2	KIDS: Init routine.
XPDINIT3	KIDS: Init routine.
XPDINIT4	KIDS: Init routine.
XPDINIT5	KIDS: Init routine.
XPDIP	KIDS: Install PACKAGE (#9.4) and ROUTINE (#9.8) file.
XPDIPM	KIDS: Load a Packman message.
XPDIQ	KIDS: Install questions.
XPDIR	KIDS: Install restart.
XPDIST	KIDS: Site tracking.
XPDIU	KIDS: Unload/Convert/Rollup distribution global.
XPDKEY	KIDS: Tools to work on keys.
XPDKRN	KIDS: Installation program.
XPDMENU	KIDS: Manage menu items.
XPDNTEG	KIDS: Package checksum checker.
XPDPINIT	KIDS: Load a Packman message using KIDS.

Routine	Description
XPDPROT	TBD
XPDR	KIDS: Routine file edit.
XPDRSUM	KIDS: Routine checksum utilities.
XPDT	KIDS: Transport a package.
XPDTA	KIDS: Build actions for Kernel files.
XPDTA1	KIDS: Build actions for Kernel files (continued).
XPDTA2	KIDS: Build actions for Kernel files (continued).
XPDTC	KIDS: Transport calls.
XPDTP	KIDS: Transport using a Packman message.
XPDUTL	KIDS: Returns parameters of check point.
XPDUTL1	KIDS: Returns parameters of check point.
XPDV	KIDS: Verify build.
XQ	MenuMan: Menu driver: Part 1.
XQ1	MenuMan: Menu driver: Part 2.
XQ11	MenuMan: Menu utilities.
XQ12	MenuMan: Utilities.
XQ2	MenuMan: Menu lister and utilities.
XQ21	MenuMan: Option: XUUSERDISP.
XQ3	MenuMan: Clean up dangling pointers in option or help frame files.
XQ31	MenuMan: Menu management reports.
XQ32	MenuMan: List users with specified menu.
XQ33	MenuMan: Remove unreferenced options.
XQ4	MenuMan: Menu diagram with entry/exit actions.
XQ41	MenuMan: Menu diagram with entry/exit actions (continued).
XQ5	MenuMan: Menu edit utilities Edit Option [XUEDITOPT].
XQ55	MenuMan: Search for user's access to an option.
XW55SPEC	TBD
XQ6	MenuMan: Bulk key distribution.
XQ61	MenuMan: Bulk editorship assignment.
XQ62	MenuMan: Generalized file lookup utility.
XQ6A	MenuMan: Bulk key distribution (continued).

Routine	Description
XQ6B	MenuMan: Bulk key distribution (continued).
XQ7	MenuMan: Microsurgery of XUTL menu trees.
XQ71	MenuMan: Lookup response to menu prompt.
XQ72	MenuMan: Jump ("^) utilities: Part 1.
XQ72A	MenuMan: Jump ("^) utilities: Part 2.
XQ73	MenuMan: Rubber Band Jump (^^) processor.
XQ74	MenuMan: Phantom Jump processor.
XQ75	MenuMan: Lookup response for jumps.
XQ8	MenuMan: Build menu trees.
XQ81	MenuMan: Build menu trees (continued).
XQ82	MenuMan: Clean old \$JOB data out of XUTL("XQ" , and others.
XQ83	MenuMan: Find ^XUTL nodes needing surgery.
XQ83A	MenuMan: Microsurgery on menu trees to add a new item to a menu.
XQ83D	MenuMan: Microsurgery on menu trees for item deleted from menu.
XQ83R	MenuMan: Microsurgery on ^XUTL("XQO" , nodes for regular modifications to options.
XQ88	TBD
XQ8A	MenuMan: Rebuild menus in all production accounts.
XQ9	MenuMan: Restrict availability of options.
XQ91	MenuMan: Restrict availability of options (continued).
XQ92	MenuMan: Date/Time for prohibited Time/Day.
XQ93	MenuMan: Date/Time for prohibited Time/Day (continued).
XQA366PO	TBD
XQABELOG	Alpha/Beta: Log alpha/beta errors received.
XQABERR	Alpha/Beta: Track errors in alpha/beta routines back to OIFO.
XQABLIST	Alpha/Beta: List usage of options in alpha/beta test.
XQABLOAD	Alpha/Beta: Set up if alpha/beta test site.
XQABTMP	TBD
XQAL173P	TBD
XQAL285P	TBD
XQALBUTL	Alerts: Utilities for OE/RR notifications.
XQALDATA	Alerts: Provide data on alerts.

Routine	Description
XQALDEL	Alerts: Delete.
XQALDOIT	Alerts: Handler.
XQALERT	Alerts: Handler.
XQALERT1	Alerts: Handler.
XQALFWD	Alerts: Forward.
XQALGUI	TBD
XQALMAKE	Alerts: High level setup.
XQALSET	Alerts: Setup.
XQALSET1	Alerts: Setup.
XQALSUR1	TBD
XQALSUR2	TBD
XQALSURO	TBD
XQARPRT1	TBD
XQARPRT2	TBD
XQCHK	MenuMan: Check security on option # XQCY.
XQCHK1	TBD
XQCHK2	TBD
XQCHK3	TBD
XQCS	TBD
XQDATE	MenuMan: Return Human readable date.
XQH	MenuMan: Help Processor.
XQH0	MenuMan: Help Processor (continued).
XQH1	MenuMan: Help Processor (continued).
XQH2	MenuMan: Help Processor (continued).
XQH3	MenuMan: Help frame cross-reference by parent.
XQH4	MenuMan: Help frame lister.
XQH5	MenuMan: Help frame lister (continued).
XQHLP	MenuMan: Menu helper.
XQKEY	MenuMan: Key and lock utilities.
XQLOCK	MenuMan: Find all the keys in the tree.
XQLOCK1	MenuMan: Utilities for keys in the tree.

Routine	Description
XQOO	MenuMan: Out-of-Order, man.
XQ001	MenuMan: Out-of-Order set calls.
XQOO2	MenuMan: Out-of-Order manager utilities.
XQOO3	MenuMan: Out-of-Order utilities.
XQOPED	TBD
XQOR	MenuMan: Prepare to unwind options.
XQOR1	MenuMan: Main unwinding loop.
XQOR2	MenuMan: Process extended actions: Protocols.
XQOR3	MenuMan: Process Menus: Protocol menus.
XQOR4	MenuMan: Process ^^ jump.
XQORD	MenuMan: Dialogue utility.
XQORD1	MenuMan: Process Menus: WP during dialogue.
XQORD101	TBD
XQORDD1	TBD
XQORM	MenuMan: Menu utility.
XQORM1	MenuMan: Display selections and prompt.
XQORM2	MenuMan: Lookup for menu utility.
XQORM3	MenuMan: Lookup for menu utility (continued).
XQORM4	MenuMan: Menu messages.
XQORM5	MenuMan: Menu help.
XQORMX	MenuMan: Compile formatted menus.
XQORO	MenuMan: Order Entry calls.
XQOROP	TBD
XQP46INI	TBD
XQP50	TBD
XQSET	MenuMan: Rebuild display/user XUTL("XQO").
XQSMD	MenuMan: Secure Menu Delegation (SMD): Part 1.
XQSMD1	MenuMan: Secure Menu Delegation: Part 2.
XQSMD2	MenuMan: Secure Menu Delegation: Part 3.
XQSMD21	MenuMan: Secure Menu Delegation: Part 4.
XQSMD3	MenuMan: Secure Menu Delegation utilities.

Routine	Description
XQSMD31	MenuMan: Secure Menu Delegation utilities (continued).
XQSMD4	MenuMan: Edit a user's options.
XQSMD5	MenuMan: Secure menu delegate edit user options.
XQSMD6	TBD
XQSMDCPY	MenuMan: Copy one user (primary and secondary menus, keys, files) to another user.
XQSMDFM	MenuMan: Permit user to build limited VA FileMan options.
XQSMDP	MenuMan: Post Init for XQSMD Kernel 6.
XQSRV	MenuMan: Server message processor.
XQSRV1	MenuMan: Server option utilities.
XQSRV2	MenuMan: Server task handler.
XQSRV3	MenuMan: Server to MailMan utilities.
XQSRV4	MenuMan: Server utilities.
XQSRV5	MenuMan: Check out a server option server.
XQSTCK	MenuMan: Stack utilities.
XQSUITE	TBD
XQSUITE1	TBD
XQT	MenuMan: Menu template loader.
XQT1	MenuMan: Menu template processor.
XQT2	MenuMan: Define a path template.
XQT3	MenuMan: Create menu templates (continued).
XQT4	MenuMan: Menu template utilities.
XQT5	MenuMan: Menu template utilities (continued).
XQTOC	MenuMan: Time Out/Continue/Jump Start.
XQUIT	TBD
XQUSR	MenuMan: Option: Display User Characteristics [XUUSERDISP].
XQUTL	TBD
XT73P113	TBD
XT73P129	TBD
XT73P132	TBD
XT73P133	TBD
XT73P136	TBD

Routine	Description
XT73P33	TBD
XT73P34	TBD
XT73P44	TBD
XT73P94	TBD
XT73P98	TBD
XT95POST	TBD
XTDEBUG	TBD
XTDEBUG1	TBD
XTDEBUG2	TBD
XTDEBUG3	TBD
XTDEBUG4	TBD
XTDEBUG5	TBD
XTDEBUG6	TBD
XTDEBUG7	TBD
XTDEBUG8	TBD
XTECGLO	TBD
XTECLIPS	TBD
XTECROU	TBD
XTEDTVXD	TBD
XTER	Error Processing: Option: Error Trap Display [XUERTRAP].
XTER1	Error Processing: Kernel Error Trap Display.
XTER1A	Error Processing: VA error reporting.
XTER1A1	Error Processing: VA error reporting (continued).
XTER1B	Error Processing: Package-specific variable identification.
XTER2	Error Processing: Modification of %XTER for use with VAX DSM.
XTERPUR	Error Processing: Delete entries from Error Trap.
XTERSUM	TBD
XTERSUM1	TBD
XTERSUM3	TBD
XTERSUM4	TBD
XTFC1	TBD

Routine	Description
XTFCE	TBD
XTFCE1	TBD
XTHC	TBD
XTHC10	TBD
XTHC10A	TBD
XTHCDEM	TBD
XTHCURL	TBD
XTHCUTL	TBD
XTID	TBD
XTID1	TBD
XTIDCTX	TBD
XTIDSET	TBD
XTIDTBL	TBD
XTIDTERM	TBD
XTIDTRM	TBD
XTKERM1	TBD
XTKERM2	TBD
XTLATSET	TBD
XTMLOG	TBD
XTMLOG1	TBD
XTMLOPAR	TBD
XTMLOSKT	TBD
XTMRPAR1	TBD
XTMRPAR2	TBD
XTMRPRNT	TBD
XTMUNIT	TBD
XTPMKPCF	TBD
ХТРМКРР	TBD
ХТРМКРТС	TBD
XTPMNEX7	TBD
XTPMSTA2	TBD

Routine	Description
XTPMSTAT	TBD
XTPOST	TBD
XTRCMP	TBD
XTRMON	Watch for changes in routine checksums.
XTRUTL	TBD
XTRUTL1	TBD
XTRUTL2	TBD
XTSUMBLD	TBD
XTSUMCK	TBD
XTSUMCK1	TBD
XTVNUM	TBD
XTVRC1	TBD
XTVRC1A	TBD
XU8343P	TBD
XU8343Q	TBD
XU8343R	TBD
XU8343S	TBD
XU8375P	TBD
XU8P125	TBD
XU8P132	TBD
XU8P1321	TBD
XU8P1322	TBD
XU8P135	TBD
XU8P137	TBD
XU8P204	TBD
XU8P246	TBD
XU8P260	TBD
XU8P264	TBD
XU8P264A	TBD
XU8P292	TBD
XU8P295	TBD

Routine	Description
XU8P297	TBD
XU8P307	TBD
XU8P314	TBD
XU8P317	TBD
XU8P324	TBD
XU8P327	TBD
XU8P328	TBD
XU8P328A	TBD
XU8P328B	TBD
XU8P328C	TBD
XU8P328D	TBD
XU8P330X	TBD
XU8P332	TBD
XU8P334	TBD
XU8P344	TBD
XU8P352	TBD
XU8P354	TBD
XU8P356	TBD
XU8P360	TBD
XU8P365	TBD
XU8P369	TBD
XU8P370	TBD
XU8P373	TBD
XU8P377	This routine was exported with Kernel Patch XU*8.0*377. This routine inactivates old Person Class entries.
XU8P377D	This routine was exported with Kernel Patch XU*8.0*377. This routine lists all users that will have their Person Class inactivated by Kernel Patch XU*8.0*377. In the report, the column DISUSER will indicate either of the following: • NO —An active user account.
	YES—A non-active user account. Sites must manually update the new Person Class entries for these users.
XU8P378	TBD

Routine	Description
XU8P378A	TBD
XU8P378B	TBD
XU8P378C	TBD
XU8P378E	TBD
XU8P381	TBD
XU8P386	TBD
XU8P387	TBD
XU8P387X	TBD
XU8P410	TBD
XU8P413	TBD
XU8P420	TBD
XU8P426	TBD
XU8P428	TBD
XU8P432	TBD
XU8P436	TBD
XU8P43P	TBD
XU8P440	TBD
XU8P444	TBD
XU8P446	TBD
XU8P452	TBD
XU8P453	TBD
XU8P455	TBD
XU8P459	TBD
XU8P463	TBD
XU8P466	TBD
XU8P467	TBD
XU8P467A	TBD
XU8P469	TBD
XU8P480	TBD
XU8P481	TBD
XU8P483	TBD

Routine	Description
XU8P487	TBD
XU8P497	TBD
XU8P497A	TBD
XU8P499	TBD
XU8P504	TBD
XU8P509	TBD
XU8P509A	TBD
XU8P509B	TBD
XU8P509C	TBD
XU8P509D	TBD
XU8P511	TBD
XU8P514	TBD
XU8P518	TBD
XU8P524	TBD
XU8P531	TBD
XU8P531A	TBD
XU8P531B	TBD
XU8P536	TBD
XU8P540	TBD
XU8P541	TBD
XU8P541A	TBD
XU8P543	TBD
XU8P545	TBD
XU8P545A	TBD
XU8P546	TBD
XU8P560	TBD
XU8P571	TBD
XU8P572	TBD
XU8P580	TBD
XU8P581	TBD
XU8P582	TBD

Routine	Description
XU8P584	TBD
XU8P585	TBD
XU8P586	TBD
XU8P591	TBD
XU8P598	TBD
XU8P599	TBD
XU8P601	TBD
XU8P601A	TBD
XU8P601B	TBD
XU8P604	TBD
XU8P608	Kernel Lock Manger utility.
XU8P608B	Kernel Lock Manger utility.
XU8P616	TBD
XU8P638	TBD
XU8P672E	Environment check routine for Kernel Patch XU*8.0*672.
XU8PATCH661POST	TBD
XU8PS629	TBD
XUA4A7	Give entries into F6 a Provider key.
XUA4A71	Better Soundex. Extrinsic function call with string, returns converted string.
XUA4A72	Better Soundex. Extrinsic function call with string, returns converted string. This routine was exported with Kernel Patch XU*8.0*27. This routine provides the Person Class APIs.
	REF: For more information on the Person Class APIs, see the Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide.
XUA4A73	Better Soundex. Extrinsic function call with string, returns converted string.
XUAF4	TBD
XUAPURGE	Purge %ZUA global files.
XUBA	TBD
XUCERT	Kernel PKI Certificate Utilities.
XUCERT1	Kernel PKI Certificate Utilities (continued).

Routine	Description
XUCIDTM	Swap UCIs: DSM-11.
XUCIGTM	TBD
XUCIMSM	Swap UCIs: MSM-UNIX.
XUCIMSQ	Swap UCIs: M/SQL.
XUCIONT	TBD
XUCIVXD	Swap UCIs: VAX/DSM.
XUCMNIT	TBD
XUCMNIT1	TBD
XUCMNIT2	TBD
XUCMNIT4	TBD
XUCMNT3A	TBD
XUCMPA	TBD
XUCMPR17	TBD
XUCMVPI	TBD
XUCMVPM	TBD
XUCMVPM1	TBD
XUCMXDR	TBD
XUCMXUTL	TBD
XUCS1E	TBD
XUCS1R	TBD
XUCS1RB	TBD
XUCS2E	TBD
XUCS2R	TBD
XUCS2RB	TBD
XUCS4E	TBD
XUCS4R	TBD
XUCS4RB	TBD
XUCS6R	TBD
XUCS8E	TBD
XUCS8R	TBD
XUCS8RB	TBD

Routine	Description
XUCS8RG	TBD
XUCSCDE	TBD
XUCSCDG	TBD
XUCSCDR	TBD
XUCSCDRB	TBD
XUCSPRG	TBD
XUCSRV	TBD
XUCSTM	TBD
XUCSTME	TBD
XUCSUTL3	TBD
XUCSXCD	TBD
XUCSXDR	TBD
XUCSXGR	TBD
XUCSXRT	TBD
XUCSXST	TBD
XUDHGUI	TBD
XUDHRES	TBD
XUDHSET	TBD
XUDHUTL	TBD
XUEPCSED	EPCS Utilities and Reports. RPC to handle ePCS data changes (Released with XU*8.0*580).
XUEPCSRT	EPCS Utilities and Reports (Released with XU*8.0*580).
XUESSO1	Single Sign-On Utilities.
XUESSO2	Enhanced Single Sign-On Utilities.
XUESSO3	Enhanced Single Sign-On Utilities.
XUESSO4	Enhanced Single Sign-On Utilities.
XUFILE	Assign and delete file access.
XUFILE0	Assign and delete file access (continued).
XUFILE1	Assign and delete file access (continued).
XUFILE3	File access control for Kernel 8.
XUGET	Package integrity checker.

Routine	Description
XUGOT	TBD
XUGOT1	TBD
XUHUI	TBD
XUHUI236	TBD
XUHUIHL7	TBD
XUHUIMSG	TBD
XUINCON	Builds accessible file multiple.
XUINEACH	Code that needs to be run on each CPU.
XUINEND	Post Install for Kernel 8.0.
XUINENV	TBD
XUINOK	Check to see if OK to load.
XUINP275	TBD
XUINP313	TBD
XUINP337	TBD
XUINP348	TBD
XUINPCH	TBD
XUINPCH2	TBD
XUINPCH3	TBD
XUINPCH4	TBD
XUINPRE	Kernel 8 pre-initialization.
XUINPRE1	Kernel 8 pre-initialization.
XUINTSK	TaskMan: Version 7.1 post-Init.
XUINTSK1	TaskMan: Version 7.1 post-Init.
XUINTSK2	Reschedule tasks in IO, JOB, LINK queues.
XULM	Kernel Lock Manger utility.
XULM1	Kernel Lock Manger utility.
XULMLD	Kernel Lock Manger utility.
XULMLOG	Kernel Lock Manger utility.
XULMOUT	Kernel Lock Manger utility.
XULMP	Kernel Lock Manger utility.
XULMRPC	Kernel Lock Manger utility.

Routine	Description
XULMU	Kernel Lock Manger utility.
XULMUI	Kernel Lock Manger utility.
XULMUI1	Kernel Lock Manger utility.
XUMF	TBD
XUMF0	TBD
XUMF04	TBD
XUMF04H	TBD
XUMF04P	TBD
XUMF04Q	TBD
XUMF1H	TBD
XUMF218	TBD
XUMF218A	TBD
XUMF218Z	TBD
XUMF261P	TBD
XUMF299	TBD
XUMF333	TBD
XUMF382	TBD
XUMF390	TBD
XUMF397	TBD
XUMF4	TBD
XUMF416	TBD
XUMF479P	TBD
XUMF4A	TBD
XUMF4H	TBD
XUMF4L0	TBD
XUMF4L1	TBD
XUMF4L2	TBD
XUMF502	TBD
XUMF502P	TBD
XUMF512F	TBD
XUMF555P	TBD

Routine	Description
XUMF5AT	TBD
XUMF5AU	TBD
XUMF5BYT	TBD
XUMF5I	TBD
XUMF5II	TBD
XUMF654	TBD
XUMF654P	TBD
XUMFEIMF	TBD
XUMFENV	TBD
XUMFH	TBD
XUMFH4	TBD
XUMFHM	TBD
XUMFHPQ	TBD
XUMFHPR	TBD
XUMFI	TBD
XUMFI0	TBD
XUMFMD5	TBD
XUMFMFE	TBD
XUMFMFI	TBD
XUMFP	TBD
XUMFP4	TBD
XUMFP4C	TBD
XUMFP4Z	TBD
XUMFP512	TBD
XUMFP513	TBD
XUMFPFT	TBD
XUMFPMFS	TBD
XUMFPOST	TBD
XUMFPZL7	TBD
XUMFQR	TBD
XUMFR	TBD

Routine	Description
XUMFX	TBD
XUMFXACK	TBD
XUMFXH	TBD
XUMFXHL7	TBD
XUMFXI	TBD
XUMFXP	TBD
XUMFXP1	TBD
XUMFXP2	TBD
XUMFXR	TBD
XUMPI	TBD
XUMVIENU	Entry point and processing routine for the XUS MVI ENRICH NEW PERSON RPC for adding and updating a record in the NEW PERSON (#200) file.
XUMVINPA	Processing routine for adding a new record in the NEW PERSON (#200) file, which is associated with the XUS MVI ENRICH NEW PERSON RPC.
XUOAAHL7	TBD
XUOAAUTL	TBD
XUP	Set up environment for developers.
XUP468	TBD
XUP522	TBD
XUP569	TBD
XUPARAM	Look up parameter substitute, KSP values.
XUPCF	TBD
XUPCH117	TBD
XUPCSRVR	TBD
XUPOS259	TBD
XUPRE247	TBD
XUPROD	TBD
XUPS	TBD
XUPS309P	TBD
XUPSB01	TBD
XUPSCLR	TBD

Routine	Description
XUPSGS	TBD
XUPSHL7B	TBD
XUPSNAME	TBD
XUPSNM1	TBD
XUPSORG	TBD
XUPSPAID	TBD
XUPSPD1	TBD
XUPSPRA	TBD
XUPSQRY	TBD
XUPSSTF	TBD
XUPSUTL1	TBD
XUPSUTQ	TBD
XURTL	TBD
XURTL1	TBD
XURTL2	TBD
XURTL3	TBD
XURTLC	TBD
XURTLK	TBD
xus	Signon.
XUS1	Signon.
XUS11	Read and store DA from terminals.
XUS1A	Signon: Overflow from XUS1 .
XUS1B	TBD
XUS2	Check or return user attributes.
XUS3	Signon.
XUS3A	Change UCIs.
XUS4	Access code generator.
XUS5	Resume logic for continue.
XUS6	Clear users at startup.
XUS9	Find a user.
XUS91	Report of users signed on.

Routine	Description
XUSAML	Kernel SAML Token Implementation.
XUSAP	TBD
XUSAP1	TBD
XUSBSE1	TBD
XUSBSE2	TBD
XUSC1	TBD
XUSC1C	TBD
XUSC1S	TBD
XUSC1S1	TBD
XUSCLEAN	Cleanup before exit.
XUSCNT	TBD
XUSECAD	TBD
XUSECBUL	TBD
XUSER	A common set of user functions.
XUSER1	TBD
XUSER2	TBD
XUSERBLK	Bulk user (NEW PERSON) computer access.
XUSERNEW	Add a new user.
XUSERP	TBD
XUSESIG	Enter or change electronic signature code.
XUSESIG1	TBD
XUSESIG2	Determines whether the XU SIG BLOCK DISABLE parameter is set to a value of ON (1), and whether the user is assigned the XUSIG security key. If the parameter is set to ON , users without the security key <i>cannot</i> edit the following Electronic Signature fields in the NEW PERSON (#200) file: • DEGREE (#10.6) • SIGNATURE BLOCK PRINTED NAME (#20.2)
XUSESIG3	Edits entries for the DEGREE (#10.6) field in the NEW PERSON (#200) file.
XUSFACHK	TBD
XUSG	Signon from GUI screen.
XUSG1	Signon from GUI screen (continued).

Routine	Description
XUSHSH	Password encryption.
XUSHSHP	Hashing routine for sig block in NEW PERSON (#200) file.
XUSKAAJ	TBD
XUSKAAJ1	TBD
XUSMGR	Security utilities.
XUSNPI	TBD
XUSNPI1	TBD
XUSNPIDA	TBD
XUSNPIE1	TBD
XUSNPIE2	TBD
XUSNPIE3	TBD
XUSNPIED	TBD
XUSNPIUT	TBD
XUSNPIX1	TBD
XUSNPIX2	TBD
XUSNPIX3	TBD
XUSNPIX4	TBD
XUSNPIX5	TBD
XUSNPIXI	TBD
XUSNPIXU	TBD
XUSP557	TBD
XUSPURGE	Purge routine for XUSEC .
XUSRA	Remote access control.
XUSRB	TBD
XUSRB1	TBD
XUSRB2	TBD
XUSRB4	TBD
XUSRB5	TBD
XUSSPKI	TBD
XUST	TBD
XUST01	TBD

Routine	Description
XUST02	TBD
XUST04	TBD
XUST05	TBD
XUST06	TBD
XUST08	TBD
XUST09	TBD
XUST12	TBD
XUST13	TBD
XUST15	TBD
XUST17	TBD
XUST18	TBD
XUST19	TBD
XUST20	TBD
XUST21	TBD
XUST22	TBD
XUST24	TBD
XUST25	TBD
XUST26	TBD
XUST27	TBD
XUST28	TBD
XUST29	TBD
XUST35	TBD
XUSTAT	User/CPU stats from signon log: Part 1.
XUSTAT1	User/CPU stats from signon log: Part 2.
XUSTAT2	User/CPU stats from signon log: Part 3.
XUSTAX	TBD
XUSTERM	Deactivate user.
XUSTERM1	Deactivate user (continued).
XUSTERM2	User terminate, package file run
XUSTZ	Security Twilight Zone.
XUSTZIP	TBD

Routine	Description
XUTMD	TaskMan: Option: XUTMDEL: Part 1: Single.
XUTMD1	TaskMan: Option: XUTMDEL : Part 2 : Bulk Delete.
XUTMDEVQ	Device call and queue in one place.
XUTMDQ	TaskMan: Option: XUTMDQ : Part 1 : Single.
XUTMDQ1	TaskMan: Option: XUTMDQ : Part 2 : Bulk DQ .
XUTMG145	TaskMan: Globals: Code for VOLUME SET (#14.5) file.
XUTMG146	TaskMan: Globals: Cross-references for UCI ASSOCIATION (#14.6) file.
XUTMG14P	TaskMan: Globals: Cross-references for VOLUME SET (#14.5) and MUMPS OPERATING SYSTEM (#.7) files.
XUTMG19	TaskMan: Code for OPTION SCHEDULING (#19.2) file.
XUTMG43	TaskMan: Globals: Cross-references for KERNEL SYSTEM PARAMETERS (#8989.3) file.
XUTMHR	TBD
XUTMK	TaskMan: Option: ZTMCLEAN/ZTMQCLEAN .
XUTMKA	TBD
XUTMKE	TaskMan: Option: XUTME LOG*.
XUTMKE1	TaskMan: Option: XUTME SCREEN*: Part 1.
XUTMKE2	TaskMan: Option: ZTME SCREEN* : Part 2 .
XUTMONH	TaskMan: Option: XUTMON : Part 3 : Help Driver.
XUTMONH1	TaskMan: Option: XUTMON : Part 4 : Help Modules.
XUTMONH2	TaskMan: Option: XUTMON : Part 5 : Help Modules.
XUTMOPT	One-time queue and Schedule option code.
XUTMPCH	TBD
XUTMQ	TaskMan: Option: XUTMINQ : Show task lists.
XUTMQ0	TaskMan: Option: ZTMINQ : Part 2 : Modules.
XUTMQ1	TaskMan: Option: ZTMINQ : Part 3 : Modules.
XUTMQ2	TaskMan: Option: XUTMINQ : Part 4 : Modules.
XUTMQ3	TaskMan: Option: ZTMINQ : Part 5 : Modules.
XUTMQH	TBD
XUTMR	TBD
XUTMR1	TBD

Routine	Description
XUTMRJD	TBD
XUTMRJD1	TBD
XUTMRP	TBD
XUTMRP1	TBD
XUTMSYNC	TBD
XUTMT	TBD
XUTMTA	TBD
XUTMTAL	TBD
XUTMTD	TBD
XUTMTDL	TBD
XUTMTED	TBD
XUTMTEIO	TBD
XUTMTEP	TBD
XUTMTES	TBD
XUTMTL	TBD
XUTMTLD	TBD
XUTMTLU	TBD
XUTMTP	TBD
XUTMTP0	TBD
XUTMTP1	TBD
XUTMTPD	TBD
XUTMTPU	TBD
XUTMTR1	TBD
XUTMTR2	TBD
XUTMTR3	TBD
XUTMTR4	TBD
XUTMTS	TBD
XUTMTU	TBD
XUTMTUL	TBD
XUTMTZ	TBD
XUTMTZ1	TBD

Routine	Description
XUTMTZ2	TBD
XUTMTZ3	TBD
XUTMUSE	TaskMan: Option: XUTMUSER : Part 1 : Driver.
XUTMUSE1	TaskMan: Option: XUTMUSER: Part 2: Print.
XUTMUSE2	TaskMan: Option: XUTMUSER : Part 3 : Edit.
XUTMUSE3	TaskMan: Option: XUTMUSER : Part 3 : Help.
XUTMUTL	TaskMan: Utility.
XUVERIFY	Checks a user's Access and Verify codes.
XUWORKDY	Workdays: Monday – Friday.
XUXCTY	TBD
XUXPRT	TBD
XUYDEV	TBD
ZISEDIT	Device edit.
ZISPL	Utilities for spooling.
ZISPL1	Utilities for spooling (continued).
ZISPL2	Spooler cleanup.
ZISX	Executes nodes in ^%ZIS global.
ZTMB	TaskMan: Manager: Boot/ Option: ZTMRESTART .
ZTMCHK	TaskMan: Option: ZTMCHECK : Part 1 .
ZTMCHK1	TaskMan: Option: ZTMCHECK : Part 2 .
ZTMKU	TaskMan: Option: ZTMWAIT/RUN/STOP .
ZTMON	TaskMan: Option: ZTMON : Part 1 (Main Loop).
ZTMON1	TaskMan: Option: ZTMON : Part 2 (Main Loop).
ZUA	Audit access.
ZUMSM	MSM-NT and MSM-UNIX: Tie all user terminals to this routine.
ZUVXD	DSM: Tie all terminals to this routine.

Table 10: Routines—Kernel and Toolkit Production Account Routines Released with Broker Security Enhancement (BSE)

Routine	Description			
XUSBSE1	This Kernel routine contains various functions and procedures used by Broker Security Enhancement (BSE). It was released with the BSE (i.e., Kernel Patch XU*1.1*404).			
XUSBSE2	This Kernel routine contains various functions and procedures used by BSE. It was released with BSE (i.e., Kernel Patch XU*1.1*404).			
XUSBSEUT	This Kernel routine is the BSE unit test routine. It was released with BSI (i.e., Kernel Patch XU*1.1*404).			
XUSRB	This Kernel routine contains various functions and procedures used by BSE. It was modified and released with BSE (i.e., Kernel Patch XU*1.1*404).			

3.3 Additional Routines Installed by Virgin Install

<u>Table 11</u> lists the additional **XV** routines that are brought in by a virgin installation for the production account:

Table 11: Routines—Virgin Installs

Routine	Description
XVIRENV	Environment check for virgin Installations.
XVIRPOST	Post Init for virgin installations.

3.4 Mapping Routines

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 used.



REF: For a list of *recommended* routine mapping, see the "Installing Kernel 8.0 in a 7.1 Environment" section in the *Kernel Installation Guide*. Under the "Installation Instructions" section, see the "Implement Routine Mapping (DSM for OpenVMS only)" section. Recommended routines to map are listed there.

4 Files

This chapter contains information on all files and globals distributed with Kernel and Kernel Toolkit. The file information includes: file numbers, file names, global location, and brief file descriptions.



REF: Table 14 lists other files that are brought in during a virgin installation.

File number ranges for Kernel and Kernel Toolkit are as follows:

- 3.05 3.084
- 3.1 3.54
- 4.00 4.11
- 5.00 5.00
- 7 7.1
- 9.2 9.8
- 10
- 11
- 13
- 14.4 14.8
- 15 15.4
- 19.00 19.2
- 40.5
- 49
- 101.00
- 200 201
- 8932.10 8935.91
- 8980 8980.22
- 8984.1 8984.4
- 8989.2 8989.3
- 8991 8992.1



REF: For a detailed list of the files exported with Kernel and Kernel Toolkit, see <u>Table 15</u>.

4.1 Globals

4.1.1 Globals—VA-FileMan-compatible Storage

These Kernel/Kernel Toolkit globals are compatible with VA FileMan files. The Kernel/Kernel Toolkit files are listed in order of the global in which they are stored:



NOTE: In <u>Table 12</u>, those globals specific to Kernel Toolkit are notated under the "Global Name" column and those files specific to Kernel Toolkit within other globals are noted under the "File Number" column.

Table 12: Globals—VA FileMan-Compatible Storage

Global Name	File Number	File Name
^DIC	3.1	TITLE
	4	INSTITUTION
	4.1	FACILITY TYPE
	4.11	AGENCY
	9.2	HELP FRAME
	9.4	PACKAGE
	9.8	ROUTINE
	19	OPTION
	19.1	SECURITY KEY
	19.2	OPTION SCHEDULING
	49	SERVICE/SECTION
^DIZ (Toolkit)	8980	KERMIT HOLDING
^HOLIDAY	40.5	HOLIDAY
^XLM	8993	XULM LOCK DICTIONARY
	8993.1	XULM LOCK MANAGER PARAMETERS
	8993.2	XULM LOCK MANAGER LOG
^XPD	9.6	BUILD
	9.7	INSTALL
^XT (Toolkit)	8984.1	LOCAL KEYWORD
	8984.2	LOCAL SHORTCUT
	8984.3	LOCAL SYNONYM
	8984.4	LOCAL LOOKUP

Global Name	File Number	File Name
^XTV	8989.2	KERNEL PARAMETERS
	8989.3	KERNEL SYSTEM PARAMETERS
	8991 (Toolkit)	XTV ROUTINE CHANGES
	8991.19 (Toolkit)	XTV VERIFICATION PACKAGE
	8991.2 (Toolkit)	XTV GLOBAL CHANGES
	8991.5	XQAB ERRORS LOGGED
	8992	ALERT
	8992.1	ALERT TRACKING
	8992.2	ALERT RECIPIENT TYPE
	8992.3	ALERT CRITICAL TEXT
	8995.9	BINARY OBJECT
^XUSEC	3.081	SIGN-ON LOG
	19.081	AUDIT LOG FOR OPTIONS
^VA	15 (Toolkit)	DUPLICATE RECORD
	15.1 (Toolkit)	DUPLICATE RESOLUTION
	200	NEW PERSON
^%ZIS	3.2	TERMINAL TYPE
	3.22	DA RETURN CODES
	3.23	LINE/PORT ADDRESS
	3.5	DEVICE
	14.5	VOLUME SET
	14.6	UCI ASSOCIATION
	14.7	TASKMAN SITE PARAMETERS
	14.71	TASKMAN MONITOR
	14.72	TASKMAN SNAPSHOT
^%ZISL	3.54	RESOURCE
	14.8	TASK SYNC FLAG

Global Name	File Number	File Name
^%ZTER	3.075	ERROR LOG
	3.076	ERROR MESSAGES
^%ZTSK	14.4	TASKS
^%ZUA	3.05	FAILED ACCESS ATTEMPTS LOG
	3.07	PROGRAMMER MODE LOG



REF: There are other VA FileMan files stored in the ^**DIC** global. You should review the *VA FileMan Technical Manual* for information on those files.

4.1.2 Globals—Non-VA-FileMan-Compatible Storage

There are several additional Kernel/Kernel Toolkit globals that are *not* compatible with VA FileMan files. These include the following:

Table 13: Globals—Not VA FileMan-Compatible Storage

Global	Description		
^XTMP	Storage location for inter-process temporary data		
^XUTL	Compiled menu system		
^%ZOSF	Operating system-specific information		
^%ZTSCH	TaskMan schedule of tasks		

In addition, many Kernel and Kernel Toolkit routines make use of the **^TMP** global for temporary storage space.

4.1.3 Globals—Storage Used for Additional Files during Virgin Install

The following additional global storage is used by files brought in by Kernel 8.0 Virgin Install:

Table 14: Globals—Storage Used for Additional Files during Virgin Installation

Global Name	File Number	File Name
^DIC	4.2	(Exported with MailMan) DOMAIN
	5	STATE
	7	PROVIDER CLASS
	7.1	SPECIALITY
	10	RACE
	11	MARITAL STATUS
	13	RELIGION
^XMB	3.8	(Exported with MailMan) MAIL GROUP

4.2 Files

4.2.1 Kernel and Kernel Toolkit Export Files

<u>Table 15</u> lists the files exported with Kernel and Kernel Toolkit:



NOTE: In <u>Table 15</u>, those files exported with Kernel Toolkit are noted under the "File #" column. Those files that are *not* notated are exported with Kernel.

Table 15: Files—Distributed with Kernel and Kernel Toolkit

File #	File Name	Global Location	Description	Data w/ File	Data Setting
3.05	FAILED ACCESS ATTEMPTS LOG	^%ZUA(3.05,	Once the maximum signon attempts limit has been exceeded, an entry is made in this file to record all available information about the failed signon attempt. Information includes the date/time, CPU, UCI, device, and, if known, user. The text entered for each attempt is recorded when it does <i>not</i> match existing codes. This file is <i>not</i> cross-referenced.	NO	N/A
3.07	PROGRAMM ER MODE LOG	^%ZUA(3.07,	Entrance into programmer mode via the menu system is automatically logged in this file. It points to the NEW PERSON (#200) file to identify the user. It is <i>not</i> cross-referenced.	NO	N/A
3.075	ERROR LOG	^%ZTER(1,	This file is used to maintain a log of the errors occurring during use of the system. Errors are entered into this log by the Error Trap established for the user by ZU or application programs calling %ZTER when an error occurs. The entries are all entered by the routine %ZTER. There is no need for a user to make a manual entry into this file.	NO	N/A
3.076	ERROR	^%ZTER(2,	This file contains a number	YES	Merge

File #	File Name	Global Location	Description	Data w/ File	Data Setting
	MESSAGES		of the abbreviations used to indicate the type of error encountered. The most important ones are those which are indicated as fatal errors warranting termination of the job after logging of the error.		
3.077	ERROR TRAP SUMMARY	^%ZTER(3.07 7,	This file captures the VistA errors at each site. These findings can be used locally and pushed to a central repository to help prioritize the efforts to seal up the hot spots in the applications.	NO	N/A
3.081	SIGN-ON LOG	^XUSEC(0,	This file records signon/signoff times by user, device, job, UCI, and CPU. It is cross-referenced by user, device, and signoff time.	NO	N/A
3.083	LOCKED IP or DEVICE	^XUSEC(3,	This file holds the IP address or domain name of a system that has failed to successfully signon within the limits imposed. Once the lock out time has passed, the record is removed, so it would be normal for this file to have no records most of the time.	NO	N/A
3.084	FAILED SIGNON ATTEMPTS	^XUSEC(4,	This file holds the count of signon attempts from an IP address or domain. This is to prevent a user from disconnecting after each try. Once a signon is successful, the record is removed, so it would be normal for this file to have no records most of the time.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
3.1	TITLE	^DIC(3.1,	This file can be used to indicate a user's title. It is pointed to by the NEW PERSON (#200) file. It is only cross-referenced by name.	NO	N/A
3.2	TERMINAL TYPE	^%ZIS(2,	This file is pointed to by the Subtype field of the DEVICE (#3.5) file. This file can hold vendor-specific code to characterize a terminal type. For example, escape sequences can be entered in the Open and Close Execute fields to set pitch or font. This file is also pointed to by the NEW PERSON (#200) file to record signon subtype characteristics by user. Data is distributed with this file to support screen-handling capabilities. This data overwrites existing data for those terminal types of the same name. However, terminal types for printers are <i>not</i> affected, since the data that is distributed is for a subset of known CRTs. The Kernel Virgin Install distribution will seed a more complete set of terminal types including those for printers as well as CRTs. However, the Kernel Virgin Install should only be performed once and only on a system where there is no preexisting Kernel. The data in this file is cross-referenced by name and synonym.	YES	Over- write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
3.22	DA RETURN CODES	^%ZIS(22,	This file holds the translation between the ANSI DA return code and the name in the TERMINAL TYPE (#3.2) file that should be associated with the return code.	YES	Merge
3.23	LINE/PORT ADDRESS	^%ZIS(3.23,	This file is used to associate device(s)/subtype(s) with line/port addresses. The line/port address should be entered when editing the name field of this file. This address can be obtained by using the OS-specific function \$ZIO on VAX DSM. To establish an association with a Device and Terminal Type, the DEVICE and SUBTYPE fields of this file <i>must</i> store the appropriate values that correspond to entries in the DEVICE (#3.5) and TERMINAL TYPE (#3.2) files. This file is cross-referenced by name and device.	SO	N/A
3.5	DEVICE	^%ZIS(1,	This file defines all input/output devices that can be accessed from this CPU (definitions are not account-specific). Each device is identified with a unique name. Each is associated with a \$I value which may correspond with a hardware port or, on layered systems, a host file or directory. If there are several devices for the same volume set and \$I, one may be given signon system status. This file is cross-referenced by name,	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			\$I, volume set (CPU), and signon/system device. It is also cross-referenced by local synonym, mnemonic, subtype, and form currently mounted.		
3.51	SPOOL DOCUMENT	^XMB(3.51,	This file stores the name of spool documents created by the Kernel spooler (i.e., %ZIS4) for all operating systems. It does not hold the text of the documents themselves. That text is first spooled to spool space, then moved into the ^XMB 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.	NO	N/A
3.519	SPOOL DATA	^XMBS(3.519,	This is the holding file for spool documents until moved to a mail message or deleted.	NO	N/A
3.54	RESOURCE	^%ZISL(3.54	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 are 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 ^%ZISL global is used. This file is cross-referenced by name and job number.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
3.6	BULLETIN	^XMB(3.6,	Bulletins are "Super" messages. Each Bulletin has a text and a subject just like a normal message. But, embedded within either the subject 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. Bulletins are processed by MailMan 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. VA FileMan sets up code that issues a bulletin automatically when the special cross-reference type is created. In either case, the parameters that go into the text and/or the subject make each bulletin unique.	NO	N/A
4	INSTITUTION	^DIC(4,	This file contains a listing of VA institutions. It is cross-referenced by name and station number. The Number field is no longer meaningful (it previously referenced the station number).	NO	N/A
4.001	MASTER FILE PARAMETER S	^DIC(4.001,	The file holds parameters related to the Master File Server (MFS). The parameters map HL7 segment data to standard FileMan data files. Local	YES	Over- write

F:1. #	File News	Global	December 1	Data	Data
File #	File Name	Location	modifications to this file will seriously disrupt standard file updating and have negative consequences to existing VistA applications. CAUTION: Do not edit this file!	w/ File	Setting
4.005	MD5 Signature	^DIC(4.005,	This file stores parameters related to the MD5 signature of the Master File Server (MFS). For each domain (Allergy, Vitals), the parameters define the file's fields to be included in MD5 hash procedure. Local modifications to this file will seriously disrupt standard file updating and have negative consequences to existing VistA applications. CAUTION: Do not edit this file!	YES	
4.009	STANDARD TERMINOLO GY VERSION F	^DIC(4.009,	This file stores the last Version of Standard Terminology update. The file entry is set within MFS. Local modifications to this file will seriously disrupt standard file updating and have negative consequences to existing VistA applications. CAUTION: Do not edit this file!	YES	
4.05	INSTITUTION ASSOCIATIO N TYPES	^DIC(4.05,	This file is used to link entries in the INSTITUTION (#4) file into associations that are meaningful.	YES	Merge

File #	File Name	Global Location	Description	Data w/ File	Data Setting
4.1	FACILITY TYPE	^DIC(4.1,	This file is pointed to by the Institution file. It contains a list of facility codes that were previously stored in the VA Type Code field of the Institution file. This file is distributed with data, and the new data should overwrite the old. It is cross-referenced by name and full name.	YES	Merge
4.11	AGENCY	^DIC(4.11,	This file replaces the Set of Codes field AGENCY that had been used in the INSTITUTION (#4) file.	YES	Over- write
5	STATE	^DIC(5,	This file contains the name of the state (or outlying area) as issued by the Department of Veterans Affairs (VA) and issued in M-1, Part I, Appendix B. CAUTION: These entries should remain as distributed and should not be edited or updated unless done via a software upgrade or under direction of VA Central Office.	YES	
5.12	POSTAL CODE	^XIP(5.12	This file stores all known Postal Codes as well as other associated information related to the Postal Code. Although the original data in this file only contains US Postal Codes, the file has been designed to allow non-US Postal Codes to be added in the future if desired.	YES	Replace

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			CAUTION: Do not point directly to this file until you get an Integration Control Registration (ICR).		
5.13	COUNTY	^XIP(5.13,	This file contains all known US County Federal Information Processing Standards (FIPS) codes according to the United States Geological Survey (USGS), Department of Housing and Urban Development (HUD), and the United States Postal Service (USPS). CAUTION: Do not point directly to this file until you get an ICR. The only file that is allowed to point directly to this file is the POSTAL CODE (#5.12) file.	YES	Replace
7	PROVIDER CLASS	^DIC(7,	This file stores the provider classes. It is pointed to by the PROVIDER CLASS (#53.5) field of the NEW PERSON (#200) file.		
7.1	SPECIALITY	^DIC(7.1,	This file stores the specialties. It is pointed to by the SPECIALTY (#442121.04) sub-field of the of the CONSULTANT'S LICENSES (#442121) file.		
9.2	HELP FRAME	^DIC(9.2,	This file contains the text of help frames created via the Help Processor (XQH). Help frames can be	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			associated with options or with data dictionary fields to provide online instruction. The file is cross-referenced by name, header, date entered, author, and editor.		
9.4	PACKAGE	^DIC(9.4,	The top level of a PACKAGE (#9.4) file entry for software now stores static software information. The PACKAGE (#9.4) file stores mainly static software information that is not version-specific, as well as the patch history of the software. KIDS updates the VERSION (Multiple) field. Patch installations update the PATCH APPLICATION HISTORY (Multiple) field, which is within the VERSION (Multiple) field. Most other fields have been designated for removal at the top level of the PACKAGE (#9.4) file.	NO	N/A
9.6	BUILD	^XPD(9.6,	This file identifies the elements of a software application that will be transported by the Kernel Installation & Distribution System (KIDS). All components of the software (i.e., templates, options, Security Keys, etc.) must be listed in this file.	NO	N/A
9.7	INSTALL	^XPD(9.7,	This file contains the installation information for a site from the Kernel Installation & Distribution System (KIDS). This file should <i>not</i> be edited. All information is updated	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			when new software is installed at a site.		
9.8	ROUTINE	^DIC(9.8,	This file is used to document system routines. Parameters and entry points can be described. When running %INDEX, some fields will be given values as the %INDEX verification tool locates variables, globals, and routine references. When using the %Z editor, the EDIT HISTORY (Multiple) field will be filled in with date, device, user, and UCI. The %ZOSF("TEST") node can be executed, checking \$T, to determine whether a routine listed in this file exists in the current account. This file is cross-referenced by name.	NO	N/A
10	RACE	^DIC(10,	This file contains the list of valid races. The allowable entries are maintained by VA Central Office and, as such, alteration and/or addition of entries is <i>not</i> allowed.	YES	
11	MARITAL STATUS	^DIC(11,	This file currently consists of six entries that are distributed by the MAS development team. Alteration of any of the six entries or addition of entries to this file that are not distributed by the MAS developers may have a negative impact on the performance of the MAS module as well as other modules.	YES	
13	RELIGION	^DIC(13,	This file currently contains 84 entries. These entries are determined by VACO	YES	

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			MAS. This file should not be added to nor should entries in it be altered or deleted by the facility. Entry, edit, or deletion of these entries could have severe negative effects on the performance of the MAS module.		
14.4	TASKS	^%ZTSK(This file describes TaskMan's main file of jobs to start. Because TaskMan works on this file from many UCIs, it does not use VA FileMan to manipulate it. There are no cross- references on this file and there are no fields that can be edited; use TaskMan options for that. The file can be searched, sorted and printed. The third piece of the zero node is only updated when the Queuable Task Log Cleanup [XUTM QCLEAN] option runs. Some applications still do their own setting into this global and wipe out the zero node. The storage of the symbol table is not in a VA FileMan-compatible format.	NO	N/A
14.5	VOLUME SET	^%ZIS(14.5	This file describes the volume sets available in the current multiprocessor network. The information pertaining to each volume set is used primarily by Kernel, especially TaskMan. The UCIs that make up each volume set can be determined by using the cross-reference in the UCI Association	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			Table file.		
14.6	UCI ASSOCIATIO N	^%ZIS(14.6,	This file contains information that indicates which UCIs on different volume sets are equivalent. This information allows the running of tasks that need a device only available on a different volume set, even if the UCI on the other volume set has another name.	NO	N/A
14.7	TASKMAN SITE PARAMETER S	^%ZIS(14.7,	This file should be used by the system manager to tune TaskMan to the site's specific needs. Entries are identified by the CPU and volume set, so that parameters can be set differently for different nodes that share a single volume set, etc. Changes to any of the fields automatically causes all accessible Task Managers on the system to update their local copies of the parameters.	NO	N/A
14.72	TASKMAN SNAPSHOT	^%ZIS(14.72,	This file holds TaskMan Snapshot data. This is a snapshot of the counts in the TaskMan ^%ZTSCH global. There should be no user entry of this data. It is just for reporting.	NO	N/A
14.8	TASK SYNC FLAG	^%ZISL(14.8,	This file holds the task synchronization flags that control if a task can run or <i>must</i> wait.	NO	N/A
15 (Toolkit)	DUPLICATE RECORD	^VA(15,	This file is designed to analyze and resolve duplicate record problems from various data files (e.g., PATIENT [#2] file).	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			The "from" and "to" records are identified, the match status is reported, and the user initiating the process is noted. This file is cross-referenced by Status and From-record.		,
15.1 (Toolkit)	DUPLICATE RESOLUTIO N	^VA(15.1,	This file facilitates duplicate checking and merging of files that have entries in the DUPLICATE RECORD (#15) file. It provides the overall control information that software developers need to identify duplicates within their files and then to merge the duplicate entries.	NO	N/A
15.2 (Toolkit)	XDR MERGE PROCESS	^VA(15.2,	When a merge process is set up, all its information is stored in this file. Once a merge process has completed, that entry can be purged using the Purge Merge Process File [XDR PURGE2] option in the Managers menu.		
15.3 (Toolkit)	XDR REPOINTED ENTRY	^VA(15.3,	This file is used to record the entry number of the FROM record that is merged into the TO record. This can be used for VA FileMan to determine which entries were merged, so the IEN of the FROM record will <i>not</i> be reused.		
15.4 (Toolkit)	MERGE IMAGES	^XDRM(This file stores an image of the pairs of entries in files that were merged immediately prior to the actual merge. In addition, there is also a record of the locations of pointer values that were changed during the merge process.		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
19	OPTION	^DIC(19,	Information in this file is used to drive the menu system. Options are created, associated with others on menus, locked, set out-of-order, assigned prohibited times or devices, or given entry/exit actions. The Edit Options [XUEDITOPT] option of the Menu Management [XUMAINT] menu should be used (instead of VA FileMan), so that the global root (DIC) and other such fields are given the correct values. Options can be tailored by setting VA FileMan variables via this file. The Order Enter/Results Reporting (OE/RR) software is accessed by using the appropriate option type. It is cross-referenced by name, menu text, uppercase menu text, type, item, synonym, help frame, out-of-order message, lock, prohibited times, restricted devices, and priority.	NO	N/A
19.081	AUDIT LOG FOR OPTIONS	^XUSEC(19,	The KERNEL SYSTEM PARAMETERS (#8989.3) file establishes when and how a log of option usage will be recorded in this file. For the indicated time period, all specified options, namespaces, and users will be audited. It is recommended that when audits are run, the number of audited entities be minimized so that disk space is <i>not</i> inadvertently wasted. This file is cross-	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			referenced by option.		
19.1	SECURITY KEY	^DIC(19.1,	This file holds the names of security keys that are used to lock options. To lock an option, the name of the key is entered in the Lock field of the OPTION (#19) file. To permit a user to unlock the option, the user's name is entered in the Holder field of this file. It is cross-referenced by name and holder.	NO	N/A
19.2	OPTION SCHEDULIN G	^DIC(19.2,	This file holds records that relate to the scheduling of options to run on a schedule or occasionally on a one-time basis. There is one record for each time that an option is scheduled. This allows one option to be scheduled to run on more than one CPU or at more than one time without having to duplicate the option in the OPTION (#19) file.	NO	N/A
19.8	MENUMAN QUICK HELP	^DIC(19.8,	This file holds help text to be displayed in the ScreenMan edit form for the menu file. It only changes when there are changes to the Menu system.	YES	Over- write
20	NAME COMPONEN TS	^VA(20,	This file, introduced with Name Standardization (Patch XU*8.0*134), stores the component parts of a person's name in the following fields: • FAMILY (LAST) NAME (#1) • GIVEN (FIRST) NAME (#2) • MIDDLE NAME (#3)	NO	N/A

		Global		Data	Data
File #	File Name	Location	Description	w/ File	Setting
			• PREFIX (#4)		
			• SUFFIX (#5)		
			• DEGREE (#6)		
			The "source name" that has these components is identified by the following three fields:		
			• FILE (#.01)		
			• FIELD (#.02)		
			• IENS (#.03)		
			The "ANAME" cross-reference on the FAMILY (LAST) NAME, GIVEN (FIRST) NAME, MIDDLE NAME, and SUFFIX fields keep each component in synchronization with the corresponding source name. In the case of Patch XU*8.0*134, the source name is the NAME (#.01) field of the NEW PERSON (#200) file. The DEGREE and PREFIX fields are <i>not</i> considered part of a standard name but can be used to build formatted names for display.		
40.5	HOLIDAY	^HOLIDAY(This file is used to record institutional holidays. It is referenced by the XUWORKDY routine and is <i>not</i> distributed with data. It is cross-referenced by date.	NO	N/A
46.11	RAI MDS MONITOR	^DGRU(46.11,	This file stores the modified and original contents of the #.01 field of the Master file entry and file reference information.	NO	N/A
			NOTE: RAI/MDS = Resident Assessment		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			Instrument/Minimum Data Set.		
49	SERVICE/ SECTION	^DIC(49,	This file is a list of the services and sections within the services. Some of the entries may be "MIS COSTING SECTIONS" for use with the cost accounting part of the Management Information System software. A section is an MIS section if there is a code entered in the field called MIS COSTING CODE. In the cost accounting system all medical center costs are tied to a particular section. When MIS sections change, do <i>not</i> delete the old section. Instead, change the fields under the multiple field called "DATE CLOSED" to identify which sections are no longer in use.	NO	N/A
101	PROTOCOL	^ORD(101,	This file contains the orderables and methods for accomplishing orders (protocols) within Order Entry/Results Reporting (OE/RR).	NO	N/A
200	NEW PERSON	^VA(200,	This file contains data on employees, users, practitioners, etc., that was previously stored in the User, Person, Provider, and other files. VistA software developers <i>must</i> check with the Kernel developers to see that a given number/namespace is available for use.	NO	N/A
201	USER CLASS	^VA(201,	This file is used for identifying the kinds of all other entries in the NEW	YES	Over- write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			PERSON (#200) file that are <i>not</i> providers identified with PERSON CLASS.		-
8932.1	PERSON CLASS	^USC(8932.1,	This file stores the Centers for Medicare & Medicaid Services (CMS) Health Care Financing Administration (HCFA) provider type data. In 2001, ANSI ASC X12N asked the National Uniform Claim Committee (NUCC) to become the official maintainer of the Health Care Provider Taxonomy List (provider type). PERSON CLASS is to be used for identifying provider types for roll-ups. Patches need to review the technical description in the INDIVIDUAL/NON (#90002) field. This field is in the Indian Health Service (HIS) numberspace and is for their use pending development and deployment of a file to support a Non-Individual taxonomy. PERSON CLASS is intended for Individuals. As of August 30, 2002, IHS has added entries for non-Individuals to the file. Patches should take that into account when planning how to load new data. Per VHA Directive 2005-044, this file has been "locked down" by Data Standardization (DS). The file definition (i.e., data dictionary) shall not be modified. All additions,	YES	Over-write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			changes and deletions to entries in the file shall be done by Enterprise Reference Terminology (ERT) using the Master File Server (MFS), provided by Common Services (CS).		
8932.2	PROGRAM OF STUDY	^USC(8932.2,	This file stores the names and information of programs of study.	YES	Replace
8980 (Toolkit)	KERMIT HOLDING	^DIZ(8980,	This file provides storage for data being transferred by the KERMIT protocol. By default, the data can only be accessed by the user that created it. The Kermit Menu (XT-KERMIT) can be used to send and receive data via this file. The menu also allows the creator of the data to permit access by others. This file is cross-referenced by Name, Creator, and Access Allowed to a user.	NO	N/A
8980.2	PKI Digital Signatures	^XUSSPKI(89 80.2,	This file stores the Public Key Infrastructure (PKI) digital signatures.	NO	N/A
8980.22	PKI CRL URLS	^XUSSPKI(89 80.22,	This file stores the Universal Resource Locator's (URL) for the Certificate Revocation List's (CRL) from the Certificate Distribution Points (CDP) in the users Public Key Infrastructure (PKI) Certificate. These URL's are sent up to a Windows server to keep a database of Certificate Revocation's up to date.	NO	N/A
8984.1 (Toolkit)	LOCAL KEYWORD	^XT(8984.1,	The lookup entry (or code) can be associated with multiple key words or key	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			phrases. The entry is displayed if the user enters all or any part of a key phrase. Lookups are performed in the following order: 1. SHORTCUT—Stops here if a match is found. 2. SYNONYM. 3. KEYWORD.		
8984.2 (Toolkit)	LOCAL SHORTCUT	^XT(8984.2,	This is a word or phrase that will be used exclusively to find an entry. During a lookup, this file is checked first. If a shortcut matches the user's entry, the corresponding entry is displayed, and no other lookups will be performed.	NO	N/A
8984.3 (Toolkit)	LOCAL SYNONYM	^XT(8984.3,	Synonyms are single terms that can be associated with one or more TERMS in the lookup file (tokens in the MTLU cross-reference). For example, "CANCER" can be associated with each of the specific forms of cancer that might be found. NOTE: If the user enters a phrase, all terms in the phrase must be true to get a match; therefore, "LUNG CANCER" might significantly restrict the search.	NO	N/A
8984.4 (Toolkit)	LOCAL LOOKUP	^XT(8984.4,	This file is used to define other files that have been configured for Multi-term lookups, along with the name of the file's MTLU cross-reference.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
8989.2	KERNEL PARAMETER S	^XTV(8989.2,	This file holds parameters that Kernel uses and the site is allowed to change. For example, the Computer Account Letter. Kernel loads its standard name into the file and if the site builds a new letter, then they can enter a replacement name that will be used in place of the standard one.	NO	N/A
8989.3	KERNEL SYSTEM PARAMETER S	^XTV(8989.3,	This file holds the site parameters for this installation of Kernel. It has only one entry, the domain name of the installation site. Some parameters are defined by the systems manager during the installation process. These include: Agency, Volume Set Multiple, Default parameters. Others can be edited subsequent to installation. Spooling and Audit parameters can be established. Priorities can be set for interactive users and for TaskMan. Defaults for fields (e.g., timed read, auto-menu, and ask device) are defined for use when <i>not</i> otherwise specified for a user or device.	NO	N/A
8989.51	PARAMETER DEFINITION	^XTV(8989.51,	This file contains the characteristics of parameters. Entries in this file <i>must</i> be namespaced.	YES	Replace
8991 (Toolkit)	XTV ROUTINE CHANGES	^XTV(8991,	This file is used to record the most current version of a routine, and information about changes that have occurred in that routine in prior versions. Routines	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			are checked for any changes by using the Update with current routines [XTVR UPDATE] option, which enters any changes noted and updates the most current version. There is no need for manual entry into this file. Use the Routine Compare - Current with Previous [XTVR COMPARE] option to obtain listings of the changes recorded for the routines from the most recent to earlier changes.		
8991.19 (Toolkit)	XTV VERIFICATIO N PACKAGE	^XTV(8991.19,	This file is used to indicate the file numbers for the main files and namespaces for options, keys, etc., which are to be included as a part of a package undergoing verification. This file is used to determine the files and other entries to be included by the routines that are used in preparing and comparing the XTV GLOBAL CHANGES file.	NO	N/A
8991.2 (Toolkit)	XTV GLOBAL CHANGES	^XTV(8991.2,	This file records the state of a given verification package in terms of DD entries, options, keys, templates, etc. for comparison with a subsequent version of the package.	NO	N/A
8991.5	XQAB ERRORS LOGGED	^XTV(8991.5,	This file is used to maintain a log of errors occurring at alpha/beta test sites.	NO	N/A
8991.6	XUEPCS DATA	^XTV(8991.6,	This file is used for the DEA ePCS project (Kernel Patch XU*8.0*580). It stores audit data for ePCS-	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			related fields that have been modified.		
8991.7	XUEPCS PSDRPH AUDIT	^XTV(8991.7,	This file is used for the DEA ePCS project (Kernel Patch XU*8.0*580). It stores audit data when a user is allocated or deallocated the PSDRPH security key.	NO	N/A
8992	ALERT	^XTV(8992,	This file is used to keep track of alerts pending processing for each user. The main entry for each record is a pointer to the NEW PERSON (#200) file. A multiple under each user is used to record the date and time an alert was generated, the unique ID associated with the alert, the text for display, an optional routine entry point or option for use in processing the alert, and an optional data string associated with the alert.	NO	N/A
8992.1	ALERT TRACKING	^XTV(8992.1,	This file is used to track the content and interactions with an alert. Every alert that is generated is initially filed within this file. Each entry has the date and time the alert was generated, which user generated the alert, whether the alert was generated in a background task, what action was to be taken, if any (the entry point or option name to be used), and the data string, if any, for use with the alert. There is a multiple field which also identifies each user that the alert was sent to, when the user	NO	N/A

"		Global		Data	Data
File #	File Name	Location	Description	w/ File	Setting
			initially saw the displayed text, when the alert was selected for processing, when the processing was completed, and when the alert was deleted after processing or associated with another user's processing, or when the alert was deleted by a cleanup operation. Unless a longer lifetime is specified for the specific alert, it is deleted from the file after 30 days. If a longer lifetime is specified, it will not be deleted until after that period passes.		
8992.2	ALERT RECIPIENT TYPE	^XTV(8992.2,	This file was added with Kernel Patch XU*8.0*285. This file was added to contain indicators as to why an alert was sent.	NO	N/A
8992.3	ALERT CRITICAL TEXT	^XTV(8992.3,	This file makes it easier for packages or sites to specify text that should be used to indicate an alert to be marked as Critical. It contains those text strings that are identified as indicating a Critical-type alert. This checking is not case sensitive, and if the identified string is immediately preceded by either of the following words, it will not be indicated as a Critical-type alert: NOT NOTE: This file was added with Kernel Patch XU*8.0*513. Using this file means that	YES	Over- write

=11 "		Global		Data	Data
File #	File Name	Location	-	w/ File	Setting
File #	File Name	Global Location	the package or site can add desired text for identification as Critical-type by using Integration Control Registration (ICR) #6869, ALERT CRITICAL TEXT LOOKUP AND EDIT. This is a "Controlled Subscription" type ICR that allows application development teams to release patches that update the ALERT CRITICAL TEXT (#8992.3) file. CAUTION: Application development teams making changes to the ALERT CRITICAL TEXT (#8992.3) file are responsible for confirming the change does not affect Kernel's reporting of Critical-type alerts. Adding an entry with Critical-type text to the ALERT CRITICAL TEXT (#8992.3) file reports any alert containing that	Data w/ File	Data Setting
			(#8992.3) file reports any alert containing that		
			text as Critical. Careful analysis is necessary to confirm changes		
			do <i>not</i> cause malfunction of any VistA alerts. When creating a		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			new entry in the ALERT CRITICAL TEXT (#8992.3) file, it is recommended the associated application be indicated in the CREATING PACKAGE (#.03) field. Thus, any inquiries regarding the Critical alert text can be directed to the appropriate development team. Also, the description included in the PACKAGE-ID (#.02) field in the ALERT CRITICAL TEXT (#8992.3) file should be reviewed to determine if it must be defined. That field's description indicates that data in this field can further screen alerts from being reported as critical. Its use should be understood when adding entries to the ALERT CRITICAL TEXT (#8992.3) file.		
8993	XULM LOCK DICTIONARY	^XLM(8993,	This file contains descriptions and specifications for locks held by various applications. The Lock	YES	Over- write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			Manager uses it to provide information and guidance to the user about locks found in the lock table.		
8993.1	XULM LOCK MANAGER PARAMETER S	^XLM(8993.1,	This is the parameter file for the Kernel Lock Manager. It should contain only one entry.	NO	N/A
8993.2	XULM LOCK MANAGER LOG	^XLM(8993.2,	This file records each instance of the Kernel Lock Manager being used to terminate a process and the locks that the process held.	NO	N/A
8994	REMOTE PROCEDUR E	^XWB(8994,	This file is owned by RPC Broker. This file is used as a repository of server- based procedures in the context of the Client/Server architecture. By using the Remote Procedure Call (RPC) Broker, applications running on client workstations can invoke (call) the procedures in this file to be executed by the server and the results are returned to the client application. Each remote procedure entry is associated with an entry point (ROUTINE with optional TAG). Calls to these procedures can include parameters of different value types. The resulting value of the call can be either a string, a list of strings, or a word- processing string as indicated by the RETURN VALUE TYPE (.04) field. The remote procedure may be available for use by anyone or its use may be restricted to one or more	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			applications. The range of availability is indicated by the AVAILABILITY field. NOTE: If there is no entry in the		
			AVAILABILITY field, then the procedure is assumed to be PUBLIC.		
			A remote procedure can be removed from service for a period of time by setting the INACTIVE field. A request for use of a procedure, which is marked inactive, will result in an error being returned to the originating application.		
8994.5	REMOTE APPLICATIO N	^XWB(8994.5,	This file is owned by RPC Broker and used by Kernel security to identify remote applications. Kernel uses this file to identify external applications in the SIGN-ON LOG (#3.081) file and for assigning a role-based user context to authenticated applications.		
			The REMOTE APPLICATION file was introduced as part of the Broker Security Enhancement (BSE) to secure access via the remote user or visitor approach by GUI applications (formerly		
			known as the CAPRI approach for the first application to use this access style). The remote visitor access permits applications where users		

		Global		Data	Data
File #	File Name	Location	Description	w/ File	Setting
			need to access a large number of sites to do so without requiring a separate Access code and Verify code at each site.		
			Following the Broker Security Enhancement, applications are able to use the remote visitor access only if they have an entry in this file with a one- way hash of a secure phrase. Identification of an entry in the file is based on the application passing in the original phrase, which is then hashed and used for a cross-reference lookup. The application must have at least one entry in the CALLBACKTYPE sub-file indicating:		
			A connection type.A valid address for the authenticating server.		
			A connection port number.		
			This information is necessary for the remote server to directly connect the authenticating server to obtain the demographic information necessary to create or match the visitor entry in the NEW PERSON (#200) file. The application also specifies the desired context option for the user, and this is given to the remote visitor instead of the application having to figure out how to set this value.		

4.2.2 Additional Files Installed During Virgin Installation

The Virgin Installation brings in the following additional files:

Table 16: Files—Kernel Virgin Installation Files

File#	File Name	Global Location	Description	Data w/ File	Data Setting
3.8	MAIL GROUP	^XMB(3.8,	(Exported with MailMan) This file holds the names of all groups and their members known to MailMan.	NO	N/A
4.2	DOMAIN	^DIC(4.2,	(Exported with MailMan) This file is used to name all of the nodes to which MailMan messages can be routed. Each name in this file corresponds to the right side of a MailMan address, the part following the @ symbol.	NO	N/A
5	STATE	^DIC(5,	This file contains a list of state names and abbreviations.	YES	Overwrit e
7	PROVIDER CLASS	^DIC(7,	This file is used to identify various classifications or types of providers.	NO	N/A
7.1	SPECIALITY	^DIC(7.1,	This file identifies locally added specialties and their associated services.	NO	N/A
10	RACE	^DIC(10,	This file currently consists of seven entries. The allowable entries are established by VACO MAS. Entries in this file should not be altered or added to. To do so may have a negative impact on the performance of the MAS module as well as other modules.	YES	Overwrit e
11	MARITAL STATUS	^DIC(11,	This file currently consists of six entries, which are distributed by the MAS development team. Alteration of any of the six entries or addition of entries to this file which are <i>not</i> distributed by the MAS developers may have a negative impact on the performance of the MAS module as well as other modules.	YES	Overwrit e

File#	File Name	Global Location	Description	Data w/ File	Data Setting
13	RELIGION	^DIC(13,	This file currently contains 30 entries. These entries are determined by VACO MAS. This file should <i>not</i> be added to nor should entries in it be altered or deleted by the facility. Entry, edit, or deletion of these entries could have severe negative effects on the performance of the MAS module.	YES	Overwrit e

4.3 Fields

4.3.1 PERSON CLASS (#8932.1) File

The PERSON CLASS (#8932.1) file contains the Health Care Financing Administration (HCFA) taxonomy that reflects provider type. It contains the following fields:

Table 17: Field List—PERSON CLASS (#8932.1) File (Kernel Patch XU*8.0*27)

Field #	Field Name	Description
.001	NUMBER	This is a number field to allow adding new entries by number.
.01	PROVIDER TYPE	This is Level I of the National Uniform Claim Committee (NUCC) structure of the Provider Taxonomy. REF: For more information on the NUCC, please visit the NUCC website located at the following Web address: http://www.nucc.org/
.011	PROVIDER TYPE CODE	This is Level I, Provider Type—2-byte alphanumeric, consisting of the 1 st and 2 nd characters of X12 CODE , which is a code that identifies a major grouping of services or occupations of health care providers.
1	CLASSIFICATION	This is the CMS (X12) Classification (Level II). Values <i>must</i> be from 3 to 65 characters in length.
1.1	CLASSIFICATION CODE	This is Level II, Classification Code—2-byte alphanumeric consisting of the 3 rd and 4 th characters of the X12 CODE , which is a code that identifies more specific services or occupations within the health care provider type. The coding is based on licensed provider

Field #	Field Name	Description
		classifications.
2	AREA OF SPECIALIZATION	This is Level III in NUCC's structure of the Provider Taxonomy. It is the most specific, but sometimes defines a "sub-category" of Classification. Values <i>must</i> be from 2 to 75 characters in length.
2.1	AREA OF SPECIALIZATION CODE This is Level III, Area of Specializar alphanumeric consisting of the 5th to characters of the X12 CODE, which that identifies:	
		Provider's specialization.
		 Segment of the population that a health care provider chooses to service.
		Specific medical service.
		Specialization in treating a specific disease.
		 Any other descriptive characteristic about the providers practice relating to the services rendered.
3	STATUS	This field allows old entries to be disabled <i>without</i> removing them from the table. Valid values are:
		• a—Active
		• i—Inactive
4	DATE INACTIVATED	This field holds the date that a Provider Class was inactivated.
5	VA CODE	This field holds the 7 -character VA assigned code for national rollup.
6	X12 CODE	This is the code assigned by American National Standards Institute (ANSI) X12. X12 published the joint X12N and Centers for Medicare & Medicaid Service (CMS) Health Care Provider Taxonomy following the June 1997 X12 meeting. NOTE: ANSI X12 subcommittee N covers
		standards in the insurance industry, including health insurance; hence these are X12N standards.
		"X12N standards include transactions for claims/encounters, attachments, enrollment, disenrollment, eligibility, payment/remittance advice, premium payments, first report of injury, claim status,

Field #	Field Name	Description
		referral certification/authorization, and coordination of benefits."1
		NOTE: A revised ANSI X12N 837 Professional Health Care Claim Companion Document was created in 2005.
7	reserved	This field is only used with a conversion routine for updates to the file. Any data is only used by an update routine.
8	SPECIALTY CODE	This field holds the 2 -character specialty code associated with the classification.
11	DEFINITION	Enter the definition of this Provider Type. Types with X12 codes are defined by the National Uniform Claim Committee (NUCC), provided by various sources.
90002	INDIVIDUAL/NON	This field indicates whether the entry is for an Individual or for a Non-Individual. Valid values are:
		I—Individual
		N—Non-Individual
		This field was added at the request of Indian Health Service (IHS) in their numberspace, until the file supporting Non-Individual taxonomies can be defined.
		Currently, the X12 CODE definition does <i>not</i> explicitly indicate whether an entry is for an Individual or for a Non-Individual, either in value or structure definition.

The following field was exported with the Assigning Person Class to Providers software (i.e., Kernel Patch XU*8.0*27):

Table 18: Field List—Assigning Person Class to Providers Software (i.e., Kernel Patches XU*8.0*27, 377, and 531)

File Number	File Name	Field Name and Number	Description
200	NEW PERSON	PERSON CLASS (#.05) field	This is a Multiple field. It includes the following subfields: NUMBER (#.001). PERSON CLASS (#.01)—Pointer to the PERSON CLASS (#8932.1) file.

¹ Excerpt taken from the "X12N" topic on the University of Miami; Miller School of Medicine website: http://privacy.med.miami.edu/glossary/xd x12n.htm, last modified May 11, 2005 (RC)

File Number	File Name	Field Name and Number	Description	
			EFFECTIVE DATE (#2)—The date the PERSON CLASS became effective.	
			EXPIRATION DATE (#3)—The date the PERSON CLASS is no longer valid.	
			Kernel Patch XU*8.0*27 added the PERSON CLASS field to the following Kernel options:	
			Edit an Existing User [XUSEREDIT]	
			Add a New User to the System [XUSERNEW]	
			Reactivate a User [XUSERREACT]	

5 Exported Options

This chapter lists the options exported with Kernel and Kernel Toolkit.

5.1 Menu Tree Roots

Kernel exports three separate menu trees. They are:

- **Systems Manager Menu** [EVE]—Eve is used by the systems manager to get to other menus. Eve contains the following submenus:
 - o Core Applications [XUCORE]
 - Device Management [XUTIO]
 - o Menu Management [XUMAINT]
 - Operations Management [XUSITEMGR]
 - o **Programmer Options** [XUPROG]
 - Spool Management [XU-SPL-MGR]
 - System Security [XUSPY]
 - Taskman Management [XUTM MGR]
 - User Management [XUSER]
- **SYSTEM COMMAND OPTIONS** [XUCOMMAND]—This menu holds the common menu options executable from anywhere in the menu processor.
- Parent of Queuable Options [ZTMQUEUABLE OPTIONS]—This menu has no parent; it collects together all parentless Kernel options that are intended to be scheduled through the TaskMan Schedule/Unschedule Options [XUTM SCHEDULE] option.

5.2 Menu Tree Diagrams

The menu tree diagrams for the menus described in the "Menu Tree Roots" section are presented in this section.

- The menu tree diagram for the **Systems Manager Menu** [EVE] is broken into the individual menu trees for each EVE option.
- The menu tree diagrams for the **Parent of Queuable Options** [ZTMQUEUABLE OPTIONS] and the **SYSTEM COMMAND OPTIONS** [XUCOMMAND] menus are presented intact.

5.2.1 Generating Menu Diagrams

To generate a menu tree diagram, perform the following procedure:

- 1. From the **Systems Manager Menu** [EVE, select the **Menu Management** option [XUMAINT].
- 2. At the "Select Menu Management Option:" prompt, select the **Display Menus and Options** option [XQDISPLAY OPTIONS]:
- 3. At the "Select Display Menus and Options Option:" prompt, select the **Diagram Menus** option [XUUSERACC].
- 4. At the "Select USER (U.xxxxx) or OPTION (O.xxxxx) name:" prompt, enter **O.XXXXXXXX**, where "XXXXXXXX" is the option name you want diagrammed (e.g., O.XUMAINT for the Menu Management menu).
- 5. At the "DEVICE: HOME//" and "Right Margin: 80//" prompts, press **Enter** to display the diagram to the screen.

Figure 6: Menus—Generating Menu Diagrams: Sample from OAKTST "Gold" Account

```
Core Applications ...
         Device Management ...
         VA FileMan ...
  FΜ
         Manage Mailman ...
         Menu Management ...
         Programmer Options ...
         Operations Management ...
         Spool Management ...
         Information Security Officer Menu ...
         Taskman Management ...
         User Management ...
  HL7
        HL7 Main Menu ...
  VDEF VDEF Configuration and Status ...
         Application Utilities ...
         Capacity Planning ...
         Fileman Access for the OIG ...
Select Systems Manager Menu Option: MENU <Enter> Management
         Edit options
         Key Management ...
         Secure Menu Delegation ...
         Restrict Availability of Options
         Option Access By User
         List Options by Parents and Use
        Fix Option File Pointers
        Help Processor ...
       Screen-based Option Editor
         Display Menus and Options ...
         Menu Rebuild Menu ...
         Out-Of-Order Set Management ...
         See if a User Has Access to a Particular Option
         Show Users with a Selected primary Menu
Select Menu Management Option: DISPLAY <Enter> Menus and Options
         Abbreviated Menu Diagrams
         Diagram Menus
         Menu Diagrams (with Entry/Exit Actions)
         Option Function Inquiry
         Print Option File
Select Display Menus and Options Option: DIAGRAM <Enter> Menus
Select USER (U.xxxxx) or OPTION (O.xxxxx) name: O.XUMAINT <Enter> Menu Management
DEVICE: HOME// <Enter> HOME (CRT) Right Margin: 80// <Enter>
Menu Management (XUMAINT)
             ----- Edit options
                                                      [XUEDITOPT]
---- Key Management ------ Allocation of
     [XUKEYMGMT]
                                                     Security Keys
                                                      [XUKEYALL]
              ----- De-allocation of
                                                     Security Keys
                                                      [XUKEYDEALL]
```

Ī	I	
		Enter/Edit of Security Keys [XUKEYEDIT]
	 	All the Keys a User Needs [XQLOCK1]
	 	Allocate/De-Allo cate Exclusive Key(s) [XUEXKEY] **LOCKED: XUEXKEY**
	 	Change user's allocated keys to delegated keys [XQKEYALTODEL]
		Delegate keys [XQKEYDEL]
	 	Keys For a Given Menu Tree [XQLOCK2]
	 	List users holding a certain key [XQSHOKEY]
	 	Remove delegated keys [XQKEYRDEL]
		Show the keys of a particular user [XQLISTKEY]

Kernel 8.0 & Kernel Toolkit 7.3 Technical Manual

5.2.2 Systems Manager Menu [EVE]

The Systems Manager Menu EVE contains the following menu trees:

- XUCORE
- XUTIO
- XUMAINT
- XUSITEMGR
- XUPROG
- XU-SPL-MGR
- XUSPY
- XUTM MGR
- XUSER
- Parent of Queuable Options [ZTMQUEUABLE OPTIONS]
- SYSTEM COMMAND OPTIONS [XUCOMMAND]



REF: Each of these menu trees is listed individually in the sections that follow.

5.2.3 XUCORE

Figure 7: XUCORE—Menu Tree Diagram: Sample from OAKTST "Gold" Account

```
Core Applications (XUCORE)
```

5.2.4 XUTIO

Figure 8: XUTIO—Menu Tree Diagram: Sample from OAKTST "Gold" Account

Figure 8: XUTIO—Menu Tree Diagram: San	pio irom charter cola Account
Device Management (XUTIO)	
T	
	Change Device's Terminal Type [XUCHANGE]
	Device Edit [XUDEV]
	Terminal Type Edit [XUTERM]
	Display Device Data [XUDISPLAY]
	List Terminal Types [XULIST]
	Clear Terminal [XUSERCLR]
	Loopback Test of Device Port [XUTLOOPBACK]
	Send Test Pattern to Terminal [XUTTEST]
	Out of Service Set/Clear [XUOUT]
	Clear all resources [XUDEV RES-CLEAR]
	Clear one Resource [XUDEV RES-ONE]
	Current Line/Port Address [XUDEV LINEPORT ADDR CURRENT]
	DA Return Code Edit [XU DA EDIT]
Device Edit [XUDEVEDIT]PQ	Print Queue Edit [XUDEVEDITPQ]
 ALL 	Edit All Device Fields [XUDEVEDITALL]
 HFS	Host File Server Device Edit [XUDEVEDITHFS]
 RES	Resource Device Edit [XUDEVEDITRES]
 SPL 	Spool Device Edit [XUDEVEDITSPL]
 TRM	TRM or VTRM Device Edit [XUDEVEDITTRM]
	Edit Line/Port Addresses

[XUDEV LINEPORT ADDR EDIT]
 Line/Port Address report [XUDEV LINEPORT ADDR RPT]

5.2.5 XUMAINT

Figure 9: XUMAINT—Menu Tree Diagram: Sample from OAKTST "Gold" Account

Menu Management (XUMAINT)	
I	
	71
·	- Edit options [XUEDITOPT]
	-
Key Management	
[XUKEYMGMT]	Security Keys
	[XUKEYALL]
	- De-allocation of
<u>.</u>	Security Keys
	[XUKEYDEALL]
	- Enter/Edit of
	Security Keys
	[XUKEYEDIT]
	- All the Keys a
i i	User Needs
	[XQLOCK1]
	- Allocate/De-Allo
İ	cate Exclusive
	Key(s) [XUEXKEY]
	LOCKED: XUEXKEY
	VOEVUET
	_
	allocated keys
	to delegated keys
	[XQKEYALTODEL]
 	- Delegate keys
i	[XQKEYDEL]
 	- Keys For a Given
	Menu Tree
<u>!</u>	[XQLOCK2]
	- List users
i	holding a
ļ	certain key
	[XQSHOKEY]
	- Remove delegated
<u>!</u>	keys [XQKEYRDEL]
	- Show the keys of
1	a particular
	user [XQLISTKEY]
Secure Menu	- Select Options
Delegation	to be Delegated
[XQSMD MGR]	[XQSMD ADD]

Ì		
	 	Options and their Users [XQSMD BY OPTION]
	 	Delegates and their Options [XQSMD BY USER]
	 	Previously Delegated [XQSMD REMOVE]
	 	Replicate or Replace a Delegate [XQSMD REPLICATE]
	 	Delegate's Options [XQSMD SHOW]
	Delegate's Menu Management [XQSMD USER MENU]	Build a New Menu [XQSMD BUILD MENU]
	 	Edit a User's Options [XQSMD EDIT OPTIONS]
		Copy Everything About an Option to a New Option [XQCOPYOP]
		Menus and Keys to others [XQSMD COPY USER]
		Limited File Manager Options (Build) [XQSMD LIMITED FM OPTIONS] **LOCKED: XOSMDFM**
	 	Specify Allowable New
		Menu Prefix [XQSMD SET PREFIX]
l		Restrict

		Availability of Options [XQRESTRICT]
		Option Access By User [XUOPTWHO]
		List Options by Parents and Use [XUXREF]
		Fix Option File Pointers [XQOPTFIX]
_	ProcessorELP-MENU]	Display/Edit Help Frames [XQHELP-DISPLAY]
	 	List Help Frames [XQHELP-LIST]
	 	New/Revised Help Frames [XQHELP-UPDATE]
	 	Cross Reference Help Frames [XQHELP-XREF]
	 	Assign Editors [XQHELP-ASSIGN]
	 	Unassign Editors [XQHELP-DEASSIGN]
		Fix Help Frame File Pointers [XQHELPFIX]
	OPED	Screen-based Option Editor [XQOPED]
and (lay Menus	Abbreviated Menu Diagrams [XUUSERACC2]
	 	Diagram Menus [XUUSERACC]
	 	List Unreferenced Menu Options [XQ LIST UNREFERENCED OPTIONS]
	 	Menu Diagrams (with Entry/Exit

Actions) (XUUSERACCI) Option Function Inquiry (XUUNGITE) Print Option File (XUPRINT)			
Option Function Inquiry [XUINQUIRE] Print Option File [XUPRINT]			•
Inquiry [XUINQUIRE] Print Option File [XUPRINT]			[XUUSERACC1]
Inquiry [XUINQUIRE] Print Option File [XUPRINT]		 	Option Function
Menu Rebuild Build Frimary Menu Trees [XQBUILDMAIN] [XQBUILDMEE]		I	Inquiry
Menu Rebuild			[XUINQUIRE]
Menu Rebuild		 	Print Option
Menu Trees (XQBUILDTREE)		•	
Menu Trees (XQBUILDTREE)			
Menu Trees (XQBUILDTREE)	Menii	Rebuild	Build Primary
Is there a menu rebuild running right now? [IXGRIGHTMON] Kick Off Micro Surgery (IXGRICKNICRO] Most Recent Menu Rebuilds (IXGSHOWBUILDS) Single User Menu Tree Rebuild (IXQBUILDUSER) Out-Of-Order Set			
rebuild running right now? [XQRTGRTNOM] Kick Off Micro Surgery [XQKTCKMICRO]	[XQB	UILDMAIN]	[XQBUILDTREE]
rebuild running right now? ([XQRTGHTNOM]) Kick Off Micro Surgery (XQKTCKMICRO]			Is there a many
right now? [XQRIGHTNOW]			
Kick Off Micro Surgery [XQRICKMICRO]		I	
Surgery [XQRICKMICRO] Most Recent Menu Rebuilds [XQSHOWBUILDS] Single User Menu Tree Rebuild [XQBUILDUSER] Out-Of-Order Set			[XQRIGHTNOW]
Surgery [XCRICKMICRO] Most Recent Menu Rebuilds [XQSHOWBUILDS] Single User Menu Tree Rebuild [XQBUILDUSER] Out-Of-Order Set		 	Kick Off Micro
Most Recent Menu Rebuilds [XQSHOWBUILDS] Single User Menu Tree Rebuild [XQBUILDUSER] Tree Rebuild [XQBUILDUSER] Single User Menu State Options To Mark Out-0f-Order [XQOOMAKE] Single User State Out-0f-Order [XQOOSHOW] Single User State Out-0f-Order [XQOOSHOW] Single User State Out-0f-Order [XQOOSHOFIL] Single User State Out-0f-Order In Protocol File [XQOOSHOFIL] Single User State Out-0f-Order In Protocol File [XQOOSHOPRO] Recover deleted Option set [XQOOSHOPO] Remove Out-0f-Order State Out-0f-Order In Protocol State Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0f-Out-0			
Rebuilds [XQSHOWBUILDS]			[XQKICKMICRO]
Rebuilds [XQSHOWBUILDS] Single User Menu Tree Rebuild [XQBUILDUSER] Out-Of-Order Set			Most Rosent Monu
CXQSHOWBUILDS]		 	
Tree Rebuild [XQBUILDUSER] Out-Of-Order Set		I	[XQSHOWBUILDS]
Tree Rebuild [XQBUILDUSER] Out-Of-Order Set			Cinala Haan Mann
Create a Set of Options To Mark (XQOOMAIN) Out-Of-Order (XQOOMAKE)			_
Management			
Management			
Management	O11†_	Of-Order Set	Create a Set of
[XQOOMAKE]			
List Defined Option Sets [XQOOSHOW]	[XQO	OMAIN]	
Option Sets [XQOOSHOW]			[XOOOMAKE]
[XQOOSHOW]		1	[2]
Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO] Remove Out-Of-Order		 	
Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Option File that are Out-Of-Order [XQOOSHOFIL] Out-Of-Order in Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Option set [XQOOREDO] Option set [XQOOREDO] Option Set [XQOOREDO] Option Set [XQOOREDO]		 	List Defined Option Sets
Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Out-Of-Order [XQOOSHOFIL] Out-Of-Order in Out-Of-Order in Protocol File [XQOOSHOPRO] Out-Of-Order in Option set [XQOOREDO] Recover deleted Option set [XQOOREDO] Out-Of-Order		 	List Defined Option Sets
Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO] Remove Out-Of-Order		 	List Defined Option Sets [XQOOSHOW]
Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO] Remove Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set
Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO] Remove Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order
are Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF]
Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the
Out-Of-Order in Protocol File [XQOOSHOPRO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order
Out-Of-Order in Protocol File [XQOOSHOPRO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order
[XQOOSHOPRO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL]
		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked
option set [XQOOREDO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File
option set [XQOOREDO] Remove Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File
[XQOOREDO]		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO]
Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted
Out-Of-Order		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set
		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO]
l Hessages from a		 	List Defined Option Sets [XQOOSHOW] Mark Option Set Out-Of-Order [XQOOFF] Options in the Option File that are Out-Of-Order [XQOOSHOFIL] Protocols Marked Out-Of-Order in Protocol File [XQOOSHOPRO] Recover deleted option set [XQOOREDO] Remove

	Set of Options [XQOON]
	 Toggle options/protocol s on and off [XQOOTOG]
	 See if a User Has Access to a Particular Option [XQOPACCESS]
	 Show Users with a Selected primary Menu [XUXREF-2]

5.2.6 XUSITEMGR

Figure 10: XUSITEMGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account

Operations Management (XUSITEMGR)	
i 	- System Status [XUSTATUS]
	- Introductory text edit [XUSERINT]
	- CPU/Service/User /Device Stats [XUSTAT]
IPV IPv4 and IPv6VA Address Tools [XLFIPV IPV4 IPV6 MENU]	L Validate IPv4 and IPv6 address [XLFIPV VALIDATE]
 IP 	4 Convert any IP address to IPv4 [XLFIPV FORCEIP4]
 IP 	6 Convert any IP address to IPv6 [XLFIPV FORCEIP6]
 CO	N Convert any IP address per system settings [XLFIPV CONVERT]
 VE	R Show system settings for IPv6 [XLFIPV VERSION]
-LOCK Lock ManagerL Menu [XULM LOCK MANAGER MENU] **LOCKED: XULM LOCKS.**	M Kernel Lock Manager [XULM LOCK MANAGER]
 EDI 	T Edit Lock Dictionary [XULM EDIT LOCK DICTIONARY]
 LO 	G View Lock Manager Log [XULM VIEW LOCK MANAGER LOG]
 SIT	E Edit Lock

		Manager Parameters [XULM EDIT PARAMETERS]
	PURG	Purge Lock Manager Log [XULM PURGE LOCK MANAGER LOG]
	RJD	<pre>Kill off a users' job [XURESJOB] **LOCKED: XUMGR**</pre>
	ManagementSURO LERT MGR]	Alerts - Set/Remove Surrogate for User [XQALERT SURROGATE SET/REMOVE]
		Delete Old (>14 d) Alerts [XQALERT DELETE OLD]
		Make an alert on the fly [XQALERT MAKE]
		Purge Alerts for a User [XQALERT BY USER DELETE] **LOCKED: XQAL-DELETE**
		Set Backup Reviewer for Alerts [XQAL SET BACKUP REVIEWER]
		Surrogate for which Users? [XQAL SURROGATE FOR WHICH USERS]
Optio	a/Beta Test on Usage [XQAB MENU]	Actual Usage of Alpha/Beta Test Options [XQAB ACTUAL OPTION USAGE]
		Low Usage Alpha/Beta Test Options [XQAB LIST LOW USAGE OPTS]
	 	Print Alpha/Beta Errors

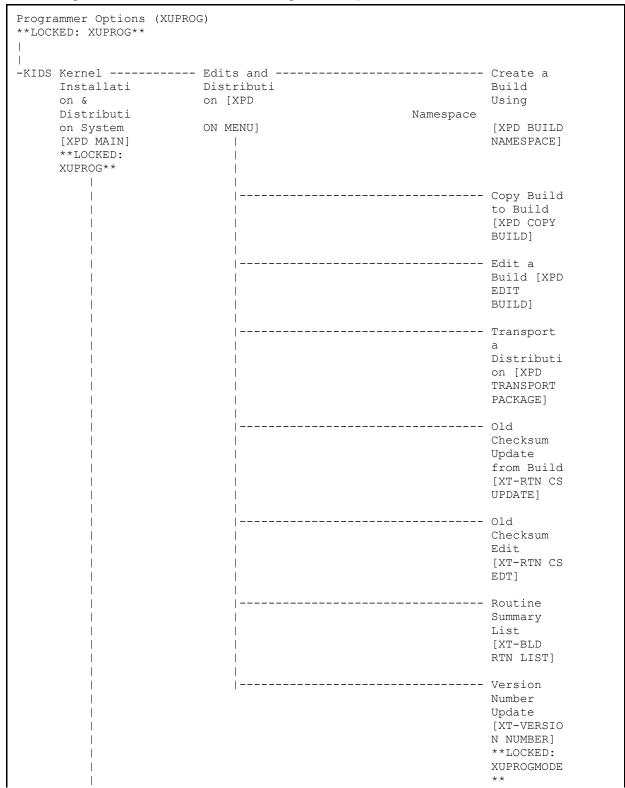
 	(Date/Site/Num/R ou/Err) [XQAB ERR DATE/SITE/NUM/RO U/ERR] Send Alpha/Beta Usage to Developers [XQAB AUTO SEND]
 	Clean old Job Nodes in XUTL [XQ XUTL \$J NODES]
 	Delete Old (>14 d) Alerts [XQALERT DELETE OLD]
 	Foundations Management [XOBU SITE SETUP MENU]
 	<pre>Institution File Query / Update [XUMF INSTITUTION] **LOCKED: XUMF INSTITUTION**</pre>
elgement Menu gement Menu ERNEL] 	Ask if Production Account [XU SID ASK] **LOCKED: XUMGR**
 	Edit Logical/Physical Mapping [XU SID EDIT]
 	Edit Site IP lockout [XU SITE LOCKOUT]
 	Enter/Edit Kernel Site Parameters [XUSITEPARM]
 	Error Trap Param Edit [XUER EDIT PARAMS]
i 	<pre>Institution DEA# edit [XU-INSTITUTION- DEA] **LOCKED:</pre>

			XUMGR**
			Institution Edit
			[XU-INSTITUTION-
			E]
			Kernel New
			Features Help
			[XUVERSIONEW-HEL P]
			-
			Kernel Parameter File Edit [XU
			PARAM]
			Manual DMT
			Kernel PKI Parameter Edit
			[XUSSPKI EDIT]
			Load Institution
			NPI values [XUMF
			LOAD NPI]
			UNAVAILABLE
	NPF cleanu		
	menu [XUPS CLEANUP MA		STATS [XUPS ASSESSMENT
	MENU]	711/	STATS]
	į.	5.7.7	
		DET	XUPS ASSESSMENT DETAIL [XUPS
	i		ASSESSMENT
	1		DETAIL]
		PRE	XUPS PREUPDATE
	1		NPF REPORTS
	l I		[XUPS PREUPDATE NPF REPORTS]
	i		NIE REFORES
		UPD	XUPS UPDATE NEW
			PERSON FILE DATA [XUPS UPDATE NEW
			PERSON FILE]
			Release IP lock
			[XU IP RELEASE]
			Text Edit [XUSERPOST]
			[
	Broker		RPC Listener Edit [XWB
	gement Menu MENU]		LISTENER EDIT]
			Start All RPC Broker Listeners
			[XWB LISTENER
			STARTER]
			Stop All RPC
•			± .

	Broker Listeners [XWB LISTENER STOP ALL]
 	Clear XWB Log Files [XWB LOG CLEAR]
 	Debug Parameter Edit [XWB DEBUG EDIT]
	View XWB Log [XWB LOG VIEW]
ManagementFIND [XUOPTUSER]	Find a user [XU FINDUSER]
 PXY 	Proxy User List [XUSAP PROXY LIST]
 	List users [XUSERLIST]
 	Print Sign-on Log [XUSC LIST]
	Proxy (Connector) Detail Report [XUSAP PROXY CONN DETAIL ALL]
 	Proxy (Connector) Inquire [XUSAP PROXY CONN DETAIL INQ]
 	Release user [XUSERREL]
 	Remote Access User Sign-on Log [XUSEC REMOTE ACCESS]
 	User Inquiry [XUSERINQ]
 	User Status Report [XUUSERSTATUS]
	Users with Foreign Visits [XUS VISIT USERS]

5.2.7 XUPROG

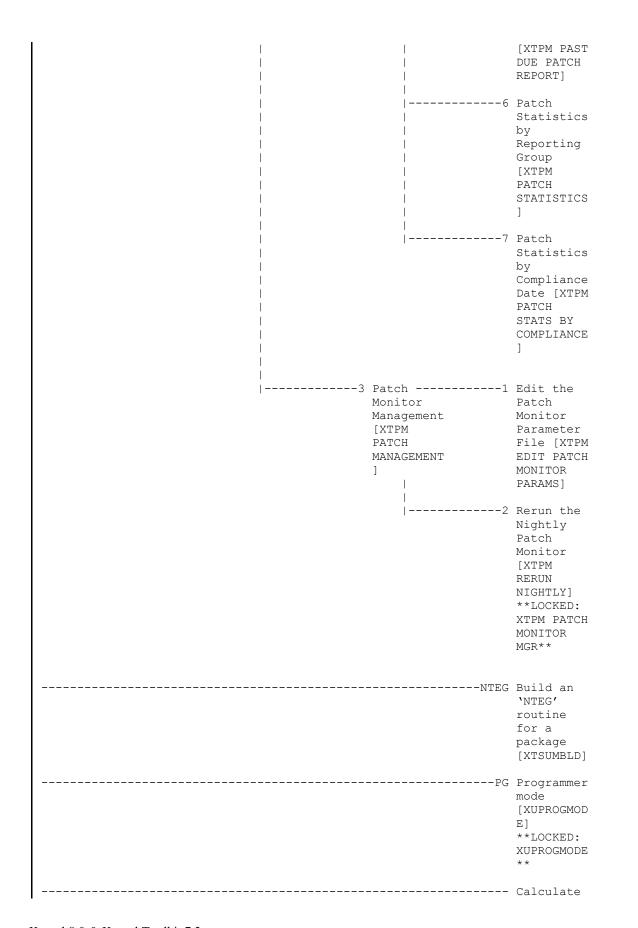
Figure 11: XUPROG—Menu Tree Diagram: Sample from OAKTST "Gold" Account



Ī	l i		
	U	tilities	Build File
	Ι [XPD	Print [XPD
	l U	TILITY]	PRINT
			BUILD]
			Tnotoll
			Install File Print
			[XPD PRINT
	i	i i	INSTALL
			FILE]
	I		
			Edit
			Install Status
			[XPD EDIT
			INSTALL]
	i	i i	
			Convert
١		1	Loaded
	l		Package
			for
	l I	1	Redistribu tion [XPD
			CONVERT
			PACKAGE]
	i		1110111102]
			Display
	I	1	Patches
	l		for a
			Package
			[XPD PRINT PACKAGE
			PATCHES]
			THICHEO
	i	· 	Purge
١		1	Build or
١	l		Install
١			Files [XPD
			PURGE
J		 	FILE]
			Rollup
	į		Patches
		1	into a
		I	Build [XPD
			ROLLUP
			PATCHES]
			Update
		i	Routine
	i	i	File [XPD
		1	ROUTINE
J	ļ.	<u> </u>	UPDATE]
			** ' 6
J			Verify a
	1	 	Build [XPD VERIFY
		 	BUILD]
	i	i	,
			Verify
	I		Package

Installati1 on [XPD INSTALLATI	Integrity [XPD VERIFY INTEGRITY] Load a Distributi on [XPD
**LOCKED: KUPROGMODE	LOAD DISTRIBUTI ON]
 2 	Verify Checksums in Transport Global [XPD PRINT CHECKSUM]
3 	Print Transport Global [XPD PRINT INSTALL]
4 	Compare Transport Global to Current System [XPD COMPARE TO SYSTEM]
5 	Backup a Transport Global [XPD BACKUP]
 6 	Install Package(s) [XPD INSTALL BUILD]
 	Restart Install of Package(s) [XPD RESTART INSTALL]
	Unload a Distributi on [XPD UNLOAD DISTRIBUTI ON]

Fatch				
Monitor Processing Inquiry Nain Menu [XTPM XTPM		Datab 1	Datah 1	Dotob
Main Menu				
CXTPM				
PATCH PROCESSING INQUIRY] MAIN MENU			[XTPM	LXTPM
MONITOR MAIN MENU		[XTPM		PATCH
MAIN MENU]		PATCH	PROCESSING	INQUIRY]
		MONITOR]	
		MAIN MENUl	1	
Informatio In (XTPM BIDIT PATCH) PATCH)		1	i	
Informatio In (XTPM BIDIT PATCH) PATCH)		i	2	Edit Patch
n [XTPM EDLT PATCH] DELT PATCH] DELT PATCH] DELT PATCH] DELT PATCH] DELT PATCH DELT				
BEDIT PATCH PATCH PATCH			•	
PATCH		1	l	=
		1	l	
NON-Kids Patch as Complete [XTFM COMPLETE A NON-KIDS PATCH]		ļ		PATCH
NON-Kids Patch as Complete [XTPM COMPLETE A NON-KIDS PATCH]		!	_	_
Patch as Complete [XTPM COMPLETE A NON-KIDS PATCH]		I		
Complete [XTPM COMPLETE A NON-KIDS PATCH]				
COMPLETE A NON-KIDS PATCH]		1		
COMPLETE A NON-KIDS PATCH] PATCH REPORTS REPORTS REPORTS] REPORTS] REPORTS] REPORTS] REPORTS] REPORTS] REPORTS			Complete	
NON-KIDS PATCH		1		[XTPM
PATCH] PATCH Reports Patch [XTPM Installati PATCH ON History REPORTS] [XTPM COMPLETE PATCH HISTORY]		1		COMPLETE A
PATCH] PATCH Reports Patch [XTPM Installati PATCH ON History REPORTS] [XTPM COMPLETE PATCH HISTORY]		1		NON-KIDS
		i		
Reports		i		
Reports		i		
Reports		2	Patch1	Complete
[XTPM		i		_
PATCH REPORTS (XTPM (X		i		Installati
REPORTS]		i		
COMPLETE PATCH HISTORY] HISTORY] Output		i		
PATCH HISTORY]		i I	=	
HISTORY]			1	
		1	l	
d Patches by Compliance Date [XTPM UNINSTALLE D BY COMPLIANCE		ļ	I I	HISTORY
d Patches by Compliance Date [XTPM UNINSTALLE D BY COMPLIANCE		l I	1	IIninatalla
by Compliance Date [XTPM UNINSTALLE D BY COMPLIANCE D SY COMPLIANCE D PATCH D PATCH D SY COMPLIANCE D		!	2	
Compliance Date (XTPM UNINSTALLE Date (XTPM UNINSTALLE Date Date (XTPM UNINSTALLE Date Date Date Date Date Date Date Date				
Date [XTPM UNINSTALLE UNINSTALLE D BY COMPLIANCE		I		
UNINSTALLE D BY COMPLIANCE CO				
D BY COMPLIANCE COMPLIANCE				
COMPLIANCE		1		UNINSTALLE
		1	I	D BY
d Patch Listing - Alphabetic al [XTPM UNINSTALLE D PATCHES] Due in the Next Seven Days [XTPM Days [XTPM PATCHES DUE NEXT 7 DAYS] DAYS]		1	1	COMPLIANCE
d Patch Listing - Alphabetic al [XTPM UNINSTALLE D PATCHES] Due in the Next Seven Days [XTPM PATCHES DUE NEXT 7 DAYS] DAYS]		1	1]
d Patch Listing - Alphabetic al [XTPM UNINSTALLE D PATCHES] Due in the Next Seven Days [XTPM Days [XTPM PATCHES DUE NEXT 7 DAYS] DAYS]		1	I	
Listing - Alphabetic al [XTPM UNINSTALLE D PATCHES]		1	3	Uninstalle
Alphabetic al [XTPM		1	1	d Patch
Alphabetic al [XTPM				Listing -
al [XTPM UNINSTALLE UNINSTALLE D PATCHES] D PATCHES]		1		
UNINSTALLE D PATCHES] D PATCHES]		i	i	
D PATCHES]		i	i	
		i	i	
Due in the Next Seven Days [XTPM Days [XTPM PATCHES DUE NEXT 7 DAYS]		İ	İ	
Due in the Next Seven Days [XTPM Days [XTPM PATCHES DUE NEXT 7 DAYS]		i		Patches
Next Seven Days [XTPM PATCHES DUE NEXT 7 DAYS] DAYS] Patch		i I	1	
Days [XTPM PATCHES DUE NEXT 7 DAYS] DAYS]		1	1	
PATCHES DUE NEXT 7 DAYS] DAYS] Patch			1	
DUE NEXT 7 DAYS] DAYS] Patch		I I	 	-
DAYS]		I I	1	
		I		
Patch			l .	DAYS]
Patch				
		!	5	
Report		ļ	<u> </u>	
	1	I	I	Report



			and Show
			Checksum
			Values
			[XTSUMBLD-
			CHECK]
			CHECK
			Delete
			Unreferenc
			ed Options
			[XQ
			UNREF'D
			OPTIONS]
Error		P1	
	essing		occurence
[XUEF	RRS1		of each
	- 3		error for
I			T-1
			(QUEUE)
1			[XUERTRP
i			PRINT T-1
l I			1 ERR]
I		P2	Drint 2
I		rz	
			occurrence
			s of
			errors on
1			T-1
i			(QUEUED)
			[XUERTRP
			PRINT T-1
			2 ERR]
I		r	
	Summ	ary	an Error
 	Summ		
 	Summ	ary [XUER	an Error
 	Summ Menu	ary [XUER	an Error [XUER
 	Summ Menu	ary [XUER	an Error [XUER NOTE]
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE]
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY
 	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE]
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY]
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary Most
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary Most Recent
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary Most
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary Most Recent
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary Most Recent Errors [XUER
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary [XUER PURGE ERROR SUMMARY]
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary [XUER PURGE ERROR SUMMARY]
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary [XUER PURGE ERROR SUMMARY]
	Summ Menu	ary [XUER ARY] 	an Error [XUER NOTE] Inquire Error Summary [XUER SUMMARY INQUIRE] Purge Error Trap Summary [XUER PURGE ERROR SUMMARY] Summary [XUER PURGE ERROR SUMMARY]

		[XUER SUMMARY TOP]
	 	Update Error Trap Summary [XUER UPDATE DEMAND/BAT CH]
	 	Clean Error Trap [XUERTRP CLEAN] **LOCKED: XUPROGMODE **
	 	Error Trap Display [XUERTRAP]
		e Print of Error Messages [XUERTRP PRINT ERRS]
		Remove a TYPE of error [XUERTRP TYPE]
		Global Block Count [XU BLOCK COUNT]
		Global [XUPRGL] **LOCKED: XUPROGMODE **
		Map Pointer Relations [DI DDMAP]
		Number base changer [XT-NUMBER BASE

	CHANGER] **LOCKED: XUPROGMODE **
Routine	%Index of Routines [XUINDEX]
	Check Routines on Other CPUs [XUPR RTN CHKSUM]
	Compare local/nati onal checksums report [XU CHECKSUM REPORT]
 	Compare routines on tape to disk [XUPR-RTN- TAPE-CMP]
	Compare two routines [XT-ROUTIN E COMPARE]
	Delete Routines [XTRDEL] **LOCKED: XUPROGMODE **
	First Line Routine Print [XU FIRST LINE PRINT]
	Flow Chart Entire Routine [XTFCR]
	from Entry Point [XTFCE]
	Group Routine

 	Edit [XTRGRPE] **LOCKED: XUPROGMODE **
 	<pre>Input routines [XUROUTINE IN] **LOCKED: XUPROG**</pre>
	List Routines [XUPRROU]
	Load/refre sh checksum values into ROUTINE file [XU CHECKSUM LOAD]
 	Output routines [XUROUTINE OUT]
	Routine Edit [XUPR RTN EDIT] **LOCKED: XUPROGMODE **
 	Routines by Patch Number [XUPR RTN PATCH]
 	Variable changer [XT-VARIAB LE CHANGER] **LOCKED: XUPROGMODE **
 	Version Number Update [XT-VERSIO N NUMBER] **LOCKED: XUPROGMODE **

ı		
		Test an option not in your menu [XT-OPTION TEST] **LOCKED: XUMGR**
Tool	fiers Menu MENU]	Update with current routines [XTVR UPDATE]
	 	Routine Compare - Current with Previous [XTVR COMPARE]
	 	Accumulate Globals for Package [XTVG UPDATE]
	 	Edit Verificati on Package File [XTV EDIT VERIF PACKAGE]
	 	Global Compare for selected package [XTVG COMPARE]
	 	Last Routine Change Date Recorded [XTVR MOST RECENT CHANGE DATE]
		UNDO Edits (Restore to Older Version of Routine) [XTVR

RESTORE PREV ROUTINE]

5.2.8 XU-SPL-MGR

Figure 12: XU-SPL-MGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account

5.2.9 XUSPY

Figure 13: XUSPY—Menu Tree Diagram: Sample from OAKTST "Gold" Account

Information	n Security Officer Menu (XUSPY)	
1		
Secu: Menu	ER SEC	User Inquiry [XUSERINQ]
	 	List users [XUSERLIST]
	 	User Status Report [XUUSERSTA TUS]
	 	Find a user [XU FINDUSER]
	 	Switch Identities [XUTESTUSE R]
	 	Show the keys of a particular user [XQLISTKEY]
	 	See if a User Has Access to a Particular Option [XQOPACCES S]
	 	User Audit Display [XUUSEROPT]
	 	Deactivate a User [XUSERDEAC T]
	 	Reactivate a User [XUSERREAC

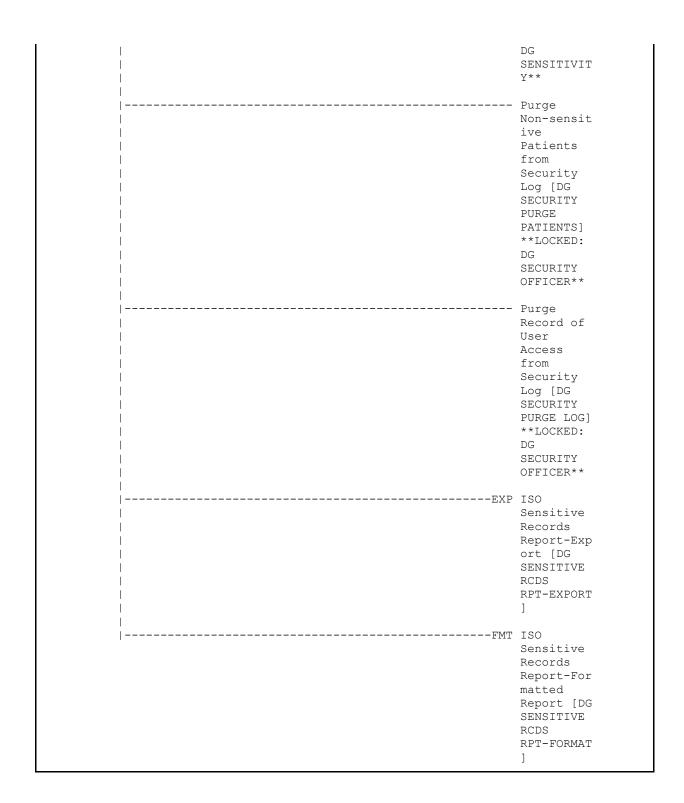
		T]
		ISO's
		Terminated
		User
		Report
		[XUSEC ISO
		TERMINATIO
		N REPORT]
		Up Arrow
		Delimited
		Terminatio
		n Report
		[XUSEC UP
		ARROW TERM
		REPORT]
m2.3	man	In and man + a
File		
Secu	ricy	a User's File
Menu	ILEACC	File Access
ESS		
OFCR		[XUFILEINQ UIRY]
OFCK	J I	OIKI
	 	List
	I I	Access to
	I I	Files by
	I I	Files by
	I I	number
	I I	[XUFILELIS
	I I	T]
	! 	+ 1
	' 	Print
		Users
		Files
		[XUFILEPRI
		NT]
		Delete
		Users'
		Access to
		a Set of
		Files
		[XUFILESET
		DELETE]
		Single
		file
		add/delete
		for a user
		[XUFILESIN
		GLEADD]
	 	Drint File
	Access for	Entries
	the ISO	[DIPRINT]
	[XUDIACCES	[הדב ועדועד]
	S FOR ISO]	
	5 FOK 150]	
	 	Search
		File
1	I	T

	 	Entries [DISEARCH]
	 	- Inquire to File Entries
	 	[DIINQUIRE]
	Audit Menu [DIAUDIT] **LOCKED: XUAUDITING **	- Fields Being Audited [DIAUDITED FIELDS]
		- Data Dictionari es Being Audited [DIAUDIT DD]
		- Purge Data Audits [DIAUDIT PURGE DATA]
	 	- Purge DD Audits [DIAUDIT PURGE DD]
		- Turn Data Audit On/Off [DIAUDIT TURN ON/OFF]
	 	- List File Attributes [DILIST]
Menu and Option Security [XU SEC OFCR]		- Option Function Inquiry [XUINQUIRE]
		- Option Access By User [XUOPTWHO]
		- Print Option File [XUPRINT]
I I		

 	Diagram Menus [XUUSERACC]
 	Abbreviate d Menu Diagrams [XUUSERACC 2]
 	Show Users with a Selected primary Menu [XUXREF-2]
	List users holding a certain key [XQSHOKEY]
 	Keys For a Given Menu Tree [XQLOCK2]
Secure	Show a Delegate's Options [XQSMD SHOW]
	List Delegated Options and their Users [XQSMD BY OPTION]
	Print All Delegates and their Options [XQSMD BY USER]
	Option Audit Display [XUOPTDISP]
 	Audited Options Log [XUOPTLOG] Audited
	AUUILEU

	Options Purge [XUOPTPURG E]
System	Establish System Audit Parameters [XUAUDIT]
	Display the Kernel Audit Parameters [XU-SPY-SH OW]
	Server audit display [XUSERVDIS P]
	Super Search Message File [XM SUPER SEARCH] **LOCKED: XM SUPER SEARCH**
	Bulletin Selection [DG BULLETIN LOCAL]
	Patient Inquiry [DG PATIENT INQUIRY]
	MAS Parameter Entry/Edit [DG PARAMETER ENTRY]
Access Monitor Menu [XUMNACCES S]	Display of Programmer Mode Entry List [XUPMDISP]
i	Programmer Mode Entry

		Log Purge
	I 	[XUPMPURGE]
		Failed Access
		Attempts
		Log
		[XUFAIL]
	' 	Failed
		Access
		Attempts
	I 	Log Purge [XUFPURGE]
		[]
		Device
	 	Failed Access
		Attempts
	l	[XUFDEV]
		User
		Failed
		Access
		Attempts
		[XUFDISP]
		Print
		Sign-on
		Log [XUSC LIST]
		шы
		Direct-mod
		e Programmer
		Access
		Audit
		[XUPROGAUD
]
Secu Offi		Display User
Menu		Access to
SECU:	RITY	Patient
OFFI		Record [DG
MENU **LO] CKED:	SECURITY DISPLAY
DG	OKED.	LOG]
SECU		**LOCKED:
OFFI	CER**	DG
	 	SECURITY OFFICER**
		Enter/Edit
		Patient
	I 	Security Level [DG
		SECURITY
		ENTER/EDIT
		**! OCKED.



5.2.10 XUTM MGR

Figure 14: XUTM MGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account

n Management (XUTM MGR)		
		Schedule/Unsched ule Options [XUTM SCHEDULE]
		One-time Option Queue [XU OPTION QUEUE]
Taskman Management Utilities [XUTM UTIL]	MTM	Monitor Taskman [XUTM ZTMON]
		Check Taskman's Environment [XUTM CHECK ENV]
 		Site Parameters Edit [XUTM BVPAIR]
		UCI Association Table Edit [XUTM UCI]
	j	Volume Set Edit [XUTM VOLUME]
 		Restart Task Manager [XUTM RESTART]
		Place Taskman in a WAIT State [XUTM WAIT]
		Remove Taskman from WAIT State [XUTM RUN]
		Stop Task Manager [XUTM STOP]
	Taskman Error Log [XUTM ERROR] 	Show Error Log [XUTM ERROR SHOW]
 		Clean Error Log Over Range Of Dates [XUTM ERROR LOG CLEAN RANGE]

 	 	Purge Error Log Of Type Of Error [XUTM ERROR PURGE TYPE]
	 	Delete Error Log [XUTM ERROR DELETE]
	 	List Error Screens [XUTM ERROR SCREEN LIST]
	 	Add Error Screens [XUTM ERROR SCREEN ADD]
	 	Edit Error Screens [XUTM ERROR SCREEN EDIT]
 	 	Remove Error Screens [XUTM ERROR SCREEN REMOVE]
 		Clean Task File [XUTM CLEAN]
 		Change tasks device [XUTM RP]
 		Problem Device Clear [XUTM PROBLEM CLEAR]
 		Problem Device report. [XUTM PROBLEM DEVICES]
 		Repoint waiting tasks to a new port/device [XUTM REPNT]
		SYNC flag file control [XUTM SYNC]
 		List Tasks [XUTM INQ]
 		Dequeue Tasks [XUTM DQ]
 		Requeue Tasks [XUTM REQ]

 Delete Tasks [XUTM DEL]
 Print Options that are Scheduled to run [XUTM BACKGROUND PRINT]
 Cleanup Task List [XUTM TL CLEAN]
 Print Options Recommended for Queueing [XUTM BACKGROUND RECOMMENDED]

5.2.11 XUSER

Figure 15: XUSER—Menu Tree Diagram: Sample from OAKTST "Gold" Account

Figure 15: AUSER—Menu Tree Diagram: Sample from OAK151 "Go	
User Management (XUSER)	
	Add a New User to the System [XUSERNEW]
	Grant Access by Profile [XUSERBLK] **LOCKED: XUMGR**
	Edit an Existing User [XUSEREDIT]
	Deactivate a User [XUSERDEAC T]
	Reactivate a User [XUSERREAC T]
	List users [XUSERLIST]
	User Inquiry [XUSERINQ]
	Switch Identities [XUTESTUSE R]
File	Grant Users' Access to a Set of Files [XUFILEGRA NT]
	Copy One User's File Access to Others

	 	[XUFILECOP Y]
	 	Single file add/delete for a user [XUFILESIN GLEADD]
	 	Inquiry to a User's File Access [XUFILEINQ UIRY]
	 	List Access to Files by File number [XUFILELIS T]
	 	Print Users Files [XUFILEPRI NT]
	 	Delete Users' Access to a Set of Files [XUFILESET DELETE]
		Remove All Access from a Single User [XUFILEREM OVEALL]
	 	Take away All access to a File [XUFILEDEL ETE]
	i	Assign/Del ete a File Range [XUFILERAN GEASSIGN]
		Clear Electronic signature

			code [XUSESIG CLEAR] **LOCKED: XUMGR**
			Electronic Signature Block Edit [XUSESIG BLOCK]
			List Inactive Person Class Users [XU-INACTI VE PERSON CLASS USERS]
Managara			D
Manage			Purge
User File [XUSER			Inactive Users'
FILE MGR]			Attributes
FILE MGR]			[XUSERPURG
l I			EATT]
			DAII]
			Purge Log
I I			of Old
			Access and
I I			Verify
I I			Codes
			[XUSERAOLD
l I			
			1
			Reindex
1			the users
			key's
			[XUSER KEY
			RE-INDEX]
		E	
Trainee			Trainee
Registrati			Registrati
on Menu			on Data
[XU-CLINIC			[XU-CLINIC
AL TRAINEE			AL TRAINEE
MENU]			EDIT]
 			Trainee
	: 		Registrati
i I			on Inquiry
i			[XU-CLINIC
i			AL TRAINEE
I			INQUIRY]
I			
R	Trainee	Local	List of
	Reports	Trainee	Active
	Menu	Registrati	Registered
	[XU-CLINIC	on Reports	Trainees

1	AL TRAINEE	[XU-CLINIC	[XU-CLINIC
	REPORTS]	AL LOCAL REPORTS]	AL ACTIVE TRAINEE]
			List of All Registered Trainees [XU-CLINIC AL TRAINEE LIST]
		 	List of Inactive Registered Trainees [XU-CLINIC AL INACTIVE TRAINEE]
			Total Count of Registered Trainees [XU-CLINIC AL TRAINEE DB COUNT]
		Transmissi on Reports to OAA [XU-CLINIC AL TRANS REPORTS]	Trainee Transmissi on Report by Date [XU-CLINIC AL TRAINEE TRANSA] Trainee Transmissi on Report by Range [XU-CLINIC AL TRAINEE TRANSC] Trainee Transmissi on Report selectable Items [XU-CLINIC AL TRAINEE
			Person Class Edit [XU-PERSON CLASS EDIT]

 Reprint
Access
agreement
letter
[XUSERREPR
INT]

5.2.12 Parent of Queuable Options [ZTMQUEUABLE OPTIONS]

Figure 16: ZTMQUEUABLE OPTIONS—Menu Tree Diagram: Sample from OAKTST "Gold" Account

```
Parent of Queuable Options (ZTMQUEUABLE OPTIONS)
---- Automatic Deactivation of Users
     [XUAUTODEACTIVATE]
---- Clear all users at startup
     [XUSER-CLEAR-ALL]
---- Copy the compiled menus from the
     print server [XU-486 MENU COPY]
---- Error trap Auto clean [XUERTRP
     AUTO CLEAN]
---- Errors Logged in Alpha/Beta Test
      (QUEUED) [XQAB ERROR LOG XMIT]
---- Monitor Routines for Changes
      [XTRMONITOR]
---- Non-interactive Build Primary
     Menu Trees [XQBUILDTREEQUE]
---- One-time Option Start (Internal
     Use Only) [XU OPTION START]
---- Print 1 occurence of each error
     for T-1 (QUEUE) [XUERTRP PRINT
     T-1 1 ERR]
---- Print 2 occurrences of errors on
     T-1 (QUEUED) [XUERTRP PRINT T-1 2
---- Purge of the %ZUA global.
      [XUSAZONK]
---- Purge old spool documents
     [XU-SPL-PURGE]
---- Purge Sign-On log [XUSCZONK]
---- Queuable Task Log Cleanup [XUTM
     QCLEAN]
---- Unlinked payers notification
      [IBCNE EIV PAYER LINK NOTIFY]
```

5.2.13 SYSTEM COMMAND OPTIONS [XUCOMMAND]

Figure 17: XUCOMMAND—Menu Tree Diagram: Sample from OAKTST "Gold" Account

STEM COMMAND OPTIONS (XUCOMMA	ND)	
	PRN	Print File Entries [DIPRINT]
	INQ	Inquire to File Entries [DIINQUIRE]
-	Patron Requests for the Local Library [LBRY PATRON REQUESTS] **UNAVAILABLE**	
 RFP	-	History of Check-in [LBRY HIST CHK-IN]
	JTA 	Journal Title Availability Inquiry [LBRY PATRON TITLES]
	SLJ	Subject List of Journals Available [LBRY PATRON SUBJECT]
BOX User's Toolbox [XUSERTOOLS]		Change my Division [XUSER DIV CHG]
		Display User Characteristics [XUUSERDISP]
		Edit User Characteristics [XUSEREDITSELF]
 		Electronic Signature code Edit [XUSESIG]
 	Menu Templates [XQTUSER]	Create a new menu template [XQTNEW]
; 	 	Delete a Menu Template [XQTKILL]

1		
	 	List all Menu Templates [XQTSHO]
		Rename a menu template [XQTRNAM]
		Show all options in a Menu Template [XQTLIST]
	Spooler Menu [XU-SPL-MENU]	Allow other users access to spool documents [XU-SPL-ALLOW]
		Browse a Spool Document [XU-SPL-BROWSE]
		Delete A Spool Document [XU-SPL-DELETE]
		List Spool Documents [XU-SPL-LIST]
		Make spool document into a mail message [XU-SPL-MAIL]
		Print A Spool Document [XU-SPL-PRINT]
		Switch UCI [XU SWITCH UCI]
		TaskMan User [XUTM USER]
		User Help [XUUSERHELP]
TIU Personal Preferences [TIU PERSONAL PREFERENCE MENU]	1	Personal Preferences [TIU PERSONAL PREFERENCES]
	2	Document List Management [TIU PREFERRED DOCUMENT LIST]

	[XQALERT] Continue
	[XUCONTINUE]
	Copy Routines to Another UCI [A1CI MOVE ROUTINE]
	Dispense Drug Look-Up [PSJU INQ DRUG]
	Halt [XUHALT]
MailMan MenuNi [XMUSER]	ML New Messages and Responses [XMNEW]
 RI 	ML Read/Manage Messages [XMREAD]
	ML Send a Message [XMSEND]
	Query/Search for Messages [XMSEARCH]
Al	ML Become a Surrogate (SHARED,MAIL or Other) [XMASSUME]
Personal	User Options Edit [XMEDITUSER]
	Banner Edit [XMBANNER]
	Surrogate Edit [XMEDITSURR]
	Message Filter Edit [XM FILTER EDIT]
	Delivery Basket Edit [XM DELIVERY BASKET EDIT]
	ML Enroll in (or Disenroll from) a Mail Group [XMENROLL]
	Personal Mail

	 	 	Group Edit [XMEDITPERSGROUP]
	 	İ	Forwarding Address Edit [XMEDITFWD] **LOCKED: XMNET**
	Fun	er MailManctions	Report on Later'd Messages [XMLATER-REPORT]
	 	 	Change/Delete Later'd Messages [XMLATER-EDIT]
	 	 	Mailbox Contents List [XMBASKLIST]
	 	 LML	Load PackMan Message [XMPACK] **LOCKED: XUPROGMODE**
	Inf	p (User/Group o., etc.)	User Information [XMHELPUSER]
			Group Information [XMHELPGROUP]
		 	Remote User Information [XMHELPLNK]
		 	New Features in MailMan [XM-NEW-FEATURES]
			General MailMan Information [XMHELPALL]
		 	Questions and Answers on MailMan [XMHELPQUEST]
			Manual for MailMan Users [XMHELP-ON-LINE- USER_MANUAL]
NOIS	[FSC MENU		New Call [FSC

NOIS		NEW CALL]
	 	Edit Call [FSC EDIT CALL]
	 	Close Call [FSC CLOSE CALL]
	 !	View Calls [FSC VIEW CALLS]
	 	List Calls [FSC LIST CALLS]
	 	Query Calls [FSC QUERY CALLS]
	 	Reports [FSC REPORTS]
	 	File Setup [FSC FILE SETUP]
	 	Schedules/Events [FSC EVENTS]
		Restart Session [XURELOG]
		Restore Other Jobs you Own [A1CI RJD OWN JOBS]
		Swap to TST uci [A1CI SUP UCI SWAP]
		Time [XUTIME]
		Where am I? [XUSERWHERE]

5.2.14 Extended-Action Options

Table 19: Protocols—Extended-Action Options

Option	Description
XU USER SIGN-ON	This is a protocol option to link other software applications that want to know about a user signon event. The protocols <i>must not</i> READ/WRITE to the screen because it may be doing a GUI signon. They can set text that is displayed to the user by calling SET^XUS1A(string) The first character should be a! to cause the text to be placed on a new line. DUZ will be defined but other variables may <i>not</i> be. It is called from the XUS1A routine.
XU USER START-UP	Added with Kernel Patch XU*8.0*593, this is a protocol option used exclusively during a VistA user signon event. Items attached to this option are "TYPE: action" options in the OPTION (#19) file, which can be used for software-specific actions that prompt users for input upon VistA signon before their Primary Menu Option is displayed. Unlike the User sign-on event [XU USER SIGN-ON] option, it can provide interactive prompting to users. It is <i>not</i> used for GUI signon. It is called from the XQ12 routine.
XU USER TERMINATE	This is a protocol option to link other software applications that want to know about a USER TERMINATE event. Other software can attach to this protocol option and they will be called when a user is terminated. The call is just after the users Access and Verify codes have been removed. DUZ will be the person that is running the terminate option. XUIFN points to the NEW PERSON (#200) file entry that is being terminated. Returns selected File #200 data to XUSR(field name) array for NEW PERSON components. It is called in the XUSTERM routine from the XUSERP routine.

5.2.15 Protocols

Table 20: Protocols—Lock Manager Utility

Option	Description
XULM DISPLAY SYSTEM LOCKS	This List Template action protocol displays a list of the system locks. System locks are generally ignored within the Lock Manager. They are locks held by infrastructure packages, such as the Kernel or HL7 package.
XULM LOCK MANAGER MENU	This is the protocol menu for the Kernel Lock Manager List Manager screen.
XULM REFRESH LOCKS	This List Manager action protocol re-builds the list of locks by reading the lock table.

Option	Description
XULM SELECT LOCK	This action allows a user to select a lock from the list. It then displays a new screen with detailed information about the lock.
XULM GO TO	This List Manager action asks the user where he wants to go to on the list and then shifts the display to that location.
XULM SORT/SCREEN LOCKS	This action provides the user with several options for how the list locks should be displayed. The options include sorting the list by patient name, sorting the list by the user name, sorting the list by the lock string, or screening the entries by lock reference, which means that only locks that relate to a specific file will be included in the display.
XULM SELECT NODE	This action allows the user to select either a single computer node or all the computer nodes. If the user selects a single node then the display of locks will include only locks placed by processes running on that node.
XULM SINGLE LOCK MENU	This is the protocol menu for the XULM DISPLAY SINGLE LOCK List Template.
XULM TERMINATE PROCESS	This List Manager action protocol will terminate the process that is currently selected.

5.2.16 Server Options

Table 21: Options—Server Options

Option	Description	
XQAB ERROR LOG SERVER	This server option is used to store data sent by the Errors Logged in Alpha/Beta Test (QUEUED) [XQAB ERROR LOG XMIT] option back to the developing site (usually an OIFO). As a server request to which the mail messages containing data on the types and frequencies of errors associated with a software application in alpha or beta test, this option starts a routine that processes the message contents and stores the data in the XQAB ERRORS LOGGED (#8991.5) file (^XTV(8991.5,). The contents of the file can be processed using several options or by the use of VA FileMan directly. The file contains data on the: Type of error. Routine involved. Option that was in use at the time of the error. Date. Number of errors for that date, by site (and if multiple Error Traps are used at a site, by the VOL,UCI).	
XQSCHK	This server option is used to test other server options by examining the host OPTION (#19) file and returning the data associated with the target server option. A message is sent to the host site with the name of the server option to be examined on the first line of the message.	
XQSPING	This is a PING server option that works like PING under TCP/IP. If you send a message to this sever option it sends it back to you, thereby showing that the network mail channel is open.	
XU-PING-SERVER	This is a PING server option that works like PING under TCP/IP. If you send a message to this server option, it sends it back to you.	

5.2.17 Options Attached to Menus for Other Software

Table 22: Options—Attached to Menus for Other Software

Option	Description
XT-KERMIT SPOOL DL	"Download a Spool file entry"; attached to Kernel Toolkit's Kermit menu [XT-KERMIT MENU] menu.

5.2.18 DEA ePCS Utility

Kernel Patch XU*8.0*580 was created in support of the Drug Enforcement Agency (DEA) e-Prescribing of Controlled Substances (ePCS) Utility using Public Key Infrastructure (PKI). The DEA ePCS Utility consists of the following standalone menu and options:

Table 23: Options—DEA ePCS Utility

Option Name	Description
XU EPCS UTILITY FUNCTIONS	The ePCS DEA Utility Functions [XU EPCS UTILITY FUNCTIONS] menu is the main menu for the DEA ePCS Utility. This menu includes the following options to print reports and utility functions:
	Print DEA Expiration Date Null [XU EPCS EXP DATE]
	Print DISUSER DEA Expiration Date Null [XU EPCS DISUSER EXP DATE]
	Print DEA Expiration Date Expires 30 days [XU EPCS XDATE EXPIRES]
	Print DISUSER DEA Expiration Date Expires 30 days [XU EPCS DISUSER XDATE EXPIRES]
	Print Prescribers with Privilege [XU EPCS PRIVS]
	Print DISUSER Prescribers with Privileges [XU EPCS DISUSER PRIVS]
	Print PSDRPH Key Holders [XU EPCS PSDRPH]
	Print Setting Parameters Privileges [XU EPCS SET PARMS]
	Print Audits for Prescriber Editing [XU EPCS PRINT EDIT AUDIT]
	Task Changes to DEA Prescribing Privileges Report [XU EPCS LOGICAL ACCESS]
	Task Allocation Audit of PSDRPH Key Report [XU EPCS PSDRPH AUDIT]
	Allocate/De-Allocate of PSDRPH Key [XU EPCS PSDRPH KEY]
	Edit Facility DEA# and Expiration Date [XU EPCS EDIT DEA# AND XDATE]
XU EPCS EXP DATE	The Print DEA Expiration Date Null [XU EPCS EXP DATE] option prints all active users with an unpopulated DEA# and DEA EXPIRATION DATE. This option prints the following data:
	NAME
	• DEA#
	DEA EXPIRATION DATE
XU EPCS DISUSER EXP DATE	The Print DISUSER DEA Expiration Date Null [XU EPCS DISUSER EXP DATE] option prints all DISUSERed users with an unpopulated DEA# and DEA EXPIRATION DATE. This option

Option Name	Description
XU EPCS XDATE EXPIRES	prints the following data: NAME DEA# TERMINATION DATE DEA EXPIRATION DATE The Print DEA Expiration Date Expires 30 days [XU EPCS XDATE EXPIRES] option prints all active users with DEA # and
	 where the DEA EXPIRATION DATE expires within 30 days. This option prints the following data: NAME DEA# DEA EXPIRATION DATE
XU EPCS DISUSER XDATE EXPIRES	The Print DISUSER DEA Expiration Date Expires 30 days [XU EPCS DISUSER XDATE EXPIRES] option prints all DISUSERed users with DEA # and where the DEA EXPIRATION DATE expires within 30 days. This option prints the following data: NAME DEA# DEA EXPIRATION DATE
XU EPCS PRIVS	The Print Prescribers with Privileges [XU EPCS PRIVS] option prints all active users who have privileges to any of the SCHEDULEs II through V and who have a DEA# or VA#. This option prints the following data: NAME DUZ DEA# VA# SCHEDULESS
XU EPCS DISUSER PRIVS	The Print DISUSER Prescribers with Privileges [XU EPCS DISUSER PRIVS] option prints all DISUSERed users who have privileges to any of the SCHEDULEs II through V and who have a DEA# or VA#. This option prints the following data: NAME DUZ DEA# TERMINATION DATE VA# SCHEDULESS
XU EPCS PSDRPH	The Print PSDRPH Key Holders [XU EPCS PSDRPH] option prints all active users holding the PSDRPH security key. This

Option Name	Description
	report sorts by Division, and within DIVISION, it sorts by NAME. This option prints the following data: NAME
	• DUZ
	GIVEN BY (Person Who Assigned Key)
	DATE GIVEN (Date Assigned)
XU EPCS SET PARMS	The Print Setting Parameters Privileges [XU EPCS SET PARMS] option prints all active users holding the XUEPCSEDIT security key. This option identifies individuals responsible for setting the parameters.
XU EPCS PRINT EDIT AUDIT	The Print Audits for Prescriber Editing [XU EPCS PRINT EDIT AUDIT] option prints information related to the editing of prescriber information.
XU EPCS LOGICAL ACCESS	The Task Changes to DEA Prescribing Privileges Report [XU EPCS LOGICAL ACCESS] option prints the setting or change to DEA prescribing privileges related to issuance of a controlled substance prescription.
	This option only prints data from the previous day and with data that has been modified. The data is retrieved from the XUEPCS DATA (#8991.6) file.
	This option should be scheduled to run on a daily basis.
XU EPCS PSDRPH AUDIT	The Task Allocation Audit of PSDRPH Key Report [XU EPCS PSDRPH AUDIT] option prints the allocation of the PSDRPH security key.
	This option only prints data from the previous day and with data that has been modified. The report prints data for the archive XUEPCS PSDRPH AUDI T (#8991.7) file.
	This option should be scheduled to run on a daily basis.
XU EPCS PSDRPH KEY	The Allocate/De-Allocate of PSDRPH Key [XU EPCS PSDRPH KEY] option allows users to allocate or de-allocate the PSDRPH security key.

5.3 Options—Listed Alphabetically by Name

Each option listed in this section includes the following information:

- Option Name
- Option Text
- Type
- Routine/Action
- Description (including any lock, entry action, and exit action information).

5.3.1 Kernel

The following option namespaces are distributed with Kernel and Kernel Toolkit: "XDR*," "XI*," "XPAR*," "XPD*," "XQ*," and "XU*" (listed alphabetically by option name):

Table 24: Options—Exported Kernel Options

			Douting / Astisus /	
			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
XDR ADD VERIFIED DUPS	Add Verified Duplicate Pair	Run Routine	Routine: XDRMADD	This option adds a pair of records that are <i>not</i> already identified as potential or verified duplicates to the DUPLICATE RECORD (#15) file. The pair goes through comparisons (Duplicate Tests). The comparison results in a computed value based on similarity of one record to the other. The resulting value is measured against the Potential Duplicate Threshold Percentage. When the record pair scores evaluate above this percentage, they are considered to be potential duplicates and are placed in the DUPLICATE RECORD (#15) file. If the user has the XUMGR security key, the user has the option to bypass the Potential Duplicate Threshold Percentage thereby adding the pair directly to the DUPLICATE RECORD (#15) file.
XDR ANCILLARY REVIEW	Ancillary Data Review	Run Routine	Routine: XDRRMRG0	This option is used by the ancillary services to verify potential duplicates. This option is used when a user is

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XDR APPROVE FOR MERGE	Approve verified duplicates for merging	Run Routine	Routine: APPROVE^XDRM ERGA	not notified by an alert. This option is used by the coordinator or team responsible for Duplicate Resolution to give final approval for selected duplicate pairs to be included in the next merge process.
XDR AUTO MERGE	Automatically Merge all Ready Verified Duplicates	Action	Entry Action: s xdrm("Auto")="" d en1^xdrmain k xdrm	This option is used to non-interactively merge all verified duplicate pairs that are ready to be merged. This option may take some time, depending on how many verified duplicate pairs there are to be merged.
XDR CHECK MERGE PROCESS STATUS	Check Merge Process Status (reverse order)	Run Routine	Routine: CHECK^XDRME RG2	This option indicates the status of a selected merge process (or all of them) displaying the information provided by the last checkpoint during its operation. This information includes the file that is being processed, which stage it is in, and the last internal entry processed. Kernel Toolkit Patch XT*7.3*46 reversed the order of printing from last to first.
XDR CHECK PAIR	Check Pair of Records to see if Duplicates	Run Routine	Routine: XDRDCOMP	This option allows the input of two records, and then run them through the Duplicate Resolution software to see what their Match Score would be. It does not add records to the DUPLICATE RECORD

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description (#45) file
XDR DISPLAY SEARCH STATUS	Display Search Status	Run Routine	Routine: XDRDSTAT	(#15) file. This option displays the status of a selected search for duplicates. It is locked with the XDR security key. The status can be any of the following: RUNNING HALTED ERROE(STOP) COMPLETED If you are checking the status to make sure the Duplicate Checking software is running you must make sure that not only is the STATUS stated to be RUNNING but also that the COUNT, which is the number of records that have been checked for duplicates, is also steadily increasing. If the COUNT is not increasing notify your site manager.
XDR EDIT DUP RECORD STATUS	Edit Duplicate Record Status	Run Routine	Routine: XDRDEDT	This option is used to edit the STATUS (#.03) field of the DUPLICATE RECORD (#15) file entry. It would be used when a pair was identified as Verified Duplicate or Verified Not A Duplicate and you want to change the status back to Potential Duplicate, Unverified.
XDR EDIT DUP RESOLUTION	Edit Duplicate Resolution	ScreenMa n		This option edits the values used by the Duplicate Resolution

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
FILE	File	.,,,,,		software for determining whether to add an entry or <i>not</i> . Once you find the sequence of scores that best fit your facility, it is recommended that you do <i>not</i> change these values.
XDR FIND POTENTIAL DUPLICATES	Find Potential Duplicates for an Entry in a File	Run Routine	Routine: XDRDFPD	This option finds all potential duplicates for an entry in a file. Any potential duplicate pairs are then added to the DUPLICATE RECORD (#15) file. The user is prompted to enter the file and then to select an entry within that file.
XDR MAIN MENU	Duplicate Resolution System	Menu	Exit Action: W:\$D(IOF) @IOF K AUPNLK("ALL") Entry Action: W:\$D(IOF) @IOF W !,"Duplicate Resolution System Menu",! S AUPNLK("ALL")=""	This is the Duplicate Resolution System main menu. It is locked with the XDR security key. It includes the following options: • XDR OPERATIONS MENU • XDR UTILITIES MENU • XDR MANAGER UTILITIES I REF: For more information on the XDR* options, see the Duplicate Record Merge: Patient Merge documentation located on the VDL at: http://www.va.gov /vdl/application.as

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				p?appid=2
XDR MANAGER UTILITIES	Manager Utilities	Menu	Exit Action: W:\$D(IOF) @IOF W !,"Duplicate Resolution System Menu",! Entry Action: W:\$D(IOF) @IOF W !,"Duplicate Manager Utilities Menu",!	This menu controls access to various manager utilities. These utilities include: Automatically merging ready to merge duplicates, Editing the DUPLICATE RESOLUTION (#15.1) file, and Purging the DUPLICATE RECORD (#15) File. This option is locked with the XDRMGR security key. It includes the following options: • XDR EDIT DUP RESOLUTION FILE • XDR PRELIMINARY SCAN • XDR PRELIMINARY SCAN LIST • XDR SEARCH ALL • XDR MERGE READY DUPLICATES • XDR STOP MERGE PROCESS • XDR RESTART MERGE PROCESS • XDR PURGE • XDR PURGE
XDR MERGE READY DUPLICATES	Schedule Process to Merge Verified Duplicates	Run Routine	Routine: QUE^XDRMERG0	This option merges all entries that currently are ready to merge verified duplicate pairs that are <i>not</i> included in another merge process.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XDR MERGE SELECTED PAIR	Merge Selected Verified Duplicate Pair	Run Routine	Routine: EN2^XDRMAIN	This option is used to select a certain ready to merge verified duplicate pair for merging.
XDR OPERATIONS MENU	Operations	Menu	Exit Action: W:\$D(IOF) @IOF W !,"Duplicate Resolution System Menu",! Entry Action: W:\$D(IOF) @IOF W !,"Duplicate Resolution Operations Menu",!	This menu contains options for running duplicate check searches and verifying and merging duplicate pairs. It includes the following options: • XDR DISPLAY SEARCH STATUS • XDR APPROVE FOR MERGE • XDR VERIFY ALL • XDR ANCILLARY REVIEW • XDR CHECK MERGE PROCESS STATUS • XDR STOP MERGE PROCESS
XDR PRELIMINARY SCAN	Preliminary Scan of File for errors	Run Routine	Routine: XDRDPREL	This option scans through a file selected for Duplicate Resolution to check for entries within the file that are missing identifiers (which are presumed to be significant data elements) or have other problems.
XDR PRELIMINARY SCAN LIST	List file entries identified in preliminary scan	Run Routine	Routine: XDRDPRE1	This option is used to generate a list of those entries in the file that were identified as lacking a zero node, having a bad SSN value, or missing one or more of the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
- 1		71	7 1-1,	identifiers in the file.
XDR PRINT LIST	Print List of File Duplicates	Run Routine	Routine: XDRDLIST	This option prints a list of file duplicates. You can choose to print potential duplicates, verified ready to merge duplicates, not ready to merge verified duplicates, and merged verified duplicates. You can also choose to print a brief listing or a captioned listing.
XDR PURGE	Purge Duplicate Record File	Run Routine	Routine: XDRDPRGE	This option is used to purge entries in the DUPLICATE RECORD (#15) file; you can purge just the Potential Duplicates, the Verified Non-Duplicates, or both. This option should only be used by the site manager.
XDR PURGE2	Purge Merge Process File	Run routine	Routine: XDRDPRG2	This option is used to purge selected entries in the XDR MERGE PROCESS (#15.2) file. This option should only be used by the site manager.
XDR RESTART MERGE PROCESS	Restart a merge process	Run routine	Routine: RESTART^XDRM ERGA	This option is used to schedule the restart of a merge process at the current time or at some point in the future.
XDR SCAN POSSIBLE DUPLICATES	Scan Possible Duplicates	Run routine	Routine: XDRDDATA	This option provides a rapid scan of possible duplicates by listing the zero node of the PATIENT (#2) file for each individual. If the output is <i>not</i> queued to a printer, then the data will be

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
		,		sent to the VA FileMan Browser for examination.
XDR SEARCH ALL	Start/Halt Duplicate Search	Run routine	Routine: XDRDQUE	This utility searches a selected file for potential duplicates. It provides a choice of two methods. A Basic search starts at the beginning of a file and checks each record against a selected subgroup of potential duplicates. A new search takes records that have been edited and checks them against a select subgroup of records. This is a tasked job that can be started and halted until the entire file has been checked.
XDR STOP MERGE PROCESS	STOP an active merge process	Run routine	Routine: STOP^XDRMERG A	This option is used to stop a currently running merge process and any associated threads.
XDR TALLY STATUS FIELDS	Tally STATUS and MERGE STATUS fields	Run routine	Routine: XDRCNT	This option produces a summary report of how many records are Verified Duplicates, Verified Not Duplicates, or Potential Duplicates, Unverified. The total number of records merged and ready to be merged will be displayed.
XDR UTILITIES MENU	Utilities	Menu	Exit Action: w:\$D(IOF) @IOF w !,"Duplicate Resolution System Menu",! Entry Action: w:\$D(IOF) @IOF w	This menu gives access to various Duplicate Resolution Utilities. It includes the following options: • XDR ADD

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
		Турс	!,"Duplicate Resolution Utilities Menu",!	VERIFIED DUPS XDR CHECK MERGE PROCESS STATUS XDR CHECK PAIR XDR DISPLAY SEARCH STATUS XDR EDIT DUP RECORD STATUS XDR FIND POTENTIAL DUPLICATES XDR PRINT LIST XDR SCAN POSSIBLE DUPLICATES XDR TALLY STATUS FIELDS XDR VIEW DUPLICATE RECORD
XDR VALID CHECK	Identify Potential Merge Problems	Run Routine	Routine: EN^XDRDVAL1	This option identifies potential merge problems.
XDR VERIFY ALL	Verify Potential Duplicates	Run Routine	Routine: XDRDPICK	This option is used to mark a potential duplicate as an actual duplicate (or mark a potential duplicate pair as VERIFIED - NOT DUPLICATES). The "from" and "to" records are identified and all top-level PATIENT (#2) file fields resolved, and a bulletin generated informing the Verified Duplicate mail group of the actual duplicate. If there is no interactive package merge that needs to take place,

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				the merge process will also occur.
XDR VERIFY SELECTED PAIR	Verify Selected Potential Duplicate Pair	Run routine	Routine: EN3^XDRMAIN	This option is used to select a Potential Duplicate pair and verify as either Verified Non-Duplicate or Verified Duplicate. The merge process will then be initiated if there are no package interactive merges that need to occur.
XDR VIEW DUPLICATE RECORD	View Duplicate Record Entries	Inquire		This option is used to view Duplicate Record entries in a captioned format.
XIP SYNCHRONIZE COUNTY	Queuable Synchronize County Multiple With 5.13	Action	Entry Action: D DEQUE^XIPSYNC	This option synchronizes the master COUNTY CODE (#5.13) file and the STATE (#5) file's COUNTY Multiple. No output device is needed. It is recommended that this option have a scheduling frequency of every three months, at a time when little to no patient registration activity will be taking place.
XIP ZIP CODE LIST	ZIP Code List	Print		This option produces a report of selected ZIP codes so that they can be compared to the U.S. Postal Service's website located at: http://www.usps.com/zip4/citytown.htm
XIPMAILSERVE R	Check file 5.13 & file 5	Server	Routine: XIPMAIL	This is a server option that checks the COUNTY CODE

		Routine / Action /	
Option Text	Туре	(Based on Type)	Description
			(#5.13) and STATE (#5) files. It also checks the STATE (#5) file for any states that are not recognized by the Corporate Franchise Data Center (CFD). Server Fields: SERVER ACTION: RUN IMMEDIATELY SERVER MAIL GROUP: XIP SERVER RESPONSE
Postal Code Update Server	Server	Routine: E1^XIPSRVR	This option takes the data contained within a message on FORUM and modifies the POSTAL CODE (#5.12) file as follows: • Adds a new postal code • Inactivates the postal code • Edits the postal code Server Fields: • SERVER ACTION: RUN IMMEDIATELY • SERVER AUDIT: NO • SERVER REPLY: NO REPLY • SUPRESS BULLETIN: YES • SAVE REQUEST: SAVE REQUEST IN POSTMASTER BASKET
Convert any			(Released with Patch
	Postal Code Update	Postal Code Update Server	Postal Code Update Server E1^XIPSRVR

Oution Name	Ontion Tout	Time	Routine / Action / RPC / Other	Decembries
Option Name CONVERT	Option Text IP address per system settings	Туре	(Based on Type)	Description XU*8.0*605)
XLFIPV FORCEIP4	Convert any IP address to IPv4			(Released with Patch XU*8.0*605)
XLFIPV FORCEIP6	Convert any IP address to IPv6			(Released with Patch XU*8.0*605)
XLFIPV IPV4 IPV6 MENU	IPV—IPv4 and IPv6 Address Tools	Menu		This option was released with Patch XU*8.0*605. It includes the following options: • XLFIPV CONVERT • XLFIPV FORCEIP4 • XLFIPV FORCEIP6 • XLFIPV VALIDATE • XLFIPV VERSION
XLFIPV VALIDATE	Validate IPv4 and IPv6 address			(Released with Patch XU*8.0*605)
XLFIPV VERSION	Show system settings for IPv6			(Released with Patch XU*8.0*605)
XPAR EDIT BY TEMPLATE	Edit Parameter Values with Template	Action	Entry Action: D SELTED^XPAREDT3	This option prompts for a Parameter template and then uses the selected template to edit parameter values.
XPAR EDIT KEYWORD	Edit Parameter Definition Keyword	Edit		This option edits the KEYWORD field in the PARAMETER DEFINITION (#8989.51) file.
XPAR EDIT PARAMETER	Edit Parameter Values	Action	Entry Action: D ^XPAREDIT	This option calls the low-level parameter editor that allows you to edit the values for every parameter. Normally, VistA software applications

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				supply other means of editing parameters.
XPAR LIST BY ENTITY	List Values for a Selected Entity	Action	Entry Action: D ALLENTS^XPARLIST	This option prompts the user for the entry of an entity (e.g., location, user, etc.) and lists all value instances for that entity.
XPAR LIST BY PACKAGE	List Values for a Selected Package	Action	Entry Action: D ALLPKG^XPARLIST	This option prompts the user for a VistA software application and lists all parameter values for the selected application.
XPAR LIST BY PARAM	List Values for a Selected Parameter	Action	Entry Action: D ALLPARS^XPARLIST	This option prompts the user for a parameter (i.e., defined in the PARAMETER DEFINITION [#8989.51] file) and lists all value instances for that parameter.
XPAR LIST BY TEMPLATE	List Values for a Selected Template	Action	Entry Action: D TMPLT^XPARLIST()	This option prompts the user for a Parameter template. Depending on the definition of the template, additional information may be requested, and then the parameter values defined by the template are displayed.
XPAR MENU TOOLS	General Parameter Tools	Menu		This menu contains general purpose tools for managing parameters. It includes the following options: • XPAR LIST BY PARAM • XPAR LIST BY ENTITY • XPAR LIST BY PACKAGE

Ontion Name	Ontion Tout	Tuna	Routine / Action / RPC / Other	Decembring
Option Name	Option Text	Туре	(Based on Type)	Description XPAR LIST BY TEMPLATE XPAR EDIT PARAMETER XPAR EDIT BY TEMPLATE XPAR EDIT KEYWORD
				REF: For more information on the XPAR* APIs, see the Parameter Tools Supplement to Patch Description: XT*7.3*26 documentation located on the VDL at: http://www.va.gov/vdl/application.as p?appid=12
XPD BACKUP	Backup a Transport Global	Run Routine	Routine: EN^XPDIB	This option creates a MailMan message that will back up all current routines on your system that would be replaced by the packages (VistA M-based software applications) in this Transport Global. Those components that are <i>not</i> routines <i>must</i> be backed up separately if they need to be preserved.
XPD BUILD NAMESPACE	Create a Build Using Namespace	Run Routine	Routine: BUILD^XPDE	This option creates a new entry in the BUILD (#9.6) file, and populates the entry using a namespace.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XPD COMPARE TO SYSTEM	Compare Transport Global to Current System	Run Routine	Routine: XPDCOM	This option lets you compare the components of a transport global, which is currently loaded in the XTMP global, to your current system.
XPD CONVERT PACKAGE	Convert Loaded Package for Redistributio n	Run Routine	Routine: EN2^XPDIU	This option changes a package (VistA Mbased software application) that was loaded on your system, to a package that can be transported in a distribution. The loaded package will be unloaded from your system and deleted from the INSTALL (#9.7) file. A BUILD (#9.6) file entry will be created for this package. You can use the Transport a Distribution option [XPD TRANSPORT PACKAGE] to create a new distribution with this package.
XPD COPY BUILD	Copy Build to Build	Run Routine	Routine: COPY^XPDE	This option copies one entry in the BUILD (#9.6) file to another.
XPD DISTRIBUTION MENU	Edits and Distribution	Menu		This menu contains options to create, edit, and transport a package (VistA Mbased software application). It includes the following options: XPD BUILD NAMESPACE XPD COPY BUILD XPD EDIT BUILD XPD TRANSPORT

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				PACKAGE XT-BLD RTN LIST XT-VERSION NUMBER XT-RTN CS EDT XT-RTN CS UPDATE
XPD EDIT BUILD	Edit a Build	Run Routine	Routine: EDIT^XPDE	This option lets you edit BUILD (#9.6) file entries.
XPD EDIT INSTALL	Edit Install Status	Edit		This option edits the STATUS and the INSTALL COMPLETE TIME fields in the INSTALL (#9.7) file.
XPD INSTALL BUILD	Install Package(s)	Run Routine	Routine: EN^XPDI	This option starts the install process for all packages (VistA M-based software applications) in a Transport Global that are part of a distribution. NOTE: You must load the distribution before you can use this option to install it.
XPD INSTALLATION MENU	Installation	Menu		This menu contains options to load, install, and restart the install of a KIDS Distribution. It includes the following options: • XPD LOAD DISTRIBUTION • XPD PRINT CHECKSUM • XPD PRINT INSTALL • XPD COMPARE

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				TO SYSTEM
				XPD BACKUP
				XPD INSTALL BUILD
				XPD RESTART INSTALL
				XPD UNLOAD DISTRIBUTION
XPD LOAD DISTRIBUTION	Load a Distribution	Run Routine	Routine: EN1^XPDIL	This option loads a KIDS distribution. A distribution is a Host File Server (HFS) file that contains one or more transport globals.
XPD MAIN	Kernel Installation & Distribution System	Menu		This menu contains options to prepare a VistA M-based module for distribution and install the module at a site. It includes the following options: • XPD DISTRIBUTION MENU • XPD UTILITY • XPD INSTALLATION MENU • XPD AUTOMATIC PATCHING MENU
XPD PRINT BUILD	Build File Print	Run Routine	Routine: EN1^XPDDP	This option prints the contents of an entry in the BUILD (#9.6) file.
XPD PRINT CHECKSUM	Verify Checksums in Transport Global	Run Routine	Routine: EN1^XPDDCS	This option verifies the checksums for the components of a Transport Global and reports any checksums that are incorrect.
XPD PRINT INSTALL	Print Transport Global	Run Routine	Routine: EN2^XPDDP	This option lets you print the contents of a Transport Global that is

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				currently loaded in the ^XTMP global.
XPD PRINT INSTALL FILE	Install File Print	Run Routine	Routine: EN1^XPDDI	This option prints the contents of an entry in the INSTALL (#9.7) file.
XPD PRINT PACKAGE PATCHES	Display Patches for a Package	Run Routine	Routine: EN1^XPDDPCK	This option prints all patches installed for a package (VistA Mbased software application). It displays the Date Installed and who installed the patches. It optionally prints the description of the patch. All information comes from the PACKAGE (#9.4) file.
XPD PURGE FILE	Purge Build or Install Files	Run Routine	Routine: PURGE^XPDR	This option purges entries in the BUILD (#9.6) or INSTALL (#9.7) files. You are prompted for the version numbers to retain.
XPD RESTART INSTALL	Restart Install of Package(s)	Run Routine	Routine: EN^XPDIR	This option restarts the install process for packages (VistA Mbased software applications) in a transport global.
XPD ROLLUP PATCHES	Rollup Patches into a Build	Run Routine	Routine: EN1^XPDER	This option finds all the patches for a package (VistA M-based software application) and adds their BUILD (#9.6) file definition to the package BUILD (#9.6) file definition. This enables you to create a single BUILD (#9.6) file entry that contains the definition for a patched package.

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
XPD ROUTINE UPDATE	Update Routine File	Run Routine	Routine: UPDT^XPDR	This option lets you update the ROUTINE (#9.8) file by adding existing routine names from the current system. You enter the namespaces for the routines being updated and the namespaces of the routines to be excluded from the update. Optionally, this option goes through the ROUTINE (#9.8) file and deletes any local routine names that no longer exist on the system. Any routine listed as national will not be removed from the file.
XPD TRANSPORT PACKAGE	Transport a Distribution	Run Routine	Routine: XPDT	This option uses entries in the BUILD (#9.6) file to create a Transport Global to export packages (VistA M-based software applications). If you choose a Host File Server (HFS) file as an output device, the Transport Global is written to the HFS file, creating a distribution. If you do not choose a device, the Transport Global is written to the *XTMP* global on your system.
XPD UNLOAD DISTRIBUTION	Unload a Distribution	Run Routine	Routine: EN1^XPDIU	This option removes the Transport Global and packages (VistA M-based software applications in the INSTALL (#9.7) file for a loaded distribution. It

			Routine / Action /	
		_	RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				also removes any dangling packages in the Transport Global. You can only select the starting package.
XPD UTILITY	Utilities	Menu		This menu contains options to print and verify a BUILD (#9.6) file \ entry. It also contains options to maintain the ROUTINE (#9.8) file. This menu contains the following options: XPD PRINT BUILD XPD PRINT HILE XPD CONVERT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PRINT PACKAGE XPD PURGE FILE XPD ROLLUP PATCHES XPD ROUTINE UPDATE XPD VERIFY BUILD XPD VERIFY INTEGRITY
XPD VERIFY BUILD	Verify a Build	Run Routine	Routine: VER^XPDE	This option verifies the contents of a build. It checks that every component that is listed in the build still exists on your system. You should use it before you export a package (VistA Mbased software application).

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XPD VERIFY INTEGRITY	Verify Package Integrity	Run Routine	Routine: EN2^XPDDCS	This option checks the integrity of a package (VistA M-based software application) on your system. It compares the current checksums with the checksums sent with the distribution.
XQ LIST UNREFERENC ED OPTIONS	List Unreference d Menu Options	Run Routine	Routine: LIST^XQ33	(Released with Patch XU*8.0*614) This option runs a report listing unreferenced options in the OPTION (#19) file. It lists entries that are <i>not</i> assigned to any user or attached to any other menu option. It does <i>not</i> include options that are assigned in TaskMan or have the KEEP FROM DELETING (#209.2) field set to "Yes".
XQ UNREF'D OPTIONS	Delete Unreference d Options	Run Routine	Routine: XQ33	This option can be used to examine those options that are <i>not</i> on any menu, are <i>not</i> used as primary or secondary options, and are <i>not</i> tasked to run. The user may then decide in each case whether to delete the unreferenced option.
XQ XUTL \$J NODES	Clean old Job Nodes in XUTL	Run Routine	Routine: XQ82	This option should be scheduled to run once a day after midnight. It can be run from a host system script to get non-global files like ^TMP . This option cleans up several temporary

			D 0 1 1 1 1	
			Routine / Action /	
Option Name	Option Text	Type		Description
Option Name	Option Text	Туре	RPC / Other (Based on Type)	globals that applications may have left behind or got left because of trapping and error or other abnormal job termination. This option causes old job-related nodes that may remain in the following globals to be removed: ^XUTL("XQ",\$J, ^UTILITY(\$J, An old job node is one
				that was started seven days prior to the current day, irrespective of the time of day. Does not have a "XUTL("XQ",\$J,"KEE PALIVE") node with a more current date in \$H format. If it has a "XUTL("XQ",\$J,"ZTS KNUM") node and a lock of "%ZTSCH("TASK",ta sknumber) is in place it will not be purged.
				It looks at ^UTILITY(\$J) and ^TMP(\$J) for entries without a ^XUTL("XQ",\$J) to kill. It looks at ^UTILITY(namespace, \$J) and ^TMP(namespace,\$J) for entries without a ^XUTL("XQ",\$J) to kill. It looks for

			Routine / Action /	
Ontion Namo	Ontion Toxt	Type	RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	**Provided Research Provided R
XQAB ACTUAL OPTION USAGE	Actual Usage of Alpha/Beta Test Options	Run Routine	Routine: ACTUAL^XQABL IST	This option is available for listing actual usage of options within a package that is in alpha or beta testing. It lists only those options that have been accessed one or more times since the last installation of the package.
XQAB AUTO SEND	Send Alpha/Beta Usage to Developers	Run Routine	Routine: DOMAIL^XQABLI ST	This option is set up to automatically send to the developing OIFO information on the usage of options in those packages currently in test status. If it is selected manually, it sends similar messages as well.
XQAB ERR DATE/SITE/NU	Print Alpha/Beta	Print		This option is used to print a listing of

			Routine / Action /	
		_	RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
M/ROU/ERR	Errors (Date/Site/N um/Rou/Err)			alpha/beta test errors reported from the test sites. The print is for a range of dates and lists the sites, the number of the errors reported by a site, the routine involved, and the error text. The range of dates, sites, and routine names are user selectable. The output format includes: Date of Errors Site.name Number.of.errors Routine Error.text The subtotals and totals are given for number of errors.
XQAB ERROR LOG SERVER	Handle Alpha/Beta Errors Logged at Sites	Server	Routine: XQABELOG Suppress Bulletin: YES, SUPRESS IT Server Action: RUN IMMEDIATEL Y Server Reply: NO REPLY (DEFAULT)	This SERVER option is used to store data sent by the XQAB ERROR LOG XMIT option back to the developing site (usually an OIFO). As a server to which the mail messages containing data on the types and frequencies of errors associated with an application package in alpha or beta test, this option starts a routine that processes the message contents and stores the data in File #8991.5 (*XTV(8991.5,). The contents of the file can be processed using several options or by the use of VA FileMan

			Routine / Action /	
Outles News	O	T	RPC / Other	D
Option Name	Option Text	Туре	(Based on Type)	Description
				directly. The file contains data on the following: Type of error Routine involved Option that was in use at the time of the error Date Number of errors for that date, by site
				(and if multiple Error Traps are used at a site, by the VOL,UCI)
XQAB ERROR LOG XMIT	Errors Logged in Alpha/Beta Test (QUEUED)	Run Routine	Routine: XQABERR Scheduling Recommended: YES	This option is used to identify any errors associated with an application package hat is in either alpha or beta test. The identified errors are combined in a mail message that includes the following: Type of error Routine involved Date (usually the previous day) Option that was being used at the time of the error Number of times the error was logged. Volume and UCI are included so that stations with error logs being maintained on different CPUs can run the task on each different system.

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				This option was designed to be tasked. It does <i>not</i> require a device and generates a mail message to the developing OIFO. An alpha or beta package is indicated by the presence of the package (and its namespaces in the ALPHA/BETA TEST PACKAGE (#32) Multiple field in the KERNEL SYSTEM PARAMETERS (#8989.3) file. The option should usually be scheduled to run after midnight and scheduled for requeuing at a daily interval.
XQAB LIST LOW USAGE OPTS	Low Usage Alpha/Beta Test Options	Run Routine	Routine: LOW^XQABLIST	This option is available for obtaining a listing of options that are in a package under alpha or beta testing and have low levels of use since the last installation of the package. An option with low use is any option in the package namespaces with zero to five accesses.
XQAB MENU	Alpha/Beta Test Option Usage Menu	Menu		This menu option is available for accessing the following options related to usage of options in alpha or beta test packages: XQAB ACTUAL OPTION USAGE XQAB LIST LOW

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
		31		USAGE OPTS • XQAB AUTO SEND • XQAB ERR DATE/SITE/NUM/R OU/ERR
XQAL ALERT LIST FROM DATE	List Alerts for a user from a specified	Run Routine	Routine: EN^XQARPRT2	This option reports all alerts from the ALERT TRACKING (#8992.1) file for a selected user within a specified date range. If an end date is not specified, the report does not run. The listing includes the following: Internal Entry Number (IEN) for the alert in the ALERT TRACKING (#8992.1) file. Date and time the alert was generated. Message text of the alert. Information about any option or routine to be executed for processing the alert.
XQAL CRITICAL ALERT COUNT	Critical Alerts Count Report	Run Routine	Routine: CRITICAL^XQAR PRT1	This option is used to generate a report of users who have alerts defined as Critical based upon inclusion of text entries from the ALERT CRITICAL TEXT (#8992.3) file between the specified start and end dates. For example, Critical -type alerts contain the

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
•	-	7 1	, ,	following words:
				ABNL IMA
				NOTE: This entry was added with Kernel Patch XU*8.0*690.
				ABNORMAL IMA
				CRITICAL
				POSSIBLE MALIG
				How the report is presented depends on the order by which method the user selects:
				Name—Report lists items alphabetized by name.
				Number—Report list items in descending order for the number of Critical-type alerts present.
				Kernel Patch XU*8.0*690 modified the Critical Alerts Count Report output, so any Critical-type alerts preceded with the words "NOT" or
				"NON", the only two supported Critical-type alert negation indicators, are automatically screened from this report.
				For each user who has the specified number of Critical -type alerts or more, the report includes the following:
				• Name—User

Ontion Name	Ontion Toyt	Type	Routine / Action / RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	name. Service/Section— Section/Service for the user. Alerts—Number of alerts in the ALERT (#8992) file. Last Sign-on— Last sign-on date. CRIT—Number of alerts with Critical-type text. Alert—Date of the
XQAL GUI ALERTS	Kernel GUI Alerts	Broker (Client / Server)		oldest alert. This is the context option for the Kernel Alert components: RPC: XQAL GUI ALERTS RPC: XUS KEY CHECK RPC: DDR DELETE ENTRY RPC: DDR FILER RPC: DDR FIND1 RPC: DDR FINDER RPC: DDR GET DD HELP RPC: DDR GETS ENTRY DATA RPC: DDR KEY VALIDATOR RPC: DDR LISTER RPC: DDR CK/UNLOCK NODE RPC: DDR VALIDATOR
XQAL NO BACKUP REVIEWER	No Alert Backup Reviewer	Run Routine	Routine: RPT1^XUP468	This option runs the report that generates a list of active

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				users/providers that hold the ORES security key and backup reviewers for alerts.
XQAL PATIENT ALERT LIST	Patient Alert List for specified date	Run Routine	Routine: DTPT^XQARPRT 2	This option is used to obtain a list of alerts for a specified patient from the ALERT TRACKING (#8992.1) file for a selected date. A prompt is provided to obtain a quick scan listing of dates with at least some alerts for the patient on it based on OR and DVB alerts (other patient-related alerts need to be identified by looking at each alert's message text and are included in the full list, but not the quick scan). The listing includes: Internal entry number for the alert in the ALERT TRACKING (#8992.1) file Date and time the alert was generated Message text of the alert Information about any option or routine to be executed for processing the alert
XQAL REPORTS MENU	Report Menu for Alerts	Menu		This menu provides several options for generating reports on alerts for users or patients. It includes the following options:

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				 XQAL USER ALERTS COUNT XQAL CRITICAL ALERT COUNT XQAL ALERT LIST FROM DATE XQAL PATIENT ALERT LIST XQAL VIEW ALERT TRACKING ENTRY
XQAL SET BACKUP REVIEWER	Set Backup Reviewer for Alerts	Run Routine	Routine: BKUPREVW^XQ ALDEL	This option provides a mechanism for a user to set entries into the PARAMETERS (#8989.5) file that will assign an individual as Backup Reviewer for alerts if there is a date specified for Days For Backup Reviewer in the Alert. If this is the case, an alert that remains unread for the indicated number of days will be forwarded to the Backup Reviewer found for the lowest level for the user in the PARAMETERS (#8989.5) file starting with User, and progressing through OERR Team, Service, Division, up to System.
XQAL SURROGATE FOR WHICH USERS	Surrogate for which Users?	Run Routine	Routine: GETFOR^XQALS URO	This option provides a view of which users have specified a selected user as surrogates for themselves.
XQAL USER	User Alerts	Run	Routine:	This option is used to

			Routine / Action / RPC / Other	
Option Name	Option Text	Type	(Based on Type)	Description
ALERTS COUNT	Count Report	Routine	EN1*XQARPRT1	generate a report on users who have more than a specified number of alerts in the ALERT (#8992) file. This report also includes users who have alerts defined as Critical based upon inclusion of text entries from the ALERT CRITICAL TEXT (#8992.3) file. For example, Critical-type alerts containing the following words: • ABNL IMA NOTE: This entry was added with Kernel Patch XU*8.0*690.
				ABNORMAL IMA
				CRITICAL
				POSSIBLE MALIG
				Kernel Patch XU*8.0*690 modified the User Alerts Count Report output, so any Critical-type alerts preceded with the words "NOT" or "NON", the only two supported Critical-type alert negation indicators, are automatically screened from this report.
				The report covers a specified range of dates, and can be sorted by any of the following data: User name.

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
	Option Text	Туре	(Dased Oil Type)	 Number of alerts. Service/Section. In addition, the report in each of these formats may be generated by Divisions if desired. For each user who has the specified number of alerts or more, the report includes the following: Name—User name. Service/Section—Section/Service for the user. Alerts—Number of alerts in the ALERTS (#8992) file. Last Sign-on—Last sign-on date.
				 CRIT—Number of alerts with Critical-type text. Alert—Date of the oldest alert.
XQAL VIEW ALERT TRACKING ENTRY	View data for Alert Tracking file entry	Run Routine	Routine: VIEWTRAK^XQA RPRT2	This option can be used to view data for one or more entries in the ALERT TRACKING (#8992.1) file in captioned format. The internal entry numbers for the entries to be displayed <i>must</i> be entered individually.
XQALERT	View Alerts	Run Routine	Routine: DOIT^XQALERT Exit Action: K:\$D(ORVP) ORVP	This option is used to select alerts or notifications produced by application packages for viewing

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				or to perform any actions associated with the alert or notification received.
XQALERT BY USER DELETE	Purge Alerts for a User	Run Routine	Routine: USERDEL^XQAL ERT	This option permits users holding the XQAL-DELETE security key to delete alerts for another user. This is intended for when a user has been inactive for a period of time (e.g., vacation, etc.) and has accumulated a number of alerts which should not need processing.
XQALERT DELETE OLD	Delete Old (>14 d) Alerts	Run Routine	Routine: OLDDEL^XQALE RT	This option is used to remove alerts that remain in the ALERT (#8992) file Applications can set a retention date (or even keep indefinitely for some clinical alerts). The >14d is the default if a retention date is not set.
XQALERT MAKE	Make an alert on the fly	Run Routine	Routine: XQALMAKE	This option creates an alert and sends it to users or mail groups on-the-fly.
XQALERT MGR	Alert Management	Menu		This menu provides a menu of options for managing alerts. These options include the ability to delete options based on time or a particular user, to generate a new alert, etc. It includes the following options: • XQALERT BY USER DELETE

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
Option Name	Option Text	Турс	(Based on Type)	XQALERT DELETE OLD XQALERT MAKE XQALERT SURROGATE SET/REMOVE XQAL SURROGATE FOR WHICH USERS XQAL SET BACKUP REVIEWER XQAL REPORTS MENU
XQALERT SURROGATE SET/REMOVE	Alerts - Set/Remove Surrogate for User	Run Routine	Routine: OTHRSURO^XQ ALSURO	System administrators or ADPACs can use this option to set or remove a surrogate for receiving alerts for a user. The option prompts for a user to be selected, then is ready to specify a new surrogate for the selected user, or to remove the current surrogate for that user. This option is <i>not</i> needed by the individual users who may select to name or remove a surrogate as one of the options while processing alerts (or, if no alerts are present for the user, as his only option on selecting alert processing).
XQBUILDMAIN	Menu Rebuild Menu	Menu		This is the main menu for all menu rebuild options. It includes the following options: • XQSHOWBUILDS

			Routine / Action /	
0 (I N		_	RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				XQKICKMICRO XORIGUTNOM
				XQRIGHTNOW
				XQBUILDTREE
				XQBUILDUSER This option is looked.
				This option is locked with the
				XUPROGMODE
				security key.
XQBUILDTREE	Build Primary	Run	Routine:	This option can be
	Menu Trees	Routine	BUILD^XQ81	used to force the rebuilding of the tree
				structures used for the
				^JUMP . Whenever an
				item in a menu is modified, the tree <i>must</i>
				get rebuilt. This
				happens automatically
				the first time it is referenced but forcing
				the rebuild can often
				save time. The
				rebuilding of all trees can be queued.
XQBUILDTREE	Non-	Run	Routine:	This option may be
QUE	interactive	Routine	QUE^XQ81	queued to run at a
	Build Primary		Exit Action:	given frequency
	Menu Trees		;s	(e.g., daily) and does
			XQSTOP=\$\$HTE^XLFD T(\$H),^FINN(DT,"S	not require interaction with a user at the time
			TOP")=XQSTOP K	it is run.
			XQSTOP	Other than being non-
				interactive it does the
				same job as XQBUILDTREE with
				specification of no
				verification and queue
VODIJII DIJOED	Oin all II	D	Danking	the job.
XQBUILDUSER	Single User Menu Tree	Run Routine	Routine:	(Released with Patch XU*8.0*614) This
	Rebuild		USER^XQ84	option collects the
				menus that a user has
				in the primary and secondary fields of the
				OPTION (#19) file and

			Routine / Action /	
Ontion Name	Ontion Toyt	Type	RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	then rebuilds the menu tree. It is attached to the Menu Rebuild Menu [XQBUILDMAIN] option. NOTE: Other users might have the same menu tree, but this will only rebuild the menu tree for the selected user.
XQCOPYOP	Copy Everything About an Option to a New Option	Run Routine	Routine: XQ11	This option does a %RCR copy of one option's fields into a new option. It also tries to enforce namespacing rules when the new option is named.
XQDIAGMENU	Menu Diagrams	Menu		This menu contains the various methods of diagramming menus. It includes the following methods: • XUUSERACC • XUUSERACC2 • XUUSERACC1
XQDISPLAY OPTIONS	Display Menus and Options	Menu		This is a menu of options that help the user display menus and their options. It includes the following options: • XUINQUIRE • XUPRINT • XUUSERACC1 • XUUSERACC2 • XUUSERACC • XQ LIST UNREFERENCED

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				OPTIONS
XQHELP- ASSIGN	Assign Editors	Run Routine	Routine: EN1^XQ61	This option allows the author of a help frame to assign editors. A help frame is editable thru ^E by the author, the editors, and anyone holding the XUAUTHOR security key.
XQHELP- DEASSIGN	Unassign Editors	Run Routine	Routine: EN2^XQ61	This option allows the author of a help frame to take away edit privileges previously assigned.
XQHELP- DISPLAY	Display/Edit Help Frames	Run Routine	Routine: XQH	This option displays the text of a help frame, and allows for the edit of the name, header, text, or related frames.
XQHELP-LIST	List Help Frames	Run Routine	Routine: XQH4	This option lists the help frames, progressing through the tree. Several different formats are available.
XQHELP-MENU	Help Processor	Menu		This menu option contains several functions for entering help text, displaying it, and listing it. It includes the following options (listed in display order): • XQHELP-DISPLAY (1) • XQHELP-LIST (2) • XQHELP-UPDATE (3) • XQHELP-XREF (4) • XQHELP-ASSIGN (5) • XQHELP-

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				DEASSIGN (6) • XQHELPFIX (7)
XQHELP- UPDATE	New/Revised Help Frames	Print		This option produces a VA FileMan listing of help frames sorted by DATE LAST UPDATED. It allows you to view any recently created or revised frames. You can also sort by package prefix.
XQHELP-XREF	Cross Reference Help Frames	Run Routine	Routine: XQH3	Lists all the help frames for a specified package, showing parent frames, linked to menu options, and invoked routines.
XQHELPFIX	Fix Help Frame File Pointers	Action	Entry Action: s %=0 d enask^xq3	This option scans through the HELP FRAME (#9.2) file for dangling pointers. It deletes keywords that point to help frames that no longer exist.
XQKEYALTOD EL	Change user's allocated keys to delegated keys	Run Routine	Routine: ATOD^XQ6	This option prompts for a user and uses %XY^%RCR to make all security keys the user holds delegated security keys, so that the user can give them to others. This option is locked with the ADP security key.
XQKEYDEL	Delegate keys	Run Routine	Routine: EN3^XQ6	This option delegates security keys to a user, so that user can then give them out to other users. It also allows other users to delegate them in return.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				This option is locked with the ADP security key.
XQKEYRDEL	Remove delegated keys	Run Routine	Routine: EN4^XQ6	This option removes security keys previously delegated to a user.
XQKICKMICRO	Kick Off Micro Surgery	Run Routine	Routine: CHEK^XQ83 Entry Action: W !!,?5,\$s(\$D(^DIC(19,"AT")):"Done." ,1:"Nothing to rebuild.")	When certain changes are made to the OPTION (#19) file those changes are recorded in the *DIC(19, "AT") cross-reference. Micro surgery is the software in *XQ83* that uses this data to rebuild the compiled menu trees in *DIC(19, "AXQ"). Micro surgery is normally triggered when a user logs into a system, but this option allows the programmer to start it manually if minor changes are made to the OPTION (#19) file, which do not merit a complete rebuild. If there is nothing in the "AT" cross-reference to work on, the option responds with: "Nothing to rebuild." If there is work to do, then the option responds with: "Done," which means that Micro surgery has been started.
XQLISTKEY	Show the keys of a particular user	Run Routine	Routine: LIST^XQ6	This option lists the security keys held by a particular user.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XQLOCK1	All the Keys a User Needs	Run Routine	Routine: EN1^XQLOCK	This option invokes a routine that follows the menu trees of a user and collects all of the security keys into a list that are needed to effectively use a menu.
XQLOCK2	Keys For a Given Menu Tree	Run Routine	Routine: EN2^XQLOCK	This option runs a routine that searches the children of a given parent option and compiles a list of the security keys needed for that menu tree.
XQOOFF	Mark Option Set Out-Of- Order	Run Routine	Routine: OFFOP^XQOO1	This option marks an option set Out-Of-Order.
XQOOMAIN	Out-Of-Order Set Management	Menu		This menu includes the following options: • XQOOMAKE • XQOOFF • XQOON • XQOOSHOFIL • XQOOSHOW • XQOOSHOPRO • XQOOREDO • XQOOTOG This option is locked with the ADP security key.
XQOOMAKE	Create a Set of Options To Mark Out- Of-Order	Run Routine	Routine: EN^XQOO	This option creates a set of options to mark Out-Of-Order.
XQOON	Remove Out- Of-Order Messages from a Set of Options	Run Routine	Routine: ONOP^XQOO1	This option removes Out-Of-Order messages from a set of options.
XQOOREDO	Recover deleted	Run Routine	Routine:	This option recovers an option set that has

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
	option set		REBLD^XQOO1	been deleted from the *XTMP global by looping through the OPTION (#19) and PROTOCOL (#101) files to find all that have a particular Out-Of- Order message. It rebuilds the option set in the *XTMP global.
XQOOSHOFIL	Options in the Option File that are Out-Of-Order	Run Routine	Routine: LALL^XQOO3	This option presents a list of options in the OPTION (#19) file that are currently marked Out-Of-Order.
XQOOSHOPRO	Protocols Marked Out- Of-Order in Protocol File	Run Routine	Routine: LAPR^XQOO3	This option presents a list of protocols in the PROTOCOL (#101) file that are currently marked as Out-Of-Order.
XQOOSHOW	List Defined Option Sets	Run Routine	Routine: EN^XQOO2	This option lists the option sets that have been created in ^XUTL by their names.
XQOOTOG	Toggle options/proto cols on and off	Run Routine	Routine: TOG^XQOO1	This option is used to write or remove Out-Of-Order messages from individual options or protocols.
XQOPACCESS	See if a User Has Access to a Particular Option	Run Routine	Routine: OPACCES^XQCH K	This option prompts for an option name and the name of a user and then searches the user's menu trees to see if the user has access to the option. It also checks to see if the user has the security key for a locked option.
XQOPED	Screen- based Option	ScreenMa n	Entry Action: D EA^XQOPED	This option runs the ScreenMan option editor form

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
	Editor		Exit Action: D XA^XQOPED	XQEDTOPT. This option is locked with the ADP security key.
XQOPTFIX	Fix Option File Pointers	Action	Entry Action: s %=1 d enask^xq3	This option scans through the OPTION (#19) file for dangling pointers. It deletes menu items that point to options that no longer exist.
XQORPHANOP TIONS	Non- queuable options with no parents	Menu		The options on this menu should <i>not</i> be assigned to a user's menu. They are also <i>not</i> queueable, so they do <i>not</i> appear on the ZTQUEUABLE OPTIONS menu. They are collected on this menu, so that they are <i>not</i> accidentally deleted from the system.
XQRESTRICT	Restrict Availability of Options	Run Routine	Routine: XQ9	This option is used to assign various sorts of restrictions to options. The following fields can be set, for individual options or groups of options: LOCK PROHIBITED TIMES SPECIFY DEVICES PRIORITY OUT OF ORDER This option is locked with the ADP security key.
XQRIGHTNOW	Is there a menu rebuild running right	Run Routine	Routine: NOW^XQ84	This option checks the various flags set in ^DIC(19,"AXQ","P0")

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	now?			to determine if there is menu rebuild activity on your system right now.
XQSCHK	Server-type Option Test Server	Server	Routine: XQSRV5 Server Action: RUN IMMEDIATELY	This server-type option is used to test other servers by examining the host OPTION (#19) file and returning the data associated with the target server. A message is sent to the host site with the name of the server option to be examined on the first line of the message.
XQSHOKEY	List users holding a certain key	Run Routine	Routine: SHOW^XQ6	This option displays all the holders of a certain security key.
XQSMD ADD	Select Options to be Delegated	Run Routine	Routine: XQSMD	This option is used to delegate the management of a set of options (or remove options already delegated) to a particular user or set of users.
XQSMD BUILD MENU	Build a New Menu	Run Routine	Routine: BUILD^XQSMD4	This option allows the delegated menu manager to build (create) new menus from the ones that are allowed.
XQSMD BY OPTION	List Delegated Options and their Users	Print		This option prints the Secure Menu Delegation (SMD) options and the users that can delegate them.
XQSMD BY USER	Print All Delegates and their Options	Print		This option prints the users that have SMD and the options that they can delegate.

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
XQSMD COPY USER	Copy One Users Menus and Keys to others	Run Routine	Routine: XQSMDCPY	This option is used to copy the primary menu and secondary menu options from one user to one or more others. The only options transferred will be those that have been delegated to the current user. Likewise, keys that are held by the selected user can be copied to the recipient users if the current user has been delegated this capacity as well. This option provides an application coordinator the ability to produce users that have the capabilities of a current user (e.g., a ward clerk, scheduling clerk, etc.).
XQSMD EDIT OPTIONS	Edit a User's Options	Run Routine	Routine: ENTRY^XQSMD5	Allows user to edit primary and secondary user options.
XQSMD LIMITED FM OPTIONS	Limited File Manager Options (Build)	Run Routine	Routine: XQSMDFM	This option permits a user to build limited PRINT, EDIT, or INQUIRE options. The user <i>must</i> have one or more ALLOWABLE MENU PREFIX and the XQSMDFM security keys. • Edit Option—To build an edit option, the user <i>must</i> have an edit template to use. • Print Option—To build a print option, the user <i>must</i> have an edit a print option, the user <i>must</i> have both a sort

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				template and a print template. Inquire Option—To build an inquire option the user can have a print template or can specify the file to use. The option is entered among the user's delegated options, so that they can be included on a menu built under the Secure Menu Delegation or given to other users as secondary options. The name of the option is restricted to the namespace designated in the ALLOWABLE MENU PREFIX followed by a Z , and
XQSMD MGR	Secure Menu Delegation	Menu		then identifying text. This menu manages the Secure Menu Delegation system. For those who are allowed to add and remove options from delegated sets of options. It includes the following options: XQSMD ADD XQSMD ADD XQSMD REMOVE XQSMD BY OPTION XQSMD BY USER MENU XQSMD SHOW XQSMD SHOW REPLICATE

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				XQSMD SET PREFIX
XQSMD REMOVE	Remove Options Previously Delegated	Run Routine	Routine: EN2^XQSMD Help Frame: XQSMD-OPTION	Removes options from already established delegates.
XQSMD REPLICATE	Replicate or Replace a Delegate	Run Routine	Routine: XQSMD3 Help Frame: XQSMD- REPLICATE	This option transfers the set of options delegated to a particular user to another user; optionally, allowing the original user's delegated options to be removed.
XQSMD SEC OFCR	Secure Menu Delegation	Menu		This menu includes Secure Menu Delegation options for reviewing the delegates and the options which they may delegate. It includes the following options: XQSMD SHOW XQSMD BY OPTION XQSMD BY USER
XQSMD SET PREFIX	Specify Allowable New Menu Prefix	Edit		Permits the user to give another user an Allowable New Menu Prefix for purposes of Secure Menu Delegation (SMD), so that the delegate can build new menus from the options that have been delegated.
XQSMD SHOW	Show a Delegate's Options	Run Routine	Routine: SHOW^XQSMD2 1	This option shows you who created a delegate, when, and what delegation level they are; as well as all of the options

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				delegated to that person, when each was delegated, and by whom.
XQSMD USER MENU	Delegate's Menu Management	Menu		This is the Secure Menu Delegation (SMD) menu that is given to individuals who can modify other's primary or secondary menus. It includes the following options: XQSMD BUILD MENU XQSMD EDIT OPTIONS XQSMD LIMITED FM OPTIONS XQSMD COPY USER XQCOPYOP
XQSPING	TCP/IP Type Ping Server	Server	Server Action: RUN IMMEDIATEL Y Server Audit: NO Suppress Bulletin: YES, SUPRESS IT Server Reply: REPLY ON ERROR ONLY	This is a PING server that works like PING under TCP/IP. If you send a message to this sever it sends it back to you, thereby showing that the network mail channel is open.
XQTKILL	Delete a Menu Template	Run Routine	Routine: KILL^XQT4	Removes a menu template from the NEW PERSON (#200) file.
XQTLIST	Show all options in a Menu Template	Run Routine	Routine: LIST^XQT4	List out all of the options in a particular menu template.
XQTNEW	Create a new menu	Run Routine	Routine:	This option invokes a routine that walks the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	template		XQT2	user through the menu trees creating a new menu template.
XQTRNAM	Rename a menu template	Run Routine	Routine: RNAM^XQT4	This option renames a particular menu template.
XQTSHO	List all Menu Templates	Run Routine	Routine: SHO^XQT4	This option lists all of the menu templates for the invoking user along with the first two options in that template.
XQTUSER	Menu Templates	Menu		This is the user's menu of menu template utilities. It includes the following options: • XQTSHO • XQTLIST • XQTKILL • XQTRNAM • XQTNEW
XU BLOCK COUNT	Global Block Count	Run Routine	Routine: %ZTBKC	This option counts the number of data blocks in a global.
XU CHECKSUM LOAD	Load/refresh checksum values into ROUTINE file	Run Routine	Routine: LOAD^XUGOT	This option updates the ROUTINE (#9.8) file with the latest checksum values from FORUM.
XU CHECKSUM REPORT	Compare local/national checksums report	Run Routine	Routine: REPORT^XUGOT 1	This option compares checksums for routines to the values in the ROUTINE (#9.8) file. It provides a report listing routines that differ by patch or version, version or patch is correct, but checksums are off, local routines being tracked and information <i>not</i> on record for a patch

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
•				(e.g., test patches). Nationally released routines' checksums are sent by Master File Updates to the local ROUTINE (#9.8) file automatically. Local sites may also record checksums in the CHECKSUM VALUE field in the ROUTINE (#9.8) file. To compare local routines which are being tracked, the CHECKSUM REPORT field should be set to "Local report".
XU DA EDIT	DA Return Code Edit	Run Routine	Routine: XUS11	This option runs a routine to allow the setup and editing of the DA RETURNS CODE (#3.22) file.
XU EPCS	User start-up event	Extended Action		Released with Kernel Patch XU*8.0*580, this option is used exclusively during a VistA user signon event. Items listed in this option are "TYPE:action" options in the OPTION (#19) file that can be used to prompt users for input upon VistA signon and before their Primary Menu Option is displayed. It will not be used for GUI signons. It is called from XQ12 routine. REF: For instructions on how to use this option, see

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
				Kernel Patch XU*8.0*593 and the Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide.
XU EPCS DISUSER EXP DATE	Print DISUSER DEA Expiration Date Null	Print		Released with Kernel Patch XU*8.0*580, this option prints all DISUSERed users with an unpopulated DEA# and DEA EXPIRATION DATE. This option prints the following data: NAME DEA# TERMINATION DATE DEA EXPIRATION DATE
XU EPCS DISUSER PRIVS	Print DISUSER Prescribers with Privileges	Print		Released with Kernel Patch XU*8.0*580, this option prints all DISUSERed users who have privileges to any of the SCHEDULEs II through V and who have a DEA# or VA#. This option prints the following data: NAME DUZ DEA# TERMINATION DATE VA# SCHEDULESS
XU EPCS DISUSER XDATE EXPIRES	Print DISUSER DEA Expiration	Print		This option prints all DISUSERed users with a DEA# and where the DEA EXPIRATION

Option Name	Option Text Date Expires 30 days	Туре	Routine / Action / RPC / Other (Based on Type)	Description DATE expires within 30 days. This option prints the following data: NAME DEA# DEA EXPIRATION DATE NOTE: This option was
XU EPCS EDIT	ePCS Edit	Broker	RPCs:	released with Kernel Patch XU*8.0*580. This is a Broker-type
DATA	Prescriber Data	(Client/ Server)	XU EPCS EDIT XUS KEY CHECK DDR DELETE ENTRY DDR FIND1 DDR FINDER DDR GET DD HELP DDR GETS ENTRY DATA DDR KEY VALIDATOR DDR LISTER DDR LOCK/UNLOC K NODE DDR VALIDATOR XWB GET VARIABLE VALUE XUS PKI GET	context option that is given to those individuals who are permitted to edit the data related to e-prescribing of controlled substances. It includes the XQAL GUI ALERTS option. This option is locked with the XUEPCSEDIT security key. NOTE: This option was released with Kernel Patch XU*8.0*580.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
- 1	- 1 - 1 - 1	71.	UPN	P. C.
XU EPCS EDIT DEA# AND XDATE	Edit Facility DEA# and Expiration Date	Edit		This option edits the FACILITY DEA NUMBER (#52) and FACILITY DEA EXPIRATION DATE (#52.1) fields in the INSTITUTION (#4) file.
				NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS EXP DATE	Print DEA Expiration Date Null	Print		This option prints all active users with an unpopulated DEA# and DEA EXPIRATION DATE. This option prints the following data: NAME DEA EXPIRATION DATE NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS LOGICAL ACCESS	Task Changes to DEA Prescribing Privileges Report	Run Routine	Routine: RPT1^XUEPCSR T	This tasked option prints the setting or change to DEA prescribing privileges related to issuance of a controlled substance prescription. This option only prints data from the previous day and with data that has been modified. The data is retrieved from the XUEPCS DATA

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
Option Hamo	option roxe	1,700	(Dacou on Typo)	(#8991.6) file.
				This option should be scheduled to run on a daily basis.
				NOTE: No data is displayed to the screen; the data is printed to the device indicated by the XUEPCS REPORT DEVICE parameter.
				CAUTION: Verify that the XUEPCS REPORT DEVICE parameter has been set before using this option.
				To set the parameter, see the "Set the XUEPCS REPORT DEVICE Parameter" section in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide.
				NOTE: This option was released with Kernel Patch XU*8.0*580.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XU EPCS PRINT EDIT AUDIT	Print Audits for Prescriber Editing	Run Routine	Routine: PRINT^XUEPCSE D	This option prints information related to the editing of prescriber information. NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS PRIVS	Print Prescribers with Privileges	Print		This option prints all active users who have privileges to any of the SCHEDULEs II through V and who have a DEA# or VA#. This option prints the following data: NAME DUZ DEA# VA# SCHEDULESS NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS PSDRPH	Print PSDRPH Key Holders	Print		This option prints all active users holding the PSDRPH security key. This report sorts by Division, and within DIVISION, it sorts by NAME. This option prints the following data: NAME DUZ GIVEN BY (Person Who Assigned Key)

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
Option Name	Option Text	Туре	(Dased Oil Type)	DATE GIVEN (Date Assigned) NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS PSDRPH AUDIT	Task Allocation Audit of PSDRPH Key Report	Run Routine	ROUTINE: RPT2^XUEPCSR T	This tasked option prints the allocation of the PSDRPH security key. This option only prints data from the previous day and with data that has been modified. The report prints data for the archive XUEPCS PSDRPH AUDIT (#8991.7) file. This option should be scheduled to run on a daily basis. NOTE: No data is displayed to the screen; the data is printed to the device indicated by the XUEPCS REPORT DEVICE parameter. CAUTION: Verify that the XUEPCS REPORT DEVICE parameter has been set before using this option.

Ontion Name	Ontion Toyt	Tymo	Routine / Action / RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	To set the parameter, see the "Set the XUEPCS REPORT DEVICE Parameter" section in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide.
				NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS PSDRPH KEY	Allocate/De- Allocate of PSDRPH Key	Run Routine	Routine: PSDKEY^XUEPC SRT	This option allows users to allocate or deallocate the PSDRPH security key.
				NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS SET PARMS	Print Setting Parameters Privileges	Print		This option prints all active users holding the XUEPCSEDIT security key. This option identifies individuals responsible for setting the parameters.
VII EDOO	- POO DEA	Manage		NOTE: This option was released with Kernel Patch XU*8.0*580.
XU EPCS	ePCS DEA	Menu		This is DEA ePCS

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
Option Name UTILITY FUNCTIONS	Option Text Utility Functions	Туре		Utility main menu. It includes the following options (listed in display order): • XU EPCS EXP DATE (1; SYNONYM: 1) • XU EPCS DISUSER EXP DATE (2; SYNONYM: 2) • XU EPCS XDATE EXPIRES (3; SYNONYM: 3) • XU EPCS DISUSER XDATE EXPIRES (4; SYNONYM: 4) • XU EPCS PRIVS (5; SYNONYM: 5) • XU EPCS PRIVS (6; SYNONYM: 6) • XU EPCS PSDRPH (7; SYNONYM: 7) • XU EPCS SET PARMS (8; SYNONYM: 8) • XU EPCS PRINT EDIT AUDIT (9; SYNONYM: 9)
				XU EPCS LOGICAL ACCESS (10; SYNONYM: 10)
				• XU EPCS PSDRPH AUDIT (11; SYNONYM: 11)
				XU EPCS PSDRPH KEY (12; SYNONYM:

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
Орион маше	Option Text	туре	(Baseu on Type)	12) • XU EPCS EDIT DEA# AND XDATE (13; SYNONYM: 13)
XU EPCS XDATE EXPIRES	Print DEA Expiration Date Expires 30 days	Print		This option prints all active users with a DEA# and where the DEA EXPIRATION DATE expires within 30 days. This option prints the following data: NAME DEA# DEA EXPIRATION DATE NOTE: This option was released with Kernel Patch XU*8.0*580.
XU FINDUSER	Find a user	Run Routine	Routine: XUS9	This option finds a user that is currently signed on to the system in this UCI group. If the user is on this CPU it also shows the menu path. It uses the "CUR" cross-reference on the SIGN-ON LOG (#3.081) file.
XU FIRST LINE PRINT	First Line Routine Print	Run Routine	Routine: %ZTP1	This option uses the %ZTP1 utility to print the first line of routines.
XU IP RELEASE	Release IP lock	Run Routine	Routine: X6IP^XUSTZIP	This option releases the lock on an IP address caused by too many invalid signon attempts.
XU NOP MENU	Do nothing menu	Menu		This menu is just a placeholder for some special access

			Routine / Action /	
Ontion Name	Ontion Toyt	Type	RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	Description methods.
				CAUTION: Do not place any new items in the menu multiple.
XU OPTION QUEUE	One-time Option Queue	Run Routine	Routine: XUTMOPT	This option allows any option that is in the OPTION (#19) file with the SCHEDULING RECOMMENDED field set to Yes , to be set up for one-time queuing.
XU OPTION START	One-time Option Start (Internal Use Only)	Action	Entry Action: N XQY,XQYO S XQYO=\$G(^DIC(19,X) UXQM,O)),XQT=\$P(X) QYO,U,4) I \$L(XQT),"APR"[XQT) S XQY=XUXQM D ZTSK2^XQ1 Q	This option works with XU OPTION QUEUE (One-time Option Queue) to allow site managers to schedule an option that usually runs on a cycle without disrupting that cycle. This option should not be used directly, either from a menu or through the Schedule/Unschedule Options [XUTM SCHEDULE] option; it is used internally by XU OPTION QUEUE to make that option work correctly.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XU PROC CNT CLUP	XUS Process count cleanup	Run Routine	Routine: CLEAR^XUSCNT (0)	This option is only needed for GT.M sites. This is the Kernel process count cleanup routine. It checks the entries in XUTL("XUSYS",\$J) to see if they are still active, and if <i>not</i> , removes the entry. For GT.M sites only, schedule this option to run between every 1 to 8 hours.
XU SEC OFCR	Menu and Option Security	Menu		This menu includes options to allow the user to review options. It includes the following options: • XUINQUIRE • XUOPTWHO • XUPRINT • XUUSERACC • XUUSERACC2 • XUXREF-2 • XQSHOKEY • XQLOCK2 • XQSMD SEC OFCR • XUOPTDISP • XUOPTLOG • XUOPTPURGE
XU SID ASK	Ask if Production Account	Run Routine	Routine: ASK^XUPROD	This option allows the user to claim that the current account is the Production account and set the SID into the KERNEL SYSTEM PARAMETERS (#8989.3) file. This option is locked with the XUMGR

Outlan Nama	Outlan Tout	T	Routine / Action / RPC / Other	D. a. sinki ara
Option Name	Option Text	Туре	(Based on Type)	Description security key.
XU SID EDIT	Edit Logical/Physi cal Mapping	Run Routine	Routine: EDIT^XUPROD	This option lets you edit the two fields that are used in the SID code to map a logical name in the Cache cpf file to the Physical name that is returned by a \$ZU(12,"") call.
XU SID STARTUP	Startup PROD check	Run Routine	Routine: CHECK^XUPROD	This option should run at every startup to check if the current SID matches the stored SID. To do this, the option needs to be in the OPTION SCHEDULING (#19.2) file with the SPECIAL QUEUEING field set to Startup Persistent.
XU SITE LOCKOUT	Edit Site IP lockout	Action	Entry Action: N DA,DR,DIE S DA=1,DR="[XUSITEI P]",DIE=8989.3 D XUDIE^XUS5	This option edits the KERNEL SYSTEM PARAMETERS (#8989.3) file for IP lockout, User lockout, and Terminal server list entry.
XU SWITCH UCI	Switch UCI	Run Routine	Routine: SWITCH^XUS3A	This option switches UCIs.
XU USER ADD	New User Event	Extended Action	Entry Action: D GET^XUSERP(XUIEN, .XUSR)	This is a protocol to link other software applications that want to know about a USER ADD event. Other packages can attach to this protocol option, and they are called when a new USER is Added. At the end of editing, the user data XU USER CHANGE protocol is called. DUZ is the person that is running the add user

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
				option. XUIFN points to the NEW PERSON (#200) file entry that has been added. It returns selected File #200 data to XUSR(field name) array for NEW PERSON components. It is called from XUSERNEW by XUSERP. It includes the following option: PSB BCBU PMU MESSAGE BUILDER
XU USER CHANGE	User Change Event	Extended Action	Entry Action: D GET^XUSERP(XUIEN, .XUSR)	This is a protocol to link other software applications that want to know about a USER CHANGE event. Other packages can attach to this protocol option, and they are called when a user is Edited. DUZ is the person that is running the edit user option. XUIFN points to the NEW PERSON (#200) file entry that has been changed. It returns selected File #200 data to XUSR(field name) array for NEW PERSON components. It includes the following option: PSB BCBU PMU MESSAGE BUILDER
XU USER SIGN-ON	User sign-on event	Extended Action		This is a protocol option to link other software applications that want to know

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				about a user signon event. The protocols must not READ/WRITE to the screen, because it may be doing a GUI signon. They can set text that is displayed to the user by calling SET^XUS1A(string) The first character should be a! to cause the text to be placed on a new line. DUZ is defined but other variables may not be. It is called from XUS1A. It includes the following options: PRSAZ SUP ALERTS RA SIGN-ON MSG VAFC EXCEPTION NOTIFIER RG EXCEPTION NOTIFIER RG EXCEPTION NOTIFIER ASL ESIG ACCESS AGREEMENT ACCESS AGREEMENT ADR PURCHASE CARD ACTIONS AEA CMR TURN IN ALERT AEA PPM TURN IN ALERT AEA WHSE TURN IN ALERT ENIT RESP
				NOTIFY
XU USER START-UP	User start-up event	Extended Action	Routine: XQ12	This is a protocol option that is used exclusively during a VistA user signon event. Items attached to this option are

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				"TYPE:action" options in the OPTION (#19) file, which can be used to prompt users for input upon VistA signon and before their Primary Menu Option is displayed. Unlike the XU USER SIGN-ON option, it can provide interactive prompting to users. It is not used for GUI signon. For example, The KEEP FROM DELETING (#209.2) field has been set to Yes on the User startup event [XU USER START-UP] option. This option is called from the XQ12 routine. NOTE: This option was released with Kernel Patch XU*8.0*593.
XU USER TERMINATE	User terminate event	Extended Action	Entry Action: D GET^XUSERP(XUIEN, .XUSR)	This is a protocol to link other software applications that want to know about a USER TERMINATE event. Other applications can attach to this protocol option and they will be called when a USER is terminated. The call is just after the user's Access and Verify codes have been removed. DUZ is the person that is running the terminate option. XUIFN points to the NEW PERSON (#200)

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				file entry that is being terminated. It returns selected File #200 data to XUSR(field name) array for NEW PERSON components. It is called in XUSTERM from XUSERP. It includes the following options: USR USER TERMINATE
				GMRC TERMINATE CLEANUP
				OR TERMINATE CLEANUP
				PRCS TERMINATE
				AEA XU TERMINATE REMOTE
				TIU TEMPLATE USER DELETE PSB BCBU PMU MESSAGE BUILDER
				ENIT USER ACCOUNT TERMINATED
XU-486 MENU COPY	Copy the compiled menus from the print server	Action	Entry Action: S SYS="CS" F S SYS=\$0 (^*ZIS (14.5 ,"B",SYS)) Q:SYS' ["CS" S UCI="VAH", *X="^XU TL(""XQO"",", *Y=" ^[UCI,SYS]XUTL("" XQO"",", *=\$E(*Y,1 ,\$L(*Y)-1)_")" X "K @% D %XY^*RCR"	(Obsolete) This option is just for the MSM 486 site that run TaskMan only on the print server and need to get updated compiled menus to the Compute servers. It should be scheduled to run after the menu tree rebuild has finished on the print server. As distributed, it only copies the

			Routine / Action / RPC / Other	_
Option Name	Option Text	Туре	(Based on Type)	Description
				compiled menus to a UCI named VAH on compute servers named CSA,CSB, It uses %RCR to copy the data.
XU-CLINICAL ACTIVE TRAINEE	List of Active Registered Trainees	Print		This option prints a report of active Registered Trainees. The SCHEDULING RECOMMENDED (#209) field has been set to YES in case the site decides they want to schedule this report at regular intervals. When manually launching this report, it is recommended that it be QUEUED.
XU-CLINICAL INACTIVE TRAINEE	List of Inactive Registered Trainees	Print		This option prints a report of inactive Registered Trainees. The SCHEDULING RECOMMENDED (#209) field has been set to YES in case the site decides they want to schedule this report at regular intervals. When manually launching this report, it is recommended that it be QUEUED.
XU-CLINICAL LOCAL REPORTS	Local Trainee Registration Reports	Menu		This menu option provides various Trainee Registration reports that look at the local database. It includes the following options: • XU-CLINICAL TRAINEE DB COUNT • XU-CLINICAL

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
Option Humo	Option Text	Турс	(Dasca on Type)	ACTIVE TRAINEE XU-CLINICAL INACTIVE TRAINEE XU-CLINICAL TRAINEE LIST
XU-CLINICAL TRAINEE COUNT	Count of Clinical Trainee's	Print		This option prints a reports of the total number of Clinical Trainee's that have been entered into the NEW PERSON (#200) file.
XU-CLINICAL TRAINEE DB COUNT	Total Count of Registered Trainees	Print		This option prints a report of the total number of Clinical Trainee's that have been entered into the NEW PERSON (#200) file.
XU-CLINICAL TRAINEE EDIT DB COUNT	Edit Trainee Registration Data	Action	Entry Action: S DIC="^VA(200,",DI C(0)="AEMQ",DIC(" S")="I \$S(\$P(^(0),U,11): \$P(^(0),U,11)'<\$\$ FMADD^XLFDT(DT,"" -1096""),1:1)" D ^DIC K DIC Q:Y=-1 S DA=+Y,DR="[XU- CLINICAL TRAINEE]",DIE="^V A(200," D XUDIE^XUS5 K D0,DA,DIE,DR	This option is used to edit the Registered Trainee data.
XU-CLINICAL TRAINEE INQUIRY	Trainee Registration Inquiry	Inquire		This option displays various attributes of Registered Trainees.
XU-CLINICAL TRAINEE LIST	List of All Registered Trainees	Print		This option reports both active and inactive Registered Trainees. The SCHEDULING RECOMMENDED (#209) field has been set to YES in case the

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				site decides they want to schedule this report at regular intervals. When manually launching this report, it is recommended that it be QUEUED.
XU-CLINICAL TRAINEE MENU	OAA Trainee Registration Menu	Menu		This is the primary menu for managing Trainee Registration. It includes the following options: • XU-CLINICAL TRAINEE EDIT • XU-CLINICAL TRAINEE INQUIRY • XU-CLINICAL TRAINEE INQUIRY
XU-CLINICAL TRAINEE REPORTS	Trainee Reports Menu	Menu		This is the Trainee Registration main reports menu. It includes the following options: • XU-CLINICAL LOCAL REPORTS • XU-CLINICAL TRANS REPORTS
XU-CLINICAL TRAINEE TRANSA	Trainee Transmission Report by Date	Print		This option produces a report of transmitted trainees by date transmitted to the OAA.
XU-CLINICAL TRAINEE TRANSB	Trainee Transmission Report Selectable Items	Print		This option selects a range for date transmitted and a range for the VHA training facility.
XU-CLINICAL TRAINEE TRANSC	Trainee Transmission Report by Range	Print		This report displays/prints the Registered Trainee transmission counts for a selected period of time.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XU-CLINICAL TRANS REPORTS	Trainee Transmission Reports to OAA	Menu		This is the menu for the Various Trainee Registration transmission reports to the OAA. It includes the following options: • XU-CLINICAL TRAINEE TRANSA • XU-CLINICAL TRAINEE TRANSB • XU-CLINICAL TRAINEE TRANSB
XU-INACTIVE PERSON CLASS USERS	List Inactive Person Class Users	Run Routine	Routine: PR^XUBA	This option lists users who currently have inactive Person Classes and need to be assigned new Person Classes.
XU- INSTITUTION- DEA	Institution DEA# edit	Edit		This option edits the Facility DEA number in the INSTITUTION (#4) file.
XU- INSTITUTION-E	Institution Edit	ScreenMa n		This option edits a subset of the fields in the INSTITUTION (#4) file.
XU-PERSON CLASS EDIT	Person Class Edit	Action	Entry Action: S DIC="^VA(200,",DI C(0)="AEMQ",DIC(" S")="I \$S(\$P(^(0),U,11): \$P(^(0),U,11)' <dt ,1:1)"="" ^dic="" class]",die="^VA(200," d="" d0,da,die,dr<="" da='+Y,DR="[XU-' dic="" k="" person="" q:y="-1" s="" td="" xudie^xus5=""><td>This option is used to edit Person Class data. This option is located under the User Management menu [XUSER]. This option can be given to any user who needs to edit this data. Users that have been terminated <i>cannot</i> be edited.</td></dt>	This option is used to edit Person Class data. This option is located under the User Management menu [XUSER]. This option can be given to any user who needs to edit this data. Users that have been terminated <i>cannot</i> be edited.
XU-PERSON CLASS REMOVE	Remove a person class entry	Run Routine	Routine: REMOVE^XUA4A 72	This option should be given only to those persons that the site trusts to remove entries from the Person Class

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
Орион маше	Option Text	Туре	(Baseu on Type)	multiple of the NEW PERSON (#200) file. The PERSON CLASS Multiple holds a history, and under normal use, entries should <i>not</i> be removed. This option is to fix real messes.
XU-PING- SERVER	TCP/IP type PING server	Server	Routine: XTSPING	This is a PING server that works like PING under TCP/IP. If you send a message to this server it will send it back to you.
XU-SPL- ALLOW	Allow other users access to spool documents	Edit		This option edits the OTHER AUTHORIZED USERS field in the SPOOL DOCUMENT file to allow other users access to a spool document.
XU-SPL- BROWSE	Browse a Spool Document	Run Routine	Routine: BROWSE^ZISPL	This option uses the VA FileMan Browser tool on a Spool Document.
XU-SPL- DELETE	Delete A Spool Document	Run Routine	Routine: DELETE^ZISPL	Delete a spool document from the SPOOL DOCUMENT file and delete the associated message if they are still linked.
XU-SPL-LIST	List Spool Documents	Print		This option lists entries in the SPOOL DOCUMENT file.
XU-SPL-MAIL	Make spool document into a mail message	Run Routine	Routine: MAIL^ZISPL	This option takes a spool document and posts it as a MailMan message to the user's IN basket. This does not move the data at all but does decrease the number of lines charged to the user.

			Routine / Action /	
041 11	0	T	RPC / Other	Description
Option Name	Option Text	Туре	(Based on Type)	Description
XU-SPL-MENU	Spooler Menu	Menu		This is the menu of options to work with spooled documents after they have been created. It includes the following options: • XU-SPL-LIST • XU-SPL-PRINT • XU-SPL-DELETE • XU-SPL-MAIL • XU-SPL-ALLOW • XU-SPL-BROWSE
XU-SPL-MGR	Spool Management	Menu		This is the menu for the system administrators to manage the spooler access. It includes the following options (listed in display order): • XU-SPL-DELETE (1) • XU-SPL-USER (2) • XU-SPL-LIST (3) • XU-SPL-PRINT (4) • XU-SPL-SITE (5) This menu is locked with the XUMGR security key.
XU-SPL-PRINT	Print A Spool Document	Run Routine	Routine: PRINT^ZISPL	This option prints a document that has been spooled.
XU-SPL- PURGE	Purge old spool documents	Run Routine	Routine: 1^ZISPL2	This option should be tasked to run at least once a week to delete spool documents that are older than the number of days in the KERNEL SYSTEM PARAMETERS (#8989.3) file.
XU-SPL-SITE	Spooler Site Parameters	Edit		Edit the site parameters for the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	Edit	7.		Spooler.
XU-SPL-USER	Edit User's Spooler Access	Edit		This option allows the system administrators to edit the spooler fields in the NEW PERSON (#200) file.
XU-SPY-SHOW	Display the Kernel Audit Parameters	Print		This is an inquire to the KERNEL SYSTEM PARAMETERS (#8989.3) file to show the current AUDIT parameters that are set up.
XUADISP	Audit Display	Menu		This is the Audit Display menu. It includes the following options (listed in display order): • XUOPTDISP (1) • XUUSEROPT (2) • XUFDEV (3) • XUFDISP (4) • XUPMDISP (5)
XUAUDIT	Establish System Audit Parameters	Action	Entry Action: S DA=1,DIE="^XTV(89 89.3,",DR="[XUAUD IT]" D XUDIE^XUS5 K DA,DIE,DR	This option establishes the audit parameters for which option, namespace, user, device, and failed access attempt to audit. Includes date to initiate and terminate this audit function.
XUAUDIT MAINT	System Audit Menu	Menu		This menu establishes and maintains audit functions. It includes the following options (listed in display order; no #5): • XUAUDIT (1) • XU-SPY-SHOW (2) • XUSERVDISP (3) • XM SUPER

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				SEARCH (4) DG BULLETIN LOCAL (6) DG PATIENT INQUIRY (7) DG PARAMETER ENTRY (8)
XUAUDIT MENU	Audit Features	Menu		This menu includes options to establish Kernel Audit Parameters and to print/display audit data. It includes the following options (listed in display order): • XUAUDIT MAINT (1) • XUAUDIT RPT (2) • XUADISP (3)
XUAUDIT RPT	System Audit Reports	Menu		This is a menu of reports pertaining to the audit of options, users, and the system. It includes the following options (listed in display order): • XUFAIL (1) • XUOPTLOG (2) • XUSC LIST (3)
XUAUTODEAC TIVATE	Automatic Deactivation of Users	Run Routine	Routine: CHECK^XUSTER M1	This option will go thru the NEW PERSON (#200) file, and search for users with a termination date in the past who still have an access code. It deletes their Access code and security keys. It calls the XU USER TERMINATE protocol in the OPTION (#19) file, so other applications can take

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				any action needed. If the DELETE ALL MAIL ACCESS field is set, then the user is removed from the MailMan system. This deletes their mail boxes and deletes them from any mail groups. Patch XU*8*514 implements the Logical Access Controls section of VA Handbook 6500. Item d states that accounts are automatically disabled if inactive for 30 days. The routine checks for users that have an access code and a LAST SIGNON DATE (#202) where the LAST SIGNON DATE is more than 30 days old and sets the DISUSER (#7) field flag for the user. If the site has set the ACADEMIC AFFILIATION WAIVER (#13) field to YES in the KERNEL SYSTEM PARAMETERS (#8989.3) file then a 90-day limit is used in place of 30 days.
XUCHANGE	Change Device's Terminal Type	Edit		This option changes the TERMINAL TYPE associated with a given device.
XUCOMMAND	SYSTEM COMMAND OPTIONS	Menu		This is the basic command menu that holds commands executable from

			Routine / Action /	
Option Name	Option Text	Туре	(Based on Type)	Description
Option Name	Option Text	Туре	RPC / Other	anywhere in the menu processor. It includes the following options: XUHALT XUTIME XUCONTINUE XURELOG XMUSER XUSERTOOLS (SYNONYM: TBOX) XQALERT (SYNONYM: VA) ENWOWARD (SYNONYM: WOR) PRSA EMP MENU (SYNONYM: LEAV) ZPBOOK (SYNONYM: PB) ZPSOMD DRUG LOOK-UP (SYNONYM: PB) ZPSOMD DRUG LOOK-UP (SYNONYM: PB) TORM) A52 VA STATION INQ (SYNONYM: PB) RTZ USER MENU (SYNONYM: RTZ) OOPS GUI EMPLOYEE XUS SIGNON XUS KAAJEE WEB LOGON XOBE ESIG USER ENIT OWNER MENU
				(SYNONYM: IT O) • EC GUI CONTEXT
				VEJDWPB CORE RPCS

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUCONTINUE	Continue	Action	Entry Action: s xQUR="CON",^("T") =^XUTL("XQ",\$J,"T ")-1 G CON^XQ12	This option halts processing, allowing for the user to directly proceed to the last option accessed on the next login.
XUCORE	Core Applications	Menu	Entry Action: D ^ASTR2,XM^ABOC	This menu branches to each of the CORE application packages. It includes the following options: PSMENU (DISPLAY ORDER: 10) DIUSER (SYNONYM: FM DISPLAY ORDER: 17) MRMENU (DISPLAY ORDER: 7) FHMGR (DISPLAY ORDER: 2) YSUSER (DISPLAY ORDER: 6) RADIOLOGY SYSTEM (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) CRMGR (DISPLAY ORDER: 13) SOWK (DISPLAY ORDER: 18) SOWK (DISPLAY ORDER: 15)

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
				DGZMGR (SYNONYM: PIMS DISPLAY ORDER: 5) FHDMP (DISPLAY ORDER: 9) NURS-SYS-MGR (SYNONYM: NS) ENMGR (SYNONYM: EN) ABSV VAVS MASTER MENU (SYNONYM: VOL) HL MAIN MENU (SYNONYM: HL7) MAG WINDOWS RDP1 UTIL MENU (SYNONYM: RDP)
XUDEV	Device Edit	Edit		This option changes the device characteristics for a given device.
XUDEV LINEPORT ADDR CURRENT	Current Line/Port Address	Action	Entry Action: W !, "Your current Line/Port address is "_\$\$LNPRTNAM^%ZIS UTL	This option identifies your current Line/Port address.
XUDEV LINEPORT ADDR EDIT	Edit Line/Port Addresses	Edit		This option edits the Line/Port addresses.
XUDEV LINEPORT ADDR RPT	Line/Port Address report	Print		This option prints a report listing Line/Port Addresses.
XUDEV RES- CLEAR	Clear all resources	Run Routine	Routine: RELALL^XUDHR ES	This option loops through all entries in the RESOURCE file (3.54) and removes any slot in use entries. CAUTION:

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				This option should only be used as a TaskMan Startup option or by a knowledgeable site person.
XUDEV RES- ONE	Clear one Resource	Run Routine	Routine: RELONE^XUDHR ES	This option clears/resets one entry of one resource. System administrators use this option to clear problems.
XUDEVEDIT	Edit Devices by Specific Types	Menu		This menu edits specific types of devices using ScreenMan or edits all device fields. It includes the following options: • XUDEVEDITSPL (SYNONYM: SPL) • XUDEVEDITHFS (SYNONYM: HFS) • XUDEVEDITRES (SYNONYM: RES) • XUDEVEDITRES (SYNONYM: TRM) • XUDEVEDITALL (SYNONYM: ALL)
XUDEVEDITAL L	Edit All Device Fields	Edit		This option will allow the editing of all the fields in the DEVICE (#3.5) file.
XUDEVEDITCH AN	Network Channel Device Edit	Run Routine	Routine: CHAN^ZISEDIT	This is a ScreenMan- oriented edit option for editing synchronous devices.
XUDEVEDITHF S	Host File Server Device Edit	Run Routine	Routine: HFS^ZISEDIT	This is a ScreenMan- oriented edit option for editing Host file devices.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUDEVEDITLP D	LPD/VMS Device Edit	ScreenMa n	(Dacod on Typo)	This option calls a ScreenMan form to edit a VMS LPD device.
XUDEVEDITMT	Magtape Device Edit	Run Routine	Routine: MT^ZISEDIT	This is a ScreenMan oriented edit option for editing magtape devices.
XUDEVEDITRE S	Resource Device Edit	Run Routine	Routine: RES^ZISEDIT	This is a ScreenMan- oriented edit option for editing resource devices.
XUDEVEDITSP L	Spool Device Edit	Run Routine	Routine: SPL^ZISEDIT	This is a ScreenMan- oriented edit option for editing spool devices.
XUDEVEDITSY NC	Network Channel Device Edit	Run Routine	Routine: CHAN^ZISEDIT	This is a ScreenMan oriented edit option for editing synchronous devices.
XUDEVEDITTR M	TRM or VTRM Device Edit	Run Routine	Routine: TRM^ZISEDIT	This option calls a ScreenMan form to edit a TRM or VTRM device.
XUDIACCESS FOR ISO	Fileman Access for the ISO	Menu		This menu contains VA FileMan options. VA FileMan access is basically required until such time as all necessary reports can be generated by standardized menu options. It includes the following options (listed in display order): DIPRINT (1) DISEARCH (2) DIINQUIRE (3) DIAUDIT (4) DILIST (5)
XUDISPLAY	Display Device Data	Print		This option prints a list of all the devices in the DEVICE file.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUEDITOPT	Edit options	Edit	Entry Action: s dlaygo=19 Exit Action: k dlaygo d kick^xQ7	This option creates the building blocks of the menu system. Each option should have an internal name, menu text, a description, and a type. Depending on its type, other fields are filled in.
XUER EDIT PARAMS	Error Trap Param Edit	ScreenMa n		This option allows the editing of Error Trap parameters in the KERNEL SYSTEM PARAMETERS (#8989.3) file.
XUER NOTE	Annotate an Error	Edit		This option provides a means of letting a programmer annotate an error that has been logged automatically.
XUER PURGE ERROR SUMMARY	Purge Error Trap Summary	Run Routine	Routine: PURGE^XTERSU M1	This option should be scheduled weekly or monthly to purge the error summary of old errors. It only purges entries where the last error was over 90 days ago.
XUER SUMMARY	Error Summary Menu	Menu		This menu holds the Error Summary options. It includes the following options: • XUER SUMMARY MOST RECENT • XUER NOTE • XUER PURGE ERROR SUMMARY • XUER UPDATE DEMAND/BATCH • XUER SUMMARY INQUIRE • XUER SUMMARY

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				ТОР
XUER SUMMARY INQUIRE	Inquire Error Summary	Inquire		This option inquires into the ERROR TRAP SUMMARY (#3.077) file.
XUER SUMMARY MOST RECENT	Summary Most Recent Errors	Print		This option displays the most recent errors in the ERROR TRAP SUMMARY (#3.077) file.
XUER SUMMARY TOP	Top Errors	Run Routine	Routine: SHOW^XTERSU M4	This option runs a report of the top errors and prints a graph of when they occurred.
XUER UPDATE DEMAND/BATC H	Update Error Trap Summary	Run Routine	Routine: TODAY^XTERSU M	This option is run on demand or by batch to update the ERROR TRAP SUMMARY (#3.077) file from the current Error Trap. This only processes the errors for the current day. DO ADD^XTERSUM to add error from the last 30 days. See the code to reach back even further.
XUERRS	Error Processing	Menu		This menu provides access to options pertaining to the Error Trap: displaying, printing, and purging errors. It includes the following options: • XUERTRAP • XUERTRAP • XUERTRAP PRINT ERRS • XUERTRAP PRINT T-1 1 ERR (SYNONYM: P1) • XUERTRAP PRINT T-1 2 ERR

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				(SYNONYM: P2) • XUERTRP CLEAN • XUERTRP TYPE • XUER SUMMARY (SYNONYM: SUM)
XUERTRAP	Error Trap Display	Run Routine	Routine: XTER	This option displays programmer error messages (operatingsystem dependent).
XUERTRP AUTO CLEAN	Error trap Auto clean	Run Routine	Routine: AUTO^XTERPUR	This is a queueable option to clean up the Error Trap. By default, this option cleans up any errors that were recorded more than 7 days ago. If in the TaskMan Schedule/Unschedule Options [XUTM SCHEDULE] option the TASK PARAMETERS field has another numeric value that is used instead.
XUERTRP CLEAN	Clean Error Trap	Run Routine	Routine: XTERPUR	This option is available to delete old errors from the Error Trap. This option is locked with the XUPROGMODE security key.
XUERTRP PRINT ERRS	Interactive Print of Error Messages	Run Routine	Routine: INTRACT^XTER1 A	This option provides an interactive print of the first <i>n</i> occurrences of an error (where <i>n</i> is user-selectable) over the specified date range.
XUERTRP PRINT T-1 1 ERR	Print 1 occurence of each error for T-1 (QUEUE)	Run Routine	Routine: ONE^XTER1A	This option obtains a listing of the first occurrence of each error recorded on the previous day. It can be

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				queued to run shortly after midnight. If a device is specified, the output is sent to the specified device. If a device is <i>not</i> specified, the output is sent in a mail message to the individual who queued the option to run. It should be set to automatically requeue at a 1D (every day) interval.
XUERTRP PRINT T-1 2 ERR	Print 2 occurrences of errors on T-1 (QUEUED)	Run Routine	Routine: TWO^XTER1A	This option obtains a listing of the first two occurrences of each error recorded on the previous day. It can be queued to run shortly after midnight. If a device is specified, the output is sent to the specified device. If a device is <i>not</i> specified, the output is sent in a mail message to the individual who queued the option to run. It should be set to automatically requeue at a 1D (every day) interval.
XUERTRP TYPE	Remove a TYPE of error	Run Routine	Routine: TYPE^XTERPUR	This option removes a type of error.
XUEXKEY	Allocate/De- Allocate Exclusive Key(s)	Run Routine	Routine: EXCLUSE^XQ6B	This option can be used to just edit the MUTUALLY EXCLUSIVE KEYS Multiple in the SECURITY KEY file. This option is locked with the XUEXKEY security key.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUFAIL	Failed Access Attempts Log	Print		This option prints a list by date/time of those users who have failed access into the system.
XUFDEV	Device Failed Access Attempts	Print		This option displays failed access attempts; it sorts on device then date/time. It gives a subtotal of attempts for each device and a total of all those attempts requested in the sort. It prompts for a print device to generate a hard copy if desired.
XUFDISP	User Failed Access Attempts	Print		This option displays the user failed access attempts; it sorts on name then date/time of attempt. It prompts for device. It gives subtotals by user; total for all failed access attempts.
XUFILEACCES	File Access Security	Menu		This menu gives and takes away files from any user; as long as you have the same access and the same files as the user you are granting or taking away the files. It includes the following options: • XUFILEGRANT (DISPLAY ORDER: 1) • XUFILESETDELET E (DISPLAY ORDER: 40) • XUFILEPRINT (DISPLAY ORDER: 30)

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
				XUFILELIST (DISPLAY ORDER: 25) XUFILECOPY (DISPLAY ORDER: 5) XUFILEREMOVEA LL (DISPLAY ORDER: 45) XUFILESINGLEAD D (DISPLAY ORDER: 10) XUFILEINQUIRY (DISPLAY ORDER: 20) XUFILEDELETE (DISPLAY ORDER: 50) XUFILERANGEAS SIGN
XUFILEACCES S SEC OFCR	Fileman Security Menu	Menu		This menu includes options to display/print the VA FileMan files users can access. It includes the following options (listed in display order): • XUFILEINQUIRY (1) • XUFILEIST (2) • XUFILEPRINT (3) • XUFILESETDELET E (4) • XUFILESINGLEAD D (5) • XUDIACCESS FOR OIG (6)
XUFILECOPY	Copy One User's File Access to	Run Routine	Routine: COPY^XUFILE	This option copies the file access that one user holds and give

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	Others			that same access to others.
XUFILEDELETE	Take away All access to a File	Run Routine	Routine: DELF^XUFILE1	This option deletes the access all users hold to a particular file. This does <i>not</i> include those users with programmer access [i.e., DUZ(0)="@"].
XUFILEGRANT	Grant Users' Access to a Set of Files	Run Routine	Routine: XUFILE	This option gives one or more users access to selected files. You can enter an individual file number, a range of numbers, and/or a list of file numbers. NOTE: You can only give out access to files to which you have access.
XUFILEINQUIR Y	Inquiry to a User's File Access	Inquire	Exit Action: K %ZISI,DISYS,DP,P, V,W,X1	This option shows what kind of file access a particular user has.
XUFILELIST	List Access to Files by File number	Run Routine	Routine: ACC^XUFILE1	This option lists, by file number, those users who have access to the range of files selected and what that access is.
XUFILEPRINT	Print Users Files	Print	Exit Action: K %ZISI,B,P,DIJ,DIS YS	This option lists, by user, each file the user has access to, and what that access is. Users who have no access are <i>not</i> listed.
XUFILERANGE ASSIGN	Assign/Delet e a File Range	Edit	Exit Action: K %X,%Y,DI,DISYS,DQ ,V,W	This option assigns or deletes a file range for a user. This file range is used when creating a new file. If the range is present, then the

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				user can only create new files whose numbers are within the range.
XUFILEREMOV EALL	Remove All Access from a Single User	Run Routine	Routine: DELI^XUFILE1	This option removes all the file access a single user holds.
XUFILESETDEL ETE	Delete Users' Access to a Set of Files	Run Routine	Routine: XUDEL^XUFILE	This option deletes the access to files held by one or more users. You can enter an individual file number, a range of numbers, and/or a list of file numbers.
XUFILESINGLE ADD	Single file add/delete for a user	Edit	Exit Action: K V,W,C,DI,DISYS,DQ ,%X,%Y,DLAYGO	This option adds or deletes the access a user has for a single file.
XUFPURGE	Failed Access Attempts Log Purge	Run Routine	Routine: FAPURGE^XUAP URGE	This option asks for a beginning and ending date to purge all those entries in that range. Also, it asks for a date/time when this task will be queued to run.
XUHALT	Halt	Action	ENTRY ACTION: s:'\$D(XQCH) XQCH="HALT" G:\$L(XQCH)>2 HALT^XQ12 s XQUR="HALT" G XPRMP^XQ12	This is the command that is used to terminate processing in MenuMan.
XUINDEX	%Index of Routines	Run Routine	Routine: XINDEX	This option runs the %INDEX routine.
XUINDEX2	Structured Routine listing	Run Routine	Routine: XCR^%INDX8	This option allows the direct printing of %INDEX 's structured routine print.
XUINQUIRE	Option Function Inquiry	Inquire		This option displays the information known to MenuMan about a

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				given option.
XUKERNEL	Kernel Management Menu	Menu		This menu contains Kernel management options. It includes the following options: • XUSITEPARM • XUVERSIONEW- HELP • XU-INSTITUTION- E • XUMF INSTITUTION • XUMF IMF ADD EDIT • XUSSPKI EDIT • XU-INSTITUTION- DEA • XUPS NPF CLEANUP MAIN MENU • XU SID ASK • XU SITE LOCKOUT • XU IP RELEASE • XUMF LOAD NPI • XU SID EDIT • XUER EDIT PARAMS
XUKEYALL	Allocation of Security Keys	Run Routine	Routine: EN1^XQ6	This option assigns a set of security keys to an individual user or a single key to a set of users. To be eligible, a security key <i>must</i> be in existence and owned by the user of this option.
XUKEYDEALL	De-allocation of Security Keys	Run Routine	Routine: EN2^XQ6	This option is used to take away a set of security keys from an individual user or a

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				single key from a set of users. To be eligible, a key <i>must</i> be in existence and owned by the user of this option.
XUKEYEDIT	Enter/Edit of Security Keys	Edit		This option edits the descriptions of existing security keys and adds new keys to the system. Holders are specified through the Allocation of Security Keys [XUKEYALL] option.
XUKEYMGMT	Key Management	Menu		This menu contains all of the options used to manage security keys. It includes the following options: ORLEASE (DISPLAY ORDER: 1) XUKEYDEALL (DISPLAY ORDER: 2) XUKEYEDIT (DISPLAY ORDER: 3) XQSHOKEY XQLISTKEY XQKEYDEL XQKEYDEL XQKEYDEL XQKEYALTODEL XQLOCK1 XQLOCK2 XUEXKEY This menu is locked with the XUSPY security key.
XULIST	List Terminal Types	Print		This option prints a list of the various terminal

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				types known to the system.
XULM LOCK MANAGER MENU	Lock Manager Menu	Menu		This menu holds all the options for the Kernel Lock Manager. It is located on Operations Management [XUSITEMGR] menu. It includes the following options: • XULM LOCK MANAGER SYNONYM: LM DISPLAY ORDER: 1 • XULM EDIT LOCK DICTIONARY SYNONYM: EDIT DISPLAY ORDER: 4 • XULM PURGE LOCK MANAGER LOG SYNONYM: PURG DISPLAY ORDER: 6 • XULM VIEW LOCK MANAGER LOG SYNONYM: LOG DISPLAY ORDER: 5 • XULM EDIT PARAMETERS SYNONYM: SITE DISPLAY ORDER: 5
XULM LOCK MANAGER	Kernel Lock Manager	Action	ENTRY ACTION: D MAIN^XULM	This option allows the user to display the lock table and terminate processes that hold
VIII NA VIII NA VIII VIII VIII VIII VIII	\ \(\).			problem locks.
XULM VIEW LOCK	View Lock	Inquire		This option is used to view the Kernel Lock

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
MANAGER LOG	Manager Log			Manager Log.
XULM PURGE LOCK MANAGER LOG	Purge Lock Manager Log	Action	ENTRY ACTION: D PURGE^XULMLOG	This option is used to purge the Lock Manger Log of old entries.
XULM EDIT PARAMETERS	Edit Lock Manager Parameters	Action		This option is used to edit the site parameters for the Kernel Lock Manager.
XULM EDIT LOCK DICTIONARY	Edit Lock Dictionary	Action		This option allows users to add entries to the lock dictionary or edit existing entries.
XULM RPC BROKER CONTEXT	KERNEL LOCK MANAGER	Broker (Client /Server)	RPC: XULM GET LOCK TABLE RPCKEY: XULM LOCKS RPC: XULM KILL PROCESS RPCKEY: XULM LOCKS	This is the "B" type option used by the Kernel Lock Manager.
XUMAINT	Menu Management	Menu		This menu allows the systems manager or developer to maintain the menus, options, and security. It includes the following options: • XUEDITOPT (DISPLAY ORDER: 1) • XUXREF (DISPLAY ORDER: 8) • XQHELP-MENU (DISPLAY ORDER: 12) • XQRESTRICT (DISPLAY ORDER:

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				5) • XUOPTWHO (DISPLAY ORDER: 6) • XQOPTFIX (DISPLAY ORDER: 11) • XQSMD MGR (DISPLAY ORDER: 4) • XUKEYMGMT (DISPLAY ORDER: 3) • XUXREF-2 • XQOOMAIN • XQDISPLAY OPTIONS • XQOPED (SYNONYM: OPED) • XQBUILDMAIN
XUMF DMIS ID LOAD	Load DMIS ID's	Run Routine	Routine: DMIS^XUMF04Q	This option is used to queue a background job that will query the Institution Master File (IMF) and get the DoD DMIS ID facilities and populate the local INSTITUTION (#4) file with them. This option is locked with the XUMF INSTITUTION security key.
XUMF IMF ADD EDIT	IMF edit	Run Routine	Out of Order Message: LOG REMEDY TICKET TO CHANGE NATIONAL ENTRY	This option edits this facility's (or associated facility's) address information. The edits update your local INSTITUTION (#4) file and the Institution Master File (IMF) on FORUM.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				CAUTION: Use extreme care updating this information, because you will be updating not just your own database but the national database as well. This option is locked with the XUMF INSTITUTION security key.
XUMF IMF EDIT STATUS	IMF Display Cleanup Status	Run Routine	Out of Order Message: DO NOT USE THIS OPTION	This option displays the facilities associated with the user and the status of the IMF data cleanup for each facility.
XUMF INSTITUTION	Institution File Query / Update	Run Routine	Routine: EN^XUMF4 Out of Order Message: Use XUMF LOAD INSTITUTION	This option provides clean up utilities to check for duplicate station numbers and to get a copy of Institution Master File from FORUM for comparison and update purposes. The cleanup utilities provide several lists to compare the local INSTITUTION (#4) file with the Institution Master File (IMF) the "Gold" file of Institutions complete with all approved station numbers including inactive as well as active station numbers. Utilities will

			Routine / Action /	
		_	RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				be included to resolve duplicate station numbers and to automatically populate the local INSTITUTION (#4) file with national IMF data.
				The INSTITUTION (#4) file cleanup utilities use the query functionality provided by the Master File Server mechanism. An HL7 Master File Query (MFQ) message is sent to FORUM to get the IFM. The MFQ message is handled by the VistA HL7 package that invokes the Master File Sever (MFS) message handler.
				The MFS handler interprets the query and builds/sends the appropriate response to the local site in an HL7 Master File Response (MFR) message. The VistA HL7 package invokes the MFS handler on the local site that stores the IMF data in a temporary global. The cleanup utilities use this information for the displays and to automatically update the local INSTITUTION (#4) file. This option is locked with the XUMF INSTITUTION security
XUMF LOAD	Update/refre	Run	Routine:	key. This option queries the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
INSTITUTION	sh Institution file with IMF data	Routine	EN^XUMF04Q	Institution Master File (IMF) to get the gold file of institutions and automatically updates the local INSTITUTION (#4) file. This option is locked with the XUMF INSTITUTION security key.
XUMF LOAD NPI	Load Institution NPI values	Run Routine	Routine: EN^XUMF416 Out of Order Message: USE XUMF LOAD INSTITUTION	This option will execute an HL7 query to FORUM to get the NPI values from the Institution Master File (IMF) and update the local INSTITUTION (#4) file.
XUMF335 clean 4.1 and 4	Patch XU*8*335 clean 4.1 and 4	Run Routine	Out of Order Message: USE XUMF LOAD INSTITUTION	This option removes existing entries from the FACILITY TYPE (#4.1) file and gets the "Gold" standard from FORUM. It updates the INSTITUTION (#4) file with IMF data. This option is locked with the XUMF INSTITUTION security key.
XUMNACCESS	Access Monitor Menu	Menu		This menu includes options to the Access Monitor Menu. It includes the following options (listed in display order): • XUPMDISP (1) • XUPMPURGE (2) • XUFAIL (3) • XUFPURGE (4) • XUFDEV (5) • XUFDISP (6)

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
.,)	, and a specific spec	XUSC LIST (7)
XUOAA SEND HL7 MESSAGE	Send HL7 PMU message	Run Routine	Routine: OAA^XUOAAHL7	This option sends an HL7 PMU message to the Office of Academic Affiliations (OAA).
XUOPTDISP	Option Audit Display	Print		This display sorts on option then date/time. Also prompts for print device to generate a hard copy of listing.
XUOPTLOG	Audited Options Log	Print		This report sorts on date/time then option; it prints all data elements of each entry requested.
XUOPTPURGE	Audited Options Purge	Run Routine	Routine: OPTPURGE^XUA PURGE	This option prompts for a beginning and ending date and time to purge the Option Audit entries. Also, it prompts for when the task will be run.
XUOPTUSER	User Management Menu	Menu		This menu contains various Kernel options that have to do with managing individual users. It includes the following options: • XUUSERSTATUS • XU FINDUSER (SYNONYM: FIND) • XUSERREL • XUSC LIST • XUSERLIST • XUSERINQ • XUSAP PROXY LIST (SYNONYM: PXY)
XUOPTWHO	Option Access By User	Run Routine	Routine: XQ55	This option prompts for a menu option, and then prints a list of which users can

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				access this option. The list can be printed with or without the menu paths to the option.
XUOUT	Out of Service Set/Clear	Edit		This option controls whether a device is out of order or <i>not</i> . If set Out of Order by this option, a device <i>cannot</i> be used for logon.
XUPMDISP	Display of Programmer Mode Entry List	Print		This displays which users entered into programmer mode, sorts by user name, and then date/time. It prompts for a print device to generate a hard copy if desired. It gives count of entries by user.
XUPMPURGE	Programmer Mode Entry Log Purge	Run Routine	Routine: PMPURGE^XUAP URGE	This option runs the XUPMPURG routine to purge the log of programmer mode entry.
XUPR RTN CHKSUM	Check Routines on Other CPUs	Run Routine	Routine: XTSUMCK	This option compares the checksum for routines on one system to the checksums for the same routines on another system. It is only for sites that have Compute and Print Servers with different routine directories.
XUPR RTN EDIT	Routine Edit	Action	Entry Action: R!,"ROUTINE: ",X:DTIME I X?1A1.7AN X ^%ZOSF("TEST") I X "ZL @X ^%Z"	This option allows developers on the site manager's staff to edit MUMPS routines. This option is locked with the security XUPROGMODE key.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				CAUTION: This option is only for developers.
XUPR RTN PATCH	Routines by Patch Number	Run Routine	Routine: %ZTPTCH	This option prints routines associated with a patch. You <i>must</i> enter a list of routines and then the output will be by patch numbers.
XUPR- ROUTINE- TOOLS	Routine Tools	Menu		This is the group of programmer options that deal with routines. It includes the following options: • XUINDEX • XU FIRST LINE PRINT • XTFCR • XTFCE • XUROUTINE IN • XUPRROU • XUROUTINE OUT • XT-ROUTINE COMPARE • XUPR RTN EDIT • XT-VARIABLE CHANGER • XT-VERSION NUMBER • XTRGRPE • XUPR-RTN-TAPE-CMP • XTRDEL • XUPR RTN CHKSUM • XU CHECKSUM REPORT

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
		-		XU CHECKSUM LOAD
XUPR-RTN- TAPE-CMP	Compare routines on tape to disk	Run Routine	Routine: TAPE^XTRCMP	This option reads a standard DSM %RS tape or disk file or M/11 tape and compares the routines on the tape with a routine with the same name in the current account.
XUPRGL	List Global	Action	Routine: %G Entry Action: D @ (\$\$ (^\$zOSF (``OS") [``MSM":"^\$GL",^\$z OSF (``OS") [``DTM":" ^\$g",1:"^\$G"))	This option runs the operating system routine to list specified globals. For MSM this is %GL for other systems it is %G . This option is locked with the XUPROGMODE security key.
XUPRINT	Print Option File	Print		This option produces a formatted listing of the OPTION (#19) file, showing each option and its associated information.
XUPROG	Programmer Options	Menu		This menu is used by developers. It includes the following options: • XUPROGMODE (SYNONYM: PG) • XUPRGL • XUERRS • XT-NUMBER BASE CHANGER • XTSUMBLD (SYNONYM: NTEG) • DI DDMAP • XT-OPTION TEST • XQ UNREF'D OPTIONS

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
·	•	,,		XUPR-ROUTINE-TOOLS XTSUMBLD-CHECK XTV MENU XPD MAIN (SYNONYM: KIDS) XUROUTINES
XUPROGMODE	Programmer mode	Run Routine	Routine: PRGMODE^%ZO SV	This option drops the programmer into programmer direct mode. This option is locked with the XUPROGMODE security key.
XUPROTOCOL EDIT	Edit a Protocol	Edit	Entry Action: s dlaygo=101 Exit Action: k dlaygo i \$D(NAME) s xQORM=\$0(^ORD(101 ,"B",NAME,0))_";0 RD(101," d xref^xQORM k xQORM,NAME	This option creates or edits a protocol.
XUPRROU	List Routines	Run Routine	Routine: %ZTPP	This option uses the %ZTPP routine to print a listing of the routines.
XUPS ASSESSMENT DETAIL	XUPS ASSESSME NT DETAIL	Run Routine	Routine: DETAIL^XUPSCL R	List NEW PERSON (#200) file entries that have missing DOB, SSN, or SEX, and NEW PERSON (#200) file statistics.
XUPS ASSESSMENT STATS	XUPS ASSESSME NT STATS	Run Routine	Routine: STATS^XUPSCL R	List NEW PERSON (#200) file statistics for the cleanup.
XUPS NPF CLEANUP MAIN MENU	NPF cleanup main menu	Menu		This is the main menu for the NEW PERSON (#200) file cleanup. It includes the following options (listed in

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				display order): XUPS ASSESSMENT STATS (SYNONYM: STA; DISPLAY ORDER: 1) XUPS ASSESSMENT DETAIL (SYNONYM: DET; DISPLAY ORDER: 2) XUPS PREUPDATE NPF REPORTS (SYNONYM: PRE; DISPLAY ORDER: 3) XUPS UPDATE NEW PERSON FILE (SYNONYM: UPD; DISPLAY ORDER: 4)
XUPS PREUPDATE NPF REPORTS	XUPS PREUPDAT E NPF REPORTS	Run Routine	Routine: EN^XUPSPAID Entry Action: s xupsact="print" Exit Action: k xupsact	This option reports on all of the NEW PERSON (#200) file entries whose Name, DOB, and/or Sex is different from their corresponding PAID EMPLOYEE file entries, as well as the NEW PERSON (#200) file entries that will be updated.
XUPS UPDATE NEW PERSON FILE	XUPS UPDATE NEW PERSON FILE DATA	Run Routine	Routine: EN^XUPSPAID Entry Action: s xupsact="update"	This option updates NEW PERSON (#200) file entries with data from the PAID EMPLOYEE file.
XUPS VISTALINK	XUPS VISTALINK	Broker (Client /	RPC: XUPS	This option is an RPC Broker Client / Server

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
		Server)	PERSONQUERY	option.
XURELOG	Restart Session	Action	Entry Action: s:'\$D(XQCH) XQCH="REST" G:\$L(XQCH)>2 REST^XQ12 s XQUR="REST" G X PRMP^XQ12	This option returns a user to the signon logic, so that a session can be restarted without dropping a telecommunication line.
XURESJOB	Kill off a users' job Synonym: RJD	Action	Entry Action: W:'\$D(^\\$ZOSF(\RES JOB")) !,*7,"NOT AVAILABLE" X:\\$D(^(\RESJOB")) ^(\RESJOB") Exit Action: D ^XUTMRJD ;call TaskMan utility to adjust the list of running tasks	This option uses the MUMPS vendor's exit forcing utility to allow the system manager to forcibly exit MUMPS jobs. An exit action on this option allows the system manager to adjust TaskMan's list of running tasks if some of the processes forcibly exited were tasks. This option is locked with the XUMGR security key.
XUROUTINE IN	Input routines Output	Action	Entry Action: N % S %=\$G(^%ZOSF("OS")) D @\$S(%["OpenM":"^% RI",%["DTM":"^%rl oad",%["GT.M":"^% RI",1:"^%RR") Entry Action:	Loads routines from an external device, like a host file. CAUTION: Do not use this option if you are not sure how to run it! This routine outputs
OUT	routines		N % S %=\$G(^%ZOSF("OS")) D @\$S(%["GT.M":"^ZR O",%["OpenM":"^%R O",%["DTM":"^%rsa ve",1:"^%RS")	routines to an external device, such as a host file.
XUROUTINES	Routine Management Menu	Menu		This menu contains various Kernel options relating to the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				management of routines on the system. It includes the following options: • XTMOVE • XTRDEL • XTMOVE-IN • XUPRROU • XU FIRST LINE PRINT
XUS KAAJEE PROXY LOGON	KAAJEE PROXY BROKER CONTEXT	Broker (Client/ Server)	RPC: XUS KAAJEE GET USER VIA PROXY	This is the KAAJEE Application User Broker Context option.
XUS KAAJEE WEB LOGON	KAAJEE BROKER CONTEXT	Broker (Client / Server)	RPCs: • XUS KAAJEE GET USER INFO • XUS KAAJEE LOGOUT • XUS ALLKEYS • XUS KAAJEE GET CCOW TOKEN	This option is an RPC Broker Client/Server option.
XUS NPI CBO LIST	List of NPI data for CBO	Run Routine	Routine: CBOLIST^XUSNP IED	This option lists providers related to the NPI rollout. This list is sent to the CBO on a monthly basis for tracking status of the rollout.
XUS NPI ENTER NPI FOR PROVIDER	Add/Edit NPI values for Providers	Run Routine	Routine: CLEREDIT^XUSN PIED	This option is intended for support staff to be able to enter data related to an NPI value for providers.
XUS NPI EXEMPT PROVIDER	Mark/Unmar k Provider Exempt from requiring an	Run Routine	Routine: CLERXMPT^XUS NPIED	This option is used by support staff to indicate that a provider who has a Person Class entry

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	NPI			relating to a taxonomy value that would normally require and NPI value, as <i>not</i> needing one (e.g., if the provider were doing administrative work full time).
XUS NPI EXTRACT	XUS NPI EXTRACT REPORT	Run Routine	Routine: TASKMAN^XUSN PIX1	This option compiles the NPI Extract file and emails it to XXX@Q- NPS.VA.GOV
XUS NPI LOCAL REPORTS	Print Local NPI Reports	Run Routine	Routine: PRINTOPT^XUSN PIED	This option generates reports for the local facility on those who are expected to have NPI values entered.
XUS NPI MENU	NPI (National Provider ID) Menu	Menu		This menu provides the ability to enter data for a provider related to the National Provider ID. It includes the following options: • XUS NPI ENTER NPI FOR PROVIDER
				XUS NPI EXEMPT PROVIDER XUS NBL COAL
				XUS NPI LOCAL REPORTS This particular is backed.
				This option is locked with the XUSNPIMTL security key.
XUS NPI PROVIDER SELF ENTRY	PROVIDER NPI SELF ENTRY	Run Routine	Routine: USEREDIT^XUSN PIED	This option provides the ability for a provider to enter his/her own NPI value and effective date. It is intended to be attached to the XU COMMON menu and checks for whether the user selecting it has the need to enter an

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				NPI value.
XUS NPI SIGNON CHECK	NPI Signon Check	Action	Entry Action: D SIGNON^XUSNPIED	This option checks a user's signon to see whether the user needs to enter an NPI value. If so, a message is displayed to the user.
XUS SIGNON	Kernel sign- on context	Broker (Client / Server)	RPCs: • XUS SIGNON SETUP • XUS AV CODE • XUS INTRO MSG • XUS CVC • XUS AV HELP • XUS DIVISION SET • XUS GET USER INFO • XUS DIVISION GET • XWB GET BROKER INFO • XUS GET TOKEN • XUS CCOW VAULT PARAM • XUS GET CCOW	This option is an RPC Broker Client/Server option.
XUSAP PROXY LIST	Proxy User List	Print	TOKEN	This option runs a VA FileMan (FM) print to show any users that have a USER CLASS of APPLICATION PROXY or CONNECTOR PROXY.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUSAZONK	Purge of the %ZUA global	Run Routine	Routine: PURG^ZUA[MGR] Entry Action: s xUSLNT=1 Exit Action: k XUSLNT	This option purges the FAILED ACCESS ATTEMPTS and PROGRAMMER MODE ACCESS logs of all entries older than 30 days.
XUSC LIST	Print Sign-on Log	Print		This option prints the SIGN-ON LOG.
XUSCZONK	Purge Sign- On log	Run Routine	Routine: SCPURG^XUSPU RGE	This option purges the SIGN-ON LOG. All entries older than 30 days are removed permanently from the file.
XUSEC ISO ACTIVE USER EXTRACT	Special Active User Excel output	Print		This option produces a special Microsoft® Excel formatted output.
XUSEC ISO Q TERMINATION REPORT	Queueable ISO Terminated User Report	Print		This is a queueable version of the ISO's termination date report. The report dates are from the current date minus eight (8) days to the current date minus one (1) day.
XUSEC ISO TERMINATION REPORT	ISO's Terminated User Report	Run Routine	Routine: EP1^XUSECAD	This is the interactive option for the ISOs, where the user can select beginning and ending dates.
XUSEC UP ARROW TERM REPORT	Up Arrow Delimited Termination Report	Run Routine	Routine: EP1^XUSECAD Entry Action: s xUSECU="	This option produces a report that is a caret (^; aka Up-Arrow) delimited termination report that can be used as a spread sheet. It is suggested that the report be sent to an HFS device. If the screen is used, it will require a 132-column

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				width.
XUSEC ISO ACTIVE USER EXTRACT	Special Active User Excel Output	Print		This option is used by the Information Security Officer (ISO) to extract information to Microsoft® Excel for the 2008 SMART Database. NOTE: This option was requested by OCIS and released with Kernel Patch XU*8.0*424.
XUSER	User Management	Menu		This menu is used to add, change, and delete users from the NEW PERSON (#200) file, as well as clear devices for signon purposes. It includes the following options: • XUSERNEW (DISPLAY ORDER: 5) • XUSEREDIT (DISPLAY ORDER: 15) • XUSERREACT (DISPLAY ORDER: 25) • XUSERREACT (DISPLAY ORDER: 25) • XUSERDEACT (DISPLAY ORDER: 20) • XUSERDEACT (DISPLAY ORDER: 20) • XUTESTUSER (DISPLAY ORDER: 40) • XUSERINQ (DISPLAY ORDER: 35) • XUFILEACCESS (DISPLAY ORDER:

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
Option Name	Option Text	Гуре	(Based on Type)	• XUSESIG CLEAR (DISPLAY ORDER: 60) • XUSERBLK (DISPLAY ORDER: 10) • XUSESIG BLOCK • XUSERREPRINT • XUSER FILE MGR • XU-PERSON CLASS EDIT • XU-CLINICAL TRAINEE MENU • XUOPTWHO (SYNONYM: WHO) • XU-INACTIVE PERSON CLASS USERS
XUSER DIV CHG	Change my Division	Run Routine	Routine: DIVCHG^XUSER 1	This option changes the division to which you are currently assigned. It performs the same function as entering your current division at the "Select DIVISION: default division //" signon prompt. If you only have one division to select from, XUSER DIV CHG shows you your current division and indicates that you cannot change it.
XUSER FILE MGR	Manage User File	Menu		This menu manages the NEW PERSON (#200) file. It includes the following options: • XUSERPURGEAT T

			Routine / Action /	
			RPC / Other	
Option Name	Option Text	Type	(Based on Type)	Description
				XUSERAOLD
				XUSER KEY RE- INDEX
XUSER KEY RE-INDEX	Reindex the users key's	Run Routine	Routine: IXKEY^XUSMGR	This option re-indexes the NEW PERSON (#200) file KEY subfield.
XUSER PC BUILD	User PC build Print	Print		This option prints a list of users in the NEW PERSON (#200) file who hold the PROVIDER security key and have a Verify code. This option is not attached to a menu but can be added to the secondary menu of any user who will be working on this project and then removed when the project is complete. This option prints the following fields: NAME PERSON CLASS (Free Text) PROVIDER TYPE (Set of Codes). NOTE: The last two fields can only contain data at sites that have implemented the Decision Support System (DSS).
XUSER PC BUILD EDIT	User PC build Edit	Edit		This option allows the rapid data entry (R/S) of Person Class data. This option is <i>not</i> attached to a menu but

			D. C. LAC.	
			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				can be added to the secondary menu of a user who will be performing data entry and then removed when the project is complete.
XUSER SEC OFCR	User Security Menu	Menu		This menu contains options that allow the user to review users on the system. It includes the following options (listed in display order): XUSERINQ (1) XUSERING (1) XUSERSTATUS (3) XU FINDUSER (4) XUTESTUSER (5) XULISTKEY (6) XQOPACCESS (7) XUUSEROPT (8) XUSERDEACT (9) XUSERREACT (10) XUSER ISO TERMINATION REPORT (11) XUSEC UP ARROW TERM REPORT (12)
XUSER- CLEAR-ALL	Clear all users at startup	Run Routine	Routine: XUS6	This option is to be setup in the SPECIAL QUEUING to run whenever TaskMan starts up. It goes through and clears all users signed-on from the multiple signon restriction.
XUSERAOLD	Purge Log of Old Access	Run Routine	Routine: AOLD^XUSPURG	This option purges all inactive Access and

Outlan Name	Outlan Tout	T	Routine / Action / RPC / Other	De contesti o c
Option Name	and Verify Codes	Туре	(Based on Type)	Verify codes that are more than 270 to 400 days old. This allows for the recycling of codes after a minimum of 3 changes.
XUSERBLK	Grant Access by Profile	Run Routine	Routine: XUSERBLK	This option adds or edits one or more users according to an existing user profile. The complete profile of the actual or dummy user, menus, and security keys included, is copied to the other users. For new users, security forms are generated. (Use the Help Processor menu to edit the XUSER COMPUTER ACCOUNT help frame containing the text of the forms.) To route forms, be sure that the user profile has a service/section and that the corresponding entry in the SERVICE/SECTION file has a Coordinator. This option is locked with the XUMGR and XUADD security keys and is restricted for use by systems management staff.
XUSERCLR	Clear Terminal	Run Routine	Routine: X6^XUSMGR	This option clears a terminal that has been locked up due to too many errors during signon.
XUSERDEACT	Deactivate a User	Run Routine	Routine: XUSTERM	As of a specified TERMINATION DATE, user will <i>not</i> be allowed

			Routine / Action /	
Option Name	Option Text	Туре	(Based on Type)	Description
				to sign on to the computer.
XUSEREDIT	Edit an Existing User	Action	Entry Action: s DIC="^VA(200,",DI C(0)="AEMQ",DIC(" S")="I \$S(\$P(^(0),U,11): \$P(^(0),U,11)' <dt ,1:1)"="" ^dic="" d="" d0,da,die,dr<="" da='+Y,DR="[XUEXIS' dic="" k="" q:y="-1" s="" td="" ting="" user]",die="^VA(2 00," xudie^xus5=""><td>This option edits a user's characteristics. Users that have been terminated <i>cannot</i> be edited.</td></dt>	This option edits a user's characteristics. Users that have been terminated <i>cannot</i> be edited.
XUSEREDITSE LF	Edit User Characteristi cs	Run Routine	Routine: EUC^XUS5	This option edits certain user attributes as defined by the KERNEL SYSTEM PARAMETERS (#8989.3) file. At most, the user can edit their own VERIFY CODE, AUTO-MENU, TYPE-AHEAD, and NICKNAME. This can vary at your site. A user can also edit the SUBTYPE of their device.
XUSERINQ	User Inquiry	Inquire	Routine: USERINQ^XUSM GR	This option displays various user attributes. If the user is currently signed on, it displays the job and device numbers, the signon time, and what option is being executed. Otherwise, it displays the last signon time. It also displays which security keys are held by this user.
XUSERINT	Introductory text edit	Action	Entry Action: W !!,"Enter introductory text	This option edits the introductory text that is displayed each time

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
·	·	, , , , , , , , , , , , , , , , , , ,	to be displayed at each logon",!! S DIE="^XTV(8989.3, ",DA=1,DR=240 D ^DIE	the user signs on.
XUSERLIST	List users	Print		This message lists users known to the system.
XUSERNEW	Add a New User to the System	Run Routine	Routine: XUSERNEW	This option adds a new user to the system.
XUSERPOST	Post sign-in Text Edit	Action	Entry Action: W!!,"Enter Post Logon Text to be displayed after each logon.",!! S DIE="^XTV(8989.3, ",DA=1,DR=245 D ^DIE	This option displays the logon text after a user signs onto the system.
XUSERPURGE ATT	Purge Inactive Users' Attributes	Run Routine	Routine: XUSTERM1	This utility cleans up files. It removes all mailboxes and messages, mail groups, and security keys for users who have been terminated. If any of these users still retain Access codes, these will be deleted.
XUSERREACT	Reactivate a User	Run Routine	Routine: REACT^XUSERN EW	This option reactivates a user who has a TERMINATION DATE. You are asked to enter their ACCESS CODE. If you give him/her an Access code (or if he/she still has one), their TERMINATION DATE is removed.
XUSERREL	Release user	Run Routine	Routine: X8^XUSMGR	This option clears the record that a user is signed on to another terminal. It may seem that a user is signed on

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				when there is an abnormal exit, such as an error or entry into Programmer Mode.
XUSERREPRIN T	Reprint Access agreement letter	Run Routine	Routine: REPRINT^XUSER NEW	This option allows a site manager to reprint the computer access agreement letter. It will not reprint the Access code on the letter.
XUSERTOOLS	User's Toolbox	Menu		This menu provides several different utilities designed for the average user. It includes the following options: • XQTUSER • XU-SPL-MENU • XUSEREDITSELF • XUUSERDISP • XUUSERHELP • XUSESIG • XUTM USER • XUSER DIV CHG
XUSERVDISP	Server audit display	Print		This option displays the server-type option audit data.
XUSERWHERE	Where am I?	Action	Entry Action: D GETENV^*ZOSV W !!,"UCI: ",\$P(Y,U)," VOLUME SET: ",\$P(Y,U,2) W :\$P(Y,U,3)]"" " NODE: ",\$P(Y,U,3) W !," DEVICE: ",\$I,\$S(\$D(IO("IP")):" ("_IO(" IP")_")",1:"")	This option shows a user their environment. Changed from showing IO("ZIO") to IO("IP").
XUSESIG	Electronic Signature code Edit	Run Routine	Routine: XUSESIG	This option edits a user's INITIALS, SIGNATURE BLOCK TITLE, ELECTRONIC

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
Срион наше	Орион тож	.,,,,,	(Duodu dii Type)	SIGNATURE CODE, and OFFICE PHONE.
XUSESIG BLOCK	Electronic Signature Block Edit	Run Routine	Routine: EN^XUSESIG2	This option gives access to the Signature Block of the Electronic Signature. This is automatically set by a cross-reference of the NAME field. If it is changed with this option, it <i>must</i> contain the last name from the NAME field. Also, if the NAME field is changed this field will be changed and may need to be re-edited.
XUSESIG CLEAR	Clear Electronic signature code	Run Routine	Routine: CLEAR^XUSESI G	This option allows the site manager to clear (delete) a user's electronic signature code, so they may enter a new one.
XUSESIG DEG	EDUCATION (Degree) File Edit	Edit	DIC(20.11,	This option is used to edit degree entries in the EDUCATION (#20.11) file. These entries define valid degrees that users can enter in the DEGREE (#10.6) field in the NEW PERSON (#200) file.
XUSFACHK	Check Failed Access Log	Run Routine	Routine: FAILED^XUSFAC HK	This option runs the Failed Access Check routine XUSFACHK. It looks to see if there have been a large number of failed access attempts, since the routine was last run. If it finds that the number of failed access attempts is greater than the limit in

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
		Туро		the FAILED ATTEMPTS LIMIT - IRM field in the KERNEL SYSTEM PARAMETERS (#8989.3) file during normal business hours (8:00 a.m. to 4:30 p.m.) it sends a message to the mail group stored in the IRM MAIL GROUP field or the limit set in the FAILED ATTEMPTS LIMIT – AOD field in the KERNEL SYSTEM PARAMETERS (#8989.3) file after hours, it sends a message to the mail group in the AFTER HOURS MAIL GROUP.
XUSITEMGR	Operations Management	Menu		This menu contains options of use to the site manager, such as options for managing Kernel site parameters, sign-on log, introductory text, etc. It includes the following options: • XUSERINT (DISPLAY ORDER: 5) • XUSTATUS (DISPLAY ORDER: 1) • XUSTAT (DISPLAY ORDER: 6) • XQ XUTL \$J NODES • XQAB MENU • XURESJOB

Ontion No.	Outless 7	To our a	Routine / Action / RPC / Other	De coniné :
Option Name	Option Text	Туре	(Based on Type)	OESCRIPTION (SYNONYM: RJD) XUOPTUSER XUKERNEL XQALERT DELETE OLD XUSERPOST XQALERT MGR XWB MENU XOBU SITE SETUP MENU XLFIPV IPV4 IPV6 MENU (SYNONYM: IPV) XULM LOCK MANAGER MENU (SYNONYM: LOCK)
XUSITEPARM	Enter/Edit Kernel Site Parameters	Action	Entry Action: W!!,"Note: the TaskMan site parameters have been moved out of this file.",!,"Use the Edit TaskMan Parameters option to edit those values.",! S DA=1,DR="[XUSITEP ARM]",DIE=8989.3 D XUDIE^XUS5 EXIT Action: K DA,DIE,DR	This option edits the KERNEL SYSTEM PARAMETERS (#8989.3) file. It contains fields for default system values, lifetime of Verify code, auto-generation of Access codes, and name of user-characteristic edit template.
XUSPY	Information Security Officer Menu	Menu	Entry Action: D ^ASTR2	This menu is for the person serving as the Information Security Officer (ISO). It includes the following options: • XUSER SEC OFCR (DISPLAY ORDER: 1) • XUFILEACCESS SEC OFCR

			Routine / Action /	_
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
		Турс		(DISPLAY ORDER: 2) • XU SEC OFCR (DISPLAY ORDER: 3) • XUAUDIT MAINT (DISPLAY ORDER: 4) • XUMNACCESS (DISPLAY ORDER: 5) • DG SECURITY OFFICER MENU (DISPLAY ORDER: 6) • XUSEC ISO ACTIVE USER EXTRACT • 452 SECURITY LOG BY USER
XUSSPKI CRL UPLOAD	PKI CRL Upload	Run Routine	Routine: CRLUP^XUSSPKI	(SYNONYM: SL3) This option should be scheduled to run every hour to send any new URL for the CRLs to be collected by the PKI verification server.
XUSSPKI EDIT	Kernel PKI Parameter Edit	Action	Entry Action: N DA,DR,DDSFILE S DA=1,DR="[XUSSPKI]",DDSFILE=8989.3 D ^DDS	This option runs the XUSSPKI form to edit the PKI server IP address.
XUSSPKI UPN SET	ePCS Set SAN from PIV Card	Broker (Client/ Server	RPCs: • XUS PKI GET UPN • XUS PKI SET UPN	This is a Broker-type context option that sets the SUBJECT ALTERNATIVE NAME (#501.2) field (aka SAN field or USER PRINCIPLE NAME) in the NEW PERSON (#200) file from the Personal Identification Verification (PIV) Smart Card. This is used with

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
Option Name	Option Text	Туре	(Dased Oil Type)	the DEA ePCS electronic signature (esig) to be sure the correct certificate is selected from the PIV card. NOTE: This option only needs to be run once for a user at a site. It was released with Kernel Patch XU*8.0*580.
XUSTAT	CPU/Service /User/Device Stats	Run Routine	Routine: XUSTAT	This option gives you a system utilization report for CPUs, Services, or users.
XUSTATUS	System Status	Action	Entry Action: w @iof n duz,dt,dtime x:\$d(^\szosf(\ss'')) #2 ^(\ss'') d HOME^\szis	This option uses an operating system utility to show all current jobs signed onto the computer.
XUTERM	Terminal Type Edit	Edit		This option edits the TERMINAL TYPE (#3.2) file.
XUTESTUSER	Switch Identities	Run Routine	Routine: TESTM^XUS91	This option simulates signing on as another user, and thus, tests out a user's menus. It assigns all security keys but will <i>not</i> allow for the execution of any options.
XUTIME	Time	Action	Entry Action: w !!,\$\$HTE^XLFDT(\$H ,"P")	This command displays the time and date.
XUTIO	Device Management	Menu		This menu maintains the DEVICE (#3.5) file, which defines the characteristics of each device attached to the

			Double - / A - ()	
			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				computer. It includes the following options:
				• XUTERM (DISPLAY ORDER: 3)
				• XUDEV (DISPLAY ORDER: 2)
				• XUOUT (DISPLAY ORDER: 10)
				• XUDISPLAY (DISPLAY ORDER: 5)
				• XUCHANGE (DISPLAY ORDER: 1)
				• XULIST (DISPLAY ORDER: 6)
				• XUTTEST (DISPLAY ORDER: 9)
				• XUTLOOPBACK (DISPLAY ORDER: 8)
				• XUSERCLR (DISPLAY ORDER: 7)
				XU DA EDIT
				XUDEVEDIT
				XUDEV LINEPORT ADDR CURRENT
				XUDEV LINEPORT ADDR EDIT
				XUDEV LINEPORT ADDR RPT
				XUDEV RES-ONE
				XUDEV RES- CLEAR
XUTLOOPBAC	Loopback Test of	Action	Entry Action: D ^%ZIS Q:POP X	This option tests a terminal line with the

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
К	Device Port		^%ZOSF("EOFF"), ^% ZOSF("TYPE- AHEAD"), "F I=65:1:90 U IO W *I R *X:1 U IO(0) W:X>32 \$C(X)" X ^%ZOSF("EON"), ^%Z IS("C")	use of a loopback connection on the line. A loopback connector just ties pins 2, 3 together.
XUTM BACKGROUND PRINT	Print Options that are Scheduled to run	Print		This option prints a list of options from the OPTION SCHEDULING (#19.2) file that have data in one of the background task fields: • QUEUED TO RUN AT WHAT TIME • DEVICE FOR QUEUED JOB OUTPUT • RESCHEDULING FREQUENCY • SPECIAL QUEUEING
XUTM BACKGROUND RECOMMENDE D	Print Options Recommend ed for Queueing	Print		This option prints a list of options that have been recommended by the developers for background queueing.
XUTM BVPAIR	Site Parameters Edit	Edit		This option allows the system manager to edit the TASKMAN SITE PARAMETERS (#14.7) file.
XUTM CHECK ENV	Check Taskman's Environment	Run Routine	Routine: ZTMCHK	This option checks TaskMan's environment to make sure that links and global nodes required by TaskMan are present. These checks are the same checks that TaskMan performs every time it is started or restarted.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUTM CLEAN	Clean Task File	Run Routine	Routine: OPTION*XUTMK	This option cleans out the Task Log for the site manager, removing all entries for tasks that have completed, have been rejected, or have failed with an error. The site manager is asked to specify how old such entries can be before they should be deleted. It then deletes them from ^%ZTSK for all inactive tasks that are older than that. NOTE: This option is not queueable; though, it does create a tasked job to do the actual deletion. ZTMQCLEAN is the queueable version of this option.
XUTM DEL	Delete Tasks	Run Routine	Routine: XUTMD	This option allows users to dequeue their own tasks and delete them from the Task Log. Users can delete either a single task or a range of tasks. Holders of the ZTMQ security key selecting this option can delete any tasks.
XUTM DQ	Dequeue Tasks	Run Routine	Routine: XUTMDQ	This option allows users to dequeue their own tasks. Holders of the ZTMQ security key selecting this option can dequeue any

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUTM ERROR	Taskman Error Log	Menu		tasks. This menu contains options to help the site manager manage TaskMan's log of errors. It includes the following options: XUTM ERROR SHOW (1) XUTM ERROR LOG CLEAN RANGE (2) XUTM ERROR PURGE TYPE (3) XUTM ERROR DELETE (4) XUTM ERROR SCREEN LIST (5) XUTM ERROR SCREEN ADD (6) XUTM ERROR SCREEN EDIT (7) XUTM ERROR SCREEN EDIT (7)
XUTM ERROR DELETE	Delete Error Log	Run Routine	Routine: KILL^XUTMKE	This option deletes the Task Error Log.
XUTM ERROR LOG CLEAN RANGE	Clean Error Log Over Range Of Dates	Run Routine	Routine: RANGE^XUTMKE	This option allows the site manager to remove from TaskMan's error log all entries that occur on or between two dates. The site manager enters the two dates, first the earlier date and then the later date, and then the option removes the appropriate entries.
XUTM ERROR PURGE TYPE	Purge Error Log Of Type	Run Routine	Routine: TYPE^XUTMKE	This option provides a way to clean

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
	Of Error			TaskMan's log of errors. The site manager can enter a string, and this option then deletes every entry in the log that contains that string. For example, if the site manager enters " <undef>", then every error that contains this string will be deleted. Two other examples are ZTSK+3^XQ1:4 and E. The first removes all errors that occurred on the line and command indicated while the second removes all errors whose \$ZE value contains an E. NOTE: This does not edit the system's main error log, only TaskMan's Error Log in the</undef>
XUTM ERROR SCREEN ADD	Add Error Screens	Run Routine	Routine: SCRAD^XUTMKE 2	**XZTSCH global. This option adds more error screens. An error screen is a string of characters that TaskMan compares to the \$ZE value of every error it traps. TaskMan only logs those trapped errors whose \$ZE values do not contain an error screen as a substring. The system manager can choose to have the screen count the number of errors it screens out.

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
XUTM ERROR SCREEN EDIT	Edit Error Screens	Run Routine	Routine: SCRED^XUTMKE 2	This option edits error screens. This involves deciding whether or not each edited screen should count the errors that occur while the screen is in place, and whether to reset counters for screens that have already counted some screened errors. The screens themselves are just strings of characters that TaskMan compares against the \$ZE values of all errors it traps. Those errors whose \$ZE values do not contain any screens as substrings are logged, but those that do are not logged.
XUTM ERROR SCREEN LIST	List Error Screens	Run Routine	Routine: SCLIST^XUTMKE 1	This option displays the error screens that are currently in place. An error screen is a string of characters. Any error that TaskMan logs is checked against the list of error screens. If an error occurs whose \$ZE string contains a screen as a substring, then that error is not logged. Some error screens count the number of errors that they prevent from being logged.
XUTM ERROR SCREEN REMOVE	Remove Error Screens	Run Routine	Routine: SCREM^XUTMKE 1	This option removes error screens. Error screens provide the system manager with a way to prevent certain

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
				errors from being logged. TaskMan traps every error caused by its own code or by the code of the tasks it runs, but the only errors logged in the system error log and in TaskMan's error log are those errors whose \$ZE values do not contain an error screen as a substring. The system manager can decide whether to count the number of errors screened out.
XUTM ERROR SHOW	Show Error Log	Run Routine	Routine: LIST^XUTMKE	This option displays a simple list of the errors recorded by TaskMan.
XUTM INQ	List Tasks	Run Routine	Routine: XUTMQ	This option lists either all tasks currently queued or else all tasks listed in the Task Log.
XUTM MGR	Taskman Management	Menu	Entry Action: w:'\$\$TM^\\$ZTLOAD *7,!!,"WARNING TASK MANAGER DOESN'T SEEM TO BE RUNNING!!!!",!!,* 7	This menu is for site managers. It allows the manipulation of TaskMan. It includes the following options: • XUTM SCHEDULE (DISPLAY ORDER: 1) • XUTM BACKGROUND PRINT (DISPLAY ORDER: 7) • XUTM DEL (DISPLAY ORDER: 6) • XUTM REQ (DISPLAY ORDER: 5) • XUTM DQ

		_	Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				(DISPLAY ORDER: 4) • XUTM UTIL
				(DISPLAY ORDER: 2)
				• XU OPTION QUEUE (DISPLAY ORDER: 2)
				• XUTM INQ (DISPLAY ORDER: 3)
				XUTM BACKGROUND RECOMMENDED
				XUTM TL CLEAN
XUTM PARAMETER EDIT	Edit Taskman Parameters	Menu		This menu contains the options that edit the TaskMan parameter files. It includes the following options: • XUTM BVPAIR • XUTM UCI • XUTM VOLUME
XUTM PROBLEM CLEAR	Problem Device Clear	Run Routine	Routine: CLEAR^XUTMKA	This option clears the Problem Device global.
XUTM PROBLEM DEVICES	Problem Device report	Run Routine	Routine: EN1^XUTMKA	This option runs the XUTMKA routine to produce a list of devices that TaskMan is having problems opening. At the end of the report the Problem Device list is cleared.
XUTM QCLEAN	Queuable Task Log Cleanup	Run Routine	Routine: XUTMK	This option is equivalent to ZTMCLEAN except that this option can be scheduled through the Schedule/Unschedule Options [XUTM SCHEDULE] option to

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				run periodically. This option only keeps completed entries from the last seven (7) days, unless overridden by the DAYS TO KEEP OLD TASKS field in the VOLUME SET file, as well as all queued entries.
XUTM QPROBLEM DEVICES	Queuable Problem Device report	Run Routine	Routines: TASK^XUTMKA	This option is for the queueable version of XUTM PROBLEM DEVICES option. At the end of the report the Problem Device list is cleared.
XUTM REPNT	Repoint waiting tasks to a new port/device	Run Routine	Routine: REPNT^XUTMRP	This option allows the site staff to take all tasks waiting for a given port/LTA device and reschedule them to some new device and/or to a new time. This is useful when a port stops working, and the tasks backed up waiting for it can be sent to another device until it is fixed.
XUTM REQ	Requeue Tasks	Run Routine	Routine: XUTMR	This option requeues a user's own tasks. Users can modify the device that the task is to be run on and also the time that the task is to be run. Holders of the ZTMQ security key selecting this option can requeue any tasks and can also modify the task's priority and partition size.

Ontion Name	Ontion Toyt	Type	Routine / Action / RPC / Other	Description
XUTM RESTART	Option Text Restart Task Manager	Run Routine	(Based on Type) Out of Order Message: Not used in RDP environment Routine: RESTART^ZTMB	Description This option re-starts TaskMan, if it has failed.
XUTM RP	Change tasks device	Run Routine	Routine: XUTMRP	This option allows site staff to indicate a replacement device and to then repoint and waiting and future tasks to the new device. This is useful when a site renames devices or device becomes dedicated to a special task. This option can also go through the OPTION SCHEDULING (#19.2) file to repoint devices in this file.
XUTM RUN	Remove Taskman from WAIT State	Run Routine	Routine: RUN^ZTMKU	This option places TaskMan in a RUN state, in which TaskMan processes tasks normally, within fifteen seconds.
XUTM SCHEDULE	Schedule/Un schedule Options	ScreenMa n		This option edits the background job fields in the OPTION SCHEDULING (#19.2) file. The result of this action is to schedule or unschedule Task Manager tasks.
XUTM SNAPSHOT	Taskman snapshot	Run Routine	Routine: SNAP^XUTMHR	Schedule this option to grab a snapshot of TaskMan work counts and save them in the TASKMAN SNAPSHOT (#14.72) file. When the Task is

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
				scheduled, it takes an entry in the TASK PARAMETERS field. This is how many MINUTES to sample for, "," and how many SECONDS to wait between samples. It has a limit of 480 minutes (8 hours) and a minimum of 2 seconds to wait. At these limits it would record 14400 samples. It defaults to 60 minutes with a sample every 60 seconds if the TASK PARAMETERS field is <i>not</i> filled in.
XUTM STOP	Stop Task Manager	Run Routine	Routine: STOP^ZTMKU	This option shuts down TaskMan.
XUTM SYNC	SYNC flag file control	Run Routine	Routine: XUTMSYNC	This option runs the SYNC flag file control.
XUTM TL CLEAN	Cleanup Task List	Run Routine	Routine: ASK^XUTMRJD	This option runs the Cleanup Task List.
XUTM UCI	UCI Association Table Edit	Edit		This option allows the system manager to edit the UCI ASSOCIATION (#14.6) file.
XUTM USER	TaskMan User	Run Routine	Routine: XUTMUSE	This option provides end users with information about their current tasks and with the ability to stop or modify and reschedule those tasks.
XUTM UTIL	Taskman Management Utilities	Menu		This menu contains options to assist in managing TaskMan. It includes the following options: • XUTM WAIT

			Routine / Action / RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
Option Name	Option Text	Туре		(DISPLAY ORDER: 5) • XUTM RUN (DISPLAY ORDER: 6) • XUTM STOP (DISPLAY ORDER: 7) • XUTM ERROR (DISPLAY ORDER: 8) • XUTM CLEAN (DISPLAY ORDER: 9) • XUTM CHECK ENV (DISPLAY ORDER: 2) • XUTM ZTMON (SYNONYM: MTM) (DISPLAY ORDER: 1) • XUTM PARAMETER EDIT (DISPLAY ORDER: 3)
				XUTM SYNC XUTM DD
				XUTM RP XUTM REPNT
				XUTM PROBLEM DEVICES
				XUTM PROBLEM CLEAR
XUTM VOLUME	Volume Set Edit	Edit		This option allows the system manager to edit the Volume Set file.
XUTM WAIT	Place Taskman in a WAIT State	Run Routine	Routine: WAIT^ZTMKU	This option places TaskMan in a WAIT state, in which TaskMan is active but does <i>not</i> process any

			Routine / Action /	
Option Name	Option Text	Type	RPC / Other (Based on Type)	Description
	·			tasks, within fifteen seconds.
XUTM ZTMON	Monitor Taskman	Run Routine	Routine: ZTMON	This option continually monitors the status of TaskMan and its queues.
XUTTEST	Send Test Pattern to Terminal	Action	Entry Action: D ^%ZIS I 'POP R "HOW MANY LINES? ",X:DTIME U IO S Y=0 X "F X=X:-1 W ! Q:'X F I=1:1:IOM W \$C(I+X#96+32)" X ^%ZIS("C")	This option prints a selected number of nonsense lines on a terminal to test data communications.
XUUSERACC	Diagram Menus	Run Routine	Routine: NORMAL^XQ4	This option displays all of the options available to a given user, including all of the menus and options, according to the security and primary option.
XUUSERACC1	Menu Diagrams (with Entry/Exit Actions)	Run Routine	Routine: FULL^XQ4	This option displays all of the options available to a given user, including all of the menus and options, according to the user's security and primary option. The information displayed includes: Entry Actions Exit Actions Prohibited Times Locks Option Names Synonyms
XUUSERACC2	Abbreviated Menu Diagrams	Run Routine	Routine: ABBREV^XQ4	This option provides an abbreviated (Option Names, Menu Text, and Synonyms) display of all the options available to a given

Option Name	Option Text	Туре	Routine / Action / RPC / Other (Based on Type)	Description
				user, including all of the menus and options, according to the user's security and primary menu.
XUUSERDISP	Display User Characteristi cs	Run Routine	Routine: XQUSR	This option displays the user's name, location, and characteristics.
XUUSERHELP	User Help	Action	Entry Action: s xQH="XQ- userhelp" d en^xQH	This option displays basic help information for the user.
XUUSEROPT	User Audit Display	Print		This option display sorts by user then by option. It also prompts for print device to generate a hard copy listing.
XUUSERSTATU S	User Status Report	Run Routine	Routine: XUS91	This option produces a report of the users currently signed onto this CPU and this UCI. It shows the option they are running and when they signed on, as well as their device and job numbers.
XUVERSIONE W-HELP	Kernel New Features Help	Action	Entry Action: s xQH="XUDOC NEW FEATURES*" D EN^XQH	This option directs you to a series of help frames describing the new features of Kernel.
XUXREF	List Options by Parents and Use	Run Routine	Routine: XQ31	This option produces a cross-reference listing of all options, showing their parents on the menu tree, detecting bad pointers, and showing which options have no parents. It also shows the uses of the option as a: • Primary menu option

			Routine / Action /	
		_	RPC / Other	
Option Name	Option Text	Туре	(Based on Type)	Description
				 Secondary menu option Tasked option Combination of these.
XUXREF-2	Show Users with a Selected primary Menu	Run Routine	Routine: XQ32	This option generates a listing of those users who have a selected option as their Primary menus option or as a Secondary menu option. It does <i>not</i> show all users who might have access to a particular option. It only looks at Primary (signon) menus and top-level secondary menu options.
XUZUSER	User Management	Menu	Entry Action: w *27,*43,!!!!!,?20 ,"USER EDIT MENU",! Exit Action: w *27,*43,!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	This is a basic user management menu. It includes the following options: • XUSERDEACT • XUSERINT • XUSERNEW • XUSERREACT • XUSERREACT
XUPS ASSESSMENT DETAIL	XUPS ASSESSME NT DETAIL	Run Routine	Routine: DETAIL^XUPSCL R	This option lists NEW PERSON (#200) file entries that have missing DOB, SSN, or SEX, and NEW PERSON (#200) file statistics.
XUPS ASSESSMENT STATS	XUPS ASSESSME NT STATS	Run Routine	Routine: STATS^XUPSCL R	This option lists NEW PERSON (#200) file statistics for the cleanup.
XUPS PREUPDATE	XUPS PREUPDAT	Run Routine	Routine:	This option reports on all of the NEW

			Routine / Action /	
Option Name	Option Text	Туре	RPC / Other (Based on Type)	Description
NPF REPORTS	E NPF REPORTS		EN^XUPSPAID Entry Action: s xupsact="print" Exit Action: k xupsact	PERSON (#200) file entries whose NAME, DOB, and/or SEX is different from their corresponding PAID EMPLOYEE file entries, as well as the NEW PERSON (#200) file entries that will be updated.
XUPS UPDATE NEW PERSON FILE	XUPS UPDATE NEW PERSON FILE DATA	Run Routine	Routine: EN^XUPSPAID Entry Action: s xupsact="update"	This option updates NEW PERSON (#200) file entries with data from the PAID EMPLOYEE file.
XUPS VISTALINK	XUPS VISTALINK	Broker (Client/ Server)	RPC: XUPS PERSONQUERY	This is an RPC Broker Client/Server option.
XUS NPI EXTRACT REPORT	XUS NPI EXTRACT REPORT	Run Routine	Routine: TASKMAN^XUSN PIX1	This option compiles the NPI EXTRACT file and emails it to XXX@Q-NPS.VA.GOV
XUS PROC CNT CLUP	XUS Process count cleanup	Run Routine	Routine: CLEAR^XUSCNT (0)	This option is only needed for GT.M sites. For a GT.M site it should be scheduled to run between every 1 to 8 hours. This is the Kernel process count cleanup routine. It checks the entries in XUTL("XUSYS",\$J) to see if they are still active and if not remove the entry.

5.3.2 Toolkit

The following options are distributed with the Kernel Toolkit software "XT" namespace; listed alphabetically:

Table 25: Options—Exported Toolkit Options

Option Name	Option Text	Туре	Routine	Description
XT-BLD RTN LIST	Routine Summary List	Run Routine	Routine: BUILD^XTRUTL	This option creates a list of routines in a build with before and after checksums, and second line data. This list can be used in a cut and paste operation when preparing a patch.
XT-KERMIT EDIT	Edit KERMIT holding file	Edit		This option allows the user to edit their own holding file. They can change the name, Transfer mode, authorized viewers, and the data.
XT-KERMIT MENU	Kermit menu	Menu	Entry Action: D INIT^XTKERM4 Exit Action: D CLEAN^XTKERM4	This is the top-level menu for Kermit functions. It gives access to the send, receive, and edit options. It includes the following options: • XT-KERMIT RECEIVE (SYNONYM: R) • XT-KERMIT SEND (SYNONYM: S) • XT-KERMIT EDIT (SYNONYM: E) • XT-KERMIT SPOOL DL
XT-KERMIT RECEIVE	Receive KERMIT file	Run Routine	Routine: R^XTKERMIT	This option receives a file over the terminal line from a remote system in the KERMIT protocol.
XT-KERMIT SEND	Send KERMIT file	Run Routine	Routine: S^XTKERMIT	This option sends a file from the host via the terminal line to a remote

Option Name	Option Text	Туре	Routine	Description
				system in the KERMIT protocol.
XT-KERMIT SPOOL DL	Download a Spool file entry	Run Routine	Routine: KERMIT^ZISPL	This option downloads (sends) a spool document from the SPOOL DOCUMENT (#3.51) file to a local PC using the KERMIT protocol.
XT-NUMBER BASE CHANGER	Number base changer	Run Routine	Routine: XTBASE	This option runs a number base calculator. It allows input in base 2, 8, 10, 16, and displays the number in all 4 bases. It is locked with the XUPROGMODE security key.
XT-OPTION TEST	Test an option not in your menu	Action	ENTRY ACTION: S DIC=19,DIC(0)="A EMQZ",DIC("A")=" Option entry to test: ",DIC("S")="I \$P(^(0),U)'[""XU PROG""" D ^DIC K DIC I Y>0 S XQY=+Y,XQUR=\$P(Y ,U,2),XQDIC="U", XQY0=^DIC(19,XQY ,0),^("T")=^XUTL ("XQ",\$J,"T")-1 G M0^XQ	This option is for inhouse testing of options only. It allows the selection of an option from the OPTION (#19) file and then executes it. CAUTION: No security checks are performed; therefore, this option should only be given to developers.
XT-PURGE ERRORS	Clean Error Trap	Run Routine	Routine: XTERPUR	This option deletes old errors from the Error Trap. This option is locked with the XUPROGMODE security key.
XT-ROUTINE COMPARE	Compare two routines	Run Routine	Routine: XTRCMP	This option compares two routines located in the current account and prints a list of differences. It uses the MailMan compare

Option Name	Option Text	Туре	Routine	Description
				routine to do the work.
XT-RTN CS EDT	Old Checksum Edit	Edit		This option edits the CHECKSUM field in the ROUTINE (#9.8) file that is used by the Routine Summary List.
XT-RTN CS UPDATE	Old Checksum Update from Build	Run Routine	Routine: UPDATE^XTRU TL	This option updates the old checksum of the routine in a build with the routines current checksum value. This option should be run after a patch has been released and before any new editing of the routines takes place.
XT-VARIABLE CHANGER	Variable changer	Run Routine	Routine: XTVCHG	This option runs the XTVCHG routine that does a fair job of changing all occurrences of a variable to another. It changes DOs and GOTOs also, but does not change the TAG. This option is locked with the XUPROGMODE security key.
XT-VERSION NUMBER	Version Number Update	Run Routine	Routine: XTVNUM	This option runs the XTVNUM routine that updates or sets the version number into a set of routines.
XTCM MAIN	Capacity Planning	Menu		This menu holds all the currently available capacity management functions. It includes the following options: • KMPS SAGG MANAGER
				KMP MAIL GROUP EDIT (SYNONYM: CMG) KMPR RUM

Option Name	Option Text	Туре	Routine	Description
				MANAGER MENU (SYNONYM: RUM) • KMPD CM TOOLS MANAGER MENU (SYNONYM: TLS)
XTFCE	Flow Chart from Entry Point	Run Routine	Routine: XTFCE	This option produces a flow chart on the terminal screen of the processing performed from the specified entry point to the termination of processing resulting from that entry point. It also permits the user to expand the code in other routines or entry points referenced by DO or GOTO commands.
XTFCR	Flow Chart Entire Routine	Run Routine	Routine: XTFCR	This option produces a flow chart of the processing performed within a routine.
XTLATSET	VAX DSM Device Set- up	Run Routine	Routine: XTLATSET Entry Action: S DIR(0)="Y",DIR(" A")="Want to proceed",DIR("A" ,1)="Do not use unless you are in the startup account",DIR("A" ,2)="where the correct VMS files are present!",DIR("B ")="No",DIR("?") ="See option description" D ^DIR K DIR S:Y'=1!\$D(DIRUT) XQUIT=""	CAUTION: Do not run this option without first understanding how it works and what will result. It assumes the existence of a SYSPRINT.CO M file, which is a VMS command file originally distributed by the DHCP Cookbook team. The LAT\$STARTUP file is also involved in the process.

Option Name	Option Text	Туре	Routine	Description
				This option runs the XTLATSET routine. The purpose is to allow system managers to keep the Kernel and VMS device tables synchronized with the least amount of effort. Those who prefer to use the VMS editor to modify the VMS device tables according to changes in the Kernel DEVICE (#3.5) file will not want to use this option. This option can be used when first moving Kernel to a VMS environment. It can be used thereafter to rebuild the files if they are not in sync. When running this option, it is critical to be in the configuration that has a complete Kernel DEVICE (#3.5) file, one with all the VMS devices used by any other configuration. The VMS files that are built are automatically used at the next VMS startup. This option runs the XTLATSET routine to build VMS command files to coordinate the Kernel and VMS device tables. It reads from the Kernel's DEVICE (#3.5) file for_LTA devices and writes three VMS command files: • LT_LOAD.COM file sets up printers in LATCP. • The LT_PRT.DAT

Option Name	Option Text	Туре	Routine	Description
				file is read by SYSPRINT.COM to set VMS parameters for printers and other devices and can optionally set up VMS spooling. The TSC_LOAD.COM file establishes printer parameters to be used in the DEC server's device tables. This option is locked with the XUMGR security key. CAUTION: This option should be used with care. The process should be reviewed beforehand to be sure that other VMS device settings are not altered in an unexpected way. It is assumed that the system has been configured with knowledge of the DHCP Cookbook recommendatio ns.
XTLKLKUP	Multi-Term Lookup (MTLU)	Run Routine	Routine: A^XTLKTICD	This is a test lookup option. It is tests what has been entered and how the package does the lookup.

Option Name	Option Text	Туре	Routine	Description
XTLKMODKY	Keywords	Action	Entry Action: s xTLKOP="Keywords " D KE^XTLKEFOP K XTLKOP	This is the option that allows the user to enter/edit the LOCAL KEYWORD (#8984.1) file.
XTLKMODPAR K	Delete Entries From Look-up	Run Routine	Routine: DD^XTLKEFOP	This option is used to delete entries out of the LOCAL LOOKUP (#8984.4) file. There cannot be any Keywords, Shortcuts, or Synonyms associated with the file to be deleted, in order to do this. This option is locked with the XTLKZMGR security key.
XTLKMODPAR S	Add Entries To Look-Up File	Run Routine	Routine: LL^XTLKEFOP	This option sets entries into the LOCAL LOOKUP (#8984.4) file. This option is locked with the XTLKZMGR security key.
XTLKMODSH	Shortcuts	Action	Entry Action: s XTLKOP="Shortcut s" D SH^XTLKEFOP K XTLKOP	This option is to enter/edit Shortcuts in the LOCAL SHORTCUT (#8984.2) file.
XTLKMODSY	Synonyms	Action	Entry Action: s XTLKOP="Synonyms " D SY^XTLKEFOP K XTLKOP	This option is to enter/edit Synonyms in the LOCAL SYNONYM (#8984.3) file.
XTLKMODUTL	Add/Modify Utility	Menu		This is a menu for the enter/edit options of the KEYWORD, SHORTCUT, and SYNONYM files. It includes the following options (listed in display order): • XTLKMODSH (1; SYNONYM: SH) • XTLKMODKY (2; SYNONYM: KE)

Option Name	Option Text	Туре	Routine	Description
				• XTLKMODSY (3; SYNONYM: SY)
XTLKPRTUTL	Print Utility	Action	Entry Action: D A^XTLKPRT	This option is used to print out the Keywords, Shortcuts, and Synonyms.
XTLKUSER2	Multi-Term Lookup Main Menu	Menu		This is the main option for the MTLU package. It includes the following options: • XTLKPRTUTL • XTLKLKUP • XTLKUTILITIES
XTLKUTILITIES	Utilities for MTLU	Menu		This is the utilities menu for MTLU. It includes the following options: • XTLKMODUTL • XTLKMODPARS (SYNONYM: ST) • XTLKMODPARK (SYNONYM: KL) This menu is locked with the XTLKZMGR security key.
XTMENU	Application Utilities	Menu		This menu contains utilities that can be used by an application programmer. It includes the following options: • XTLKUSER2 • XDR MAIN MENU
XTMOVE	Move Routines across Volume Sets	Run Routine	Routine: %ZTMOVE	This option runs the %ZTMOVE routine. It moves routines from one volume set to another. A specified set of routines can be moved to a specified UCI on a different volume set in one step (automatically) or in two steps. The second step requires use of the Bring in Sent Routines

Option Name	Option Text	Туре	Routine	Description
				[XTMOVE-IN] option in the destination UCI/Volume Set. This second option brings in the sent routines by running IN^%ZTMOVE. This option is locked with the XUPROGMODE security key.
XTMOVE-IN	Bring in Sent Routines	Run Routine	Routine: IN^%ZTMOVE	CAUTION: This option is only to be used after invoking the Move Routines across Volume Sets [XTMOVE] option.
				When in the destination UCI/Volume Set, this option installs the routines that were previously sent. This option is locked
				with the XUPROGMODE security key.
XTOOLS	Programmer tools	Menu		This is a menu to link and document programmer tools that are part of Kernel. Not all of the items will make sense to use from a menu. It includes the following options:
				XT-VERSION NUMBER
				XT-VARIABLE CHANGER
				XT-NUMBER BASE CHANGER
				XT-ROUTINE COMPARE XTEOR
				XTFCR

Option Name	Option Text	Туре	Routine	Description
				(SYNONYM: FCR) • XTFCE (SYNONYM: FCE) This menu is locked with the XUPROGMODE security key.
XTQUEUABLE OPTIONS	Toolkit Queuable Options	Menu		This menu, which has no parent, collects together all of the parentless Toolkit options that are intended to be scheduled through the TaskMan Schedule/Unschedule Options [XUTM SCHEDULE] option.
XTRDEL	Delete Routines	Run Routine	Routine: %ZTRDEL	This option runs the %ZTRDEL routine to delete one or more routines. This option is locked with the XUPROGMODE security key.
XTRGRPE	Group Routine Edit	Run Routine	Routine: XTRGRPE	This option calls the XTRGRPE routine to edit a group of routines. Once several routines are identified, the Kernel %Z editor is called. This option is locked with the XUPROGMODE security key.
XTRMONITOR	Monitor Routines for Changes	Run Routine	Routine: XTRMON	This option schedules the XTRMON routine to Monitor routines for changes. It uses the ROUTINE MONITOR field in the KERNEL SYSTEM PARAMETERS (#8989.3) file to control if all routines or just

Option Name	Option Text	Туре	Routine	Description
				selected N-spaces should be monitored. The checksum that is calculated is stored in the routine file along with the date that it changed. It also goes through the ROUTINE (#9.8) file and checks that all of the routines are still in the UCI. This keeps the ROUTINE (#9.8) file current for KIDS. The output of the routine is the XTRMON bulletin that is sent to the attached mail group.
XTSUMBLD	Build an 'NTEG' routine for a package	Run Routine	Routine: XTSUMBLD	This option gets a package namespace from the PACKAGE (#9.4) file. It then lists routines from the user. It then builds a <namespace>NTEG routine that has a checksum for each of the routines. This routine can be run to see if there has been any change to a routine since the NTEG routine was built.</namespace>
XTSUMBLD- CHECK	Calculate and Show Checksum Values	Run Routine	Routine: CHCKSUM^XTS UMBLD	This option calls CHCKSUM^XTSUMBL D to calculate and show the checksum value for one or more routines in the current account. This value is referenced in the Patch Module description for routine patches.
XTV EDIT VERIF PACKAGE	Edit Verification Package File	Edit		This option is used to enter or edit files and namespaces in the PACKAGE (#9.4) file.
XTV MENU	Verifier Tools	Menu		This menu contains

Option Name	Option Text	Туре	Routine	Description
	Menu			options that are available as tools for verification during program development. It includes the following options: • XTVR COMPARE (DISPLAY ORDER: 20) • XTVR UPDATE (DISPLAY ORDER: 5) • XTVG COMPARE • XTVG COMPARE • XTVG UPDATE • XTVG UPDATE • XTV EDIT VERIF PACKAGE • XTVR MOST RECENT CHANGE DATE • XTVR RESTORE PREV ROUTINE
XTVG COMPARE	Global Compare for selected package	Run Routine	Routine: XTVGC2	This option is used to produce a listing of changes in the global structure, including file protection and templates, and a previously stored version of the package (using the Accumulate Global [XTVGC UPDATE] option).
XTVG UPDATE	Accumulate Globals for Package	Run Routine	Routine: XTVGC1	This option accumulates the current globals for a package for comparison with subsequent versions. The global data is accumulated for the ^DIC(fn,0, the ^DD(fn, nodes where fn is an included file number), and the Edit, Print, and Sort templates for the files indicated as related to the package in the

Option Name	Option Text	Туре	Routine	Description
				PACKAGE (#9.4) file.
XTVR COMPARE	Routine Compare - Current with Previous	Run Routine	Routine: XTVRC2	This option compares one or more current routines to previous versions that have been recorded using the Update with current routines option. Differences between the current version and the indicated number of prior versions are noted.
XTVR MENU	Verifier Tools Menu	Menu		This menu contains options that are available as tools for verification during program development. It includes the following options: • XTVR COMPARE (DISPLAY ORDER: 20) • XTVR UPDATE (DISPLAY ORDER: 5)
XTVR MOST RECENT CHANGE DATE	Last Routine Change Date Recorded	Run Routine	Routine: XTVRC1A	This option lists the most recent date on which a change was recorded for the selected routines. The date piece of the first line of the routine and version and patch information are also displayed. The version number can be changed, and the routine recorded after that date, but the last change date recorded is that date involving a change in more than the second (version number) line.

Option Name	Option Text	Туре	Routine	Description
				Update Routine option must have been used one or more times to record the routine and changes to the routine.
XTVR RESTORE PREV ROUTINE	UNDO Edits (Restore to Older Version of Routine)	Run Routine	Routine: XTVRCRE	This option restores a routine back to a previous version that is available in the previous version edits shown by the Routine Compare option. The user <i>must</i> specify a routine name to be used for the restored routine that is <i>not</i> currently used, so that no current routine is destroyed as a result of saving the newly restored routine. After checking that the restored routine is the desired version, the user can rename it as desired.
XTVR UPDATE	Update with current routines	Run Routine	Routine: XTVRC1	This option records the text of the routines indicated in the file used to maintain changes in routines. Only the last version entered is kept completely, previous entries reflect only the changes in lines added and/or deleted to make the next version. This option is used to record the current routine structure, so that it can be compared with future versions of the routine using the Routine Compare - Current with Previous option.

6 Archiving and Purging

6.1 Archiving

There are no software-specific archiving procedures or recommendations for Kernel or Kernel Toolkit.

6.2 Purging

Kernel provides a number of options to facilitate the purging of Kernel files and the cleanup of Kernel-produced globals. <u>Table 26</u> contains a list of the purging options. The recommended scheduling frequency is shown for some options; all such options are queueable. The Clear All Users at Startup option requires special queueing.



REF: The location of a detailed discussion of each option is given in <u>Table 26</u>; unless otherwise noted, the reference given is to a chapter in the *Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide*.

Table 26: Options—Kernel Purging Options

Purging Option	Frequency	References for More Information
Audited Options Purge		Menu Manager: System Management" chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide & Security Tools Manual
Automatic Deactivation of Users	1 day	Signon/Security: System Management chapter in the <i>Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide</i>
Clean Error Log over Range of Dates		TaskMan: System Management— Operation Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Clean Old Job Nodes in ^XUTL	7 days	Menu Management: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Clean Task File		TaskMan: System Management— Operation Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Clear All Users at Startup		Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide

Purging Option	Frequency	References for More Information
Clean Error Trap		Error Processing Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Deactivate a User		Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Delete Error Log		TaskMan: System Management— Operation Chapter in the <i>Kernel 8.0 & Kernel Toolkit 7.3 Systems</i> <i>Management Guide</i>
Delete Old (>14 d) Alerts	1 day	Alerts Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Failed Access Attempts Log Purge		Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide & Security Tools Manual
Programmer Mode Entry Log Purge		Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide & Security Tools Manual
Purge Error Log of Type of Error		TaskMan: System Management— Operation Chapter in the <i>Kernel 8.0 &</i> <i>Kernel Toolkit 7.3 Systems</i> <i>Management Guide</i>
Purge Inactive Users' Attributes		Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Purge Log of Old Access and Verify Codes	(up to site)	Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide & Security Tools Manual
Purge of ^%ZUA Global	15 days	Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide
Purge Old Spool Documents	7 days	Spooling Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide

Purging Option	Frequency	References for More Information
Purge Sign-on Log	1 day	Signon/Security: System Management Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide & Security Tools Manual
Queuable Task Log Cleanup	1 day	TaskMan: System Management— Operation Chapter in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide



REF: The "KIDS: System Management—Installations" chapter in the *Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide* contains recommendations for purging the INSTALL (#9.7) and BUILD (#9.6) files.

7 Callable Entry Points

This chapter lists all of the callable entry points (i.e., Application Program Interfaces [APIs]) that are available for general use with Kernel and Kernel Toolkit (i.e., supported or controlled subscription).



NOTE: A set of nodes is created during Kernel's installation that contains operating system-specific code. These nodes are descendent from ^%ZOSF. Most can be executed in application code.

REF: Each operating system node is described in the "Operating System Interface: Programmer Tools" chapter in the *Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide*.

<u>Table 27</u> lists the Kernel and Kernel Toolkit APIs. It includes the routine name, tag entry point, Integration Control Registration (ICR) number, if any, and a brief description.



REF: Every API and executable node is described in detail in the *Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide*. Refer to the appropriate section in that manual for details, including input and output parameters/variables for each API.

Table 27: Kernel and Kernel Toolkit APIs (Callable Entry Points)—Supported and Controlled Subscription

Routine	Entry Point	ICR#	Description
MXMLDOM	\$\$ATTRIB	3561	XML—Get Attribute Name
	\$\$CHILD	3561	XML—Get Child Node
	\$\$CMNT	3561	XML—Extract Comment Text (True/False)
	CMNT	3561	XML—Extract Comment Text (True/False)
	DELETE	3561	XML—Delete Document Instance
	\$\$EN	3561	XML—Initial Processing, Build Inmemory Image
	\$\$NAME	3561	XML—Get Element Name
	\$\$PARENT	3561	XML—Get Parent Node
	\$\$SIBLING	3561	XML—Get Sibling Node
	\$\$TEXT	3561	XML—Get Text (True/False)
	TEXT	3561	XML—Get Text (True/False)
	\$\$VALUE	3561	XML—Get Attribute Value
MXMLPRSE	EN	4149	XML—Event Driven API
MXMLUTL	\$\$SYMENC	4153	XML—Encoded Strings in Messages

Routine	Entry Point	ICR#	Description
	\$\$XMLHDR	4153	XML—Message Headers
XGF	CHGA	3173	Screen Change Attributes
	CLEAN	3173	Screen/Keyboard Exit and Cleanup
	CLEAR	3173	Screen Clear Region
	FRAME	3173	Screen Frame
	INITKB	3173	Keyboard Setup Only
	IOXY	3173	Screen Cursor Placement
	PREP	3173	Screen/Keyboard Setup
	\$\$READ	3173	Read Using Escape Processing
	RESETKB	3173	Exit XGF Keyboard
	RESTORE	3173	Screen Restore
	SAVE	3173	Screen Save
	SAY	3173	Screen String
	SAYU	3173	Screen String with Attributes
	SETA	3173	Screen Video Attributes
	WIN	3173	Screen Text Window
XIPUTIL	CCODE	3618	FIPS Code Data
	\$\$FIPS	3618	FIPS Code for ZIP Code
	\$\$FIPSCHK	3618	Check for FIPS Code
	POSTAL	3618	ZIP Code Information
	POSTALB	3618	Active ZIP Codes
XLFCRC	\$\$CRC16	3156	Cyclic Redundancy Code 16
	\$\$CRC32	3156	Cyclic Redundancy Code 32
XLFDT	\$\$%H	10103	Convert Seconds to \$H
	\$\$DOW	10103	Day of Week
	\$\$DT	10103	Current Date (FM Date Format)
	\$\$FMADD	10103	VA FileMan Date Add
	\$\$FMDIFF	10103	VA FileMan Date Difference
	\$\$FMTE	10103	Convert FM Date to External Format
	\$\$FMTH	10103	Convert FM Date to \$H
	\$\$FMTHL7	10103	Convert FM Date to HL7 Date

Routine	Entry Point	ICR#	Description
	\$\$HADD	10103	\$H Add
	\$\$HDIFF	10103	\$H Difference
	\$\$HL7TFM	10103	Convert HL7 Date to FM Date
	\$\$HTE	10103	Convert \$H to External Format
	\$\$HTFM	10103	Convert \$H to FM Date Format
	\$\$NOW	10103	Current Date & Time (FM Format)
	\$\$SCH	10103	Next Scheduled Runtime
	\$\$SEC	10103	Convert \$H/FM date to Seconds
	\$\$TZ	10103	Time Zone Offset (GMT)
	\$\$WITHIN	NONE	Checks Dates/Times Within Schedule
XLFHYPER	\$\$ACOSH	10144	Hyperbolic Arc-cosine
	\$\$ACOTH	10144	Hyperbolic Arc-cotangent
	\$\$ACSCH	10144	Hyperbolic Arc-cosecant
	\$\$ASECH	10144	Hyperbolic Arc-secant
	\$\$ASINH	10144	Hyperbolic Arc-sine
	\$\$ATANH	10144	Hyperbolic Arc-tangent
	\$\$COSH	10144	Hyperbolic Cosine
	\$\$COTH	10144	Hyperbolic Cotangent
	\$\$CSCH	10144	Hyperbolic Cosecant
	\$\$SECH	10144	Hyperbolic Secant
	\$\$SINH	10144	Hyperbolic Sine
	\$\$TANH	10144	Hyperbolic Tangent
XLFIPV	SSCONVERT	5844	Convert any IP Address to Standardized IP Address
	\$\$FORCEIP4	5844	Convert any IP Address to IPv4
	\$\$FORCEIP6	5844	Convert any IP Address to IPv6
	\$\$VALIDATE	5844	Validate IP Address Format
	\$\$VERSION	5844	Show System Settings for IPv6
XLFMSMT	\$\$BSA	3175 & 10143	Body Surface Area
	\$\$LENGTH	3175 & 10143	Convert Length

Routine	Entry Point	ICR#	Description
	\$\$TEMP	3175 & 10143	Convert Temperature
	\$\$VOLUME	3175 & 10143	Convert Volume
	\$\$WEIGHT	3175 & 10143	Convert Weight
XLFMTH	\$\$ABS	10105	Absolute Value
	\$\$ACOS	10105	Arc-cosine (Radians)
	\$\$ACOSDEG	10105	Arc-cosine (Degrees)
	\$\$ACOT	10105	Arc-cotangent (Radians)
	\$\$ACOTDEG	10105	Arc-cotangent (Degrees)
	\$\$ACSC	10105	Arc-cosecant (Radians)
	\$\$ACSCDEG	10105	Arc-cosecant (Degrees)
	\$\$ASEC	10105	Arc-secant (Radians)
	\$\$ASECDEG	10105	Arc-secant (Degrees)
	\$\$ASIN	10105	Arc-sine (Radians)
	\$\$ASINDEG	10105	Arc-sine (Degrees)
	\$\$ATAN	10105	Arc-tangent (Radians)
	\$\$ATANDEG	10105	Arc-tangent (Degrees)
	\$\$COS	10105	Cosine (Radians)
	\$\$COSDEG	10105	Cosine (Degrees)
	\$\$COT	10105	Cotangent (Radians)
	\$\$COTDEG	10105	Cotangent (Degrees)
	\$\$CSC	10105	Cosecant (Radians)
	\$\$CSCDEG	10105	Cosecant (Degrees)
	\$\$DECDMS	10105	Conv. Decimals to Degrees:Minutes:Seconds
	\$\$DMSDEC	10105	Conv. Degrees:Minutes:Seconds to Decimal
	\$\$DTR	10105	Convert Degrees to Radians
	\$\$E	10105	e—Natural Logarithm
	\$\$EXP	10105	e—Natural Logarithm to the Nth Power
	\$\$LN	10105	Natural Log (Base e)

Routine	Entry Point	ICR#	Description
	\$\$LOG	10105	Logarithm (Base 10)
	\$\$MAX	10105	Maximum of 2 Numbers
	\$\$MIN	10105	Minimum of 2 Numbers
	\$\$PI	10105	PI
	\$\$PWR	10105	X to the Y Power
	\$\$RTD	10105	Convert Radians to Degrees
	\$\$SD	10105	Standard Deviation
	\$\$SEC	10105	Secant (Radians)
	\$\$SECDEG	10105	Secant (Degrees)
	\$\$SIN	10105	Sine (Radians)
	\$\$SINDEG	10105	Sine (Degrees)
	\$\$SQRT	10105	Square Root
	\$\$TAN	10105	Tangent (Radians)
	\$\$TANDEG	10105	Tangent (Degrees)
XLFNAME	\$\$BLDNAME	3065	Build Name from Component Parts
	\$\$CLEANC	3065	Name Component Std. Routine
	\$\$FMNAME	3065	Convert HL7 Formatted Name to Name
	\$\$HLNAME	3065	Convert Name to HL7 Formatted Name
	NAMECOMP	3065	Component Parts from Standard Name
	\$\$NAMEFMT	3065	Formatted Name from Name Components
	STDNAME	3065	Name Standardization Routine
XLFNAME2	DELCOMP	3066	Delete Name Components Entry (Controlled Subscription)
	UPDCOMP	3066	Update Name Components Entry (Controlled Subscription)
XLFNSLK	\$\$ADDRESS	3056	Conversion (Domain Name to IP Addresses)
	MAIL	3056	Get IP Addresses for a Domain Name
XLFSHAN	\$\$AND	6157	Bitwise Logical AND
	\$\$CPUTIME	6157	Return System and User CPU Time
	\$\$ETIMEMS	6157	Return Elapsed Time in Milliseconds

Routine	Entry Point	ICR#	Description
	\$\$FILE	6157	Returns SHA Hash for Specified FileMan File or Subfile Entry
	\$\$GLOBAL	6157	Returns SHA Hash for a Global
	\$\$HOSTFILE	6157	Returns SHA Hash for Specified Host File
	\$\$LSHAN	6157	Returns SHA Hash for a Long Message
	\$\$OR	6157	Bitwise Logical OR
	\$\$ROUTINE	6157	Returns SHA Hash for a VistA Routine
	\$\$SHAN	6157	Returns SHA Hash for a Message
	\$\$XOR	6157	Bitwise Logical XOR
XLFSTR	\$\$CJ	10104	Center Justify String
	\$\$INVERT	10104	Invert String
	\$\$LJ	10104	Left Justify String
	\$\$LOW	10104	Convert String to Lowercase
	\$\$REPEAT	10104	Repeat String
	\$\$REPLACE	10104	Replace Strings
	\$\$RJ	10104	Right Justify String
	\$\$SENTENCE	10104	Convert String to Sentence Case
	\$\$STRIP	10104	Strip a String
	\$\$TITLE	10104	Convert String to Title Case
	\$\$TRIM	10104	Trim String
	\$\$UP	10104	Convert String to Uppercase
XLFUTL	\$\$BASE	2622	Convert Between Two Bases
	\$\$CCD	2622	Append Check Digit
	\$\$CNV	2622	Convert Base 10 to Another Base
	\$\$DEC	2622	Convert Another Base to Base 10
	\$\$VCD	2622	Verify Integrity
^XPAR	ADD	2263	Add Parameter Value
	CHG	2263	Change Parameter Value
	DEL	2263	Delete Parameter Value
	EN	2263	Add, Change, Delete Parameters
	ENVAL	2263	Return All Parameter Instances

Routine	Entry Point	ICR#	Description
	\$\$GET	2263	Return an Instance of a Parameter
	GETLST	2263	Return All Instances of a Parameter
	GETWP	2263	Return Word-Processing Text
	NDEL	2263	Delete All Instances of a Parameter
	PUT	2263	Add/Update Parameter Instance
	REP	2263	Replace Instance Value
XPAREDIT	BLDLST	2336	Return All Entities of a Parameter
	EDIT	2336	Edit Instance and Value of a Parameter
	EDITPAR	2336	Edit Single Parameter
	EN	2336	Parameter Edit Prompt
	GETENT	2336	Prompt for Entity Based on Parameter
	GETPAR	2336	Select Parameter Definition File
	TED	2336	Edit Template Parameters (No Dash Dividers)
	TEDH	2336	Edit Template Parameters (with Dash Dividers)
XPDID	EXIT	2172	Progress Bar Emulator: Restore Screen, Clean Up Variables, and Display Text
	INIT	2172	Progress Bar Emulator: Initialize Device and Draw Box Borders
	TITLE	2172	Progress Bar Emulator: Display Title Text
	UPDATE	2172	Update KIDS Install Progress Bar
XPDIJ	EN	2243	Task Off KIDS Install (Controlled Subscription)
XPDIP	\$\$PKGPAT	2067	Update Patch History
XPDKEY	DEL	1367	Delete Security Key
	\$\$LKUP	1367	Look Up Security Key Value
	\$\$RENAME	1367	Rename Security Key
XPDMENU	\$\$ADD	1157	Add Option to Menu
	DELETE	1157	Delete Menu Item
	LKOPT	1157	Look Up Option IEN
	LOCK	1157	Set LOCK Field in OPTION File

Routine	Entry Point	ICR#	Description
	OUT	1157	Edit Option's Out of Order Message
	RENAME	1157	Rename Option
	RLOCK	1157	Set REVERSE/NEGATIVE Field in OPTION File
	\$\$TYPE	1157	Get Option Type
XPDPROT	\$\$ADD	5567	Add Child Protocol to Parent Protocol
	\$\$DELETE	5567	Delete Child Protocol from Parent Protocol
	FIND	5567	Find All Parents for a Protocol
	\$\$LKPROT	5567	Look Up Protocol IEN
	OUT	5567	Edit Protocol's Out of Order Message
	RENAME	5567	Rename Protocol
	\$\$TYPE	5567	Get Protocol Type
XPDUTL	BMES	10141	Output Message with Blank Line
	\$\$COMCP	10141	Complete Checkpoint
	\$\$CURCP	10141	Get Current Checkpoint Name/IEN
	\$\$INSTALDT	10141	Return All Install Dates/Times
	\$\$LAST	10141	Last Software Patch
	MES	10141	Output a Message
	\$\$NEWCP	10141	Create a Checkpoint
	\$\$OPTDE	10141	Disable/Enable an Option
	\$\$PARCP	10141	Get Checkpoint Parameter
	\$\$PATCH	10141	Verify Patch Installation
	\$\$PKG	10141	Parse Software Name from Build Name
	\$\$PRODE	10141	Disable/Enable a Protocol
	\$\$RTNUP	10141	Update Routine Action
	\$\$UPCP	10141	Update Checkpoint
	\$\$VER	10141	Parse Version from Build Name
	\$\$VERCP	10141	Verify Checkpoint
	\$\$VERSION	10141	PACKAGE File Current Version
XQ92	NEXT	10077	Restricted Times Check

Routine	Entry Point	ICR#	Description
XQALBUTL	AHISTORY	2788	Get Alert Tracking File Information
	ALERTDAT	2788	Get Alert Tracking File Information
	DELSTAT	3197	Get User Information and Status for Recent Alert
	NOTIPURG	3010	Purge Alerts Based on Code
	\$\$PENDING	2788	Pending Alerts for a User
	\$\$PKGPEND	2788	Pending Alerts for a User in Specified Software
	PTPURG	3010	Purge Alerts Based on Patient
	RECIPURG	3010	Purge User Alerts
	USERDATA	2788	Get User Information for an Alert
	USERLIST	2788	Get Recipient Information for an Alert
XQALERT	ACTION	10081	Process an Alert
	DELETE	10081	Clear Obsolete Alerts (Single)
	DELETEA	10081	Clear Obsolete Alerts (All)
	GETACT	10081	Return Alert Variables
	PATIENT	10081	Get Alerts for a Patient
	SETUP	10081	Send Alerts
	\$\$SETUP1	10081	Send Alerts
	USER	10081	Get Alerts for a User
XQALFWD	FORWARD	3009	Forward Alerts
XQALSURO	\$\$CURRSURO	2790	Get Current Surrogate for Alerts
	\$\$GETSURO	3213	Get Current Surrogate Information
	REMVSURO	2790	Remove Surrogates for Alerts
	SETSURO1	3213	Establish a Surrogate for Alerts
	SUROFOR	3213	Return a Surrogate's List of Users
	SUROLIST	3213	List Surrogates for a User
хоснк	\$\$ACCESS	10078	User Option Access Test
	ОР	10078	Current Option Check
XQDATE	^XQDATE	10079	Convert \$H to VA FileMan Format (Obsolete) (Use \$\$FMTE^XLFDT or \$\$HTFM^XLFDT)

Routine	Entry Point	ICR#	Description
XQH	EN	10074	Display Help Frames (Clear Screen)
	EN1	10074	Display Help Frames
XQH4	ACTION	10080	Print Help Frame Tree
XQOR	EN	10101	Navigating Protocols
	EN1	10101	Navigating Protocols (Entry/Exit Actions Not Executed)
	MSG	10101	Enable HL7 Messaging
XQORM	EN	10140	Menu Item Display and Selection
	XREF	10140	Force Menu Recompile
XQORM1	DISP	10102	Display Menu Selections From Help Code
XTHC10	\$\$GETURL	5553	Return URL Data Using HTTP
XTHCURL	\$\$ENCODE	5554	Encodes a Query String
	\$\$MAKEURL	5554	Creates a URL from Components
	\$\$PARSEURL	5554	Parses a URL
XTHCUTL	\$\$DECODE	5555	Decodes a String
XTID	GETIREF	4631	Get IREF (Term/Concept)
	\$\$GETMASTR	4631	Get Master VUID Flag (Term/Concept)
	\$\$GETSTAT	4631	Get Status Information (Term/Concept)
	\$\$GETVUID	4631	Get VUID (Term/Concept)
	\$\$SCREEN	4631	Get Screening Condition (Term/Concept)
	\$\$SETMASTR	4631	Set Master VUID Flag (Term/Concept)
	\$\$SETSTAT	4631	Set Status Information (Term/Concept)
	\$\$SETVUID	4631	Set VUID (Term/Concept)
XTIDTRM	\$\$GETRPLC	5078	Get Immediate Replacement Term (Term/Concept)
	\$\$RPLCLST	5078	Get List of Replacement Terms, w/Optional Status Date and History (Term/Concept)
	\$\$RPLCMNT	5078	Get Final Replacement Term (Term/Concept)
	\$\$RPLCTRL	5078	Get Replacement Trail for Term, with Replaced "BY" and Replacement "FOR" Terms (Term/Concept)

Routine	Entry Point	ICR#	Description
	\$\$RPLCVALS	5078	Get Field Values of Final Replacement Term (Term/Concept)
	\$\$SETRPLC	5078	Set Replacement Term (Term/Concept)
XTKERM4	RFILE	2075	Add Entries to Kermit Holding File
XTKERMIT	RECEIVE	10095	Load a File into the Host
	SEND	10095	Send Data from Host
XTLKKWL	XTLKKWL	10122	Perform Supported VA FileMan Calls on Files Configured for MTLU
XTLKMGR	DK	10153	Delete Keywords from the Local Keyword File
	DLL	10153	Delete an Entry from the Local Lookup File
	DSH	10153	Delete Shortcuts from the Local Shortcut File
	DSY	10153	Delete Synonyms from the Local Synonym File
	К	10153	Add Keywords to the Local Keyword File
	L	10153	Define a File in the Local Lookup File
	LKUP	10153	General Lookup Facility for MTLU
	SH	10153	Add Shortcuts to the Local Shortcut File
	SY	10153	Add Terms and Synonyms to the Local Synonym File
XUA4A71	\$\$EN	3178	Convert String to Soundex
XUA4A72	\$\$CODE2TXT	1625	Get HCFA Text
	\$\$GET	1625	Get Specialty and Subspecialty for a User
	\$\$IEN2CODE	1625	Get VA Code
XUAF4	\$\$ACTIVE	2171	Institution Active Facility (True/False)
	CDSYS	2171	Coding System Name
	CHILDREN	2171	List of Child Institutions for a Parent
	\$\$CIRN	2171	Institution CIRN-enabled Field Value
	F4	2171	Institution Data for a Station Number
	\$\$ID	2171	Institution Identifier

Routine	Entry Point	ICR#	Description
	\$\$IDX	2171	Institution IEN (Using Coding System & ID)
	\$\$IEN	2171	IEN for Station Number
	\$\$LEGACY	2171	Institution Realigned/Legacy (True/False)
	\$\$LKUP	2171	Institution Lookup
	LOOKUP	2171	Look Up Institution Identifier
	\$\$MADD	2171	Institution Mailing Address
	\$\$NAME	2171	Institution Official Name
	\$\$NNT	2171	Institution Station Name, Number, and Type
	\$\$NS	2171	Institution Name and Station Number
	\$\$ O99	2171	IEN of Merged Station Number
	\$\$PADD	2171	Institution Physical Address
	PARENT	2171	Parent Institution Lookup
	\$\$PRNT	2171	Institution Parent Facility
	\$\$RF	NONE	Realigned From Institution Information
	\$\$RT	NONE	Realigned To Institution Information
	SIBLING	2171	Sibling Institution Lookup
	\$\$STA	2171	Station Number for IEN
	\$\$TF	2171	Treating Facility (True/False)
	\$\$WHAT	2171	Institution Single Field Information
XUDHGUI	DEVICE	3771	GUI Device Lookup
XUDHSET	\$\$RES	2232	Set Up Resource Device
XUHUI	OPKG	3589	Monitor New Style Cross-referenced Fields
XULMU	CLEANUP	5832	Lock Manager: Execute the Housecleaning Stack
	SETCLEAN	5832	Lock Manager: Register a Cleanup Routine
	UNCLEAN	5832	Lock Manager: Remove Entries from the Housecleaning Stack
	ADDPAT	5832	Lock Manager: Add Patient Identifiers for a Computable File Reference

Routine	Entry Point	ICR#	Description
	PAT	5832	Lock Manager: Get a Standard Set of Patient Identifiers
XUMF	\$\$IEN	3795	Institution IEN (Using IFN, Coding System, & ID)
XUMFI	MAIN	2171	HL7 Master File Message Builder (Controlled Subscription)
XUMFP	MAIN	2171	Master File Parameters (Controlled Subscription)
XUP	\$\$DTIME	4409	Reset DTIME for USER
XUPARAM	\$\$GET	2542	Get Parameters
	\$\$KSP	2541	Return Kernel Site Parameter
	\$\$LKUP	2542	Look Up Parameters
	SET	2542	Set Parameters
XUPROD	PROD	4440	Production Vs. Test Account
XUPS	\$\$IEN	4574	Get IEN Using VPID in File #200
	\$\$VPID	4574	Get VPID Using IEN in File #200
XUPSQRY	EN1	4575	Query New Person File
xus	Н	10044	Programmer Halt
XUS1A	SET	3057	Output Message During Signon
XUS2	AVHLPTXT	4057	Get Help Text (Controlled Subscription)
XUSAP	\$\$CREATE	4677	Create Application Proxy User
XUSCLEAN	KILL	10052	Clear all but Kernel Variables
	TOUCH	10052	Notify Kernel of Tasks that Run 7 Days or Longer
XUSER	\$\$ACTIVE	2343	Status Indicator
	\$\$DEA	2343	Get DEA Number. Modified with Kernel Patch XU*8.0*580 for ePCS.
	\$\$DETOX	2343	Get Detox/Maintenance ID Number Added with Kernel Patch XU*8.0*580 for ePCS.
	DIV4	2533	Get User Divisions (Controlled Subscription)
	\$\$LOOKUP	2343	NEW PERSON File Lookup

Routine	Entry Point	ICR#	Description
	\$\$NAME	2343	Get Name of User
	\$\$PROVIDER	2343	Providers in NEW PERSON File
	\$\$SDEA	2343	Check for Prescribing Privileges Added with Kernel Patch XU*8.0*580 for ePCS.
	\$\$VDEA	2343	Check if User Can Sign Controlled Substance Orders Added with Kernel Patch XU*8.0*580 for ePCS.
XUSERNEW	\$\$ADD	10053	Add New User
XUSESIG	^XUSESIG	936	Set Up Electronic Signature Code (Controlled Subscription)
	SIG	10050	Verify Electronic Signature Code
XUSESIG1	\$\$CHKSUM	1557	Build Checksum for Global Root
	\$\$CMP	1557	Compare Checksum to \$Name_Value
	\$\$DE	1557	Decode String
	\$\$EN	1557	Encode ESBLOCK
	\$\$ESBLOCK	1557	Electronic Signature (E-Sig) Fields Required for Hash
XUSHSH	\$\$AESDECR	6189	Returns Plaintext String Value for AES Encrypted Ciphertext Entry
	\$\$AESENCR	6189	Returns AES Encrypted Ciphertext for String Entry
	\$\$B64DECD	6189	Returns Decoded Value for a Base64 String Entry
	\$\$B64ENCD	6189	Returns Base64 Encoded Value for a String Entry
	\$\$RSADECR	6189	Returns Plaintext String Value for RSA Encrypted Ciphertext Entry
	\$\$RSAENCR	6189	Returns RSA Encrypted Ciphertext for String Entry
	\$\$SHAHASH	6189	Returns SHA Hash for a String Entry
XUSHSHP	DE	10045	Decrypt Data String
	EN	10045	Encrypt Data String
	HASH	10045	Hash Electronic Signature Code

Routine	Entry Point	ICR#	Description
XUSNPI	\$\$CHKDGT	4532	Validate NPI Format
	\$\$NPI	4532	Get NPI from Files #200 or #4
	\$\$QI	4532	Get Provider Entities
XUSRB	\$\$CHECKAV	2882	Check Access/Verify Codes (Controlled Subscription)
	CVC	4054	VistALink-Change User's Verify Code (Controlled Subscription)
	\$\$INHIBIT	3277	Check if Logons Inhibited
	INTRO	4054	VistALink-Get Introductory Text (Controlled Subscription)
	\$\$KCHK	2120	Check If User Holds Security Key (Controlled Subscription)
	LOGOUT	4054	VistALink-Log Out User From M (Controlled Subscription)
	OWNSKEY	3277	Verify Security Keys Assigned to a User
	SETUP	4054	VistALink-Set Up User's Partition in M (Controlled Subscription)
	VALIDAV	4054	VistALink-Validate User Credentials (Controlled Subscription)
XUSRB1	\$\$DECRYP	2241	Decrypt String
	\$\$ENCRYP	2240	Encrypt String
XUSRB2	DIVGET	4055	Get Divisions for Current User (Controlled Subscription)
	DIVSET	4055	Set Division for Current User (Controlled Subscription)
	USERINFO	4055	Get Demographics for Current User (Controlled Subscription)
XUSRB4	\$\$HANDLE	4770	Return Unique Session ID String
XUSTAX	\$\$TAXIND	4911	Get Taxonomy Code from File #200 (Controlled Subscription)
	\$\$TAXORG	4911	Get Taxonomy Code from File #4 (Controlled Subscription)
XUTMDEVQ	\$\$DEV	1519	Force Queueing—Ask for Device
	EN	1519	Run a Task (Directly or Queued)
	\$\$NODEV	1519	Run a Task (Force Queueing—No Device Selection)

Routine	Entry Point	ICR#	Description
	\$\$QQ	1519	Double Queue—Direct Queuing in a Single Call
	\$\$REQQ	1519	Schedule Second Part of a Task
XUTMOPT	DISP	1472	Display Option Schedule
	EDIT	1472	Edit an Option's Scheduling
	OPTSTAT	1472	Obtain Option Schedule
	RESCH	1472	Set Up Option Schedule
XUTMTP	EN	3521	Display HL7 Task Information (Controlled Subscription)
XUVERIFY	^XUVERIFY	10051	Verify Access and Verify Codes
	\$\$CHECKAV	10051	Check Access/Verify Codes
	WITNESS	1513	Return IEN of Users with A/V Codes & Security Keys (Controlled Subscription)
XUWORKDY	^XUWORKDY	10046	Workday Calculation (Obsolete)
	\$\$EN	10046	Number of Workdays Calculation
	\$\$WORKDAY	10046	Workday Validation
	\$\$WORKPLUS	10046	Workday Offset Calculation
%ZIS	^%ZIS	10086	Standard Device Call
	HLP1	10086	Display Brief Device Help
	HLP2	10086	Display Device Help Frames
	HOME	10086	Reset Home Device IO Variables
	\$\$REWIND	10086	Rewind Devices
%ZISC	^%ZISC	10089	Close Device
%ZISH	CLOSE	2320	Close Host File
	\$\$DEFDIR	2320	Get Default Host File Directory
	\$\$DEL	2320	Delete Host File
	\$\$FTG	2320	Load Host File into Global
	\$\$GATF	2320	Copy Global to Host File (Append Existing global Nodes)
	\$\$GTF	2320	Copy Global to Host File
	\$\$LIST	2320	List Directory
	\$\$MV	2320	Rename Host File

Routine	Entry Point	ICR#	Description
	OPEN	2320	Open Host File
	\$\$PWD	2320	Get Current Directory
	\$\$STATUS	2320	Return End-of-File (EOF) Status
%ZISP	PKILL	3172	Kill Special Printer Variables
	PSET	3172	Set Up Special Printer Variables
ZISPL	DSD	1092	Delete Spool Data File Entry (Controlled Subscription)
	DSDOC	1092	Delete Spool Document File Entry (Controlled Subscription)
%ZISS	ENDR	10088	Set Up Specific Screen Handling Variables
	ENS	10088	Set Up Screen Handling Variables
	GKILL	10088	KILL Graphic Variables
	GSET	10088	Set Up Graphics Variables
	KILL	10088	KILL Screen Handling Variables
%ZISTCP	CALL	2118	Make TCP/IP Connection (Remote System)
	CLOSE	2118	Close TCP/IP Connection (Remote System)
%ZISUTL	CLOSE	2119	Close Device with Handle
	OPEN	2119	Open Device with Handle
	RMDEV	2119	Delete Data Given a Handle
	SAVDEV	2119	Save Data Given a Handle
	USE	2119	Use Device Given a Handle
%ZOSF	^%ZOSF	NONE	Operating System-dependent Logic Global
%ZOSV	\$\$ACTJ	10097	Number of Active Jobs
	\$\$AVJ	10097	Number of Available Jobs
	DOLRO	3883	Display Local Variables (Controlled Subscription)
	\$\$EC	10097	Get Error Code
	GETENV	10097	Current System Information
	GETPEER	4056	VistALink-Get IP Address for Current Session (Controlled Subscription)

Routine	Entry Point	ICR#	Description
	\$\$LGR	10097	Last Global Reference
	LOGRSRC	10097	Record Resource Usage (RUM)
	\$\$OS	10097	Get Operating System Information
	SETENV	10097	Set VMS Process Name (Caché/OpenVMS Systems)
	SETNM	10097	Set VMS Process Name: Parameter Passing (Caché/OpenVMS Systems)
	T0 (Obsolete)	10097	(Obsolete) Start RT Measure
	T1 (Obsolete)	10097	(Obsolete) Stop RT Measure
	\$\$VERSION	10097	Get OS Version Number or Name
%ZTER	^%ZTER	1621	Kernel Standard Error Recording Routine
	APPERROR	1621	Set Application Error Name in Kernel Error Trap Log
	\$\$NEWERR	1621	Verify Support of Standard Error Trapping (Obsolete)
	UNWIND	1621	Quit Back to Calling Routine
%ZTLOAD	^%ZTLOAD	10063	Queue a Task
	\$\$ASKSTOP	10063	Stop TaskMan Task
	DESC	10063	Find Tasks with a Description
	DQ	10063	Unschedule a Task
	ISQED	10063	Return Task Status
	\$\$JOB	10063	Return a Job Number for a Task
	KILL	10063	Delete a Task
	OPTION	10063	Find Tasks for an Option
	PCLEAR	10063	Clear Persistent Flag for a Task
	\$\$PSET	10063	Set Task as Persistent
	REQ	10063	Requeue a Task
	RTN	10063	Find Tasks that Call a Routine
	\$\$ S	10063	Check for Task Stop Request
	STAT	10063	Task Status
	\$\$TM	10063	Check if TaskMan is Running
	ZTSAVE	10063	Build ZTSAVE Array

8 Direct Mode Utilities

This chapter lists all Kernel and Kernel Toolkit direct mode utilities. Direct mode utilities can be used from programmer mode, but developers *cannot* call them from within applications.



REF: Every direct mode utility is described in the *Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide and Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide.* Refer to the indicated section in that manual for details on the use of the utility.

The direct mode utilities in Table 28 are listed in routine order and by tag within each routine:

Table 28: Direct Mode Utilities

Direct Mode Utility	Description	Reference Documentation
D ^%G	List Global option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Miscellaneous: Developer Tools
(obsolete) d ^%index Use: d ^xindex	To run %INDEX	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Routine Tools and Toolkit: Developer Tools
D ^%RR	Input Routines option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D ^%RS	Output Routines option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D ^XQ1	Test an Option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Menu Manager: Programmer Tools
D ^XTER	Display Error Trap	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Error Processing: Developer Tools
D ^XTERPUR	Purge Error Log	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Error Processing: Developer Tools
D ^XTFCR	Flow Chart from Entry Point option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Routine Tools
D ^XTRCMP	Compare Two Routines option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D TAPE^XTRCMP	Compare Routines on Tape to Disk option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools

Direct Mode Utility	Description	Reference Documentation		
D ^XTRGRPE	Group Routine Edit option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools		
D CHCKSUM^XTSUMBLD	Integrity checking utility	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools		
D ^XTVCHG	Variable Changer option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools		
D ^XTVNUM	Version Number Update option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools		
D ENABLE^XUFILE3	Enable File Access Security System	Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide; File Access Security		
D ^XUINCON	Run File Access Security Conversion	Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide; File Access Security		
D ^XUP	Programmer Sign-On	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Signon/Security: Programmer Tools		
D ^XUS	User Sign-On, No Error Trapping	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Signon/Security: Programmer Tools		
D H^XUS	Programmer Halt	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Signon/Security: Programmer Tools		
D ^XUSCLEAN	Programmer Halt	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Signon/Security: Programmer Tools		
X ^%Z	Routine Edit option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Miscellaneous: Developer Tools		
D ^%ZTBKC	Global Block Count	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Operating System Interface: Developer Tools		
D ^ZTEDIT	Install ^%Z editor	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Miscellaneous: Developer Tools		
D ^%ZTER	Record an error	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools		

Direct Mode Utility	Description	Reference Documentation
D ^ZTMB	Start TaskMan	Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide; TaskMan: System Management—Configuration
D RESTART^ZTMB	Restart TaskMan	Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide; TaskMan: System Management—Configuration
D ^ZTMCHK	Check TaskMan's Environment	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D ^ZTMGRSET	Update ^%ZOSF Nodes	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Operating System Interface: Developer Tools
D RUN^ZTMKU	Remove TaskMan from a WAIT state	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; TaskMan Developer Tools
D STOP^ZTMKU	Stop TaskMan	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; TaskMan Developer Tools
D WAIT^ZTMKU	Place TaskMan in a WAIT state	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; TaskMan Developer Tools
D ^ZTMON	Monitor TaskMan	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; TaskMan Developer Tools
D ^%ZTPP	List Routines option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D ^%ZTRDEL	Delete Routines option	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Toolkit: Developer Tools
D ^ZU	User Sign-On	Kernel 8.0 & Kernel Toolkit 7.3 Developer's Guide; Signon/Security: Developer Tools

9 Remote Procedure Calls (RPCs)

<u>Table 29</u> lists the Remote Procedure Calls (RPCs) in the Kernel and Kernel Toolkit namespaces as stored in the REMOTE PROCEDURE (#8994) file (listed alphabetically by RPC name):



NOTE: The Kernel and Kernel Toolkit namespaces include: "XDR*," "XI*," "XPAR*," "XPD*," "XQ*," "XT," and "XU*."

Table 29: Remote Procedure Calls (RPCs)—Kernel and Kernel Toolkit

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
XDR ADD POTENTIAL PATIENT DUP Availability: AGREEMENT	5271	ENTRY*XQALGUI	FILE NUMBER: File number for the file to which the potential duplicate records belong. For example, if the two potential duplicate entries are on the PATIENT file, this value is set to 2. TO_IEN: Internal Entry Number (IEN) of one of the potential duplicate records. For example, this could be a DFN from the PATIENT (#2) file. FROM_IEN: Internal Entry Number (IEN) of one of the potential duplicate records. For example, this could be a DFN from the PATIENT (#2) file.	Success: IEN from the DUPLICATE RECORD (#15) file. If no errors occur, and if either an existing record is found, or a new record is added. Failure: -1^Error Message—If any errors occur.	This RPC adds a record to the VistA DUPLICATE RECORD (#15) file, or find an existing record for the pair of potential duplicates passed to the RPC. This was written to allow MPI to add potential duplicate patients to the file when potential duplicates are detected by the Person Service Identity Management (PSIM) probabilistic search.
XDR UPD SUPPR EMAIL	None	ADD^XDRDADDS	• FILE NUMBER: File	Returns:	This API remotely sets the

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
Availability: AGREEMENT			number for the file that is the .01 field of a record in the DUPLICATE RESOLUTION (#15.1) file. This is the record that is to be updated by this RPC. • VALUE: Must be set to 1 or 0. This value will be put into the SUPPRESS NEW DUP. • EMAIL field.	Success: 0—If no errors occurred. Failure: -1^Error Message—If errors occurred.	SUPPRESS NEW DUP EMAIL (#99) field in the DUPLICATE RESOLUTION (#15.1) file. SUPPRESS NEW DUP EMAIL is set to 1 (Yes) to suppress the email that is normally sent when a new record is added to the DUPLICATE RECORD file by PSIM (i.e., by a call from routine XDRDADDS). If SUPPRESS NEW DUP EMAIL is set to 0 (No) or NULL, the email is sent.
XQAL GUI ALERTS Availability: PUBLIC	None	ENTRY^XQALGUI	DATA: Subscripted, and the subscript contains the actual variable name (and can be a global reference), while the value for the variable is the value associated with that DATA element.	Array: Contains the return values for the type of call.	This RPC handles the XUAlert component.
XU EPC EDIT Agreement: RESTRICTED	None	ENTRY^XUEPCSE D	DATA	Single Value	This RPC stores information on editing changes in the NEW PERSON (#200) file related to the electronic prescribing of controlled substances. NOTE: This RPC was released with Kernel Patch XU*8.0*580.
XULM GET LOCK TABLE	5832	LOCKS^XULMRPC	LOCKGBL: This is	Returns:	The Lock Manager uses this

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			the global reference of the location where the lock table should be returned. Maximum data length: 245 .	0 on failure.1 on success.	RPC to obtain the lock table on a specific node. The lock table is returned in a global.
			RESULT: Global location to place the result. Maximum data length: 200.		
XULM KILL PROCESS	5832	KILLPROC*XULM RPC	PID: This is the PID of the process to be KILLed. Maximum data length: 250.		The Lock Manager uses this RPC to terminate a process.
			RETURN: This is the global location to return the result. The result shuould be returned in ^XTMP, since it is translated between nodes.Maximum data length: 200.		
XUPS PERSONQUERY Availability: PUBLIC	None	EN1^XUPSQRY	XUPSLNAM: Required if lookup by name.	Array: Output data stored in a global array.	This RPC performs a person lookup.
			XUPSFNAM XUPSENAM		
			XUPSSSN XUPSPROV		
			XUPSSTN		
			XUPSMNM		
			• XUPSDATE		

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			XUPSVPID: Required if lookup by VPID.		
XUS ALLKEYS Agreement: PUBLIC	6287	ALLKEYS*XUSRB	 IEN: This is the IEN or DUZ of the user in question. If not passed in, the RPC will use the current DUZ. FLAG: Not in use at this time. 	Returns: • Success: Returns a list of the names of the Security KEYS the user holds. • Failure: Returns -1 if failed for some reason.	This RPC returns all the KEYS that a user holds. If the FLAG is set to some value, the list of KEYS will be screened to only be those for J2EE use. For KAAJEE.
XUS AV CODE Agreement: RESTRICTED	1630	VALIDAV^XUSRB	AVCODE: accessCode_";"_verifyCo de in unencrypted form.	Array: It returns an array of values.	This RPC checks if an ACCESS/VERIFY code pair is valid.
XUS AV HELP Agreement: RESTRICTED	None	AVHELP^XUSRB	None	Array: Returns instructions on entering new access/verify codes.	This RPC returns instructions on entering new Access/Verify codes.
XUS CCOW VAULT PARAM Agreement: RESTRICTED	None	CCOWPC^XUSRB4	None	Returns a value for use with the CCOW vault.	This RPC returns a value for use with the CCOW vault.
XUS CVC Agreement: RESTRICTED	6296	CVC^XUSRB	None		This RPC allows the user to change their Verify code.
XUS DIVISION GET Agreement: RESTRICTED	5198	DIVGET^XUSRB2	IEN: If passed, this will be the user to get the division info on.	Returns a list of divisions for a user.	This RPC returns a list of divisions for a user.
XUS DIVISION SET Agreement: RESTRICTED	5199	DIVSET^XUSRB2	DIV	Returns: • Success: 1 if the value was accepted. • Failure: 0 if the input was not OK.	This RPC sets the user's selected Division in DUZ(2) during signon.
XUS GET CCOW TOKEN	None	CCOW^XUSRB4	None	Array	This RPC gets a token to save

336

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
Agreement: RESTRICTED					in the CCOW context to aid in signon.
XUS GET TOKEN Agreement: RESTRICTED	6813	ASH^XUSRB4	None	Returns: A handle to a token that signs on a new process.	This RPC returns a handle to a token that signs on a new process.
XUS GET USER INFO Agreement: RESTRICTED	2857	USERINFO^XUSR B2	None	Array: Returns information about a user after logon.	This RPC returns information about a user after logon.
XUS GET VISITOR Agreement: SUBSCRIPTION	5532	GETVISIT*XUSBS E1	TOKEN	Single Value	This controlled-subscription RPC is used by the Broker Security Enhancement (BSE) to check a user's credentials based on a BSE TOKEN that was passed to identify and authenticate a visiting user. The remote VistA system calls this RPC on the authenticating VistA system to validate if the visiting user is permitted to visit, and if so, obtain the authenticated user's demographics.
XUS INTRO MSG Agreement: RESTRICTED	1631	INTRO^XUSRB	None	Returns: Introductory text.	This RPC returns the INTRO message from the KERNEL SYSTEM PARAMETERS (#8989.3) file.
XUS KEY CHECK Agreement: PUBLIC	6286	OWNSKEY^XUSR B	 KEY: If key is a single value, it holds the one key to check. If key is an array, then the result is an array that matches the key 	 Array. Returns: 1—If the user has the key. 0—If the user does not have the key. 	This RPC checks if the user (DUZ) holds a security key or an array of keys. If a single security KEY is sent, the result is returned in R(0). If an array is sent down, then the return array has the same order as

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			list with values that match the status of the key check for each key.		the calling array.
XUS MVI ENRICH NEW PERSON	1059	UPDATE*XUMVIE NU	• PARAM: Input array: PARAM("WHO") = Stati on Number of requesting station PARAM("NPI") = Natio nal Provider Identifier Required elements only when FLAG input parameter is A: PARAM("NAME") = surn ame first name middle name suffix full .01 name Optional elements (only pass those elements you want to update): PARAM("ADDRESS DATA") = street address 1 street address 2 street address 3 city state zip code office phone fax number	Returns: • Success: DUZ of New Person File entry edited or added. Returned if there were no issues adding or editing the entry. DUZ^-1^ErrorMessage Returned if entry was edited, but some data was not valid and could not be filed. • Failure: -1^ErrorMessage Returned, for example, if required data was not passed; entry could not be added when FLAG="A", or entry could not be found based on the NPI when FLAG="U".	This controlled subscription RPC is used exclusively by the Master Veteran Index (MVI) software to update enriched data in the NEW PERSON (#200) file. NOTE: This RPC was released with Kernel Patch XU*8.0*711.

338

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
		-	PARAM("SubjectOrga		
			n")=subject		
			organization		
			Default: "Department		
			Of Veterans Affairs"		
			PARAM("SubjectOrga		
			nID")=subject		
			organization id		
			Default:		
			"urn:oid:2.16.840.1.11		
			3883.4.349"		
			PARAM("ADUPN")=adu		
			pn		
			PARAM("AuthWriteMe		
			dOrders")=1 or 0		
			for YES/NO		
			Default if WHO is		
			200PIEV and a DEA#		
			is sent: 1 (for YES)		
			PARAM("DEA", <seq#></seq#>		
			,"DEA")=Drug		
			Enforcement Agency		
			(DEA) #		
			PARAM("DEA", <seq#></seq#>		
			,"Detox") = detox		
			number		
			PARAM("DEA", <seq#></seq#>		
			,"DEAExpire")=expi		
			ration date (can		
			be future)		
			PARAM("DEA", <seq#></seq#>		
			, "SchedIINarc") =1		
			or 0 for YES/NO		
			PARAM("DEA", <seq#></seq#>		
			, "SchedIINonNarc")		
			=1 or 0 for YES/NO		
			PARAM("DEA", <seq#></seq#>		
			,"SchedIIINarc")=1		

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			or 0 for YES/NO		
			PARAM("DEA", <seq#></seq#>		
			, "SchedIIINonNarc"		
)=1 or 0 for		
			YES/NO		
			PARAM("DEA", <seq#></seq#>		
			,"SchedIV")=1 or 0		
			for YES/NO		
			PARAM("DEA", <seq#></seq#>		
			,"SchedV")=1 or 0		
			for YES/NO		
	1		PARAM("DEGREE")=de		
			grees (codes		
			delimited by a		
			space)		
			<pre>PARAM("EMAIL") = ema</pre>		
			il address		
			PARAM ("GENDER") =M		
			or F		
			PARAM("Inactivate"		
)=inactive date		
			(can be future)		
			PARAM("NonVAPrescr		
			<pre>iber")=1 or 0 for</pre>		
			YES/NO		
			Default if WHO is		
			200PIEV: 1 (for		
			YES)		
			PARAM ("NTUSERNAME"		
)=network user		
			name		
	1		PARAM("PersonClass		
	1		", <seq#>,"PersonCl</seq#>		
	1		ass")=X12 code		
	1		value		
	1		PARAM("PersonClass		
	1		", <seq#>,"PersonCl</seq#>		
	1		<pre>assActive") = date</pre>		
			Default if not currently		

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			active: TODAY PARAM("PersonClass ", <seq#>, "PersonCl assExpire") = date PARAM("ProviderCla ss") = a value from the PROVIDER CLASS (#7) file PARAM("ProviderTyp e") = provider type code provider type value PARAM("Remarks") = r emarks Default if WHO is 200PIEV: "NON-VA PROVIDER" PARAM("SECID") = sec id PARAM("TaxID") = tax id PARAM("Termination ") = termination</seq#>		
			(cannot be future) PARAM("Title") = val ue from TITLE file (#3.1) Default if WHO is 200PIEV: "NON-VA PROVIDER" PARAM("UniqueUserI D") = unique user id • FLAG: This flag controls whether the RPC is adding a new entry to the NEW		

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			PERSON (#200) file or updating an existing entry. Possible values are: • U—Update an existing entry • A—Add a new entry		
XUS PKI SET UPN Agreement: RESTRICTED	5823	SETUPN^XUSER2	UPN: This is the SUBJECT ALTERNATIVE NAME from the PIV card.	Single Value	This RPC sets the SUBJECT ALTERNATIVE NAME (#501.2) field in the NEW PERSON (#200) file.
XUS PKI GET UPN Agreement: PUBLIC	5816	GETUPN^XUSER2	None	Single Value	This RPC gets the SUBJECT ALTERNATIVE NAME (#501.2) field from the NEW PERSON (#200) file. It is used to check that the correct PIV card has been put into the reader.
XUS SEND KEYS Agreement: RESTRICTED	1633	SENDKEYS*XUSR B	None	Array: strings that are used in the hashing algorithm. The strings that are returned are picked up from Z^XUSRB .	This RPC returns an array of strings that are used in the hashing algorithm. The strings that are returned are picked up from Z^XUSRB .
XUS SET VISITOR Agreement: PUBLIC	5501	SETVISIT^XUSBSE 1	None	Returns: A BSE token string	This RPC is run on the Authenticating VistA M Server. It returns a Kernel Authentication Token that is used to identify the current user. NOTE: This RPC was added with the Broker

RPC	ICR#	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
					Security Enhancement (BSE) project, which was released with Kernel Patch XU*8.0*404.
XUS SIGNON SETUP Agreement: PUBLIC	1632	SETUP^XUSRB		Array	This RPC establishes the environment necessary for DHCP signon
XWB GET VARIABLE VALUE Agreement: PUBLIC	1629	XWBLIB		Single Value	This RPC accepts the name of a variable that will be evaluated, and its value returned to the server. For example, this RPC can be called with a parameter like DUZ, which will be returned as 123456.
					NOTE: This is an RPC Broker namespaced RPC but included here as part of Kernel Patch XU*8.0*580.

10 External Relations

10.1 External Relations with Other VistA Software

Kernel establishes external relations with all other VistA software and with the various implementations of ANSI M. Kernel provides a transparent interface between VistA and the host operating system.

All other VistA software depends upon the presence of Kernel, for two main reasons:

- Kernel provides a wealth of application mode entry points that software applications use to solve many common programming problems.
- Kernel provides other VistA applications with portability. In order to achieve independence from any particular vendor's implementation of the M standard, VistA adopted programming standards and conventions that advise software applications to avoid the use of the non-portable features of ANSI M. Though all VistA software depends upon an ANSI M environment, they also depend upon Kernel to replace non-portable features with standard Kernel entry points and services.

10.2 External Relations with M Operating Systems

Kernel itself depends upon the presence of one of the ANSI M environments it supports. Currently, Caché is the centrally procured M operating systems in use at the VA medical centers and the primary ANSI M environment supported by Kernel. As VistA adjusts its strategies for configuring computer sites, the list of ANSI M environments supported by Kernel continues to change.

Operating system interfaces are involved in each aspect of Kernel. Identifying the M operating system upon Kernel installation starts processes that create the appropriate Kernel environment. To begin, the ^%ZOSF global is built from an operating system-specific routine. By executing nodes of the ^%ZOSF global, implementation-specific functions that are *not* part of ANSI M are possible. Functions include turning echo on or off, allowing type-ahead, or reporting the current UCI.

Other operating system-specific routines distributed with Kernel include:

- %ZIS4 for spooling.
- %ZOSV for system viewing.
- %XUCI for UCI swapping.
- **ZU** for tied terminals.

The %ZOSV routine contains code that enables use of the VIEW command and \$VIEW function to get information from the operating system. Another routine, TaskMan's %ZTM, similarly makes possible the use of a protected M procedure, the JOB command, to spawn jobs on a mounted volume set.

Kernel allows processors running different operating systems to be linked. The ^%ZOSF global makes this possible, too. The ^%ZOSF global is never translated, and thus, can retain processor-specific information.

The Manager account is generally reserved for operating system-specific routines and globals. Part of Kernel, however, *must* also reside in this account to take care of certain input/output procedures. To avoid collision with pre-existing operating system routines and globals, Kernel uses the local **Z** namespace. Globals in the Manager account include:

- ^%ZTSK and ^%ZTSCH for TaskMan
- ^%ZUA for audit data
- %Z as the routine editor

Routines include the %ZTM* (TaskMan) and %ZIS* (Device Handler).

Kernel's use of variables illustrates the way it functions as a buffer between the host operating system and VistA applications. It uses M special variables to create utilities for use by application developers. \$HOROLOG is used by VA FileMan in date/time routines such as %DT and %DTC, \$JOB is used by TaskMan, and \$IO is used by the Device Handler. In turn, Kernel has key variables that can be referenced by VistA application routines. Perhaps not surprisingly, one of these is DT and another is IO. As VistA system-wide variables, they are documented in the VistA Standards and Conventions (SAC).

10.3 Required Software

Kernel 8.0 and Kernel Toolkit 7.3 require the following VistA software:

- VA FileMan 22.2
- MailMan 8.0



REF: For more details, see the Kernel Installation Guide and Toolkit Installation Guide.

10.4 DBA Approvals and Integration Control Registration (ICRs)

The Database Administrator (DBA) maintains a list of Integration Control Registrations (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 communicate with the underlying operating system files, Kernel has the approval of the DBA to reference the following globals:

- ^%ET
- ^%IS
- ^%SY
- ^**CP**U
- ^RTH
- ^SPOOL
- ^SYS

10.4.1 ICRs—Current List for Kernel or Kernel Toolkit as Custodian

To obtain a current list of ICR to which the Kernel (XU) or Kernel Toolkit (XT) software is a custodian, perform the following procedure:

- 1. Sign on to the **FORUM** system.
- 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 prompted for a package, enter XU or Kernel; XT or Toolkit.
- 7. All current IAs to which the Kernel or Kernel Toolkit software is a custodian are listed.

10.4.2 ICRs—Detailed Information

To obtain detailed information on a specific Integration Control Registration, perform the following procedure:

- 1. Sign on to the **FORUM** system.
- 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 Control Registration number of the ICR you would like to display.
- 6. The option then lists the full text of the ICR you requested.

10.4.3 ICRs—Current List for Kernel or Kernel Toolkit as Subscriber

To obtain the current list of IAs, if any, to which the Kernel (XU) or Kernel Toolkit (XT) software is a subscriber, perform the following procedure:

- 1. Sign on to the **FORUM** system.
- 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 **XU** or **KERNEL**; **XT** or **TOOLKIT** (uppercase).
- 7. When prompted with "GO TO SUBSCRIBING PACKAGE," enter XU or KERNEL; XT or TOOLKIT (uppercase).

8.	All current IAs to which the Kernel (XU) or Kernel Toolkit (XT) software is a subscriber
	are listed.

11 Internal Relations

11.1 Independence of Options

All of Kernel's options can be invoked independently. None requires any special setup in order to run successfully.

When rearranging options on menus, care should be taken that security is preserved. In several cases, a menu is locked with a security key, but all the options on that menu are *not* locked with the same key. In other cases, items are assumed to be locked because the parent menu is itself locked. So, if an option were placed on another menu, the security on that option could be lost. This situation exists for some options on the following menus:

- Audit Menu (VA FileMan, locked with the XUAUDITING security key)
- Filegrams (locked with the XUFILEGRAM security key)
- **KIDS Installation Menu** (locked with the XUPROGMODE security key)
- KIDS Main Menu (locked with the XUPROG security key)
- **Programmer Options** (locked with the XUPROG security key)
- ScreenMan (locked with the XUSCREENMAN security key)
- VA FileMan Management (locked with the XUMGR security key)

12 Software-Wide Variables

<u>Table 30</u> lists the software-wide key variables that can be assumed to be defined at all times when operating within the menu system, as per Appendix 10-B in of VA's *Veterans Health Administration Manual M-11 (Medical Information Resources Management Office: Operations Document):*

Table 30: Variables—Defined at All Times

Variable	Description
DUZ	Internal entry number (IEN) from the NEW PERSON (#200) file.
DUZ(0)	User's FILE MANAGER ACCESS CODE string.
DUZ(2)	User's institutional affiliation. It is the internal entry number from the Institution file.
DUZ("AG")	User's agency code.
DT	Current date in VA FileMan internal format.
DTIME	Integer value of the number of seconds the user has to respond to a timed read.
Ю	Hardware name (\$I) of the last selected input/output device.
IOF	Contains the code to issue a form feed for the last selected input/output device.
IOM	Column position of the right margin, for the last selected input/output device.
ION	Name of the last selected input/output device from the DEVICE (#3.5) file (.01 field value).
IOSL	Variable indicating the number of lines on the last selected input/output device (e.g., screen or page length).
IOST	The last selected input/output device's subtype from the TERMINAL TYPE (#3.2) file (.01 field value).
ЮТ	Type of the last selected input/output device, such as TRM for terminal.

In addition to the variables described in Appendix 10-B of the M-11 manual, <u>Table 31</u> lists the variables defined by Kernel while a user is in the menu system:

Table 31: Variables—Defined While a User is in the Menu System

Variable	Description
DUZ("AUTO")	Current auto-menu flag.
DUZ("LANG")	Contains a pointer to VA FileMan's LANGUAGE (#.85) file, which VA FileMan uses for language-specific displays of prompts, dates and times, and dialogs (from the DIALOG [#.84] file).
IO(0)	\$I value of the home device at the time of the call to the Device Handler

Variable	Description
	(^%ZIS).
IOBS	Contains the code to issue a backspace for last selected input/output device.
IOS	Internal entry number of the last selected input/output device from the DEVICE (#3.5) file.
IOST(0)	The last selected input/output device's subtype from the TERMINAL TYPE (#3.2) file (internal entry number).
IOXY	Value of the XY field from the TERMINAL TYPE (#3.2) file for the last selected input/output device.

<u>Table 32</u> lists the software-wide variable is defined within the menu system if alpha-beta tracking is taking place:

Table 32: Variables—Defined While a User is in the Menu System with Alpha-Beta Tracking

Variable	Description
XQABTST	Flag that signals whether alpha-beta testing is in effect.

13 SACC Exemptions

<u>Table 33</u> lists the Standards and Conventions (SAC) exemptions that currently pertain to Kernel and Kernel Toolkit that were granted by the Programming Standards and Conventions Committee (SACC). The table includes the following data:

- Standards Section Number
- Nature of Exemption
- Date Created (Granted)
- Description

Table 33: SAC Exemptions

	Standards			
#	Section Number	Nature of Exemption	Date Created	Description
1	6D	FM compatibility		The ^XUTL global is exempted from VA FileMan compatibility. It is a <i>non</i> -translated, completely re-creatable global used in MenuMan.
2	2D2	* and # READs	08/10/1989	The ZISL * and ^%Z editor can use * and #- readers.
3	6D	FM compatibility	08/10/1989	The following globals are exempt from VA FileMan compatibility: • ^%Z • ^%ZTSK • ^%ZTSCH • ^%ZOSF • ^%ZIS("C") and ^%ZIS("H")
4	1	ANSI	05/14/1990	TaskMan routines can use extended global references.
5	2В	Exclusive & Argumentless KILL	05/14/1990	The Submanager of TaskMan can use exclusive KILL commands in the portion of the Submanager that is responsible for recycling the partition.
6	2A	H XUS	05/14/1990	The routine %ZTM can use the HALT command.
7	2A	OPEN, CLOSE device	05/14/1990	TaskMan routines can use direct OPEN and CLOSE commands.
8	1	ANSI	06/18/1990	Kernel can use operating-specific code, which uses many implementation-specific language features.

#	Standards Section Number	Nature of Exemption	Date Created	Description
9	3A	Namespacing	06/18/1990	Kernel can export Z namespaced routines and XUCI* , DIDT* , and DIRCR to be renamed as % routines when installed.
10	2B	Exclusive & Argumentless KILL	06/18/1990	The Kernel login (XUS) and the Error Trap restore variable routines (XTER*) can use exclusive KILL statements.
11	4A	DUZ-array SET & KILL	06/18/1990	The following Kernel routines can SET or KILL the DUZ variable: • ZTM* • ZTEDIT3 • XQSMD31 • XQSRV • XQ1
12	2A	OPEN, CLOSE device	06/18/1990	The Device Handler and Kernel Operating-specific code can issue direct OPEN and CLOSE commands.
13	2A	H XUS	06/18/1990	Kernel (Signon/Security) can issue a HALT command in the routines ZU* without using the ^XUSCLEAN entry point.
14	9B	%ZOSF nodes	06/18/1990	Kernel Operating-specific code can make direct calls to operating system routines rather than using the ^%ZOSF global.
15	2D2	* & # READs	11/29/1990	Kernel can use a #255 READ in the ZOSV* routines.
16	2B	Exclusive & Argumentless KILL	02/07/1991	Kernel can use an exclusive KILL in the utility to clean up variables when exiting from an option.
17	8A	Queueing, \$I	07/12/1993	Kernel is granted an exemption for the XUPR-RTN-TAPE-CMP option to be <i>non</i> -queueable.
18	NA	NA	12/07/1994	Permanent exemption for Kernel 8.0 to use the following M language Features:

#	Standards Section Number	Nature of Exemption	Date Created	Description
				 Merge Command \$Order with two arguments \$Get with two arguments \$Name Set \$Extract Pattern match with alternation Sorts After operator Missing parameters in calling list Set \$X and \$Y 10k routine size \$Qlength \$Qsubscript \$Principal All Structured System Variable Names (SSVNs) M standard Error Processing Global subscript length not to exceed 240 character (KIDS only) or 200 characters for the remainder of Kernel. Length is determined by algorithm in 1994 draft SAC.
19	NA	NA	12/07/1994	Permanent exemption for Kernel Installation and Distribution System (KIDS) to Set DUZ and DUZ(0) .

14 Global Protection, Translation, and Journaling

An outline of a possible scheme for the management of Kernel globals is presented in this section.

Cookbook recommendations should also be consulted. DSM for OpenVMS sites should refer to the most recent VAX DSM Systems Guide (otherwise known as the Cookbook) for recommendations concerning global characteristics.

Kernel's recommendations and the cookbooks' recommendations should serve as examples as you manage your site's global configuration.

14.1 Globals in Production Account

Table 34: Globals in Production Account—Protection, Translation and Journaling Information

Global Name	DSM for OpenVMS Protection	Translate?	Journal? / Comments
^DIC	System: RWP W/G/U: RW	Yes	See VA FileMan Technical Manual
^HOLIDAY	System: RWP W/G/U: RW	Yes	
^TMP	System: RWP W/G/U: RW	Separate Copy per CPU	
^USC	N/A	Yes	The PERSON CLASS file is in the ^USC global. Please be sure to place this global and add it to your translation tables. This is a static file.
^UTILITY	System: RWP W/G/U: RW	Separate Copy per CPU	
^VA	System: RWP W/G/U: RW	Yes	Yes
^XMB	System: RWP W/G/U: RW	Yes	See MailMan Technical Manual
^XMBS	System: RWP W/G/U: RW	Yes	See MailMan Technical Manual
^XPD	System: RWP W/G/U: RW	Yes	
^XTV	System: RWP W/G/U: RW	Yes	Yes

Global Name	DSM for OpenVMS Protection	Translate?	Journal? / Comments
^XTMP	System: RWP W/G/U: RW	Yes	
^XUSEC	System: RWP W/G/U: RW	Yes	
*XUTL	System: RWP W/G/U: RW	 *XUTL = Separate Copy per CPU. *XUTL("XGAT R") = Translated. *XUTL("XQKB") = Translated. *XUTL("XQO") = Translated. *XUTL("XQOR M") = Translated. 	
^%ZIS	System: RWP World: RW Group: RW UCI: RWP	• Yes	
^%ZISL	System: RWP World: RW Group: RW UCI: RWP	• Yes	
^%ZOSF	System: RWP World: R Group: R UCI: RWP	Separate Copy per CPU	
^%ZTER	System: RWP World: RW Group: RW UCI: RWP	• Yes	
^%ZTSCH	System: RWP World: RW Group: RW UCI: RWP	• Yes*	

Global Name	DSM for OpenVMS Protection	Translate?	Journal? / Comments
^%ZTSK	System: RWP World: RW Group: RW UCI: RWP	• Yes*	
^%ZUA	System: RWP World: R Group: RW UCI: RW	• Yes	Yes

There should be only one copy of the TaskMan globals (^%ZTSCH and ^%ZTSK) within TaskMan's reach. At VA sites, TaskMan's reach is across all CPUs. Other sites should evaluate TaskMan's reach in their configurations. Also, at DSM for OpenVMS sites, these globals should *not* be in a volume set that is cluster-mounted across all systems; instead, master from **two** nodes and DDP server to the other nodes.



REF: For more information about TaskMan's reach, see the *Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide*.

15 Security

15.1 Security Management

To protect the security of VistA systems, distribution of this software for use on any other computer system by VistA sites is prohibited. All requests for copies of Kernel for *non*-VistA use should be referred to the VistA site's local Office of Information Field Office (OIFO).

Otherwise, there are no special legal requirements involved in the use of Kernel.

15.2 Mail Groups, Alerts, and Bulletins

15.2.1 Mail Groups

Kernel and Kernel Toolkit do *not* create or use any specific mail groups, but it does provide fields, files, options, APIs, and utilities for creating/processing mail groups.

15.2.2 Alerts

Kernel and Kernel Toolkit do *not* make use of alerts itself, but it does provide fields, files, options, APIs, and utilities for creating/processing alerts.

15.2.3 Bulletins

Kernel and Kernel Toolkit distribute the following bulletins:

Table 35: Bulletins—Kernel and Kernel Toolkit

	Table 35: Bulletins—Kernel and Kernel Toolkit					
Name	Description	Subject	Message	Parameters		
XDR ERROR	This bulletin is sent by the Kernel Duplicate Resolution software when an error that halts the process is encountered by a background task. It is only sent if there is an entry in the Duplicate Manager mail group in the DUPLICATE RESOLUTION (#15.1) file.	ERROR DURING DUPLICATE CHECKING OR MERGE	NOWRAP This is to notify you that an error was encountered while trying to either check for duplicates or during the early merge process of the 1 file. From DA/DFN: 2 To DA/DFN: 3 4 5 WRAP 6	 1—File from which the two records come from. 2—From record's DA/DFN. 3—To record's DA/DFN. 4—Internal value of the .01 field of the From Record. 5—Internal value of the .01 field of the To Record. 6—Error condition that was encountered. 		
XDR MERGED	This bulletin is sent by the Kernel Duplicate Resolution software when a Verified Duplicate pair is merged together. This bulletin is sent only if a package merge developer does not have a routine that sends its own customized merge message.	NOTIFICATION OF DUPLICATES MERGED	WRAP The following records from the 1 file have been merged. NOWRAP From record DA/DFN: 2 To record DA/DFN: 3 4 5 WRAP The FROM Record has now been merged to the TO Record. NOWRAP 6	 1—File from which the two records come from. 2—From record's DA/DFN. 3—To record's DA/DFN. 4—Internal value of the .01 field of the From Record. 5—Internal value of the .01 field of the To Record. 6—Package 		

Name	Description	Subject	Message	Parameters
				merge error listing header.
XDR VERIFIED	This bulletin is sent by the Kernel Duplicate Resolution software anytime a pair of Potential Duplicates is reviewed, and the operator determines that the pair is indeed Verified Duplicates. This bulletin is sent only if a package merge developer does not have a routine that sends its own customized verified message.	NOTIFICATION OF VERIFIED DUPLICATES	WRAP The following records have been identified as Verified Duplicates of the 1 file: NOWRAP From record DA/DFN: 2 To record DA/DFN: 3 4 5 WRAP The FROM record will be merged to the TO record. Please resolve any package discrepancies so that the merge may proceed.	 1—File from which the two records come from. 2—From record's DA/DFN. 3—To record's DA/DFN. 4—Internal value of the From Record. 5—Internal value of the .01 field of the To Record.
XQSERVER	This is the standard, or default, bulletin used by the menu system to notify system administrators and users about server request events.	Server Request Notice	1 A request for execution of a server option has been received. Sender: 2 Option name: 3 Subject: 4 Message #: 5 Comments: 6	 1—Date and time in human-readable form when the server request was received. 2—Name of the sender of the server request. 3—Name of the option that was requested by Mailman. 4—Subject of the message which requested a

Name	Description	Subject	Message	Parameters
				server. • 5—Internal number of the message requesting a server. • 6— Comments appended to the bulleting. These may include errors trapped by the server
				software and/or the operating system, as well as general purpose messages.
XTRMON	This bulletin is used by the XTRMON routine to send mail messages about routines that change in the set of routines being tracked.	Changes to routines	A check of the routines in 3 on 1 showed that 2 routines changed, Here is the list:	
XU-INSTALL- DONE	This bulletin sends a message back to the developers when an install has been done.	Install of package done.	Package ' 1 ' version 2 was installed at site 4 by 5 . Timing data: INIT started at 6 Pre-INIT started at 7 Pre-INIT finished at 8 Post-INIT started at 9 and finished at 3 For a TOTAL of	

Name	Description	Subject	Message	Parameters
			10 (hh:mm:ss).	
XUMF ERROR	This bulletin is triggered upon receipt of a Master File Notification message from the Master File Server.	Master File Server - error message	The Master File Server has received a Message Acknowledgement (MSA) segment with an Acknowledgement Code indicating an application error for the following message: HL7 Message ID: 1 Server message: 2 HL7, FM, or other message: 3 4 This message must be investigated, or the master file related to this message will be out of sync with the national standard table.	 1—Message Control ID. 2—Message from MFS. 3—Message from HL7 application, VA FileMan (FM), or other source. 4—FM error message.
XUMF INSTITUTION	This bulletin notifies the XUMF INSTITUTION mail group that an unsolicited update message has been received and processed by the Master File Server (MFS) mechanism. An INSTITUTION	Master File Server - update notification - INSTITUTION file	The following Master File Notification (MFN) message was received and processed by the Master File Server: HL7 Message ID: 1 The following INSTITUTION (#4) file entry has been 2 : IEN: 3 STATION	 1—Message ID. 2—Added or Updated. 3—Internal Entry Number. 4—STATION NUMBER. 5—NAME. 6—OFFICIAL VA NAME. 7—FACILITY

OFFICIAL VA NAME 6 FACILITY TYPE: 17 INACTIVE FACILITY FLAG: 111 VISN: 13 PARENT FACILITY: 14 STREET ADDR. 1: 19 CITY: 20 STATE: 12 ZIP: 22 ST. ADDR. 1 (MAILING): 24 STATE (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 26 ZIP (MAILING): 27 ZIP (MAILING): 28 ZIP (MAILING): 28 ZIP (MAILING): 26 ZIP (MAILING): ZIP (MAILING): 26 ZIP (Name	Description	Subject	Message	Parameters
26	Name	(#4) file entry has been added	Subject	NUMBER: 4 UPDATED ENTRY NAME: 5 OFFICIAL VA NAME: 6 FACILITY TYPE: 7 INACTIVE FACILITY FLAG: 11 VISN: 13 PARENT FACILITY: 14 STREET ADDR. 1: 19 CITY: 20 STATE: 12 ZIP: 22 ST. ADDR. 1 (MAILING): 23 CITY (MAILING): 24 STATE (MAILING): 25	TYPE. 8—OLD NAME. 9—OLD OFFICIAL VA NAME. 10—OLD FACILITY TYPE. 11— INACTIVE FACILITY FLAG. 12—STATE. 13—VISN. 14—PARENT FACILITY. 15—OLD INACTIVE FACILITY. 16—OLD STATE. 17—OLD VISN. 18—OLD PARENT
OLD VALUES NAME: 8 OFFICIAL VA NAME: 9 FACILITY TYPE: 10 INACTIVE FACILITY FLAG: 15 VISN: 17 ADDR. 1. 20—CITY 22—ZIP. 23—ST. ADDR. 1 (MAILING) (MAILING) • 25—STAT (MAILING) • 26—ZIP				ZIP: 22 ST. ADDR. 1 (MAILING): 23 CITY (MAILING): 24 STATE (MAILING): 25 ZIP (MAILING):	FLAG. • 16—OLD STATE. • 17—OLD VISN. • 18—OLD PARENT FACILITY.
FACILITY: 18 • 27—OLD				NAME: 8 OFFICIAL VA NAME: 9 FACILITY TYPE: 10 INACTIVE FACILITY FLAG: 15 VISN: 17 PARENT	 20—CITY. 22—ZIP. 23—ST. ADDR. 1 (MAILING). 24—CITY (MAILING). 25—STATE (MAILING). 26—ZIP (MAILING).

Name	Description	Subject	Message	Parameters
			1: 27 CITY: 28 STATE: 16 ZIP: 29 ST. ADDR. 1 (MAILING): 30 CITY (MAILING): 31 STATE (MAILING): 32 ZIP (MAILING):	ADDR. 1. 28—OLD CITY. 29—OLD ZIP. 30—OLD ST. ADDR. 1 (MAILING). 31—OLD CITY (MAILING). 32—OLD STATE (MAILING). 33—OLD ZIP (MAILING).
XUPROGMODE	User going into progmode message.	DROPPING INTO PROGRAMMER MODE	User # 1 has dropped into programmer mode on device 2	1—User name.2—Device.
XUS ACCESS CODE VIOLATION	This bulletin is sent by the Syntax check of the ACCESS CODE field of the USER file, whenever someone tries to assign an ACCESS CODE that is already in use for a different user. The bulletin goes to whoever is in the mail group, plus the user who tried to input the code.	A USER HAS SEEN ANOTHER USER'S ACCESS CODE	The user above tried to assign the ACCESS CODE that already belonged to 1 . 1 should change his/her code as soon as possible, since its secrecy has now been compromised.	1—Name of the USER whose ACCESS CODE was discovered.
XUSECURITY	This bulletin is sent by the signon system if a user uses a terminal that has SECURITY	SIGN-ON DISALLOWED ON SECURED TERMINAL	User 1 tried to sign on to device 2 , which has SECURITY code 3 , but 1 has security code ' 4 '.	 1—Name of User. 2—Device. 3—Device's security code.

Name	Description	Subject	Message	Parameters
	to sign on, and his DUZ(0) code is <i>not</i> found in the terminal's SECURITY code, as the FILE MANAGER ACCESS CODE attempts to sign on.		Use ^UTIO to edit the device's SECURITY, if necessary.	• 4—User's security code.
XUSERDEAC	This bulletin is sent to the ISO SECURITY mail group when a user gets deactivated.	XUSER DEACTIVATION	User name: 1 Title: 2 Service: 3 IEN: 4 Station #: 5 was deactivated on 6 .	 1—Name of user who gets deactivated. 2—Title. 3—Service. 4—Internal Entry Number (IEN). 5—Station Number and Name. 6— Deactivation Date.
XUSERDIS	This bulletin is sent to the ISO SECURITY mail group when a user has the DISUSER field set to YES .	USER DISUSER	User name: 1 Title: 2 Service: 3 IEN: 4 Station #: 5 was deactivated on 6 .	 1—Name of user who gets deactivated. 2—Title. 3—Service. 4—Internal Entry Number (IEN). 5—Station Number and Name. 6— Deactivation Date.
XUSERTERM	This bulletin is issued whenever a message cannot be delivered after the Simple	USER TERMINATION	USER 1 has been terminated as of 2 The error message was ' 3 '.	1—Name of the remote site rejecting the message (may be

Name	Description	Subject	Message	Parameters
	Mail Transfer Protocol (SMTP) DATA command is issued. It indicates that the "Mail From:" and RCPT (recipient) commands were successfully issued, but that something in the header of the message was rejected, such as duplicate message ID. The error message returned by the remote receiver is included in the bulletin.			intermediate relay). • 2—Title and message number of message which was rejected. • 3—Rejection message issued by the rejecting receiver.
XUSIGNON	This bulletin is triggered whenever someone signs on through XUS.	USER SIGNING ON	User 2 has signed on at Device 3 .	 1—User number ('DUZ') of user signing on. 2—Name of user. 3—Device at which sign-on occurred.
XUSLOCK	This bulletin is triggered when the number of bad signons causes a terminal device or IP address to be "locked out".	DEVICE LOCKED DUE TO BAD SIGN- ONS	Device 1 has made 2 bad sign-on attempts and has been locked. The device will automatically clear after the Lockout time in the Kernel System Parameters. To make the device	 1—Name of device being locked. 2—Number of bad signons recorded for the device. 3—Name of the device to release.

Name	Description	Subject	Message	Parameters
			or IP address useable before the lockout time is up use the "CLEAR TERMINAL" or "Release IP lock" option to make the device available again. Select 3 as the device to release.	
XUSSPKI CRL SERVER	This bulletin is sent when the CRL UPLOAD TASK has a problem.	CRL UPLOAD MESSAGE	At 2 The CRL Upload task reported the following problem. " 1 " Be sure that the "CRLService" is running on the server. Try stopping and restarting the service. It should be listening on a specific port.	 1—Error message. 2—Date time of the message.
XUSSPKI SAN	This bulletin is sent when the SUBJECT ALTERNATIVE NAME (#501.2) field in the NEW PERSON (#200) file has been changed or deleted. The bulletin is sent to users holding the PSDMGR security key. INOTE: Released with Kernel Patch XU*8.0*58	"Subject Alternative Name" field	The "Subject Alternative Name" field in New Person File (#200) has been changed or deleted for: 3 Before: 1 After: 2	 1—Old value before changed or deleted. 2—New value. If NULL, value was deleted. 3—Name of the user.

Name	Description	Subject	Message	Parameters
	0.			
XUSTIME	This bulletin is triggered by the Signon system if the device being used has a "PROHIBITED SIGN-ON TIMES" value, and somebody has tried to sign on during that prohibited time period; the prohibited time frame.	SIGN-ON TO A TERMINAL DURING PROHIBITED TIME	" 2 " attempted to sign on to device 1 with code " 3 ", but the device is locked out during the time period 4 .	 1—Device name (\$1). 2—User name. 3—
XUTM PROBLEM DEVICES	This bulletin is used by the XUTMKA routine to report devices that TaskMan is having problems opening.	Problem Devices	This is the XUTM PROBLEM DEVICE bulletin; it reports devices that TaskMan is having problems opening. The list shows the \$I value for the device.	None
XUVISIT	This is the default XUESSO bulletin that is issued at the time a new visitor is entered in the NEW PERSON (#200) file. A "visitor" is a user who has been validated at another VA site and is entered in your data base, so that he or she may look up patient data.	A visitor has been added to your New Person File	A visitor has been added to your New Person File with no Access or Verify Codes. Name: 2 DUZ: 3 This visitor was authenticated at 4 , (5). This user has a DUZ of 6 on the authenticating system, and a phone number of 7 . This is the bulletin	Title/date of this bulletin. 2—Name of the visitor. 3—DUZ of this visitor in the New Person File. 4—Name of the site where the visitor was authentica

Name	Description	Subject	Message	Parameters
			named XUVISIT.	ted.
				• 5— Number of the site where the visitor was authentica ted.
				6— Visitors DUZ at the authentica ting site.
				• 7— Visitor's phone number at the authentica ting site.

15.3 Remote Systems

Kernel provides options and utilities for accessing remote (and local) systems.

15.4 Interfaces

Kernel interfaces with the following VA products:

- Kernel Toolkit 7.2 or higher.
- VA FileMan 21.0 or higher.
- MailMan 7.0 or higher.

The Assigning Person Class to Providers software (i.e., Kernel Patches XU*8.0*27, 377, and 531) allows for interfaces with all of the VistA Clinical Software developed in-house. It also allows for interfaces with the QuadraMed Encoder Product Suite, which is a Commercial-Off-The-Shelf (COTS; *non*-VA) software product.



REF: For more information on QuadraMed products, see the QuadraMed website at the following Web address: http://www.quadramed.com

Kernel and Kernel Toolkit do *not* embed or require any special interfaces to any other COTS (*non*-VA) products; other than those provided by the underlying operating systems.

15.5 Electronic Signatures

Kernel and Kernel Toolkit do *not* use any electronic signatures within the software itself; however, it does provide fields, files, options, APIs, and utilities for creating and processing electronic signatures.

15.5.1 Electronic Signature Restrictions

As of Patch XU*8.0*679, the system restricts access to electronic signature fields in the NEW PERSON (#200) file for sites that elect to enable this functionality. Prior to Patch XU*8.0*679, any user could access the following fields in the NEW PERSON (#200) file through the Electronic Signature options on the VistA User's Toolbox [XUSERTOOLS] menu:

- DEGREE (#10.6)
- SIGNATURE BLOCK PRINTED NAME (#20.2)
- SIGNATURE BLOCK TITLE (#20.3)

If restrictions are enabled, then access to these fields is allowed only for users who are assigned the XUSIG security key.

To enable restrictions, authorized site personnel *must* set the XU SIG BLOCK DISABLE general parameter to a value of **ON** (1). The parameter definition is stored in the PARAMETER DEFINITION (#8989.51) file, and the parameter data is stored in the PARAMETER (#8989.5) file:

- If the XU SIG BLOCK DISABLE parameter is set to **ON** and the user has the XUSIG security key assigned in the NEW PERSON (#200), then access to the restricted fields is allowed.
- If the XU SIG BLOCK DISABLE parameter is set to **ON**, but the user does *not* have the XUSIG security key assigned, then access to the restricted fields is *not* allowed.
- If the site leaves the XU SIG BLOCK DISABLE parameter set to **OFF** (0), then access to all electronic signature fields is allowed.

The following two options on the VistA **User's Toolbox** [XUSERTOOLS] menu were affected by Patch XU*8.0*679:

- Electronic Signature Code Edit [XUSESIG]
- Electronic Signature Block Edit [XUSESIG BLOCK]

If the XU SIG BLOCK DISABLE parameter is set to **ON**, then only supervisors holding the XUSIG security key can update the SIGNATURE BLOCK PRINTED NAME (#20.2) and SIGNATURE BLOCK TITLE (#20.3) fields through the **Electronic Signature Code Edit** [XUSESIG] option, and the SIGNATURE BLOCK PRINTED NAME (#20.2) and DEGREE (#10.6) fields through the **Electronic Signature Block Edit** [XUSESIG BLOCK] option. In addition, the patch enables access to the SIGNATURE BLOCK TITLE (#20.3) field through the **Electronic Signature Block Edit** [XUSESIG BLOCK] option. This allows supervisors holding the XUSIG security key to enter the SIGNATURE BLOCK TITLE (#20.3) for other users after the XU SIG BLOCK DISABLE parameter is set to **ON**.

To maintain valid educational credentials, DEGREE (#10.6) field entries made through the **Electronic Signature Block Edit** [XUSESIG BLOCK] option are restricted to valid degrees stored in the EDUCATION (#20.11) file. To support this functionality, Patch XU*8.0*679 added the **EDUCATION (Degree) File Edit** [XUSESIG DEG] option to the **User Management** [XUSER] menu. The **EDUCATION (Degree) File Edit** [XUSESIG DEG] option, which is locked by the XUSIG security key, enables maintenance of DEGREE field entries in the EDUCATION (#20.11) file. VistA uses these records to validate user entries when appending one or more degrees to an electronic signature. This validation applies even when the XU SIG BLOCK DISABLE parameter is set to **OFF**.



NOTE: Because VistA automatically cross-references DEGREE (#10.6) field entries in the NEW PERSON (#200) with the DEGREE (#6) field in the NAME COMPONENTS (#20) file, any updates made directly to the DEGREE (#6) field in the NAME COMPONENTS (#20) file will also be validated against degrees in the EDUCATION (#20.11) file.

15.6 Security Keys

For a list of security keys exported with Kernel and Kernel Toolkit, use the VA FileMan **Inquire** to File Entries option [DIINQUIRE] as shown in Figure 18.

Figure 18: Security Keys—Obtaining Security Key Information for Kernel

Table 36: Security Keys—Kernel and Kernel Toolkit

Security Key	Description
XDR	This security key allows access to the Duplicate Resolution System.
XDRMGR	This security key allows a user access to the Kernel Duplicate Resolution Manager Utilities. This security key should only be given to the people responsible for management of the various Duplicate
	Resolution packages (e.g., Patient Registration).
XQAL-DELETE	This security key permits a user to delete alerts associated with another user. This key <i>must</i> be held in order for the user to have this capability.
XQSMDFM	This security key is required for use of the XQSMD LIMITED FM option to permit users to build some options based on VA FileMan templates.
XTLKZMGR	This security key unlocks the option to create/modify entries in the ICD files.
XTLKZUSER	This security key unlocks the Auto-Coding Utility [XTLKUSER] menu.
XUARCHIVE	This security key is needed to access the Archiving menu or to run any of the archiving options.
XUAUDITING	This security key is needed to access the Auditing menu or to run any of the Auditing options.
XUAUTHOR	This security key allows the holder to edit all existing help frames, using ^E when the frame is displayed, as well as allowing the holder to create new frames from within the menu system.
XUEPCSEDIT	This security key is required for individuals who will enter data related to electronic prescribing of controlled substances (eCPS) for providers.
	CAUTION: The holder of this key <i>CANNOT</i> also hold the XUORES security key. They are exclusive keys, and should <i>not</i> both be held by an individual at the same time.
XUEXKEY	This security key allows access to the XUEXKEY option.
XUFILEGRAM	This security key is needed to access the Filegram menu or to run any of the Filegram options except the View Filegram option.
XULM LOCKS	Controls access to the Kernel Lock Manager.
XULM SYSTEM LOCKS	Controls access to the system-level locks.
XUMF INSTITUTION	This security key locks the XUMF INSTITUTION option.

Security Key	Description
XUMGR	This security key is for users who need to act as site management staff. This key gives the user access to see information that is normally only available to the user that created it. This is a partial list of its uses:
	 Allows its holders to create "Routine"-type Options in the OPTION file with bracket syntax ([UCI]) for UCI-switching.
	Allows its holders to see the list of all spool file entries.
XUORES	This security key is given to Non-VistA persons that are authorized to write orders in the chart.
	This security key is typically given to licensed Physicians. CAUTION: DO NOT give this security key to anyone who has VistA access. Nor assign it to an individual option or menu.
	Should the person who holds this key become a VistA user then this key should be de-allocated.
XUPROG	Assign this security key to all users allowed to go into programmer options from the Menu system.
XUPROGMODE	This security key locks the Global List and "Programmer Mode options.
XUSCREENMAN	This security key is needed to access the ScreenMan menu.
XUSHOWSSN	This security key allows the user to enter all 9 digits of a person's Social Security Number (SSN) for look up in the NEW PERSON (#200) file. Any user who does <i>not</i> hold this security key will <i>not</i> be allowed to use a 9 -digit SSN lookup on the NEW PERSON (#200) file .
XUSIG	This security key is required to add and edit Electronic Signature fields using the Electronic Signature code Edit [XUSESIG] option and Electronic Signature Block Edit [XUSESIG BLOCK] options. The following fields in the NEW PERSON (#200) file are affected: • DEGREE (#10.6)
	SIGNATURE BLOCK PRINTED NAME (#20.2)
	SIGNATURE BLOCK TITLE (#20.3)
XUSNPIMTL	This security key allows users to access the NPI (National Provider ID) Menu option [XUS NPI MENU]. This key is normally assigned to the Local NPI Maintenance Team Leader; the person with authority to assign/edit VA Provider NPIs.
XUSPF200	This security key allows special privileges in the NEW PERSON (#200) file. The first of these is that holders of this key do <i>not</i> have to enter a SSN to add a new person to the file.

Security Key	Description
ZTMQ	This security key allows users to use the advanced features of the TaskMan Dequeue Tasks, Requeue Tasks, and Delete Tasks options.

15.7 File Security

File number ranges for Kernel and Kernel Toolkit are as follows:

- 3.05 3.084
- 3.1 3.54
- 4.00 4.11
- 5.00 5.00
- 7 7.1
- 9.2 9.8
- 10
- 11
- 13
- 14.4 14.8
- 15 15.4
- 19.00 19.2
- 40.5
- 49
- 101.00
- 200 201
- 8932.10 8935.91
- 8980 8980.22
- 8984.1 8984.4
- 8989.2 8989.3
- 8991 8992.1

To print File Security Access for files for Kernel, go to the programmer prompt, enter **FileMan**, and do the following:



NOTE: You can sort by Number and select a range of file numbers. **;Lnn** gives you control over column width.

Figure 19: File Security—Sample User Dialogue to Obtain File Security

```
Select OPTION: PRINT <Enter> FILE ENTRIES
OUTPUT FROM WHAT FILE: FILE// <Enter>
SORT BY: NAME// NUMBER
 Enter a file number range within Kernel.
START WITH NUMBER: FIRST// 1.0
GO TO NUMBER: LAST// 4.6
  WITHIN NUMBER, SORT BY: <Enter>
 Here the user selected a print template previously created.
FIRST PRINT ATTRIBUTE: [FILE
    1 FILE LIST
                              (Aug 01, 1990@18:41)
                                                   File #1
       FILE SECURITY ACCESS
                              (Aug 16, 2006@11:23) User #1529 File #1
     3 FILE SECURITY CODES
                                                           File #1
CHOOSE 1-3: 2 <Enter>
                                     (Aug 16, 2006@11:23) User #1529 File #1
WANT TO EDIT 'FILE SECURITY ACCESS' TEMPLATE? No// Y <Enter> (Yes)
NAME: FILE SECURITY ACCESS Replace <Enter>
READ ACCESS: @// <Enter>
WRITE ACCESS: @// <Enter>
FIRST PRINT ATTRIBUTE: NUMBER// NUMBER; L6
THEN PRINT ATTRIBUTE: NAME; L25// NAME; L30
THEN PRINT ATTRIBUTE: DD ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: RD ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: WR ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: DEL ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: LAYGO ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: AUDIT ACCESS; L3// <Enter>
THEN PRINT ATTRIBUTE: <Enter>
Heading (S/C): FILE SECURITY ACCESS Replace <Enter>
STORE PRINT LOGIC IN TEMPLATE: FILE
                            (Aug 01, 1990@18:41)
    1 FILE LIST
                                                          File #1
     2 FILE SECURITY ACCESS
                       (Jul 10, 2002@10:25) User #1529 File #1
CHOOSE 1-2: 2 <Enter>
                                     (Jul 10, 2002@10:25) User #1529 File #1
TEMPLATE ALREADY STORED THERE.... OK TO REPLACE? Y <Enter> (Yes)
START AT PAGE: 1// <Enter>
DEVICE: <Enter> Telnet terminal
```

<u>Figure 20</u> lists the *recommended* file security settings for access to Kernel and Kernel Toolkit files.

Figure 20: File Security—Recommended Kernel File Security Access

Figure 20: File Sec							
FILE SECURITY ACCESS		DD	May 16,2 RD	013 11: WR	32 DEL	LAYGO	PAGE 1 AUDIT
NAME						ACCESS	
FAILED ACCESS ATTEMPTS LOG	3.05	@	@	@	@	@	
FAILED ACCESS ATTEMPTS LOG PROGRAMMER MODE LOG	3.07	@	@	@	@	@	
ERROR LOG	3.075						
	3.076						
	3.077						
SIGN-ON LOG	3.081	@	@	@	@	@	@
LOCKED IP or DEVICE FAILED SIGNON ATTEMPTS	3.083	@	@	#	@	@	@
FAILED SIGNON ATTEMPTS	3.084	@	@	#	@	@	@
	3.1		@	@	#	@	#
	3.2	#		#	#	#	#
DA RETURN CODES	3.22 3.23	a	a	a	@	@	a
LINE/PORT ADDRESS DEVICE	ა.∠ა ვნ	#	@ I	#	#	#	@ #
SPOOL DOCUMENT	3.5 3.51	π G	(d	@ #	# @	(d	@ #
	3.519	G	G	G	G	G	
	3.54						
INSTITUTION	4	@		#	@	#	
MASTER FILE PARAMETERS			@	@	@	@	@
MD5 Signature	4 005		-	-	-	-	
STANDARD TERMINOLOGY VERSION F INSTITUTION ASSOCIATION TYPES FACILITY TYPE	4.009	@	@	@	@	@	@
INSTITUTION ASSOCIATION TYPES	4.05	@		@	@	@	@
FACILITY TYPE					@	@	@
AGENCY	4.11	@			@	@	@
STATE	5	#	@	#	#	#	@
POSTAL CODE	5.12	@		@	@	@	@
COUNTY CODE	5.13	@		@	@	@	@
PROVIDER CLASS	7	#			#		
SPECIALITY		#			#		"
HELP FRAME	9.2	#	_	ш	#	ш	#
		#	I #	#	#	#	#F
BUILD		@ @	#	# @	#	# @	#
INSTALL ROUTINE		#	# T	#	#	#	#
RACE	10	#			# d	# d	II .
MARITAL STATUS		#			d	d	
RELIGION		#			d	d	
TASKS	14.4	(a		^	@	a a	@
VOLUME SET	14.5	Č			Ü	Č	-
UCI ASSOCIATION	14.6						
TASKMAN SITE PARAMETERS	14.7						
TASKMAN SNAPSHOT	14.71	@		@	@	@	@
TASKMAN SNAPSHOT	14.72	@				@	@
TASK SYNC FLAG	14.8	@	@	@	@	@	@
DUPLICATE RECORD	15						
DUPLICATE RESOLUTION	15.1	@	#	@	@	#	
XDR MERGE PROCESS	15.2	@					#
XDR REPOINTED ENTRY	15.3	@					#
MERGE IMAGES	15.4	@	@	@	@	@	@
OPTION	19	#	#	#	#	#	#
AUDIT LOG FOR OPTIONS	19.081	@	#	#	#	#	#
SECURITY KEY	19.1	#	#	# @	# @	# @	#
OPTION SCHEDULING	19.2	@ @	@ @	@ @	@ @	@ @	@ @
MENUMAN QUICK HELP	19.8 20	@ @	@ #	#	(d #	#	G
NAME COMPONENTS HOLIDAY	40.5	#	#	# Dd	# Dd	# Dd	#
SERVICE/SECTION	40.5	#	# D	d d	d d	d d	π
			ט		#	#	
	101	Id		#			
PROTOCOL	101 200	@ #	#	#			
	101 200 8932.1	# @	#	# # ^	# # @	#	<u>@</u>

KERMIT HOLDING	8980		#	#	#			ĺ
PKI Digital Signatures	8980.2							
PKI CRL URLS	8980.22	#	#	#	#	#	#	
LOCAL KEYWORD	8984.1							
LOCAL SHORTCUT	8984.2	@	#	@	@	@	@	
LOCAL SYNONYM	8984.3	@	#	@	@	@	@	
LOCAL LOOKUP	8984.4	@	#	@	@	@	@	
KERNEL PARAMETERS	8989.2	@	@	@	@	@	@	
KERNEL SYSTEM PARAMETERS	8989.3	@	@	@	@	@	@	
XTV ROUTINE CHANGES	8991	@	@	@	@	@	@	
XTV VERIFICATION PACKAGE	8991.19	@	@	@	@	@	@	
XTV GLOBAL CHANGES	8991.2	@	@	@	@	@	@	
XQAB ERRORS LOGGED	8991.5							
ALERT	8992	@	@	@	@	@	@	
ALERT TRACKING	8992.1							



NOTE: This report was reformatted to fit the display area (smaller font).

15.8 Contingency Planning

All sites should develop a local contingency plan to be used in the event of software/hardware problems in a production (live) environment. The contingency plan *must* identify the procedure for maintaining functionality provided by this software in the event of system outage.

15.9 Official Policies

To protect the security of VistA systems, distribution of this software for use on any other computer system by VistA sites is prohibited. All requests for copies of Kernel for *non*-VistA use should be referred to the VistA site's local Office of Information Field Office (OIFO).

User should refer to <u>VHA Directive 2012-003</u>, <u>Person Class File Taxonomy</u>, which redefines established policy for assigning Person Class codes to providers in the Veterans Health Information Systems and Technology Architecture (VistA) NEW PERSON (#200) file.



REF: For software and documentation disclaimers, see the "Disclaimers" section.

Glossary

Table 37: Glossary of Terms and Acronyms

Term	Definition
ALPHA TESTING	In VA terminology, Alpha testing is when a VistA test software application is running in a site's account.
AUDIT ACCESS	A user's authorization to mark the information stored in a computer file to be audited.
AUDITING	Monitoring computer usage such as changes to the database and other user activity. Audit data can be logged in a number of VA FileMan and Kernel files.
AUTO MENU	An indication to MenuMan that the current user's menu items should be displayed automatically. When AUTO MENU is <i>not</i> in effect, the user <i>must</i> enter a question mark at the menu's select prompt to see the list of menu items.
BETA TESTING	In VA terminology, Beta testing is when a VistA test software application is running in a Production account.
CAPACITY MANAGEMENT	The process of assessing a system's capacity and evaluating its efficiency relative to workload in an attempt to optimize system performance. Kernel provides several utilities.
CARET	A symbol expressed as ^ (caret). In many M systems, a caret is used as an exiting tool from an option. Also, this symbol is sometimes referred to as the "up-arrow" symbol.
CHECKSUM	A numeric value that is the result of a mathematical computation involving the characters of a routine or file.
CIPHER	A system that arbitrarily represents each character as one or more other characters.
	(See also: ENCRYPTION.)
CMS	Centers for Medicare & Medicaid Services (related to assigning users to Person Class).
COMMON MENU	Options that are available to all users. Entering two question marks (??) at the menu's select prompt will display any SECONDARY MENU OPTIONS available to the signed-on user along with the common options available to all users.
COMPILED MENU SYSTEM (*XUTL GLOBAL)	Job-specific information that is kept on each CPU so that it is readily available during the user's session. It is stored in the ^XUTL global, which is maintained by the menu system to hold commonly referenced information. The user's place within the menu trees is stored, for example, to enable navigation via menu jumping.

Term	Definition
COMPUTED FIELD	This field takes data from other fields and performs a predetermined mathematical function (e.g., adding two columns together). You do <i>not</i> , however, see the results of the mathematical function on the screen. Only when you are printing or displaying information on the screen do you see the results for this type of field.
DEVICE HANDLER	The Kernel module that provides a mechanism for accessing peripherals and using them in controlled ways (e.g., user access to printers or other output devices).
DIFROM	VA FileMan utility that gathers all software components and changes them into routines (namespacel* routines) so that they can be exported and installed in another VA FileMan environment.
DOUBLE QUOTE (")	A symbol used in front of a Common option's menu text or synonym to select it from the Common menu. For example, the five-character string "TBOX selects the User's Toolbox Common option.
DR STRING	The set of characters used to define the DR variable when calling VA FileMan. Since a series of parameters may be included within quotes as a literal string, the variable's definition is often called the DR string. To define the fields within an edit sequence, for example, the developer may specify the fields using a DR string rather than an INPUT template.
DUZ(0)	A local variable that holds the FILE MANAGER ACCESS CODE of the signed-on user.
ENCRYPTION	Scrambling data or messages with a cipher or code so that they are unreadable without a secret key. In some cases, encryption algorithms are one directional; that is, they only encode, and the resulting data cannot be unscrambled (e.g., Access and Verify codes).
FILE ACCESS SECURITY SYSTEM	Formerly known as Part 3 of the Kernel Inits. If the File Access Security conversion has been run, file-level security for VA FileMan files is controlled by Kernel's File Access Security system, <i>not</i> by File Manager Access codes (i.e., FILE MANAGER ACCESS CODE field).
FORCED QUEUING	A device attribute indicating that the device can only accept queued tasks. If a job is sent for foreground processing, the device will reject it and prompt the user to queue the task instead.
GO-HOME JUMP	A menu jump that returns the user to the primary menu presented at signon. It is specified by entering two carets (^^) at the menu's select prompt. It resembles the Rubber-band Jump but without an option specification after the carets.

Term	Definition
HCFA	Health Care Financing Administration (related to assigning users to Person Class).
HELP PROCESSOR	A Kernel module that provides a system for creating and displaying online documentation. It is integrated within the menu system so that help frames associated with options can be displayed with a standard query at the menu's select prompt.
HOST FILE SERVER (HFS)	A procedure available on layered systems whereby a file on the host system can be identified to receive output. It is implemented by the Device Handler's HFS device type.
INDEX (%INDEX)	A Kernel utility used to verify routines and other M code associated with a software application. Checking is done according to current ANSI MUMPS standards and VistA programming standards. This tool can be invoked through an option or from direct mode (>D ^%INDEX).
INIT	Initialization of a software application. INIT* routines are built by VA FileMan's DIFROM and, when run, recreate a set of files and other software components.
JUMP	In VistA applications, the Jump command allows you to go from a particular field within an option to another field within that same option. You can also Jump from one menu option to another menu option without having to respond to all the prompts in between. To jump, type a caret (^) and then type the name of the field or option you wish to jump to. (See also GO-HOME JUMP, PHANTOM JUMP, RUBBER-BAND JUMP, or UP-ARROW JUMP.)
JUMP START	A logon procedure whereby the user enters the "Access code;Verify code;option" to go immediately to the target option, indicated by its menu text or synonym. The jump syntax can be used to reach an option within the menu trees by entering "Access;Verify;^option".
KERMIT	A standard file transfer protocol. It is supported by Kernel and can be set up as an alternate editor.
MANAGER ACCOUNT	A UCI that can be referenced by non-manager accounts (e.g., production accounts). Like a library, the MGR UCI holds percent routines and globals (e.g., ^%ZOSF) for shared use by other UCIs.
MENU CYCLE	The process of first visiting a menu option by picking it from a menu's list of choices and then returning to the menu's select prompt. MenuMan keeps track of information (e.g., the user's place in the menu trees) according to the completion of a cycle through the menu system.

Term	Definition
MENU MANAGER	The Kernel module that controls the presentation of user activities (e.g., menu choices or options). Information about each user's menu choices is stored in the Compiled Menu System, the ^XUTL global, for easy and efficient access.
MENU SYSTEM	The overall MenuMan logic as it functions within the Kernel framework.
MENU TEMPLATE	An association of options as pathway specifications to reach one or more final destination options. The final options <i>must</i> be executable activities and <i>not</i> merely menus for the template to function. Any user can define user-specific MENU templates via the corresponding Common option.
MENU TREES	The menu system's hierarchical tree-like structures that can be traversed or navigated, like pathways, to give users easy access to various options.
PAC	P rogrammer A ccess C ode. An optional user attribute that can function as a second level password into programmer mode.
PART 3 OF THE KERNEL INIT	See FILE ACCESS SECURITY SYSTEM.
PATTERN MATCH	A preset formula used to test strings of data. Refer to your system's M Language Manuals for information on Pattern Match operations.
PHANTOM JUMP	Menu jumping in the background. Used by the menu system to check menu pathway restrictions.
PRIMARY MENUS	The list of options presented at signon. Each user <i>must</i> have a PRIMARY MENU OPTION in order to sign on and reach MenuMan. Users are given primary menus by system administrators. This menu should include most of the computing activities the user will need.
PROGRAMMER ACCESS	Privilege to become a programmer on the system and work outside many of the security controls of Kernel. Accessing programmer mode from Kernel's menus requires having the programmer's at-sign security code, which sets the variable DUZ(0)=@ .
PROTOCOL	An entry in the PROTOCOL (#101) file. Used by the Order Entry/Results Reporting (OE/RR) software to support the ordering of medical tests and other activities. Kernel includes several protocol-type options for enhanced menu displays within the OE/RR software.
QUEUING	Requesting that a job be processed in the background rather than in the foreground within the current session. Kernel's TaskMan module handles the queuing of tasks.

Term	Definition
QUEUING REQUIRED	An option attribute that specifies that the option <i>must</i> be processed by TaskMan (the option can only be queued). The option can be invoked, and the job prepared for processing, but the output can only be generated during the specified time periods.
RESOURCE	A method that enables sequential processing of tasks. The processing is accomplished with a RES device type designed by the application programmer and implemented by system administrators. The process is controlled via the RESOURCE (#3.54) file.
RUBBER-BAND JUMP	A menu jump used to go out to an option and then return, in a bouncing motion. The syntax of the jump is two carets (^^) followed by an option's menu text or synonym (e.g., ^^Print Option File). If the two carets are <i>not</i> followed by an option specification, the user is returned to the primary menu.
	(See also: GO-HOME JUMP.)
SCHEDULING OPTIONS	A way of ordering TaskMan to run an option at a designated time with a specified rescheduling frequency (e.g., once per week).
SCROLL/NO SCROLL	The Scroll/No Scroll button (also called Hold Screen) allows the user to " stop " (No Scroll) the terminal screen when large amounts of data are displayed too fast to read and " restart " (Scroll) when the user wishes to continue.
SECONDARY MENU OPTIONS	Options assigned to individual users to tailor their menu choices. If a user needs a few options in addition to those available on the primary menu, the options can be assigned as secondary options. To facilitate menu jumping, secondary menus should be specific activities, <i>not</i> elaborate and deep menu trees.
SECURE MENU DELEGATION (SMD)	A controlled system whereby menus and keys can be allocated by people other than system administrators (e.g., application coordinators) who have been so authorized. SMD is a part of MenuMan.
SERVER OPTION	In VistA, an entry in the OPTION (#19) file. An automated mail protocol that is activated by sending a message to the server with the " S.server " syntax. A server option's activity is specified in the OPTION (#19) file and can be the running of a routine or the placement of data into a file.
SIGNON/SECURITY	The Kernel module that regulates access to the menu system. It performs a number of checks to determine whether access can be permitted at a particular time. A log of signons is maintained.

Term	Definition
SPECIAL QUEUEING	An option attribute indicating that TaskMan should automatically run the option whenever the system reboots.
SPOOLER	An entry in the DEVICE (#3.5) file. It uses the associated operating system's spool facility, whether it's a global, device, or host file. Kernel manages spooling so that the underlying OS mechanism is transparent. In any environment, the same method can be used to send output to the spooler. Kernel will subsequently transfer the text to a global for subsequent despooling (printing).
SYNONYM	In VistA, a field in the OPTION (#19) file. Options can be selected by their menu text or synonym.
TASKMAN	The Kernel module that schedules and processes background tasks (aka Task Manager).
TIMED READ	The amount of time Kernel will wait for a user response to an interactive READ command before starting to halt the process.
UP-ARROW JUMP	In the menu system, entering a caret (^) followed by an option name accomplishes a jump to the target option without needing to take the usual steps through the menu pathway.
Z EDITOR (^%Z)	A Kernel tool used to edit routines or globals. It can be invoked with an option, or from direct mode after loading a routine with >X ^%Z.
ZOSF GLOBAL (^%ZOSF)	The Operating System File—a manager account global distributed with Kernel to provide an interface between VistA software and the underlying operating system. This global is built during Kernel installation when running the manager setup routine (ZTMGRSET). The nodes of the global are filled-in with operating system-specific code to enable interaction with the operating system. Nodes in the ^%ZOSF global can be referenced by application developers so that separate versions of the software need <i>not</i> be written for each operating system.



REF: For a list of commonly used terms and definitions, see the OIT Master Glossary VA Intranet Website.

For a list of commonly used acronyms, see the VA Acronym Lookup Intranet Website.

Index

	%ZTMOVE Routine, 24
#	%ZTMS Routine, 24
# OF ATTEMPTS (#51.2) E: 14.5	%ZTMS0 Routine, 24
# OF ATTEMPTS (#51.2) Field, 5	%ZTMS1 Routine, 24
	%ZTMS2 Routine, 24
%	%ZTMS3 Routine, 24
%Index of Routines Option, 244	%ZTMS4 Routine, 24
%INDEX Utility, 77	%ZTMS7 Routine, 24
%XUCI Routine, 344	%ZTMSH Routine, 24
%Z Editor, 77	
%ZIS Routine, 23	1
%ZIS1 Routine, 23	-
%ZIS2 Routine, 23]], 102
%ZIS3 Routine, 23	
%ZIS4 Routine, 344	٨
%ZIS5 Routine, 23	A0/FT C1 1 1 245
%ZIS6 Routine, 23	^%ET Global, 345
%ZIS7 Routine, 23	^%IS Global, 345
%ZISC Routine, 23	^%SY Global, 345
%ZISP Routine, 23	^%Z Global, 345, 351
%ZISS Routine, 23	^%ZIS Global, 25, 64, 355
%ZISS1 Routine, 24	^%ZIS("C") Global, 351
%ZISS2 Routine, 24	^%ZIS("H") Global, 351
%ZISUTL Routine, 24	^%ZISL Global, 64, 71, 355
%ZOSF("TEST") Node, 77	^%ZOSF Global, 66, 311, 344, 351, 352,
%ZOSV Routine, 344	355 ^%ZTER Global, 65, 355
%ZTER Routine, 24	^%ZTSCH Global, 66, 345, 351, 356
%ZTER1 Routine, 24	^%ZTSH Global, 355
%ZTLOAD Routine, 24	^%ZTSK Global, 65, 78, 345, 351, 356
%ZTLOAD1 Routine, 24	^%ZUA Global, 65, 309, 345, 356
%ZTLOAD2 Routine, 24	^CPU Global, 345
%ZTLOAD3 Routine, 24	^DIC Global, 63, 354
%ZTLOAD4 Routine, 24	^DIC Global;, 66
%ZTLOAD5 Routine, 24	^DIZ Global, 63
%ZTLOAD6 Routine, 24	^HOLIDAY Global, 63, 354
%ZTLOAD7 Routine, 24	^RTH Global, 345
%ZTM Routine, 24, 344	^SPOOL Global, 345
%ZTM0 Routine, 24	^SYS Global, 345
%ZTM1 Routine, 24	^TMP Global, 66, 354
%ZTM2 Routine, 24	^USC Global, 354
%ZTM3 Routine, 24	^UTILITY Global, 354
%ZTM4 Routine, 24	^VA Global, 64, 354
%ZTM5 Routine, 24	^XLM Global, 63
%ZTM6 Routine, 24	122112 010001, 00

^XMB Global, 66, 354	ALERT CRITICAL TEXT (#8992.3) file,
^XMBS Global, 354	91
^XPD Global, 63, 354	ALERT CRITICAL TEXT (#8992.3) File,
^XT Global, 63	64, 91, 183, 188
^XTMP Global, 66, 174, 198, 355	Alert Management Menu, 190
^XTV Global, 64, 354	ALERT RECIPIENT TYPE (#8992.2) file,
^XUCM Global, 22	91
^XUSEC Global, 64, 355	ALERT RECIPIENT TYPE (#8992.2) File,
^XUTL Global, 66, 351, 355	64
	ALERT TRACKING (#8992.1) File, 64, 90,
A	183, 186, 189
A	Alert Tracking file entry Option, 189
Abbreviated Menu Diagrams Option, 289	Alerts, 357
Access Code, 151, 221	Alerts - Set/Remove Surrogate for User
Access Monitor Menu, 252	Option, 191
Accounts	All the Keys a User Needs Option, 197
Manager, 345	Allocate/De-Allocate Exclusive Key(s)
Manger Account Routines, 23	Option, 240
Production Account Routines, 26	Allocate/De-Allocate of PSDRPH Key
Accumulate Globals for Package Option,	Option, 154, 156, 213
304	Allocation of Security Keys Option, 245
Acronyms	Allow other users access to spool documents
Intranet Website, 382	Option, 227
ACTIVE by Custodial Package Option, 346	ALLOWABLE ENTITIES (#51, 30)
Actual Usage of Alpha/Beta Test Options	Multiple Field, 11
Option, 179	Alpha/Beta Test Option Usage Menu, 182
Add a New User to the System, 10	ALPHA/BETA TEST PACKAGE (#32)
Add a New User to the System Option, 101,	Multiple Field, 182
270	Ancillary Data Review Option, 157
Add Entries To Look-Up File Option, 18	Annotate an Error Option, 237
Add Entries To Look-Up File Option:, 299	Application Program Interfaces (APIs), 311
Add Error Screens Option, 281	Application Utilities Menu, 300
Add Verified Duplicate Pair Option, 157	Approve verified duplicates for merging
Add/Edit NPI values for Providers Option,	Option, 158
260	Archiving, 308
Add/Modify Utility Menu, 299	ASK DEVICE TYPE AT SIGN-ON (#205)
Additional	· /
Files Installed During Virgin Installation,	Field, 5
97	Ask if Production Account Option, 217
Routines Installed by Virgin Install, 61	Assign Editors Option, 194
•	Assign/Delete a File Range Option, 243
ADP Security Key, 195, 196, 197, 199	Assumptions, xxiii
AFFECTS RECORD MERGE (#20) Field,	Audit Display Menu, 229
22 A CENCY (#4.11) Eila 62.74	Audit Features Menu, 230
AGENCY (#4.11) File, 63, 74	AUDIT LOG FOR OPTIONS (#19.081)
AGENCY CODE (#9) Field, 5	File, 64, 81
ALERT (#8992) File, 64, 90, 185, 188, 189,	Audit Menu, 348
190	

Audited Options Log Option, 253	XUTM PROBLEM DEVICES, 367
Audited Options Purge Option, 253, 308	XUVISIT, 367
Audit-Related site parameters, 15	BYPASS DEVICE LOCK-OUT (#211)
Authentication	Field, 5, 6
Kernel Authentication Token, 342	
AUTO MENU (#51.6) Field, 5	С
AUTO-GENERATE ACCESS CODES	
(#11) Field, 5	Calculate and Show Checksum Values
Automatic Deactivation of Users Option,	Option, 303
230, 308	Callable Entry Points, 311
Automatically Merge all Ready Verified	Callout Boxes, xxi
Duplicates Option, 158	Capacity Planning Menu, 295
В	Change Device's Terminal Type Option, 231
5	Change my Division Option, 265
Backup a Transport Global Option, 170	Change tasks device Option, 285
BINARY OBJECT (#8995.9) File, 64	Change user's allocated keys to delegated
Bring in Sent Routines Option, 301	keys Option, 195
Browse a Spool Document Option, 227	Check Failed Access Log Option, 272
BUILD (#9.6) File, 33, 63, 76, 170, 171,	Check file 5.13 & file 5 Option, 166
172, 173, 174, 175, 176, 310	Check Merge Process Status (reverse order)
Build a New Menu Option, 200	Option, 158
Build an 'NTEG' routine for a package	Check Pair of Records to see if Duplicates
Option, 303	Option, 158
Build File Print Option, 173	Check Routines on Other CPUs Option, 254
Build Primary Menu Trees Option, 192	Check Taskman's Environment Option, 278
BULLETIN (#3.6) File, 72	CHECKSUM REPORT Field, 206
Bulletins, 358	Clean Error Log over Range of Dates
XDR ERROR, 358	Option, 308
XDR MERGED, 358	Clean Error Log Over Range Of Dates
XDR VERIFIED, 359	Option, 280
XQSERVER, 359	Clean Error Trap Option, 239, 294, 309
XTRMON, 360	Clean Old Job Nodes in ^XUTL Option, 308
XU-INSTALL-DONE, 360	Clean old Job Nodes in XUTL Option, 177
XUMF ERROR, 361	Clean Task File Option, 278, 308
XUMF INSTITUTION, 361	Cleanup Task List Option, 287
XUPROGMODE, 363	Clear all resources Option, 234
XUS ACCESS CODE VIOLATION, 363	Clear all users at startup Option, 267
XUSECURITY, 363	Clear All Users at Startup Option, 308
XUSERDEAC, 364	Clear Electronic signature code Option, 272
XUSERDIS, 364	Clear one Resource Option, 235
XUSERTERM, 364	Clear Terminal Option, 268
XUSIGNON, 365	CM DAILY STATISTICS (#8986.6) File,
XUSLOCK, 365	22
XUSSPKI CRL SERVER, 366	CM DISK DRIVE RAW DATA, 23
XUSSPKI SAN, 366	CM NODENAME RAW DATA, 23
XUSTIME, 367	CM SITE NODENAMES file, 23

CM SITE PARAMETERS file, 23 D Codes DA Return Code Edit Option, 206 Access, 151, 221 DA RETURN CODES (#3.22) File, 64, 70 Verify, 7, 151, 221 DA RETURNS CODE (#3.22) File, 206 Compare local/national checksums report Option, 205 RTHIST, 23 Compare routines on tape to disk Option, **Data Dictionary** 256 Data Dictionary Utilities Menu, xxii Compare Transport Global to Current Listings, xxii System Option, 171 DBA Approvals, 345 Compare two routines Option, 294 DBA IA CUSTODIAL MENU, 346 Configuring VAX/Alpha Performance DBA IA CUSTODIAL Option, 346 Monitor (VPM), 22 DBA IA INQUIRY Option, 346 Contingency Planning, 376 DBA IA ISC Menu, 346 Continue Option, 233 DBA IA SUBSCRIBER MENU, 346 Convert any IP address per system settings DBA IA SUBSCRIBER Option, 346 Option, 167 DBA Menu, 346 Convert any IP address to IPv4 Option, 168 Deactivate a User Option, 268, 309 Convert any IP address to IPv6 Option, 168 De-allocation of Security Keys Option, 245 Convert Loaded Package for Redistribution DEFAULT # OF ATTEMPTS (#202) Field, Option, 171 5 Copy Build to Build Option, 171 DEFAULT (#3) Field, 10 Copy Everything About an Option to a New DEFAULT AUTO-MENU (#206) Field, 5 Option Option, 193 DEFAULT Field, 4 Copy One User's File Access to Others DEFAULT INSTITUTION (#217) Field, 5 Option, 242 DEFAULT LANGUAGE (#207) Field, 6 Copy One Users Menus and Keys to others DEFAULT LOCK-OUT TIME (#203) Option, 201 Field, 6 Copy the compiled menus from the print DEFAULT MULTIPLE SIGN-ON (#204) server Option, 222 Field, 6 Core Applications Menu, 102, 106, 233 **DEFAULT TIMED-READ (SECONDS)** Count of Clinical Trainee's Option, 224 (#210) Field, 6 COUNTY CODE (#5.13) File, 75, 167 DEFAULT TYPE-AHEAD (#209) Field, 6 CPT (#81) File, 1 DEGREE (#10.6) Field, 369, 370 CPU/Service/User/Device Stats Option, 276 DEGREE (#6) Field, 370 Create a Build Using Namespace Option, Delegate keys Option, 195 170 Delegate's Menu Management Menu, 204 Create a new menu template Option, 204 Delete a Menu Template Option, 204 Create a Set of Options To Mark Out-Of-Delete A Spool Document Option, 227 Order Option, 197 Delete Entries From Look-up Option, 299 Critical Alerts Count Report Option, 183 Delete Error Log Option, 280, 309 Cross Reference Help Frames Option, 195 Delete Old (>14 d) Alerts Option, 190, 309 **Cross-References** Delete Routines Option, 302 MUMPS, 18 Delete Tasks Option, 279 Current Line/Port Address Option, 234 Delete Unreferenced Options Option, 177

Custodial Package Menu, 346

Delete Users' Access to a Set of Files	DR Variable, 8
Option, 244	DT Variable, 349
Dequeue Tasks Option, 279	DTIME Variable, 349
DEVICE (#3.5) File, 5, 6, 25, 64, 69, 70,	DUPLICATE RECORD (#15) file, 26
235, 276, 297, 349, 350	DUPLICATE RECORD (#15) File, 2, 20,
DEVICE ATTRIBUTES Message, 5	21, 22, 26, 27, 28, 29, 30, 64, 79, 80, 157,
Device Edit Option, 234	159, 160, 161, 163, 333
Device Failed Access Attempts Option, 241	DUPLICATE RESOLUTION (#15.1) File,
DEVICE Field, 70	2, 20, 28, 30, 64, 80, 161, 333, 334, 358
Device Handler, 71, 345, 349, 352	Duplicate Resolution System Menu, 160
Device Management Menu, 102, 107, 276	Duplicate Resolution Utilities
DEVICE TO AUDIT (#212.1) Multiple	DUPLICATE RECORD (#15) File, 21
Field, 6, 16	Implementing
DI DDU Menu, xxii	Data Storage, 20
Diagram Menus Option, 103, 289	Programmer Notes, 20
DIALOG (#.84) File, 349	Resource Requirements, 20
DIEDIT Option, 20	Retention, 20
DIINQUIRE Option, 370	Duplicate Resolution Utilities,, 2, 22
DILIST Option, xxii	DUZ, 352
Direct Mode Utilities, 330	DUZ Variable, 349, 353
Directives	DUZ("AG") Variable, 349
2012-003, Person Class Taxonomy, 376	DUZ("AUTO") Variable, 349
Disclaimers	DUZ("LANG") Variable, 6, 349
Software, xix	DUZ(0) Variable, 349, 353
Display Device Data Option, 236	DUZ(2) Variable, 5, 349
Display Menus and Options Option, 103,	
193	E
Display of Programmer Mode Entry List	E
Option, 254	Edit a Build Option, 172
Display Patches for a Package Option, 174	Edit a Protocol Option, 257
Display Search Status Option, 159	Edit a User's Options Option, 201
Display the Kernel Audit Parameters	Edit All Device Fields Option, 235
Option, 229	Edit an Existing User Option, 10, 101, 269
Display User Characteristics Option, 40, 289	Edit Devices by Specific Types Menu, 235
Display/Edit Help Frames Option, 194	Edit Duplicate Record Status Option, 159
Do nothing menu, 215	Edit Duplicate Resolution File Option, 159
Documentation	Edit Error Screens Option, 281
History, ii	Edit Facility DEA# and Expiration Date
Information Sources	Option, 154, 209
Files	Edit File Option, 20
Security Access, 373	EDIT HISTORY (Multiple) Field, 77
Symbols, xx	Edit Install Status Option, 172
Documentation Conventions, xx	Edit KERMIT holding file Option, 293
Documentation Navigation, xxi	Edit Line/Port Addresses Option, 234
DOMAIN (#4.2) File, 66, 97	Edit Logical/Physical Mapping Option, 218
Download a Spool file entry Option, 294	Edit Option Option, 36
	Edit options Option, 237

Edit Options Option, 81	Exemptions
Edit Parameter Definition Keyword Option,	SACC, 351
168	Exported Options, 102
Edit Parameter Values Option, 168	Extended-Action Options, 151
Edit Parameter Values with Template	External Relations, 344
Option, 168	Kernel
Edit Site IP lockout Option, 7, 218	Other VistA Software, 344
Edit Taskman Parameters Menu, 284	M Operating Systems, 344
Edit Trainee Registration Data Option, 224	W Operating Systems, 5 TT
Edit User Characteristics Option, 10, 269	_
Edit User's Spooler Access Option, 229	F
Edit Verification Package File Option, 303	FACILITY TYPE (#4.1) File, 63, 74, 252
Editors	FAILED ACCESS ATTEMPT AUDIT
%Z, 77	(#212.5) Field, 6, 16
Edits and Distribution Menu, 171	FAILED ACCESS ATTEMPTS LOG
EDUCATION (#20.11) File, 370	(#3.05) File, 65, 67
EDUCATION (#20.11) File, 576 EDUCATION (Degree) File Edit Option,	Failed Access Attempts Log Option, 241
272, 370	Failed Access Attempts Log Purge Option,
Electronic Signature Block Edit Option,	244, 309
272, 369, 370, 372	FAILED SIGNON ATTEMPTS (#3.084)
Electronic Signature code Edit Option, 271,	File, 68
372	Fields, 98
Electronic Signature Code Edit Option, 369	# OF ATTEMPTS (#51.2), 5
Electronic Signature Restrictions, 369	AFFECTS RECORD MERGE (#20), 22
Electronic Signatures, 369	AGENCY CODE (#9), 5
Enter/Edit Kernel Site Parameters Option,	ALLOWABLE ENTITIES (#51, 30)
15, 17, 274	Multiple, 11
Enter/Edit of Security Keys Option, 246	ALPHA/BETA TEST PACKAGE
ePCS DEA Utility Functions Menu, 154,	multiple (#32), 182
213	ASK DEVICE TYPE AT SIGN-ON
ePCS Edit Prescriber Data Option, 208	(#205), 5
ePCS Set SAN from PIV Card Option, 275	AUTO MENU (#51.6), 5
ERROR LOG (#3.075) File, 65, 67	AUTO-GENERATE ACCESS CODES
ERROR MESSAGES (#3.076) File, 65, 67	(#11), 5
Error Processing Menu, 238	BYPASS DEVICE LOCK-OUT (#211),
Error Summary Menu, 237	5, 6
Error trap Auto clean Option, 239	CHECKSUM REPORT, 206
Error Trap Display Option, 41, 239	DEFAULT, 4
Error Trap Param Edit Option, 237	DEFAULT # OF ATTEMPTS (#202), 5
ERROR TRAP SUMMARY (#3.077) File,	DEFAULT (#3), 10
68, 238	DEFAULT AUTO-MENU (#206), 5
Errors Logged in Alpha/Beta Test	DEFAULT INSTITUTION (#217), 5
(QUEUED) Option, 153, 181	DEFAULT LANGUAGE (#207), 6
Establish System Audit Parameters Option,	DEFAULT LOCK-OUT TIME (#203), 6
15, 229	DEFAULT MULTIPLE SIGN-ON
EVE Menu, 102, 103, 106	(#204), 6

DEFAULT TIMED-READ (SECONDS)	ORGANIZATION ID (#200.3), 9
(#210), 6	OUT-OF-SERVICE DATE (#6), 5
DEFAULT TYPE-AHEAD (#209), 6	PATCH APPLICATION HISTORY
DEGREE (#10.6), 369, 370	(Multiple), 76
	PERFORM DEVICE CHECKING
DEGREE (#6), 370	
DEVICE, 70	(#59.91), 5
DEVICE TO AUDIT (#212.1) Multiple,	PROHIBITED TIMES FOR SIGN-ON
6, 16	(#2009), 5
EDIT HISTORY (Multiple), 77	RECORD HAS PACKAGE DATA
FAILED ACCESS ATTEMPT AUDIT	(#9.402,4), 22
(#212.5), 6, 16	REPLACEMENT, 4
FILE MANAGER ACCESS CODE, 349	REPLACEMENT (#4), 10
INDEX (#.03), 18	ROUTINE MONITORING (#9.8), 9
INITIATE AUDIT (#19.4), 6, 8, 9, 16, 17	ROUTINE N-SPACE TO MONITOR
INTERACTIVE USER'S PRIORITY	(#9.81) Multiple, 9
(#216), 7	SCHEDULING RECOMMENDED
IP SECURITY ON (#405.1), 7	(#209), 223, 224
LAST SIGN-ON, 5	SECURITY (#15), 5
LIFETIME OF VERIFY CODE (#214), 7	SECURITY TOKEN SERVICE (#200.1),
LOCK-OUT TIME (#51.3), 6	9
LOG RESOURCE USAGE? (#300), 7	SIGNATURE BLOCK PRINTED NAME
LOG SYSTEM RT? (#41, 6), 7, 10	
	(#20.2), 369
MAX SIGNON ALLOWED (#41, 2), 7,	SIGNATURE BLOCK TITLE (#20.3),
10	369
MAX SPOOL DOCUMENT LIFE-SPAN	STATUS (#15.01101,.02), 22
(#31.3), 7, 17	SUBJECT ORGANIZATION (#205.2), 8
MAX SPOOL DOCUMENTS PER	SUBJECT ORGANIZATION ID
USER (#31,2), 7	(#205.3), 9
MAX SPOOL DOCUMENTS PER	SUBTYPE, 70
USER (#31.2), 17	TERMINATE AUDIT (#19.5), 6, 8, 9, 16,
MAX SPOOL LINES PER USER	17
(#31.1), 8, 17	TIMED READ (# OF SECONDS)
MERGE PACKAGES (#15,1101)	(#51.1), 6
Multiple, 22	TYPE-AHEAD (#51.9), 6
•	
MULTIPLE SIGN-ON (#200.04), 6	USER TO AUDIT (#19.3) Multiple, 8, 9,
NAME OF MERGE ROUTINE	16
(#9.402,3), 22	USER TO AUDIT (Multiple), 17
NAMESPACE TO AUDIT (#19.2), 8	VERSION (Multiple), 76
NAMESPACE TO AUDIT (#19.2)	VOLUME SET (#41) Multiple, 7, 10
Multiple, 8, 16	File Access Security Option, 241
NEW PERSON IDENTIFIERS (#21), 8	FILE MANAGER ACCESS CODE Field,
OPTION AUDIT (#19, 16	349
OPTION AUDIT (#19), 6, 8, 9, 16, 17	Filegrams Menu, 348
OPTION TO AUDIT (#19.1) Multiple, 8,	FileMan
16	File Protection, 373
ORGANIZATION (#200.2), 8	Fileman Access for the ISO Menu, 236
ONOMINIZATION (π 200.2), 0	i neman Access for the 150 Menu, 250

Fileman Security Menu, 242 Files PATIENT (#2), 165 Files, 62, 67 AGENCY (#4.11), 63, 74 ALERT (#8992), 64, 90 ALERT CRITICAL TEXT (#8992.3), 91 ALERT CRITICAL TEXT (8992.3), 64,	INSTITUTION (#4), 63, 72, 73, 74 INSTITUTION ASSOCIATION TYPES (#4.05), 73 KERMIT HOLDING (#8980), 63, 86 Kernel Site Parameters File Changes, 4 KERNEL PARAMETERS (#8989.2), 4, 10, 64, 88
91	KERNEL SYSTEM PARAMETERS
ALERT RECIPIENT TYPE (8992.2), 64,	(#8989.3), 4, 17, 58, 64, 81, 88
91	KERNEL SYSTEM PARAMETERS
ALERT TRACKING (#8992.1), 64, 90	(#8989.3) file, 15
AUDIT LOG FOR OPTIONS (#19.081),	LINE/PORT ADDRESS (#3.23), 64, 70
64, 81	LOCAL KEYWORD (#8984.1), 18, 63,
BINARY OBJECT (#8995.9), 64	86
BUILD (#9.6), 33, 63, 76	LOCAL LOOKUP (#8984.4), 2, 18, 63,
BULLETIN (#3.6), 72	87
CM DAILY STATISTICS (#8986.6), 22	LOCAL SHORTCUT (#8984.2), 18, 63,
CM SITE NODENAMES, 23	87
CM SITE PARAMETERS, 23	LOCAL SYNONYM (#8984.3), 18, 63,
COUNTY CODE (#5.13), 75	87
CPT (#81), 1 DA RETURN CODES (#3.22), 64, 70 DEVICE (#3.5), 5, 6, 25, 64, 69, 70 DEVICE (#2.5) 512, 6	LOCKED IP or DEVICE (#3.083), 68 MAIL GROUP (#3.8), 66, 97 MAILMAN SITE PARAMETERS (#4.3),
DEVICE (#3.5) file., 6	4
DOMAIN (#4.2), 66, 97	MARITAL STATUS (#11), 66, 77, 97
DUPLICATE RECORD (#15), 2, 20, 21,	MASTER FILE PARAMETERS
22, 26, 27, 28, 29, 30, 64, 79, 80, 157,	(#4.001), 72
159, 160, 161, 163	MD5 Signature (#4.005), 73
DUPLICATE RESOLUTION (#15.1), 2,	MENUMAN QUICK HELP (#19.8), 82
20, 28, 30, 64, 80, 161	MUMPS OPERATING SYSTEM (#.7),
ERROR LOG (#3.075), 65, 67	58
ERROR MESSAGES (#3.076), 65, 67	NEW PERSON (#200), 5, 6, 8, 9, 56, 64,
ERROR TRAP SUMMARY (#3.077), 68	67, 69, 84, 90, 100, 151
FACILITY TYPE (#4.1), 63, 74	OPTION (#19), 63, 81, 82, 151, 153
FAILED ACCESS ATTEMPTS LOG	OPTION SCHEDULING (#19.2), 58, 63,
(#3.05), 65, 67	82
FAILED SIGNON ATTEMPTS (#3.084),	OPTION TOTALS (#20), 82
68	PACKAGE (#9.4), 21, 22, 29, 35, 63, 76
Globals, 63	PARAMETER DEFINITION (#8989.51),
HELP FRAME (#9.2), 63, 75	4, 11, 15
HOLIDAY (#40.5), 63, 83	PATIENT (#2), 79, 163
ICD DIAGNOSIS (#80), 1, 18	PERSON CLASS (#8932.1), 85, 98, 100
ICD OPERATIONS/PROCEDURE	PKI CRL URLS (#8980.22), 86
(#80.1), 1 INSTALL (#9.7), 33, 63, 76	PKI CKL OKLS (#8980.22), 86 PKI Digital Signatures (#8980.2), 86 POSTAL CODE (#5), 74

PROGRAM OF STUD (#8932.2), 86 PROGRAMMER MODE LOG (#3.07), 65, 67 PROTOCOL (#101), 84 PROVIDER CLASS (#7), 66, 75, 97 RACE (#10), 66, 77, 97 RAI MDS MONITOR (#46.11), 83 RELIGION (#13), 66, 77, 98 REMOTE APPLICATION (#8994.5), 95 REMOTE PROCEDURE (#8994), 94 RESOURCE (#3.54), 64, 71 ROUTINE (#9.8), 35, 63, 77 SECURITY KEY (#19.1), 63, 82 SERVICE/SECTION (#49), 63, 84 SIGN-ON LOG (#3.081), 64, 68 SPECIALITY (#7.1), 66, 75, 97 SPOOL DATA (#3.519), 71 SPOOL DOCUMENT (#3.51), 71 STANDARD TERMINOLOGY	XULM LOCK DICTIONARY (#8993), 63 XULM LOCK MANAGER LOG (#8993.2), 63 XULM LOCK MANAGER PARAMETERS (#8993.1), 63 Files COUNTY CODE (#5.13), 167 Files STATE (#5), 167 Files POSTAL CODE (#5.12), 167 Files PARAMETER DEFINITION (#8989.51), 168 Files BUILD (#9.6), 170
VERSION F (#4.009), 73	Files
STATE (#5), 66, 74, 97 TASK SYNC FLAG (#14.8), 64, 79	INSTALL (#9.7), 171 Files
TASKMAN MONITOR (#14.71), 64	BUILD (#9.6), 171
TASKMAN SITE PARAMETERS	Files
(#14.7), 18, 64, 79	BUILD (#9.6), 171
TASKMAN SNAPSHOT (#14.72), 64, 79	Files
TASKS (#14.4), 65, 78	BUILD (#9.6), 172
TERMINAL TYPE (#3.2), 64, 69, 70	Files
TITLE (#3.1), 63, 69	INSTALL (#9.7), 172
UCI ASSOCIATION (#14.6), 18, 58, 64,	Files
79	BUILD (#9.6), 173
USER CLASS (#201), 84	Files
Virgin Installations, 97	INSTALL (#9.7), 174
VOLUME SET (#14.5), 18, 58, 64, 78	Files
XQAB ERRORS LOGGED (#8991.5),	PACKAGE (#9.4), 174
64, 89, 153	Files
XTV GLOBAL CHANGES (#8991.2),	BUILD (#9.6), 174
64, 89	Files
XTV ROUTINE CHANGES (#8991), 64,	INSTALL (#9.7), 174
88	Files
XTV VERIFICATION PACKAGE	BUILD (#9.6), 174
(#8991.19), 64, 89	Files
XUEPCS DATA (#8991.6), 89, 156	BUILD (#9.6), 174
XUEPCS PSDRPH AUDIT (#8991.7),	Files
90, 156	ROUTINE (#9.8), 175
	Files

ROUTINE (#9.8), 175	Files
Files	OPTION (#19), 196
BUILD (#9.6), 175	Files
Files	OPTION (#19), 198
INSTALL (#9.7), 175	Files
Files	PROTOCOL (#101), 198
BUILD (#9.6), 176	Files
Files	OPTION (#19), 198
ROUTINE (#9.8), 176	Files
Files	PROTOCOL (#101), 198
OPTION (#19), 177	Files
Files	OPTION (#19), 199
KERNEL SYSTEM PARAMETERS	Files
(#8989.3), 182	OPTION (#19), 200
Files	Files
ALERT TRACKING (#8992.1), 183	NEW PERSON (#200), 204
Files	Files
ALERT TRACKING (#8992.1), 183	ROUTINE (#9.8), 205
Files	Files
ALERT CRITICAL TEXT (#8992.3), 183	ROUTINE (#9.8), 205
Files	Files
ALERT (#8992), 185	ROUTINE (#9.8), 206
Files	Files
ALERT TRACKING (#8992.1), 186	ROUTINE (#9.8), 206
Files	Files
ALERT TRACKING (#8992.1), 186 Files	DA RETURNS CODE (#3.22), 206 Files
PARAMETERS (#8989.5), 187	OPTION (#19), 206
Files	Files
PARAMETERS (#8989.5), 187	INSTITUTION (#4), 209
Files	Files
ALERT (#8992), 188	XUEPCS DATA (#8991.6), 210
Files	Files
ALERT CRITICAL TEXT (#8992.3), 188	XUEPCS PSDRPH AUDIT (#8991.7)
Files	212
ALERT (#8992), 189	Files
Files	SIGN-ON LOG (#3.081), 215
ALERT TRACKING (#8992.1), 189	Files
Files	OPTION (#19), 216
ALERT (#8992), 190	Files
Files	KERNEL SYSTEM PARAMETERS
OPTION (#19), 192	(#8989.3), 217
Files	Files
HELP FRAME (#9.2), 195	OPTION SCHEDULING (#19.2), 218
Files	Files
OPTION (#19), 196	

KERNEL SYSTEM PARAMETERS	INSTITUTION (#4), 249
(#8989.3), 218	Files
Files	INSTITUTION (#4), 250
NEW PERSON (#200), 219	Files
Files	INSTITUTION (#4), 251
NEW PERSON (#200), 219	Files
Files	INSTITUTION (#4), 251
OPTION (#19), 221	Files
Files	INSTITUTION (#4), 251
NEW PERSON (#200), 222	Files
Files	INSTITUTION (#4), 252
NEW PERSON (#200), 224	Files
Files	
	INSTITUTION (#4), 252
NEW PERSON (#200), 224	Files
Files	FACILITY TYPE (#4.1), 252
INSTITUTION (#4), 226	Files
Files	INSTITUTION (#4), 252
INSTITUTION (#4), 226	Files
Files	OPTION (#19), 256
KERNEL SYSTEM PARAMETERS	Files
(#8989.3), 228	NEW PERSON (#200), 257
Files	Files
NEW PERSON (#200), 229	NEW PERSON (#200), 257
Files	Files
KERNEL SYSTEM PARAMETERS	NEW PERSON (#200), 257
(#8989.3), 229	Files
Files	NEW PERSON (#200), 257
OPTION (#19), 230	Files
Files	NEW PERSON (#200), 258
KERNEL SYSTEM PARAMETERS	Files
(#8989.3), 231	NEW PERSON (#200), 258
Files	Files
DEVICE (#3.5), 235	NEW PERSON (#200), 258
Files	Files
KERNEL SYSTEM PARAMETERS	NEW PERSON (#200), 264
(#8989.3), 237	Files
Files	NEW PERSON (#200), 265
ERROR TRAP SUMMARY (#3.077),	Files
238	NEW PERSON (#200), 266
Files	Files
ERROR TRAP SUMMARY (#3.077),	NEW PERSON (#200), 266
238	Files
Files	KERNEL SYSTEM PARAMETERS
ERROR TRAP SUMMARY (#3.077),	(#8989.3), 269
238	Files
Files	1 1103
1 1100	

KERNEL SYSTEM PARAMETERS DEVICE (#3.5), 297 (#8989.3), 273Files Files DEVICE (#3.5), 297 KERNEL SYSTEM PARAMETERS Files (#8989.3), 273DEVICE (#3.5), 297 Files Files KERNEL SYSTEM PARAMETERS LOCAL KEYWORD (#8984.1), 299 (#8989.3), 274Files Files LOCAL LOOKUP (#8984.4), 299 NEW PERSON (#200), 275 Files Files LOCAL LOOKUP (#8984.4), 299 TERMINAL TYPE (#3.2), 276 Files LOCAL SHORTCUT (#8984.2), 299 Files DEVICE (#3.5), 276 Files LOCAL SYNONYM (#8984.3), 299 Files OPTION SCHEDULING (#19.2), 278 Files Files KERNEL SYSTEM PARAMETERS TASKMAN SITE PARAMETERS (#8989.3), 302 (#14.7), 278Files Files ROUTINE (#9.8), 303 OPTION SCHEDULING (#19.2), 286 Files ROUTINE (#9.8), 303 OPTION SCHEDULING (#19.2), 286 Files Files PACKAGE (#9.4), 303 TASKMAN SNAPSHOT (#14.72), 286 Files PACKAGE (#9.4), 303 Files UCI ASSOCIATION (#14.6), 287 Files PACKAGE (#9.4), 305 NEW PERSON (#200), 291 Files Files Purging, 308 NEW PERSON (#200), 291 Files INSTALL (#9.7), 310 NEW PERSON (#200), 291 Files Files BUILD (#9.6), 310 NEW PERSON (#200), 291 Files REMOTE PROCEDURE (#8994), 333 NEW PERSON (#200), 291 Files Files PATIENT (#2), 333 NEW PERSON (#200), 292 Files Files PATIENT (#2), 333 SPOOL DOCUMENT (#3.51), 294 Files DUPLICATE RECORD (#15), 333 OPTION (#19), 294 Files DUPLICATE RECORD (#15), 333 Files ROUTINE (#9.8), 295 Files

Files

DUPLICATE RESOLUTION (#15.1),	Files
333	PARAMETER (#8989.5), 369
Files	Files
DUPLICATE RESOLUTION (#15.1),	NEW PERSON (#200), 369
334	Files
Files	EDUCATION (#20.11) file, 370
NEW PERSON (#200), 334	Files
· //	
Files	EDUCATION (#20.11) file, 370
KERNEL SYSTEM PARAMETERS	Files
(#8989.3), 337	NEW PERSON (#200), 370
Files	Files
NEW PERSON (#200), 342	NAME COMPONENTS (#20), 370
Files	Files
NEW PERSON (#200), 342	NAME COMPONENTS (#20), 370
Files	Files
NEW PERSON (#200), 349	EDUCATION (#20.11) file, 370
Files	Files
DEVICE (#3.5), 349	NEW PERSON (#200), 372
Files	Files
TERMINAL TYPE (#3.2), 349	NEW PERSON (#200), 372
Files	Files
LANGUAGE (#.85), 349	NEW PERSON (#200), 372
Files	Files
DIALOG (#.84), 349	Security, 373
Files	Files
DEVICE (#3.5), 350	Security Access, 373
Files	Files
TERMINAL TYPE (#3.2), 350	NEW PERSON (#200), 376
Files	Find a user Option, 215
TERMINAL TYPE (#3.2), 350	Find Potential Duplicates for an Entry in a
Files	File Option, 160
DUPLICATE RESOLUTION (#15.1),	First Line Routine Print Option, 215
358	Fix Help Frame File Pointers Option, 195
Files	Fix Option File Pointers Option, 199
INSTITUTION (#4), 361	Flow Chart Entire Routine Option, 296
Files	Flow Chart from Entry Point Option, 296
NEW PERSON (#200), 366	, 1 , 1 , 1
Files	
NEW PERSON (#200), 367	G
Files	General Parameter Tools Menu, 169
NEW PERSON (#200), 369	Global Block Count Option, 205
Files	Global Compare for selected package
NEW PERSON (#200), 369	Option, 304
Files	Globals, 63
PARAMETER DEFINITION (#8989.51),	^%ET, 345
369	^%IS, 345
	^%SY, 345

^%Z, 345, 351	Translation, 354
^%ZIS, 25, 64, 355	XTMP, 171
^%ZIS("C"), 351	Glossary, 377
^%ZIS("H"), 351	Intranet Website, 382
^%ZISL, 64, 71, 355	Grant Access by Profile Option, 268
^%ZOSF, 66, 311, 344, 351, 352, 355	Grant Users' Access to a Set of Files
^%ZTER, 65, 355	Option, 243
^%ZTSCH, 66, 345, 351, 356	Group Routine Edit Option, 302
^%ZTSH, 355	
^%ZTSK, 65, 78, 345, 351, 356	Н
^%ZUA, 65, 309, 345, 356	••
^CPU, 345	Halt Option, 244
^DIC, 63, 66, 354	Handle Alpha/Beta Errors Logged at Sites
^DIZ, 63	Option, 180
^HOLIDAY, 63, 354	Help
^RTH, 345	At Prompts, xxii
^SPOOL, 345	Online, xxii
^SYS, 345	Question Marks, xxii
^TMP, 66, 354	HELP FRAME (#9.2) File, 63, 75, 195
^USC, 354	Help Processor Menu, 194
^UTILITY, 354	History, Revisions to Documentation and
^VA, 64, 354	Patches, ii
^XLM, 63	HOLIDAY (#40.5) File, 63, 83
^XMB, 66, 354	Home Pages
^XMBS, 354	Acronyms Intranet Website, 382
^XPD, 63, 354	Adobe Website, xxiii
^XT, 63	Glossary Intranet Website, 382
^XTMP, 66, 174, 198, 355	Kernel Website, xxiii
^XTV, 64, 354	NUCC Home Page Web Address, 98
^XUCM, 22	QuadraMed Web Address, 368
^XUSEC, 64, 355	VHA Software Document Library (VDL)
^XUTL, 66, 351, 355	Website, xxiii
Cleanup, 308	Host File Server Device Edit Option, 235
Exempt From VA FileMan Compatibility,	How to
351	Obtain
Journaling, 354	Files Security Access, 373
Management, 354	Obtain Technical Information Online, xxii
Manager Account, 345	Use this Manual, xix
Non-VA-FileMan-compatible Storage, 63	,
Non-VA-FileMan-Compatible Storage, 66	1
Operating System, 345	1
Production Account, 354	ICD DIAGNOSIS (#80) File, 1, 18
Protection, 354	ICD OPERATIONS/PROCEDURE (#80.1)
Storage	File, 1
Used for Additional Files During Virgin	Identify Potential Merge Problems Option,
Install, 66	165
	IMF Display Cleanup Status Option, 250
	= = = •

IMF edit Option, 249	IO Variable, 349
Implementation, 3	IO(0) Variable, 349
Independence of Options, 348	IOBS Variable, 350
INDEX (#.03) Field, 18	IOF Variable, 349
Information Security Officer Menu, 274	IOM Variable, 349
Information Sources	ION Variable, 349
Documentation	IOS Variable, 350
Files	IOSL Variable, 349
Security Access, 373	IOST Variable, 349
INITIATE AUDIT (#19.4) Field, 6, 8, 9, 16,	IOST(0) Variable, 350
17	IOT Variable, 349
Input routines Option, 259	IOXY Variable, 350
Inquire Error Summary Option, 238	IP SECURITY ON (#405.1) Field, 7
Inquire Option, 346	IPV—IPv4 and IPv6 Address Tools Menu,
Inquire to File Entries Option, 370	168
Inquiry to a User's File Access Option, 243	Is there a menu rebuild running right now?
INSTALL (#9.7) File, 33, 63, 76, 171, 172,	Option, 199
174, 175, 310	ISO's Terminated User Report Option, 263
Install File Print Option, 174	1 1 ,
Install Package(s) Option, 172	1
Installation, 3	J
Installation Menu, 172	Journaling
Installations	Globals, 354
Virgin Files, 97	
INSTITUTION (#4) File, 63, 72, 73, 74,	K
209, 226, 249, 250, 251, 252, 361	K
INSTITUTION ASSOCIATION TYPES	KAAJEE BROKER CONTEXT Option,
(#4.05) File, 73	260
Institution DEA# edit Option, 226	KAAJEE PROXY BROKER CONTEXT
Institution Edit Option, 226	Option, 260
Institution File Query / Update Option, 250	KERMIT HOLDING (#8980) File, 63, 86
Integration Agreements Menu Option, 346	Kermit menu, 153, 293
Integration Control Registrations, 345	Kernel
Current List for Kernel or Kernel Toolkit	APIs, 311
Custodian, 346	Archiving, 308
Subscriber, 346	Authentication
Detailed Information, 346	Token, 342
T . 1 1 A 1' '	
Intended Audience, xix	Callable Entry Points, 311
Interactive Print of Error Messages Option,	Direct Mode Utilities, 330
· · · · · · · · · · · · · · · · · · ·	Direct Mode Utilities, 330 External Relations
Interactive Print of Error Messages Option,	Direct Mode Utilities, 330 External Relations Other VistA Software, 344
Interactive Print of Error Messages Option, 239	Direct Mode Utilities, 330 External Relations Other VistA Software, 344 Files, 62
Interactive Print of Error Messages Option, 239 INTERACTIVE USER'S PRIORITY (#216)	Direct Mode Utilities, 330 External Relations Other VistA Software, 344 Files, 62 Globals, 63
Interactive Print of Error Messages Option, 239 INTERACTIVE USER'S PRIORITY (#216) Field, 7	Direct Mode Utilities, 330 External Relations Other VistA Software, 344 Files, 62 Globals, 63 Interfaces, 368
Interactive Print of Error Messages Option, 239 INTERACTIVE USER'S PRIORITY (#216) Field, 7 Interfaces, 368	Direct Mode Utilities, 330 External Relations Other VistA Software, 344 Files, 62 Globals, 63 Interfaces, 368 Internal Relations, 348
Interactive Print of Error Messages Option, 239 INTERACTIVE USER'S PRIORITY (#216) Field, 7 Interfaces, 368 Internal Relations, 348	Direct Mode Utilities, 330 External Relations Other VistA Software, 344 Files, 62 Globals, 63 Interfaces, 368

Namespace, 3	List Alerts for a user from a specified
Purging, 308	Option, 183
Remote Systems, 368	List all Menu Templates Option, 205
Routines, 23	List Defined Option Sets Option, 198
SACC Exemptions, 351	List Delegated Options and their Users
Site Parameters File Changes, 4	Option, 200
Software-Wide Variables, 349	List Error Screens Option, 282
Website, xxiii	List File Attributes Option, xxii
Kernel GUI Alerts Option, 185	List file entries identified in preliminary
Kernel Installation & Distribution System	scan Option, 162
Menu, 173	List Global Option, 256
Kernel Management Menu, 245	List Help Frames Option, 194
Kernel New Features Help Option, 290	List Inactive Person Class Users Option, 226
KERNEL PARAMETERS (#8989.2) File,	List of Active Registered Trainees Option,
4, 10, 64, 88	223
Kernel PKI Parameter Edit Option, 275	List of All Registered Trainees Option, 224
Kernel sign-on context Option, 262	List of Inactive Registered Trainees Option,
KERNEL SYSTEM PARAMETER	223
(#8989.3)S File, 229	List of NPI data for CBO Option, 260
KERNEL SYSTEM PARAMETERS	List Options by Parents and Use Option, 290
(#8989.3) File, 4, 15, 17, 58, 64, 81, 88,	List Routines Option, 257
182, 217, 218, 228, 231, 237, 269, 273,	List Spool Documents Option, 227
274, 302, 337	List Tasks Option, 283
Key Management Menu, 246	List Terminal Types Option, 246
Keys, 370	List Unreferenced Menu Options Option,
Keys For a Given Menu Tree Option, 197	177
Keywords Option, 299	List users holding a certain key Option, 200
Kick Off Micro Surgery Option, 196	List users Option, 270
KIDS Installation Menu, 348	List Values for a Selected Entity Option,
KIDS Main Menu, 348	169
Kill off a users' job Option, 259	List Values for a Selected Package Option,
• •	169
1	List Values for a Selected Parameter Option,
L	169
LANGUAGE (#.85) File, 349	List Values for a Selected Template Option,
Last Routine Change Date Recorded Option,	169
305	Load a Distribution Option, 173
LAST SIGN-ON Field, 5	Load DMIS ID's Option, 249
LIFETIME OF VERIFY CODE (#214)	Load Institution NPI values Option, 252
Field, 7	Load/refresh checksum values into
Limited File Manager Options (Build)	ROUTINE file Option, 205
Option, 201	LOCAL KEYWORD (#8984.1) File, 18, 63,
LINE/PORT ADDRESS (#3.23) File, 64, 70	86, 299
Line/Port Address report Option, 234	LOCAL LOOKUP (#8984.4) File, 2, 18, 63,
List Access to Files by File number Option, 243	87, 299

LOCAL SHORTCUT (#8984.2) File, 18, MAX SPOOL LINES PER USER (#31.1) 63, 87, 299 Field, 8, 17 MD5 Signature (#4.005) File, 73 LOCAL SYNONYM (#8984.3) File, 18, 63, 87, 299 Menu and Option Security Menu, 217 Menu Diagrams Menu, 193 Local Trainee Registration Reports Menu, Menu Diagrams Option, 289 223 Menu Management Menu, 81, 102, 103, Lock Manger Utility 109, 248 Protocols, 151 Menu Rebuild Menu, 191 LOCKED IP or DEVICE (#3.083) File, 68 LOCK-OUT TIME (#51.3) Field, 6 Menu Structure, 102 LOG RESOURCE USAGE? (#300) Field, 7 Menu Templates Menu, 205 LOG SYSTEM RT? (#41, 6) Field, 7, 10 MENUMAN QUICK HELP (#19.8) File, 82 Loopback Test of Device Port Option, 277 Menus Low Usage Alpha/Beta Test Options Access Monitor Menu, 252 Option, 182 Add/Modify Utility, 299 LPD/VMS Device Edit Option, 236 Alert Management, 190 Alpha/Beta Test Option Usage Menu, 182 Application Utilities, 300 M Audit Display, 229 Magtape Device Edit Option, 236 Audit Features, 230 MAIL GROUP (#3.8) File, 66, 97 Audit Menu, 348 Mail Groups, 357 Capacity Planning, 295 MAILMAN SITE PARAMETERS (#4.3) Core Applications, 102, 106, 233 File, 4 Custodial Package Menu, 346 Maintenance, 3 Data Dictionary Utilities, xxii Make an alert on the fly Option, 190 DBA, 346 Make spool document into a mail message DBA IA CUSTODIAL MENU, 346 Option, 227 DBA IA ISC, 346 Manage User File Menu, 265 DBA IA SUBSCRIBER MENU, 346 Manager Account, 345 DBA Option, 346 Routines, 23 Delegate's Menu Management, 204 Manager Utilities Menu, 161 Device Management, 102, 107, 276 Mapping Routines, 61 DI DDU, xxii MARITAL STATUS (#11) File, 66, 77, 97 Display Menus and Options, 193 Mark Option Set Out-Of-Order Option, 197 Do nothing menu, 215 Mark/Unmark Provider Exempt from Duplicate Resolution System, 160 requiring an NPI Option, 260 Edit Devices by Specific Types, 235 MASTER FILE PARAMETERS (#4.001) Edit Taskman Parameters, 284 File, 72 Edits and Distribution, 171 MAX SIGNON ALLOWED (#41, 2) Field, ePCS DEA Utility Functions, 154, 213 7, 10 Error Processing, 238 MAX SPOOL DOCUMENT LIFE-SPAN Error Summary Menu, 237 (#31.3) Field, 7, 17 EVE, 102, 103, 106 MAX SPOOL DOCUMENTS PER USER Exported, 102 (#31,2) Field, 7 Filegrams, 348 MAX SPOOL DOCUMENTS PER USER Fileman Access for the ISO, 236

(#31.2) Field, 17

Fileman Security Menu, 242 General Parameter Tools, 169 Help Processor, 194 Information Security Officer Menu, 274 Installation, 172 Integration Agreements Menu, 346 IPV—IPv4 and IPv6 Address Tools, 168 Kermit menu, 153, 293 Kernel Installation & Distribution System, Kernel Management Menu, 245 Key Management, 246 KIDS Installation Menu, 348 KIDS Main Menu, 348 Local Trainee Registration Reports, 223 Locked, 348 Manage User File, 265 Manager Utilities, 161 Menu and Option Security, 217 Menu Diagrams, 193 Menu Management, 81, 102, 103, 109, 248 Menu Rebuild Menu, 191 Menu Templates, 205 Menu Tree Diagrams, 102 Menu Tree Roots, 102 Multi-Term Lookup Main Menu, 300 Non-queuable options with no parents, 199 NPF cleanup main menu, 257 NPI (National Provider ID) Menu, 261 OAA Trainee Registration Menu, 225 Operations, 162 Operations Management, 102, 114, 273 Out-Of-Order Set Management, 197 Parent of Queuable Options, 102, 145 Programmer Options, 102, 119, 256, 348 Programmer tools, 301 Report Menu for Alerts, 186 Routine Management Menu, 259 Routine Tools, 255 ScreenMan, 348 Secure Menu Delegation, 202, 203 Spool Management, 102, 129, 228

System Audit Menu, 229 System Audit Reports, 230 SYSTEM COMMAND OPTIONS, 102, 146, 231 System Security, 102, 130 Systems Manager Menu, 102, 103, 106 Taskman Error Log, 279 Taskman Management, 102, 137, 283 Taskman Management Utilities, 287 Toolkit Queuable Options, 302 Trainee Reports Menu, 225 Trainee Transmission Reports to OAA, 226 Trees Systems Manager Menu [EVE], 102 User Management, 102, 140, 226, 264, 291, 370 User Management Menu, 253 User Security Menu, 267 User's Toolbox, 271 User's Toolbox, 369 Utilities, 164, 176 Utilities for MTLU, 300 VA FileMan Management, 348 Verifier Tools Menu, 303, 305 XDR MAIN MENU, 160 XDR MANAGER UTILITIES, 161 XDR OPERATIONS MENU, 162 XDR UTILITIES MENU, 164 XLFIPV IPV4 IPV6 MENU, 168 XPAR MENU TOOLS, 169 XPD DISTRIBUTION MENU, 171 XPD INSTALLATION MENU, 172 XPD MAIN, 173 XPD UTILITY, 176 XQAB MENU, 182 XQAL REPORTS MENU, 186 XQALERT MGR, 190 XQBUILDMAIN, 191 XQDIAGMENU, 193 XQDISPLAY OPTIONS, 193 XQHELP-MENU, 194 XQOOMAIN, 197 XQORPHANOPTIONS, 199 XQSMD MGR, 202 XQSMD SEC OFCR, 203

Subscriber Package Menu, 346

Spooler Menu, 228

XQSMD USER MENU, 204	XUSERTOOLS, 271, 369
XQTUSER, 205	XUSITEMGR, 102, 114, 273
XTCM MAIN, 295	XU-SPL-MENU, 228
XT-KERMIT MENU, 153, 293	XU-SPL-MGR, 102, 129, 228
XTLKMODUTL, 299	XUSPY, 102, 130, 274
XTLKUSER2, 300	XUTIO, 102, 107, 276
XTLKUTILITIES, 300	XUTM ERROR, 279
XTMENU, 300	XUTM MGR, 102, 137, 283
XTOOLS, 301	XUTM PARAMETER EDIT, 284
XTQUEUABLE OPTIONS, 302	XUTM UTIL, 287
XTV MENU, 303	XUZUSER, 291
XTVR MENU, 305	ZTMQUEUABLE OPTIONS, 102, 145
XU EPCS UTILITY FUNCTIONS, 154,	Merge
213	Description, 21
XU NOP MENU, 215	MERGE PACKAGES (#15,1101) Multiple
XU SEC OFCR, 217	Field, 22
XUADISP, 229	Merge Selected Verified Duplicate Pair
XUAUDIT MAINT, 229	Option, 162
XUAUDIT MENU, 230	Messages
XUAUDIT RPT, 230	DEVICE ATTRIBUTES, 5
XU-CLINICAL LOCAL REPORTS, 223	Monitor Routines for Changes Option, 302
XU-CLINICAL TRAINEE MENU, 225	Monitor Taskman Option, 288
XU-CLINICAL TRAINEE REPORTS,	Move Routines across Volume Sets Option,
225	300
XU-CLINICAL TRANS REPORTS, 226	MULTIPLE SIGN-ON (#200.04) Field, 6
XUCOMMAND, 102, 146, 231	Multi-Term Look-Up (MTLU), 1
XUCORE, 102, 106, 233	Implementing, 18
XUDEVEDIT, 235	Multi-Term Lookup (MTLU) Option, 298
XUDIACCESS FOR ISO, 236	Multi-Term Lookup Main Menu, 300
XUER SUMMARY, 237	MUMPS Cross-reference, 26
XUERRS, 238	MUMPS Cross-Reference, 18
XUFILEACCESS SEC OFCR, 242	MUMPS OPERATING SYSTEM (#.7) File,
XUKERNEL, 245	58
XUKEYMGMT, 246	20
XUMAINT, 81, 102, 103, 109, 248	
XUMNACCESS, 252	N
XUOPTUSER, 253	NAME COMPONENTS (#20) File, 82, 370
XUPROG, 102, 119, 256	NAME OF MERGE ROUTINE (#9.402,3)
XUPR-ROUTINE-TOOLS, 255	Field, 22
XUPS NPF CLEANUP MAIN MENU,	Namespace
257	Kernel, 3
XUROUTINES, 259	Toolkit, 3
XUS NPI MENU, 261	NAMESPACE TO AUDIT (#19.2) Field, 8
XUSER, 102, 140, 226, 264, 370	NAMESPACE TO AUDIT (#19.2) Multiple
XUSER FILE MGR, 265	Field, 8, 16
XUSER SEC OFCR, 267	Network Channel Device Edit Option, 235,
AUSLIC OF CR, 20/	236

NEW PERSON (#200) File, 5, 6, 8, 9, 56, 64, 67, 69, 84, 90, 100, 151, 204, 219, 222, 224, 229, 257, 258, 264, 265, 266,	Option Audit Display Option, 253 Option Function Inquiry Option, 244 OPTION SCHEDULING (#19.2) File, 58,
275, 291, 292, 334, 342, 349, 366, 367,	63, 82, 218, 278, 286
369, 370, 372, 376	OPTION TO AUDIT (#19.1) Multiple
NEW PERSON IDENTIFIERS (#21) Field,	Field, 8, 16
8	Options
New User Event Option, 218	Rollup Patches into a Build, 174
New/Revised Help Frames Option, 195	Options
No Alert Backup Reviewer Option, 185	Add a New User to the System, 101
Nodes	Add Entries To Look-Up File, 18
%ZOSF("TEST"), 77	Add Verified Duplicate Pair, 157
Non-interactive Build Primary Menu Trees Option, 192	Allocate/De-Allocate of PSDRPH Key, 154, 156
Non-queuable options with no parents	Ancillary Data Review, 157
Menu, 199	Approve verified duplicates for merging
NPF cleanup main menu, 257	158
NPI (National Provider ID) Menu, 261	Attached to Menus for Other Software,
NPI Signon Check Option, 262	153
NUCC Home Page Web Address, 98	Automatically Merge all Ready Verified
Number base changer Option, 294	Duplicates, 158
	Backup a Transport Global, 170
0	Build File Print, 173
	Check file 5.13 & file 5, 166
OAA Trainee Registration Menu, 225	Check Merge Process Status (reverse
Obtaining	order), 158
Data Dictionary Listings, xxii	Check Pair of Records to see if
Official Policies, 376	Duplicates, 158
Old Checksum Edit Option, 295	Compare Transport Global to Current
Old Checksum Update from Build Option, 295	System, 171
One-time Option Queue Option, 216	Convert any IP address per system
One-time Option Start Option	settings, 167 Convert any IP address to IPv4, 168
Internal Use Only, 216	Convert any IP address to IPv6, 168
Online	Convert Loaded Package for
Documentation, xxii	Redistribution, 171
Technical Information, How to Obtain,	Copy Build to Build, 171
XXII	Core Applications, 102, 106
Operating System Globals, 345	Create a Build Using Namespace, 170
Operations Management Menu, 102, 114,	Data Dictionary Utilities, xxii
273	Device Management, 102, 107
Operations Menu, 162	DI DDU, xxii
OPTION (#19) File, 63, 81, 82, 151, 153,	Diagram Menus, 103
177, 192, 196, 198, 199, 200, 206, 216,	DIEDIT, 20
221, 230, 256, 294	DILIST, xxii
Option Access By User Option, 253	Display Menus and Options, 103
OPTION AUDIT (#19) Field, 6, 8, 9, 16, 17	- · ·

Display Patches for a Package, 174 List Values for a Selected Package, 169 Display Search Status, 159 List Values for a Selected Parameter, 169 Display User Characteristics, 40 List Values for a Selected Template, 169 Duplicate Resolution System, 160 Load a Distribution, 173 Edit a Build, 172 Manager Utilities, 161 Edit an Existing User, 10, 101 Menu Management, 81, 102, 103, 109 Edit Duplicate Record Status, 159 Menu Tree Diagrams, 102 Menu Tree Roots, 102 Edit Duplicate Resolution File, 159 Edit Facility DEA# and Expiration Date, Merge Selected Verified Duplicate Pair, Edit File, 20 Operations, 162 Operations Management, 102, 114 Edit Install Status, 172 Options Listed Alphabetically by Name, Edit Option, 36 Edit Options, 81 156 Edit Parameter Definition Keyword, 168 Parent of Queuable Options, 102, 145 Edit Parameter Values, 168 Postal Code Update Server, 167 Edit Parameter Values with Template, 168 Preliminary Scan of File for errors, 162 Print Audits for Prescriber Editing, 154, Edit Site IP lockout, 7 Edit User Characteristics, 10 Edits and Distribution, 171 Print DEA Expiration Date Expires 30 days, 154, 155 Enter/Edit Kernel Site Parameters, 15, 17 Print DEA Expiration Date Null, 154 ePCS DEA Utility Functions, 154 Error Trap Display, 41 Print DISUSER DEA Expiration Date Errors Logged in Alpha/Beta Test Expires 30 days, 154, 155 (QUEUED), 153 Print DISUSER DEA Expiration Date Establish System Audit Parameters, 15 Null, 154 EVE, 102, 103, 106 Print DISUSER Prescribers with Exported, 102 Privileges, 154, 155 Extended-Action Options, 151 Print List of File Duplicates, 163 Print Prescribers with Privilege, 154 Find Potential Duplicates for an Entry in a File, 160 Print Prescribers with Privileges, 155 General Parameter Tools, 169 Print PSDRPH Key Holders, 154, 155 Identify Potential Merge Problems, 165 Print Setting Parameters Privileges, 154, 156 Install File Print, 174 Install Package(s), 172 Print Transport Global, 173 Programmer Options, 102, 119 Installation, 172 IPV—IPv4 and IPv6 Address Tools, 168 Purge Build or Install Files, 174 Purge Duplicate Record File, 163 Kermit menu, 153 Kernel Installation & Distribution System, Purge Merge Process File, 80, 163 Purge old spool documents, 7 173 Queuable Synchronize County Multiple Kernel Options Listed Alphabetically by Name, 157 With 5.13, 166 List File Attributes, xxii Queuable Task Log Cleanup, 78 List file entries identified in preliminary Reactivate a User, 10, 101 scan, 162 Release IP lock, 7 List Values for a Selected Entity, 169 Restart a merge process, 163

Restart Install of Package(s), 174 XDR EDIT DUP RESOLUTION FILE, Routine Compare - Current with Previous, 159 88 XDR FIND POTENTIAL DUPLICATES, Scan Possible Duplicates, 163 160 Schedule Process to Merge Verified XDR MAIN MENU, 160 Duplicates, 161 XDR MANAGER UTILITIES, 161 Schedule/Unschedule Options, 23, 102 XDR MERGE READY DUPLICATES, Server, 153 161 XDR MERGE SELECTED PAIR, 162 Show system settings for IPv6, 168 Spool Management, 102, 129 XDR OPERATIONS MENU, 162 Spooler Site Parameters Edit, 17 XDR PRELIMINARY SCAN, 162 Start/Halt Duplicate Search, 164 XDR PRELIMINARY SCAN LIST, 162 STOP an active merge process, 164 XDR PRINT LIST, 163 SYSTEM COMMAND OPTIONS, 102, XDR PURGE, 163 146 XDR PURGE2, 80, 163 System Security, 102, 130 XDR RESTART MERGE PROCESS, Systems Manager Menu, 102, 103, 106 163 Tally STATUS and MERGE STATUS XDR SCAN POSSIBLE DUPLICATES, fields, 164 Task Allocation Audit of PSDRPH Key XDR SEARCH ALL, 164 Report, 154, 156 XDR STOP MERGE PROCESS, 164 Task Changes to DEA Prescribing XDR TALLY STATUS FIELDS, 164 Privileges Report, 154, 156 XDR UTILITIES MENU, 164 Taskman Management, 102, 137 XDR VALID CHECK, 165 Update with current routines, 88 XDR VERIFY ALL, 165 User Management, 102, 140 XDR VERIFY SELECTED PAIR, 166 User sign-on event, 151 XDR VIEW DUPLICATE RECORD, 166 Utilities, 164 XIP SYNCHRONIZE COUNTY, 166 Validate IPv4 and IPv6 address, 168 XIP ZIP CODE LIST, 166 Verify Checksums in Transport Global, XIPMAILSERVER, 166 173 XIPSRVR, 167 Verify Potential Duplicates, 165 XLFIPV CONVERT, 167 Verify Selected Potential Duplicate Pair, XLFIPV FORCEIP4, 168 XLFIPV FORCEIP6, 168 166 View Duplicate Record Entries, 166 XLFIPV IPV4 IPV6 MENU, 168 XDR ADD VERIFIED DUPS, 157 XLFIPV VALIDATE, 168 XDR ANCILLARY REVIEW, 157 XLFIPV VERSION, 168 XDR APPROVE FOR MERGE, 158 XPAR EDIT BY TEMPLATE, 168 XDR AUTO MERGE, 158 XPAR EDIT KEYWORD, 168 XDR CHECK MERGE PROCESS XPAR EDIT PARAMETER, 168 STATUS, 158 XPAR LIST BY ENTITY, 169 XDR CHECK PAIR, 158 XPAR LIST BY PACKAGE, 169 XDR DISPLAY SEARCH STATUS, 159 XPAR LIST BY PARAM, 169 XDR EDIT DUP RECORD STATUS, XPAR LIST BY TEMPLATE, 169 159 XPAR MENU TOOLS, 169 XPD BACKUP, 170

VDD DIJII D NAMECDA CE 170	VILID DELEACE 7
XPD BUILD NAMESPACE, 170	XU IP RELEASE, 7
XPD CONVERT BACK ACE 171	XU SITE LOCKOUT, 7
XPD CONVERT PACKAGE, 171	XU USER SIGN-ON, 151
XPD COPY BUILD, 171	XU USER START-UP, 151
XPD DISTRIBUTION MENU, 171	XU USER TERMINATE, 151
XPD EDIT BUILD, 172	XUAUDIT, 15
XPD EDIT INSTALL, 172	XUCOMMAND, 102, 146
XPD INSTALL BUILD, 172	XUCORE, 102, 106
XPD INSTALLATION MENU, 172	XUEDITOPT, 36, 81
XPD LOAD DISTRIBUTION, 173	XUERTRAP, 41
XPD MAIN, 173	XULM DISPLAY SYSTEM LOCKS,
XPD PRINT BUILD, 173	151
XPD PRINT CHECKSUM, 173	XULM GO TO, 152
XPD PRINT INSTALL, 173	XULM LOCK MANAGER, 151
XPD PRINT INSTALL FILE, 174	XULM REFRESH LOCKS, 151
XPD PRINT PACKAGE PATCHES, 174	XULM SELECT LOCK, 152
XPD PURGE FILE, 174	XULM SELECT NODE, 152
XPD RESTART INSTALL, 174	XULM SINGLE LOCK MENU, 152
XPD ROLLUP PATCHES, 174	XULM SORT/SCREEN LOCKS, 152
XQAB ERROR LOG SERVER, 153	XULM TERMINATE PROCESS, 152
XQAB ERROR LOG XMIT, 153	XUMAINT, 81, 102, 103, 109
XQDISPLAY OPTIONS, 103	XU-PING-SERVER, 153
XQSCHK, 153	XUPROG, 102, 119
XQSPING, 153	XUSER, 102, 140
XT-KERMIT MENU, 153	XUSEREDIT, 10, 101
XT-KERMIT SPOOL DL, 153	XUSEREDITSELF, 10
XTLKMODPARS, 18	XUSERNEW, 10, 101
XTVR COMPARE, 88	XUSERREACT, 10, 101
XTVR UPDATE, 88	XUSITEMGR, 102, 114
XU EPCS DISUSER EXP DATE, 154	XUSITEPARM, 15, 17
XU EPCS DISUSER PRIVS, 154, 155	XU-SPL-MGR, 102, 129
XU EPCS DISUSER XDATE EXPIRES,	XU-SPL-PURGE, 7, 17
154, 155	XU-SPL-SITE, 17
XU EPCS EDIT DEA# AND XDATE,	XUSPY, 102, 130
154	XUTIO, 102, 107
XU EPCS EXP DATE, 154	XUTM MGR, 102, 137
XU EPCS LOGICAL ACCESS, 154, 156	XUTM QCLEAN, 78
XU EPCS PRINT EDIT AUDIT, 154,	XUTM SCHEDULE, 23, 102
156	XUUSERACC, 103
XU EPCS PRIVS, 154, 155	XUUSERDISP, 40
XU EPCS PSDRPH, 154, 155	ZIP Code List, 166
XU EPCS PSDRPH AUDIT, 154, 156	ZTMQUEUABLE OPTIONS, 102, 145
XU EPCS PSDRPH KEY, 154, 156	Options
XU EPCS SET PARMS, 154, 156	XPD ROUTINE UPDATE, 175
XU EPCS UTILITY FUNCTIONS, 154	Options
XU EPCS XDATE EXPIRES, 154, 155	Update Routine File, 175
	1

Options AND TRANSPORT RANGE ASS.	Options
XPD TRANSPORT PACKAGE, 175	Print Alpha/Beta Errors
Options	(Date/Site/Num/Rou/Err), 179
Transport a Distribution, 175	Options
Options	XQAB ERROR LOG SERVER, 180
XPD UNLOAD DISTRIBUTION, 175	Options
Options Unload a Distribution, 175	Handle Alpha/Beta Errors Logged at Sites, 180
Options	Options
XPD UTILITY, 176	XQAB ERROR LOG XMIT, 181
Options	Options
Utilities, 176	Errors Logged in Alpha/Beta Test
Options	(QUEUED), 181
XPD VERIFY BUILD, 176	Options
Options	XQAB LIST LOW USAGE OPTS, 182
Verify a Build, 176	Options
Options	Low Usage Alpha/Beta Test Options, 182
XPD VERIFY INTEGRITY, 177	Options
Options	XQAB MENU, 182
Verify Package Integrity, 177	Options
Options	Alpha/Beta Test Option Usage Menu, 182
XQ LIST UNREFERENCED OPTIONS,	Options
177	XQAL ALERT LIST FROM DATE, 183
Options	Options
List Unreferenced Menu Options, 177	List Alerts for a user from a specified, 183
Options	Options
XQ UNREF'D OPTIONS, 177	XQAL CRITICAL ALERT COUNT, 183
Options	Options
Delete Unreferenced Options, 177	Critical Alerts Count Report, 183
Options	Options
XQ XUTL \$J NODES, 177	XQAL GUI ALERTS, 185
Options	Options
Clean old Job Nodes in XUTL, 177	Kernel GUI Alerts, 185
Options	Options
XQAB ACTUAL OPTION USAGE, 179	XQAL NO BACKUP REVIEWER, 185
Options of Test Control, 177	Options
Actual Usage of Alpha/Beta Test Options,	No Alert Backup Reviewer, 185
179	Options
Options	XQAL PATIENT ALERT LIST, 186
XQAB AUTO SEND, 179	Options Options
Options	Patient Alert List for specified date, 186
Send Alpha/Beta Usage to Developers,	Options
179	XQAL REPORTS MENU, 186
Options	Options
XQAB ERR	Report Menu for Alerts, 186
DATE/SITE/NUM/ROU/ERR, 179	Options
DITE STEEL TO WINCOLDING, 17)	Ophono

XQAL SET BACKUP REVIEWER, 187	Menu Rebuild Menu, 191
Options	Options
Set Backup Reviewer for Alerts, 187	XQBUILDTREE, 192
Options	Options
XQAL SURROGATE FOR WHICH	Build Primary Menu Trees, 192
USERS, 187	Options
Options	XQBUILDTREEQUE, 192
Surrogate for which Users?, 187	Options
Options	Non-interactive Build Primary Menu
XQAL USER ALERTS COUNT, 187	Trees, 192
Options	Options
User Alerts Count Report, 187	XQBUILDUSER, 192
Options	Options 792
XQAL VIEW ALERT TRACKING	Single User Menu Tree Rebuild, 192
ENTRY, 189	Options
	<u>-</u>
Options	XQCOPYOP, 193
Alert Tracking file entry, 189	Options
Options VOALERT 199	Copy Everything About an Option to a
XQALERT, 189	New Option, 193
Options	Options
View Alerts, 189	XQDIAGMENU, 193
Options	Options
XQALERT BY USER DELETE, 190	Menu Diagrams, 193
Options	Options
Purge Alerts for a User, 190	XQDISPLAY OPTIONS, 193
Options	Options
XQALERT DELETE OLD, 190	Display Menus and Options, 193
Options	Options
Delete Old (>14 d) Alerts, 190	XQHELP-ASSIGN, 194
Options	Options
XQALERT MAKE, 190	Assign Editors, 194
Options	Options
Make an alert on the fly, 190	XQHELP-DEASSIGN, 194
Options	Options
XQALERT MGR, 190	Unassign Editors, 194
Options	Options
Alert Management, 190	XQHELP-DISPLAY, 194
Options	Options
XQALERT SURROGATE	Display/Edit Help Frames, 194
SET/REMOVE, 191	Options
Options Options	XQHELP-LIST, 194
Alerts - Set/Remove Surrogate for User,	Options
191	List Help Frames, 194
Options	Options
XQBUILDMAIN, 191	XQHELP-MENU, 194
Options	Options
X/1/13/110	X/ULIVII 3

Help Processor, 194	Options
Options	XQOOMAIN, 197
XQHELP-UPDATE, 195	Options
Options	Out-Of-Order Set Management, 197
New/Revised Help Frames, 195	Options
Options	XQOOMAKE, 197
XQHELP-XREF, 195	Options
Options	Create a Set of Options To Mark Out-Of-
Cross Reference Help Frames, 195	Order, 197
Options	Options
XQHELPFIX, 195	XQOON, 197
Options	Options
Fix Help Frame File Pointers, 195	Remove Out-Of-Order Messages from a
Options	Set of Options, 197
XQKEYALTODEL, 195	Options
Options	XQOOREDO, 197
Change user's allocated keys to delegated	Options
keys, 195	Recover deleted option set, 197
Options	Options
XQKEYDEL, 195	XQOOSHOFIL, 198
Options	Options
Delegate keys, 195	Options in the Option File that are Out-
Options	Of-Order, 198
XQKEYRDEL, 196	Options
Options	XQOOSHOPRO, 198
Remove delegated keys, 196	Options
Options	Protocols Marked Out-Of-Order in
XQKICKMICRO, 196	Protocol File, 198
Options	Options
Kick Off Micro Surgery, 196	XQOOSHOW, 198
Options	Options
XQLISTKEY, 196	List Defined Option Sets, 198
Options	Options
Show the keys of a particular user, 196	XQOOTOG, 198
Options	Options
XQLOCK1, 197	Toggle options/protocols on and off, 198
Options	Options
All the Keys a User Needs, 197	XQOPACCESS, 198
Options NOLOGICA 107	Options
XQLOCK2, 197	See if a User Has Access to a Particular
Options To 107	Option, 198
Keys For a Given Menu Tree, 197	Options VOORED 100
Options VOCCEE 107	XQOPED, 198
XQOOFF, 197	Options Server based Option Editor, 108
Options Made Option Set Out Of Order 107	Screen-based Option Editor, 198
Mark Option Set Out-Of-Order, 197	Options

XQOPTFIX, 199	Copy One Users Menus and Keys to
Options	others, 201
Fix Option File Pointers, 199	Options
Options	XQSMD EDIT OPTIONS, 201
XQORPHANOPTIONS, 199	Options
Options	Edit a User's Options, 201
Non-queuable options with no parents,	Options
199	XQSMD LIMITED FM OPTIONS, 201
Options	Options
XQRESTRICT, 199	Limited File Manager Options (Build),
Options	201
Restrict Availability of Options, 199	Options
Options	XQSMD MGR, 202
XQRIGHTNOW, 199	Options
Options	Secure Menu Delegation, 202
Is there a menu rebuild running right	Options
now?, 199	XQSMREMOVE, 203
Options	Options
XQSCHK, 200	Remove Options Previously Delegated,
Options Options	203
Server-type Option Test Server, 200	Options
Options	XQSMD REPLICATE, 203
XQSHOKEY, 200	Options Options
Options Options	Replicate or Replace a Delegate, 203
List users holding a certain key, 200	Options
Options	XQSMD SEC OFCR, 203
XQSMD ADD, 200	Options
Options	Secure Menu Delegation, 203
Select Options to be Delegated, 200	Options Options
Options	XQSMD SET PREFIX, 203
XQSMD BUILD MENU, 200	Options Options
Options Options	Specify Allowable New Menu Prefix, 203
Build a New Menu, 200	Options
Options	XQSMD SHOW, 203
XQSMD BY OPTION, 200	Options QSMD SHOW, 203
Options Options	Show a Delegate's Options, 203
•	
List Delegated Options and their Users, 200	Options XQSMD USER MENU, 204
Options VOSMD DV LISER 200	Options Delegate's Many Management 204
XQSMD BY USER, 200	Delegate's Menu Management, 204
Options Distant Dista	Options 204
Print All Delegates and their Options, 200	XQSPING, 204
Options VOSMID CORV LISER 201	Options TOP/ID Town Pine Correct 204
XQSMD COPY USER, 201	TCP/IP Type Ping Server, 204
Options	Options
	XQTKILL, 204

Options	Options
Delete a Menu Template, 204	Print DISUSER DEA Expiration Date
Options	Null, 207
XQTLIST, 204	Options
Options	XU EPCS DISUSER PRIVS, 207
Show all options in a Menu Template, 204	Options
Options	Print DISUSER Prescribers with
XQTLNEW, 204	Privileges, 207
Options	Options
Create a new menu template, 204	XU EPCS DISUSER XDATE EXPIRES,
Options	207
XQTRNAM, 205	Options
Options	Print DISUSER DEA Expiration Date
Rename a menu template, 205	Expires 30 days, 207
Options	Options
XQTSHO, 205	XU EPCS EDIT DATA, 208
Options Options	Options 200 ESTI STITI, 200
List all Menu Templates, 205	ePCS Edit Prescriber Data, 208
Options 200	Options
XQTUSER, 205	XU EPCS EDIT DEA# AND XDATE,
Options	209
Menu Templates, 205	Options
Options	Edit Facility DEA# and Expiration Date,
XU BLOCK COUNT, 205	209
Options	Options
Global Block Count, 205	XU EPCS EXP DATE, 209
Options	Options
XU CHECKSUM LOAD, 205	Print DEA Expiration Date Null, 209
Options 2011 20112, 201	Options
Load/refresh checksum values into	XU EPCS LOGICAL ACCESS, 209
ROUTINE file, 205	Options
Options	Task Changes to DEA Prescribing
XU CHECKSUM REPORT, 205	Privileges Report, 209
Options	Options
Compare local/national checksums report,	XU EPCS PRINT EDIT AUDIT, 211
205	Options
Options	Print Audits for Prescriber Editing, 211
XU DA EDIT, 206	Options
Options	XU EPCS PRIVS, 211
DA Return Code Edit, 206	Options
Options 2000 2001, 200	Print Prescribers with Privileges, 211
XU EPCS, 206	Options
Options Options	XU EPCS PSDRPH, 211
User start-up event, 206	Options
Options	Print PSDRPH Key Holders, 211
XU EPCS DISUSER EXP DATE, 207	Options
,	±

XU EPCS PSDRPH AUDIT, 212	Internal Use Only, 216
Options	Options
Task Allocation Audit of PSDRPH Key	Schedule/Unschedule Options, 216
Report, 212	Options
Options	XUTM SCHEDULE, 216
XU EPCS PSDRPH KEY, 213	Options
Options	XU PROC CNT CLUP, 217
Allocate/De-Allocate of PSDRPH Key,	Options
213	XUS Process count cleanup, 217
Options	Options
XU EPCS SET PARMS, 213	XU SEC OFCR, 217
Options	Options
Print Setting Parameters Privileges, 213	Menu and Option Security, 217
Options	Options
XU EPCS UTILITY FUNCTIONS, 213	XU SID ASK, 217
Options	Options
ePCS DEA Utility Functions, 213	Ask if Production Account, 217
Options	Options
XU EPCS XDATE EXPIRES, 215	XU SID EDIT, 218
Options	Options
Print DEA Expiration Date Expires 30	Edit Logical/Physical Mapping, 218
days, 215	Options
Options	XU SID STARTUP, 218
XU FINDUSER, 215	Options
Options	Startup PROD check, 218
Find a user, 215	Options
Options	XU SITE LOCKOUT, 218
XU FIRST LINE PRINT, 215	Options
Options	Edit Site IP lockout, 218
First Line Routine Print, 215	Options
Options	XU SWITCH UCI, 218
XU IP RELEASE, 215	Options
Options	Switch UCI, 218
Release IP lock, 215	Options
Options	XU USER ADD, 218
XU NOP MENU, 215	Options
Options	New User Event, 218
Do nothing menu, 215	Options
Options	XU USER CHANGE, 219
XU OPTION QUEUE, 216	Options
Options	User Change Event, 219
One-time Option Queue, 216	Options
Options	XU USER SIGN-ON, 219
XU OPTION START, 216	Options
Options	User sign-on event, 219
One-time Option Start	Options

XU USER START-UP, 220	Options
Options 220	List of All Registered Trainees, 224
User start-up event, 220	Options
Options	XU-CLINICAL TRAINEE MENU, 225
XU USER TERMINATE, 221	Options Options
Options Options	OAA Trainee Registration Menu, 225
User terminate event, 221	Options Options
Options	XU-CLINICAL TRAINEE REPORTS,
XU-486 MENU COPY, 222	225
Options	Options
Copy the compiled menus from the print	Trainee Reports Menu, 225
server, 222	Options
Options	XU-CLINICAL TRAINEE TRANSA,
XU-CLINICAL ACTIVE TRAINEE, 223	225
Options Options	Options
List of Active Registered Trainees, 223	Trainee Transmission Report by Date, 225
Options	Options
XU-CLINICAL INACTIVE TRAINEE,	XU-CLINICAL TRAINEE TRANSB,
223	225
Options	Options
List of Inactive Registered Trainees, 223	Trainee Transmission Report Selectable
Options Table 1 Table 2 Table	Items, 225
XU-CLINICAL LOCAL REPORTS, 223	Options
Options	XU-CLINICAL TRAINEE TRANSC,
Local Trainee Registration Reports, 223	225
Options	Options
XU-CLINICAL TRAINEE COUNT, 224	Trainee Transmission Report by Range,
Options	225
Count of Clinical Trainee's, 224	Options
Options	XU-CLINICAL TRANS REPORTS, 226
XU-CLINICAL TRAINEE DB COUNT,	Options
224	Trainee Transmission Reports to OAA,
Options	226
Total Count of Registered Trainees, 224	Options
Options	XU-INACTIVE PERSON CLASS
XU-CLINICAL TRAINEE EDIT DB	USERS, 226
COUNT, 224	Options
Options	List Inactive Person Class Users, 226
Edit Trainee Registration Data, 224	Options
Options	XU-INSTITUTION-DEA, 226
XU-CLINICAL TRAINEE INQUIRY,	Options
224	Institution DEA# edit, 226
Options	Options
Trainee Registration Inquiry, 224	XU-INSTITUTION-E, 226
Options	Options
XU-CLINICAL TRAINEE LIST, 224	Institution Edit, 226

Options	Options
XU-PERSON CLASS EDIT, 226	XU-SPL-PRINT, 228
Options	Options
Person Class Edit, 226	Print A Spool Document, 228
Options	Options
User Management, 226	XU-SPL-PURGE, 228
Options	Options
XUSER, 226	Purge old spool documents, 228
Options	Options
XU-PERSON CLASS REMOVE, 226	XU-SPL-SITE, 228
Options	Options
Remove a person class entry, 226	Purge old spool documents, 228
Options	Options
XU-PING-SERVER, 227	XU-SPL-USER, 229
Options	Options
TCP/IP type PING server, 227	Edit User's Spooler Access, 229
Options	Options
XU-SPL-ALLOW, 227	XU-SPY-SHOW, 229
Options	Options
Allow other users access to spool	Display the Kernel Audit Parameters, 229
documents, 227	Options
Options	XUADISP, 229
XU-SPL-BROWSE, 227	Options
Options	Audit Display, 229
Browse a Spool Document, 227	Options
Options	XUAUDIT, 229
XU-SPL-DELETE, 227	Options
Options	Establish System Audit Parameters, 229
Delete A Spool Document, 227	Options
Options	XUAUDIT MAINT, 229
XU-SPL-LIST, 227	Options
Options	System Audit Menu, 229
List Spool Documents, 227	Options
Options	XUAUDIT MENU, 230
XU-SPL-MAIL, 227	Options
Options	Audit Features, 230
Make spool document into a mail	Options
message, 227	XUAUDIT RPT, 230
Options	Options
XU-SPL-MENU, 228	System Audit Reports, 230
Options	Options
Spooler Menu, 228	XUAUTODEACTIVATE, 230
Options	Options
XU-SPL-MGR, 228	Automatic Deactivation of Users, 230
Options	Options
Spool Management, 228	XUCHANGE, 231

Options	Edit All Device Fields, 235
Change Device's Terminal Type, 231	Options
Options	XUDEVEDITCHAN, 235
XUCOMMAND, 231	Options
Options	Network Channel Device Edit, 235
SYSTEM COMMAND OPTIONS, 231	Options
Options	XUDEVEDITHFS, 235
XUCONTINUE, 233	Options
Options	Host File Server Device Edit, 235
Continue, 233	Options
Options	XUDEVEDITLPD, 236
XUCORE, 233	Options
Options	LPD/VMS Device Edit, 236
Core Applications, 233	Options
Options 200	XUDEVEDITMT, 236
XUDEV, 234	Options
Options	Magtape Device Edit, 236
Device Edit, 234	Options 25 of Total 25 of Tota
Options	XUDEVEDITRES, 236
XUDEV LINEPORT ADDR CURRENT,	Options 250
234	Resource Device Edit, 236
Options	Options 250
Current Line/Port Address, 234	XUDEVEDITSPL, 236
Options	Options 2, 230
XUDEV LINEPORT ADDR EDIT, 234	Spool Device Edit, 236
Options	Options
Edit Line/Port Addresses, 234	XUDEVEDITSYNC, 236
Options	Options 7 Options
XUDEV LINEPORT ADDR RPT, 234	Network Channel Device Edit, 236
Options 7, 23 i	Options
Line/Port Address report, 234	XUDEVEDITTRM, 236
Options	Options 7 Options
XUDEV RES-CLEAR, 234	TRM or VTRM Device Edit, 236
Options CEEF III, 23 F	Options
Clear all resources, 234	XUDIACCESS FOR ISO, 236
Options	Options 7 Options
XUDEV RES-ONE, 235	Fileman Access for the ISO, 236
Options Options	Options
Clear one Resource, 235	XUDISPLAY, 236
Options	Options 700 Options
XUDEVEDIT, 235	Display Device Data, 236
Options Options	Options Device Bata, 250
Edit Devices by Specific Types, 235	XUEDITOPT, 237
Options	Options
XUDEVEDITALL, 235	Edit options, 237
Options	Options
COMORIS	COUCHS

XUER EDIT PARAMS, 237	Options
Options	XUERTRP CLEAN, 239
Error Trap Param Edit, 237	Options
Options	Clean Error Trap, 239
XUER NOTE, 237	Options
Options	XUERTRP PRINT ERRS, 239
Annotate an Error, 237	Options
Options	Interactive Print of Error Messages, 239
XUER PURGE ERROR SUMMARY,	Options
237	XUERTRP PRINT T-1 1 ERR, 239
Options	Options
Purge Error Trap Summary, 237	Print 1 occurence of each error for T-1
Options	(QUEUE), 239
XUER SUMMARY, 237	Options
Options	XUERTRP PRINT T-1 2 ERR, 240
Error Summary Menu, 237	Options
Options	Print 2 occurrences of errors on T-1
XUER SUMMARY INQUIRE, 238	(QUEUED), 240
Options	Options
Inquire Error Summary, 238	XUERTRP TYPE, 240
Options	Options
XUER SUMMARY MOST RECENT,	Remove a TYPE of error, 240
238	Options
Options	XUEXKEY, 240
Summary Most Recent Errors, 238	Options
Options	Allocate/De-Allocate Exclusive Key(s),
XUER SUMMARY TOP, 238	240
Options	Options
Top Errors, 238	XUFAIL, 241
Options	Options
XUER UPDATE DEMAND/BATCH,	Failed Access Attempts Log, 241
238	Options
Options	XUFDEV, 241
Update Error Trap Summary, 238	Options
Options	Device Failed Access Attempts, 241
XUERRS, 238	Options
Options	XUFDISP, 241
Error Processing, 238	Options
Options	User Failed Access Attempts, 241
XUERTRAP, 239	Options
Options	XUFILEACCESS, 241
Error Trap Display, 239	Options
Options	File Access Security, 241
XUERTRP AUTO CLEAN, 239	Options
Options	XUFILEACCESS SEC OFCR, 242
Error trap Auto clean, 239	Options

Fileman Security Menu, 242	Failed Access Attempts Log Purge, 244
Options	Options
XUFILECOPY, 242	XUHALT, 244
Options	Options
Copy One User's File Access to Others,	Halt, 244
242	Options
Options	XUINDEX, 244
XUFILEDELETE, 243	Options
Options	%Index of Routines, 244
Take away All access to a File, 243	Options
Options	XUINDEX2, 244
XUFILEGRANT, 243	Options
Options	Structured Routine listing, 244
Grant Users' Access to a Set of Files, 243	Options
Options	XUINQUIRE, 244
XUFILEINQUIRY, 243	Options
Options	Option Function Inquiry, 244
Inquiry to a User's File Access, 243	Options
Options	XUKERNEL, 245
XUFILELIST, 243	Options
Options Options	Kernel Management Menu, 245
List Access to Files by File number, 243	Options Options
Options	XUKEYALL, 245
XUFILEPRINT, 243	Options Options
Options	Allocation of Security Keys, 245
Print Users Files, 243	Options
Options	XUKEYDEALL, 245
XUFILERANGEASSIGN, 243	Options 2 10 21 12 21 21 21 21 21 21 21 21 21 21 21
Options	De-allocation of Security Keys, 245
Assign/Delete a File Range, 243	Options Options
Options	XUKEYEDIT, 246
XUFILEREMOVEALL, 244	Options
Options	Enter/Edit of Security Keys, 246
Remove All Access from a Single User,	Options
244	XUKEYMGMT, 246
Options	Options
XUFILESETDELETE, 244	Key Management, 246
Options Options	Options 2 10
Delete Users' Access to a Set of Files, 244	XULIST, 246
Options	Options
XUFILESINGLEADD, 244	List Terminal Types, 246
Options	Options 13 Pess, 2 10
Single file add/delete for a user, 244	XUMAINT, 248
Options	Options
XUFPURGE, 244	Menu Management, 248
Options	Options
- Lucino	Phono

XUMF DMIS ID LOAD, 249	Options
Options	Audited Options Purge, 253
Load DMIS ID's, 249	Options
Options	XUOPTUSER, 253
XUMF IMF ADD EDIT, 249	Options
Options	User Management Menu, 253
IMF edit, 249	Options
Options	XUOPTWHO, 253
XUMF IMF EDIT STATUS, 250	Options
Options	Option Access By User, 253
IMF Display Cleanup Status, 250	Options
Options	XUOUT, 254
XUMF INSTITUTION, 250	Options
Options	Out of Service Set/Clear, 254
Institution File Query / Update, 250	Options
Options	XUPMDISP, 254
XUMF LOAD INSTITUTION, 251	Options
Options	Display of Programmer Mode Entry List,
Update/refresh Institution file with IMF	254
data, 251	Options
Options	XUPMPURGE, 254
XUMF LOAD NPI, 252	Options
Options	Programmer Mode Entry Log Purge, 254
Load Institution NPI values, 252	Options
Options	XUPR RTN CHKSUM, 254
XUMF335 clean 4.1 and 4, 252	Options
Options	Check Routines on Other CPUs, 254
Patch XU*8*335 clean 4.1 and 4, 252	Options
Options	XUPR RTN EDIT, 254
XUMNACCESS, 252	Options
Options	Routine Edit, 254
Access Monitor Menu, 252	Options
Options	XUPR RTN PATCH, 255
XUOAA SEND HL7 MESSAGE, 253	Options
Options	Routines by Patch Number, 255
Send HL7 PMU message, 253	Options
Options	XUPR-ROUTINE-TOOLS, 255
XUOPTDISP, 253	Options
Options	Routine Tools, 255
Option Audit Display, 253	Options
Options	XUPR-RTN-TAPE-CMP, 256
XUOPTLOG, 253	Options
Options	Compare routines on tape to disk, 256
Audited Options Log, 253	Options
Options	XUPRGL, 256
XUOPTPURGE, 253	Options

1: + 01 1 1 276	
List Global, 256	Options
Options VI IDD D. IT. 256	XUPS VISTALINK, 258
XUPRINT, 256	Options
Options Prince of the Prince	XUPS VISTALINK, 258
Print Option File, 256	Options
Options	XURELOG, 259
XUPROG, 256	Options
Options	Restart Session, 259
Programmer Options, 256	Options
Options	XURESJOB, 259
XUPROGMODE, 257	Options
Options	Kill off a users' job, 259
Programmer mode, 257	Options
Options	XUROUTINE IN, 259
XUPROTOCOL EDIT, 257	Options
Options	Input routines, 259
Edit a Protocol, 257	Options
Options	XUROUTINE OUT, 259
XUPRROU, 257	Options
Options	Output routines, 259
List Routines, 257	Options
Options	XUROUTINES, 259
XUPS ASSESSMENT DETAIL, 257	Options
Options	Routine Management Menu, 259
XUPS ASSESSMENT DETAIL, 257	Options
Options 25 /	XUS KAAJEE PROXY LOGON, 260
XUPS ASSESSMENT STATS, 257	Options
Options Options	KAAJEE PROXY BROKER CONTEXT
XUPS ASSESSMENT STATS, 257	260
Options 7 Options	Options
XUPS NPF CLEANUP MAIN MENU,	XUS KAAJEE WEB LOGON, 260
257	Options
Options	KAAJEE BROKER CONTEXT, 260
1	
NPF cleanup main menu, 257	Options VIIS NIN CRO LIST 260
Options VINE PRELIDEATE NEEDERS	XUS NPI CBO LIST, 260
XUPS PREUPDATE NPF REPORTS,	Options
258	List of NPI data for CBO, 260
Options White Presented Affective Presented	Options
XUPS PREUPDATE NPF REPORTS,	XUS NPI ENTER NPI FOR PROVIDER
258	260
Options	Options
XUPS UPDATE NEW PERSON FILE,	Add/Edit NPI values for Providers, 260
258	Options
Options	XUS NPI EXEMPT PROVIDER, 260
XUPS UPDATE NEW PERSON FILE	Options
DATA, 258	

Mark/Unmark Provider Exempt from	Options Special Active Hear Excel output, 262
requiring an NPI, 260	Special Active User Excel output, 263
Options VIS NRI EYTRACT 261	Options VISEC ISO O TERMINATION
XUS NPI EXTRACT, 261	XUSEC ISO Q TERMINATION
Options WIGNESE ACT DEPORT 261	REPORT, 263
XUS NPI EXTRACT REPORT, 261	Options
Options 261	Queueable ISO Terminated User Report,
XUS NPI LOCAL REPORTS, 261	263
Options	Options
Print Local NPI Reports, 261	XUSEC ISO TERMINATION REPORT,
Options	263
XUS NPI MENU, 261	Options
Options	ISO's Terminated User Report, 263
NPI (National Provider ID) Menu, 261	Options
Options	XUSEC UP ARROW TERM REPORT,
XUS NPI PROVIDER SELF ENTRY,	263
261	Options
Options	Up Arrow Delimited Termination Report,
PROVIDER NPI SELF ENTRY, 261	263
Options	Options
XUS NPI SIGNON CHECK, 262	XUSEC ISO ACTIVE USER EXTRACT.
Options 202	264
NPI Signon Check, 262	Options
-	<u> </u>
Options VIS SIGNON 262	Special Active User Excel Output, 264
XUS SIGNON, 262	Options
Options	XUSER, 264
Kernel sign-on context, 262	Options
Options	User Management, 264
XUSAP PROXY LIST, 262	Options
Options	XUSER DIV CHG, 265
Proxy User List, 262	Options
Options	Change my Division, 265
XUSAZONK, 263	Options
Options	XUSER FILE MGR, 265
Purge of the %ZUA global, 263	Options
Options	Manage User File, 265
XUSC LIST, 263	Options
Options	XUSER KEY RE-INDEX, 266
Print Sign-on Log, 263	Options
Options	Reindex the users key's, 266
XUSCZONK, 263	Options
Options	XUSER PC BUILD, 266
Purge Sign-On log, 263	Options Options
Options	User PC build Print, 266
XUSEC ISO ACTIVE USER EXTRACT,	Options
263	XUSER PC BUILD EDIT, 266
403	AUSER I C DUILD EDII, 200

Options List users, 270 User PC build Edit, 266 **Options** XUSERNEW, 270 **Options** XUSER SEC OFCR, 267 **Options Options** Add a New User to the System, 270 **Options** User Security Menu, 267 XUSERPOST, 270 **Options** XUSER-CLEAR-ALL, 267 **Options Options** Post sign-in Text Edit, 270 Clear all users at startup, 267 **Options Options** XUSERPURGEATT, 270 XUSERAOLD, 267 **Options** Purge Inactive Users' Attributes, 270 **Options Options** Purge Log of Old Access and Verify Codes, 267 XUSERREACT, 270 **Options Options** XUSERBLK, 268 Reactivate a User, 270 **Options Options** XUSERREL, 270 Grant Access by Profile, 268 **Options Options** XUSERCLR, 268 Release user, 270 **Options Options** Clear Terminal, 268 XUSERREPRINT, 271 **Options Options** XUSERDEACT, 268 Reprint Access agreement letter, 271 **Options Options** Deactivate a User, 268 XUSERTOOLS, 271 **Options Options** XUSEREDIT, 269 User's Toolbox, 271 **Options Options** XUSERVDISP, 271 Edit an Existing User, 269 **Options Options** XUSEREDITSELF, 269 Server audit display, 271 **Options Options** Edit User Characteristics, 269 XUSERWHERE, 271 **Options Options** XUSERINQ, 269 Where am I?, 271 **Options Options** User Inquiry, 269 XUSESIG, 271 **Options Options** XUSERINT, 269 Electronic Signature code Edit, 271 **Options Options** Introductory text edit, 269 XUSESIG BLOCK, 272 **Options Options** XUSERLIST, 270 Electronic Signature Block Edit, 272 **Options Options**

XUSESIG CLEAR, 272	Terminal Type Edit, 276
Options	Options
Clear Electronic signature code, 272	XUTESTUSER, 276
Options	Options
XUSESIG DEG, 272	Switch Identities, 276
Options	Options
EDUCATION (Degree) File Edit, 272	XUTIME, 276
Options	Options
XUSFACHK, 272	Time, 276
Options	Options
Check Failed Access Log, 272	XUTIO, 276
Options	Options
XUSITEMGR, 273	Device Management, 276
Options	Options
Operations Management, 273	XUTLOOPBACK, 277
Options	Options
XUSITEPARM, 274	Loopback Test of Device Port, 277
Options	Options
Enter/Edit Kernel Site Parameters, 274	XUTM BACKGROUND PRINT, 277
Options	Options
XUSPY, 274	Print Options that are Scheduled to run
Options	277
Information Security Officer Menu, 274	Options
Options	XUTM BACKGROUND
XUSSPKI CRL UPLOAD, 275	RECOMMENDED, 278
Options	Options
PKI CRL Upload, 275	Print Options Recommended for
Options	Queueing, 278
XUSSPKI EDIT, 275	Options
Options	XUTM BVPAIR, 278
Kernel PKI Parameter Edit, 275	Options
Options	Site Parameters Edit, 278
XUSSPKI UPN SET, 275	Options 2416, 276
Options	XUTM CHECK ENV, 278
ePCS Set SAN from PIV Card, 275	Options
Options Options	Check Taskman's Environment, 278
XUSTAT, 276	Options 2 21 Tolling 2 7 0
Options Options	XUTM CLEAN, 278
CPU/Service/User/Device Stats, 276	Options
Options	Clean Task File, 278
XUSTATUS, 276	Options
Options Options	XUTM DEL, 279
System Status, 276	Options
Options	Delete Tasks, 279
XUTERM, 276	Options
Options Options	XUTM DQ, 279
Options	$\Lambda_{\text{O IMI}} DQ, 277$

Options	XUTM MGR, 283
Dequeue Tasks, 279	Options
Options	Taskman Management, 283
XUTM ERROR, 279	Options
Options	XUTM PARAMETER EDIT, 284
Taskman Error Log, 279	Options
Options 2 Options	Edit Taskman Parameters, 284
XUTM ERROR DELETE, 280	Options
Options Detailed Bellette, 200	XUTM PROBLEM CLEAR, 284
Delete Error Log, 280	Options
Options 200	Problem Device Clear, 284
XUTM ERROR LOG CLEAN RANGE,	Options
280	XUTM PROBLEM DEVICES, 284
Options	Options Options
-	<u> -</u>
Clean Error Log Over Range Of Dates,	Problem Device report, 284
280	Options
Options NUTMERROR BURGE TYPE 280	XUTM QCLEAN, 284
XUTM ERROR PURGE TYPE, 280	Options 204
Options 200	Queuable Task Log Cleanup, 284
Purge Error Log Of Type Of Error, 280	Options
Options	Schedule/Unschedule Options, 284
XUTM ERROR SCREEN ADD, 281	Options
Options	XUTM SCHEDULE, 284
Add Error Screens, 281	Options
Options	XUTM QPROBLEM DEVICES, 285
XUTM ERROR SCREEN EDIT, 281	Options
Options	Queuable Problem Device report, 285
Edit Error Screens, 281	Options
Options	XUTM REPNT, 285
XUTM ERROR SCREEN LIST, 282	Options
Options	Repoint waiting tasks to a new
List Error Screens, 282	port/device, 285
Options	Options
XUTM ERROR SCREEN REMOVE,	XUTM REQ, 285
282	Options
Options	Requeue Tasks, 285
Remove Error Screens, 282	Options
Options	XUTM RESTART, 285
XUTM ERROR SHOW, 283	Options
Options	Restart Task Manager, 285
Show Error Log, 283	Options
Options Options	XUTM RP, 285
XUTM INQ, 283	Options
Options Options	Change tasks device, 285
List Tasks, 283	Options
Options Options	XUTM RUN, 286
O Priorito	110 1111 11011, 200

Options Options Remove Taskman from WAIT State, 286 XUTTEST, 288 **Options Options** XUTM SCHEDULE, 286 Send Test Pattern to Terminal, 288 **Options Options** Schedule/Unschedule Options, 286 XUUSERACC, 289 **Options Options** XUTM SNAPSHOT, 286 Diagram Menus, 289 **Options Options** Taskman snapshot, 286 XUUSERACC1, 289 **Options Options** XUTM STOP, 287 Menu Diagrams, 289 **Options Options** Stop Task Manager, 287 XUUSERACC2, 289 **Options Options** XUTM SYNC, 287 Abbreviated Menu Diagrams, 289 **Options Options** XUUSERDISP, 289 SYNC flag file control, 287 **Options Options** XUTM TL CLEAN, 287 Display User Characteristics, 289 **Options Options** XUUSERHELP, 290 Cleanup Task List, 287 Options **Options** XUTM UCI, 287 User Help, 290 **Options Options** XUUSEROPT, 290 UCI Association Table Edit, 287 **Options Options** XUTM USER, 287 User Audit Display, 290 **Options Options** XUUSERSTATUS, 290 TaskMan User, 287 **Options Options** XUTM UTIL, 287 User Status Report, 290 **Options Options** Taskman Management Utilities, 287 XUVERSIONEW-HELP, 290 **Options Options** XUTM VOLUME, 288 Kernel New Features Help, 290 **Options Options** XUXREF, 290 Volume Set Edit, 288 **Options Options** XUTM WAIT, 288 List Options by Parents and Use, 290 **Options Options** Place Taskman in a WAIT State, 288 XUXREF-2, 290 **Options Options** XUTM ZTMON, 288 Show Users with a Selected primary **Options** Menu, 290 Monitor Taskman, 288 **Options**

XUZUSER, 291	Options
Options	XT-KERMIT MENU, 293
User Management, 291	Options
Options	Kermit menu, 293
XUPS ASSESSMENT DETAIL, 291	Options
Options	XT-KERMIT RECEIVE, 293
XUPS ASSESSMENT DETAIL, 291	Options
Options	Receive KERMIT file, 293
XUPS ASSESSMENT STATS, 291	Options
Options	XT-KERMIT SEND, 293
XUPS ASSESSMENT STATS, 291	Options
Options	Send KERMIT file, 293
XUPS PREUPDATE NPF REPORTS,	Options
291	XT-KERMIT SPOOL DL, 294
Options	Options
XUPS PREUPDATE NPF REPORTS,	Download a Spool file entry, 294
291	Options
Options	XT-NUMBER BASE CHANGER, 294
XUPS UPDATE NEW PERSON FILE,	Options
292	Number base changer, 294
Options	Options
XUPS UPDATE NEW PERSON FILE	XT-OPTION TEST, 294
DATA, 292	Options
Options	Test an option not in your menu, 294
XUPS VISTALINK, 292	Options
Options	XT-PURGE ERRORS, 294
XUPS VISTALINK, 292	Options
Options	Clean Error Trap, 294
XUS NPI EXTRACT REPORT, 292	Options
Options	XT-ROUTINE COMPARE, 294
XUS NPI EXTRACT REPORT, 292	Options
Options	Compare two routines, 294
XUS PROC CNT CLUP, 292	Options
Options	XT-RTN CS EDT, 295
XUS Process count cleanup, 292	Options
Options	Old Checksum Edit, 295
Kernel Toolkit Options Listed	Options
Alphabetically by Name, 293	XT-RTN CS UPDATE, 295
Options	Options
XT-BLD RTN LIST, 293	Old Checksum Update from Build, 295
Options	Options
Routine Summary List, 293	XT-VARIABLE CHANGER, 295
Options	Options
XT-KERMIT EDIT, 293	Variable changer, 295
Options	Options
Edit KERMIT holding file, 293	XT-VERSION NUMBER, 295
$\boldsymbol{\varepsilon}$	

Options Options Version Number Update, 295 XTLKPRTUTL, 300 **Options Options** XTCM MAIN, 295 Print Utility, 300 **Options Options** Capacity Planning, 295 XTLKUSER2, 300 **Options Options XTFCE**, 296 Multi-Term Lookup Main Menu, 300 **Options Options** XTLKUTILITIES, 300 Flow Chart from Entry Point, 296 **Options Options XTFCR**, 296 Utilities for MTLU, 300 **Options Options** Flow Chart Entire Routine, 296 XTMENU, 300 **Options Options** XTLATSET, 296 Application Utilities, 300 **Options Options** VAX DSM Device Set-up, 296 XTMOVE, 300 **Options Options** XTLKLKUP, 298 Move Routines across Volume Sets, 300 **Options Options** XTMOVE-IN, 301 Multi-Term Lookup (MTLU), 298 **Options Options** XTLKMODKY, 299 Bring in Sent Routines, 301 **Options Options** Keywords, 299 XTOOLS, 301 **Options Options** XTLKMODPARK, 299 Programmer tools, 301 **Options Options** Delete Entries From Look-up, 299 XTQUEUABLE OPTIONS, 302 **Options Options** XTLKMODPARS, 299 Toolkit Queuable Options, 302 **Options Options** Add Entries To Look-Up File, 299 Schedule/Unschedule Options, 302 **Options Options** XTLKMODSH, 299 XUTM SCHEDULE, 302 **Options Options** Shortcuts, 299 XTRDEL, 302 **Options Options** Delete Routines, 302 XTLKMODSY, 299 **Options Options** Synonyms, 299 XTRGRPE, 302 **Options Options** XTLKMODUTL, 299 Group Routine Edit, 302 **Options Options** Add/Modify Utility, 299 XTRMONITOR, 302

Options	UNDO Edits (Restore to Older Version of
Monitor Routines for Changes, 302	Routine), 306
Options	Options
XTSUMBLD, 303	XTVR UPDATE, 306
Options	Options
Build an 'NTEG' routine for a package,	Update with current routines, 306
303	Options
Options VTSUMBUD GUECK 202	Audited Options Purge, 308
XTSUMBLD-CHECK, 303	Options
Options Colorate and Share Charleson Values	Automatic Deactivation of Users, 308
Calculate and Show Checksum Values, 303	Options Clean Error Log over Range of Dates, 308
Options	Options
XTV EDIT VERIF PACKAGE, 303	Clean Old Job Nodes in ^XUTL, 308
Options	Options
Edit Verification Package File, 303	Clean Task File, 308
Options	Options
XTV MENU, 303	Clear All Users at Startup, 308
Options	Options
Verifier Tools Menu, 303	Clean Error Trap, 309
Options	Options
XTVG COMPARE, 304	Deactivate a User, 309
Options	Options
Global Compare for selected package, 304	Delete Error Log, 309
Options	Options
XTVG UPDATE, 304	Delete Old (>14 d) Alerts, 309
Options	Options
Accumulate Globals for Package, 304	Failed Access Attempts Log Purge, 309
Options	Options
XTVR COMPARE, 305	Programmer Mode Entry Log Purge, 309
Options	Options
Routine Compare - Current with Previous,	Purge Error Log of Type of Error, 309
305	Options
Options	Purge Inactive Users' Attributes, 309
XTVR MENU, 305	Options
Options	Purge Log of Old Access and Verify
Verifier Tools Menu, 305	Codes, 309
Options	Options
XTVR MOST RECENT CHANGE	Purge of ^%ZUA Global, 309
DATE, 305	Options
Options	Purge Old Spool Documents, 309
Last Routine Change Date Recorded, 305	Options
Options	Purge Sign-on Log, 310
XTVR RESTORE PREV ROUTINE, 306	Options
Options	Queuable Task Log Cleanup, 310
-	Options

DBA, 346	Options
Options	Locked, 348
DBA Option, 346	Options
Options	Audit Menu, 348
Integration Agreements Menu, 346	Options
Options	Filegrams, 348
DBA IA ISC, 346	Options
Options	KIDS Installation Menu, 348
Custodial Package Menu, 346	Options
Options	KIDS Main Menu, 348
DBA IA CUSTODIAL MENU, 346	Options
Options	Programmer Options, 348
ACTIVE by Custodial Package, 346	Options
Options	ScreenMan, 348
DBA IA CUSTODIAL, 346	Options
Options	VA FileMan Management, 348
DBA, 346	Options
Options	User's Toolbox, 369
DBA Option, 346	Options
Options	XUSERTOOLS, 369
Integration Agreements Menu, 346	Options
Options	User's Toolbox, 369
DBA IA ISC, 346	Options
Options	XUSERTOOLS, 369
Inquire, 346	Options
Options	Electronic Signature Code Edit, 369
DBA IA INQUIRY, 346	Options Options
Options	XUSESIG, 369
DBA, 346	Options
Options	Electronic Signature Block Edit, 369
DBA Option, 346	Options
Options Options	XUSESIG BLOCK, 369
Integration Agreements Menu, 346	Options Decore, 509
Options	Electronic Signature Code Edit, 369
DBA IA ISC, 346	Options
Options Options	XUSESIG, 369
Subscriber Package Menu, 346	Options Options
Options	Electronic Signature Block Edit, 369
DBA IA SUBSCRIBER MENU, 346	Options
Options	XUSESIG BLOCK, 369
Print ACTIVE by Subscribing Package,	Options Options
346	Electronic Signature Block Edit, 369
Options	Options
DBA IA SUBSCRIBER Option, 346	XUSESIG BLOCK, 369
Options Options	Options
Independence, 348	Electronic Signature Block Edit, 370
mucpenuence, 540	Electronic Signature Block Edit, 5/0

Kernel 8.0 and Kernel Toolkit 7.3 Technical Manual

Options	AUTO-GENERATE ACCESS CODES
XUSESIG BLOCK, 370	(#11) Field, 5
Options	BYPASS DEVICE LOCK-OUT (#211)
EDUCATION (Degree) File Edit, 370	Field, 5, 6
Options	DEFAULT # OF ATTEMPTS (#202)
User Management, 370	Field, 5
Options	DEFAULT AUTO-MENU (#206) Field, 5
XUSER, 370	DEFAULT INSTITUTION (#217) Field,
Options	5
EDUCATION (Degree) File Edit, 370	DEFAULT LANGUAGE (#207) Field, 6
Options	DEFAULT LOCK-OUT TIME (#203)
Inquire to File Entries, 370	Field, 6
Options	DEFAULT MULTIPLE SIGN-ON (#204)
DIINQUIRE, 370	Field, 6
Options	DEFAULT TIMED-READ (SECONDS)
Electronic Signature code Edit, 372	(#210) Field, 6
Options	DEFAULT TYPE-AHEAD (#209) Field,
XUSESIG, 372	6
Options	DEVICE TO AUDIT (#212.1) Multiple
Electronic Signature Block Edit, 372	Field, 6, 16
Options	FAILED ACCESS ATTEMPT AUDIT
XUSESIG BLOCK, 372	(#212.5) Field, 6, 16
Options in the Option File that are Out-Of-	INITIATE AUDIT (#19.4), 6
Order Option, 198	INITIATE AUDIT (#19.4) Field, 6, 8, 9,
ORES Security Key, 186	16, 17
ORGANIZATION (#200.2) Field, 8	INITIATE AUDIT (#19.5) Field, 6, 16
ORGANIZATION ID (#200.3) Field, 9	INTERACTIVE USER'S PRIORITY
Orientation, xix	(#216) Field, 7
Out of Service Set/Clear Option, 254	IP SECURITY ON (#405.1) Field, 7
Out-Of-Order Set Management Menu, 197	Kernel, 10
OUT-OF-SERVICE DATE (#6) Field, 5	Site Parameters File Changes, 4
Output routines Option, 259	Kernel Site Parameters, 4
	LAST SIGN-ON, 5
P	LIFETIME OF VERIFY CODE (#214)
	Field, 7
PACKAGE (#9.4) File, 21, 22, 29, 35, 63,	LOG RESOURCE USAGE? (#300) Field,
76, 174, 303, 305	7
PARAMETER (#8989.5) File, 369	LOG SYSTEM RT? (#41, 6) Field, 7, 10
PARAMETER DEFINITION (#8989.51),	MAX SIGNON ALLOWED (#41, 2)
169	Field, 7, 10
PARAMETER DEFINITION (#8989.51)	MAX SPOOL DOCUMENT LIFE-SPAN
File, 4, 11, 15, 168, 169, 369	(#31.3) Field, 7, 17
Parameters	MAX SPOOL DOCUMENTS PER
AGENCY CODE (#9) Field, 5	USER (#31,2) Field, 7
ASK DEVICE TYPE AT SIGN-ON	MAX SPOOL DOCUMENTS PER
(#205) Field, 5	USER (#31.2) Field, 17

MAX SPOOL LINES PER USER (#31.1)	XPAR TEST MULTIPLE, 11
Field, 8, 17	XPAR TEST MULTIPTR, 11
NAMESPACE TO AUDIT (#19.2) Field,	XPAR TEST NUMERIC, 11
8	XPAR TEST POINTER, 11
NAMESPACE TO AUDIT (#19.2)	XPAR TEST PWP, 11
Multiple, 8	XPAR TEST SET OF CODES, 12
NAMESPACE TO AUDIT (#19.2)	XPAR TEST WP, 12
Multiple Field, 16	XPAR TEST YES/NO, 12
NEW PERSON IDENTIFIERS (#21)	XPD PATCH HFS SERVER, 12
Field, 8	XQ MENUMANAGER PROMPT, 12
OPTION AUDIT (#19 Field, 16	XQAL BACKUP REVIEWER, 12
OPTION AUDIT (#19) Field, 6, 8, 9, 16,	XU SIG BLOCK DISABLE, 13, 369, 370
17	XU522, 13
OPTION TO AUDIT (#19.1) Multiple, 8	XU594, 13
OPTION TO AUDIT (#19.1) Multiple	XU645, 13
Field, 8, 16	XUEDIT CHARACTERISTICS, 10
ORGANIZATION (#200.2) Field, 8	XUEPCS REPORT DEVICE, 14, 210,
ORGANIZATION ID (#200.3) Field, 9	212
OUT-OF-SERVICE DATE (#6) Field, 5	XUEXISTING USER, 10
PERFORM DEVICE CHECKING	XUNEW USER, 10
(#59.91) Field, 5	XUREACT USER, 10
PROHIBITED TIMES FOR SIGN-ON	XUS CCOW VAULT PARAM, 14
(#2009) Field, 5	XUSC1 DEBUG, 14
ROUTINE MONITORING (#9.8) Field, 9	XUSER COMPUTER ACCOUNT, 10
ROUTINE N-SPACE TO MONITOR	XUSNPI QUALIFIED IDENTIFIER, 14
(#9.81) Multiple Field, 9	XUS-XUP SET ERROR TRAP, 14
SECURITY (#15) Field, 5	XUS-XUP VPE, 14
SECURITY TOKEN SERVICE (#200.1)	PARAMETERS (#8989.5) File, 187
Field, 9	Parent of Queuable Options Menu, 102, 145
Spooler, 17	Parent of Queuable Options Menu], 102
System, 4, 11	PATCH APPLICATION HISTORY
TERMINATE AUDIT (#19.5) Field, 8, 9,	(Multiple) Field, 76
16, 17	Patch XU*8*335 clean 4.1 and 4 Option,
USER TO AUDIT (#19.3) Multiple, 8, 9	252
USER TO AUDIT (#19.3) Multiple Field,	Patches
16	History, xiii
USER TO AUDIT (Multiple), 17	PATIENT (#2) File, 79, 163, 165, 333
VOLUME SET (#41) Multiple Field, 7, 10	Patient Alert List for specified date Option, 186
XPAR ALL ENTITIES, 11	PERFORM DEVICE CHECKING (#59.91)
XPAR MY NEW PARAM, 11	Field, 5
XPAR TEST DATE/TIME, 11	PERSON CLASS (#8932.1) File, 85, 98,
XPAR TEST FREE TEXT, 11	100
XPAR TEST M CODE, 11	Person Class Edit Option, 226
XPAR TEST ME, 11	PKI CRL Upload Option, 275
XPAR TEST MULT FREE TEXT, 11	PKI CRL URLS (#8980.22) File, 86

PKI Digital Signatures (#8980.2) File, 86 Print Setting Parameters Privileges Option, Place Taskman in a WAIT State Option, 288 154, 156, 213 Print Sign-on Log Option, 263 **Policies** Official, 376 Print Transport Global Option, 173 Print Users Files Option, 243 Post sign-in Text Edit Option, 270 POSTAL CODE (#5.12) File, 74, 167 Print Utility Option, 300 Postal Code Update Server Option, 167 Problem Device Clear Option, 284 Preliminary Scan of File for errors Option, Problem Device report Option, 284 **Production Account** 162 Primary Menu, 378, 381 Routines, 26 Print 1 occurence of each error for T-1 PROGRAM OF STUD (#8932.2) File, 86 Programmer Mode Entry Log Purge Option, (QUEUE) Option, 239 Print 2 occurrences of errors on T-1 254, 309 (QUEUED) Option, 240 PROGRAMMER MODE LOG (#3.07) File, Print A Spool Document Option, 228 65, 67 Print ACTIVE by Subscribing Package Programmer mode Option, 257 Option, 346 Programmer Options, 348 Print All Delegates and their Options Programmer Options Menu, 102, 119, 256 Option, 200 Programmer tools Menu, 301 Print Alpha/Beta Errors PROHIBITED TIMES FOR SIGN-ON (Date/Site/Num/Rou/Err) Option, 179 (#2009) Field, 5 Print Audits for Prescriber Editing Option, Protection 154, 156, 211 Globals, 354 Print DEA Expiration Date Expires 30 days PROTOCOL (#101) File, 84, 198 Option, 154, 155, 215 **Protocols** Print DEA Expiration Date Null Option, Lock Manager Utility, 151 154, 209 XU USER SIGN-ON, 151 Print DISUSER DEA Expiration Date XU USER START-UP, 151 Expires 30 days Option, 154, 155, 207 XU USER TERMINATE, 151 Print DISUSER DEA Expiration Date Null XULM DISPLAY SYSTEM LOCKS, Option, 154, 207 151 Print DISUSER Prescribers with Privileges XULM GO TO, 152 Option, 154, 155, 207 XULM LOCK MANAGER, 151 Print List of File Duplicates Option, 163 XULM REFRESH LOCKS, 151 Print Local NPI Reports Option, 261 XULM SELECT LOCK, 152 Print Option File Option, 256 XULM SELECT NODE, 152 Print Options Recommended for Queueing XULM SINGLE LOCK MENU, 152 Option, 278 XULM SORT/SCREEN LOCKS, 152 Print Options that are Scheduled to run XULM TERMINATE PROCESS, 152 Option, 277 Protocols Marked Out-Of-Order in Protocol Print Prescribers with Privilege Option, 154 File Option, 198 Print Prescribers with Privileges Option, PROVIDER CLASS (#7) File, 66, 75, 97 PROVIDER NPI SELF ENTRY Option, 155, 211 Print PSDRPH Key Holders Option, 154, 261 155, 211 PROVIDER Security Key, 266 Proxy User List Option, 262

PS Anonymous Directories, xxiii PSDRPH Security Key, 90, 155, 156, 211, 212 Purge Alerts for a User Option, 190 Purge Build or Install Files Option, 174 Purge Duplicate Record File Option, 163 Purge Error Log of Type of Error Option, 309 Purge Error Log Of Type Of Error Option, Purge Error Trap Summary Option, 237 Purge Inactive Users' Attributes Option, 309 Purge Inactive Users' Attributes Option, 270 Purge Log of Old Access and Verify Codes Option, 267, 309 Purge Merge Process File Option, 80, 163 Purge of ^%ZUA Global Option, 309 Purge of the %ZUA global Option, 263 Purge old spool documents, 17 Purge old spool documents Option, 7, 228 Purge Old Spool Documents Option, 309 Purge Sign-on Log Option, 310 Purge Sign-On log Option, 263 Purging, 308

Q

QuadraMed Home Page Web Address, 368
Question Mark Help, xxii
Queuable Problem Device report Option,
285
Queuable Synchronize County Multiple
With 5.13 Option, 166
Queuable Task Log Cleanup Option, 78,
284, 310
Queuable ISO Terminated User Report
Option, 263

R

RACE (#10) File, 66, 77, 97 RAI MDS MONITOR (#46.11) File, 83 Reactivate a User Option, 10, 101, 270 Receive KERMIT file Option, 293 RECORD HAS PACKAGE DATA (#9.402,4) Field, 22 Recover deleted option set Option, 197

Reference Materials, xxiii Reindex the users key's, 266 Relations External, 344 Kernel, 344 Internal, 348 Release IP lock Option, 7, 215 Release user Option, 270 RELIGION (#13) File, 66, 77, 98 REMOTE APPLICATION (#8994.5) File, 95 REMOTE PROCEDURE (#8994) File, 94, Remote Systems, 368 Remove a person class entry Option, 226 Remove a TYPE of error Option, 240 Remove All Access from a Single User Option, 244 Remove delegated keys Option, 196 Remove Error Screens Option, 282 Remove Options Previously Delegated Option, 203 Remove Out-Of-Order Messages from a Set of Options Option, 197 Remove Taskman from WAIT State Option, 286 Rename a menu template Option, 205 REPLACEMENT (#4) Field, 10 REPLACEMENT Field, 4 Replicate or Replace a Delegate Option, 203 Repoint waiting tasks to a new port/device Option, 285 Report Menu for Alerts Menu, 186 Reprint Access agreement letter Option, 271 Requeue Tasks Option, 285 Required Software, 345 RESOURCE (#3.54) File, 64, 71 Resource Device Edit Option, 236 Restart a merge process Option, 163 Restart Install of Package(s) Option, 174 Restart Session Option, 259 Restart Task Manager Option, 285 Restrict Availability of Options Option, 199 Restrictions

Electronic Signature, 369

Revision History, ii

De aumontation :	0/7TM2 24
Documentation, ii	%ZTM3, 24
Patches, xiii Pallyn Patches into a Payild Ontion 174	%ZTM4, 24
Rollup Patches into a Build Option, 174	%ZTM5, 24
ROUTIN (#9.8)E File, 175	%ZTM6, 24
ROUTINE (#9.8) File, 35, 63, 77, 175, 176,	%ZTMOVE, 24
205, 206, 295, 303	%ZTMS, 24
Routine Compare - Current with Previous	%ZTMS0, 24
Option, 88, 305	%ZTMS1, 24
Routine Edit Option, 254	%ZTMS2, 24
Routine Management Menu, 259	%ZTMS3, 24
ROUTINE MONITORING (#9.8) Field, 9	%ZTMS4, 24
ROUTINE N-SPACE TO MONITOR	%ZTMS7, 24
(#9.81) Multiple Field, 9	%ZTMSH, 24
Routine Summary List Option, 293	Additional Routines Installed by Virgin
Routine Tools Menu, 255	Install, 61
Routines, 23	Manager Account, 23
%XUCI, 344	Mapping, 61
%ZIS, 23	Operating System, 344
%ZIS1, 23	Production Account, 26
%ZIS2, 23	XDR2NULL, 26
%ZIS3, 23	XDRDADD, 26
%ZIS4, 344	XDRDADDS, 26
%ZIS5, 23	XDRDADJ, 26
%ZIS6, 23	XDRDCNT, 26
%ZIS7, 23	XDRDCOMP, 26
%ZISC, 23	XDRDDATA, 26
%ZISP, 23	XDRDEDT, 26
%ZISS, 23	XDRDEFLG, 26
%ZISS1, 24	XDRDFPD, 26
%ZISS2, 24	XDRDLIST, 27
%ZISUTL, 24	XDRDMAIN, 27
%ZOSV, 344	XDRDOC, 27
%ZTER, 24	XDRDOC1, 27
%ZTER1, 24	XDRDOC2, 27
%ZTLOAD, 24	XDRDPDTI, 27
%ZTLOAD1, 24	XDRDPICK, 27
%ZTLOAD2, 24	XDRDPRE1, 27
%ZTLOAD3, 24	XDRDPREL, 27
%ZTLOAD4, 24	XDRDPRG2, 27
%ZTLOAD5, 24	XDRDPRGE, 27
%ZTLOAD6, 24	XDRDQUE, 27
%ZTLOAD7, 24	XDRDSCOR, 28
%ZTM, 24, 344	XDRDSHOW, 28
%ZTM0, 24	XDRDSTAT, 28
%ZTM1, 24	XDRDUP, 28
%ZTM2, 24	XDREMSG, 28

XDRHLP, 28	XGSW, 31
XDRLRFIX, 29	XINDX, 31
XDRMADD, 29	XINDX1, 31
XDRMAIN, 29	XINDX10, 31
XDRMAINI, 29	XINDX11, 31
XDRMERG, 29	XINDX2, 31
XDRMERG0, 29	XINDX3, 31
XDRMERG1, 29	XINDX4, 31
XDRMERG2, 29	XINDX5, 31
XDRMERGA, 29	XINDX5, 51 XINDX51, 31
XDRMERGB, 29	XINDX51, 31 XINDX52, 31
XDRMERGG, 29	XINDX52, 31 XINDX53, 31
XDRMPACK, 29	XINDX53, 31 XINDX6, 31
·	XINDX0, 31 XINDX7, 31
XDRMRG, 29	· · · · · · · · · · · · · · · · · · ·
XDRMRG1, 29	XINDX8, 31
XDRMSG, 30	XINDX9, 31
XDRMVFY, 30	XIPENV, 31
XDRPREI 1 20	XIPMAIL, 31
XDRPREL1, 30	XIPMAILA, 31
XDRPTCAN, 30	XIPMAILB, 31
XDRPTCLN, 30	XIPPOST, 31
XDRPTDOB, 30	XIPSRVR, 31
XDRPTDOD, 30	XIPSYNC, 31
XDRPTLSD, 30	XIPUTIL, 31
XDRPTMMN, 30	XIPUTIL1, 31
XDRPTN, 30	XIPXREF, 31
XDRPTSSN, 30	XLFCRC, 32
XDRPTSX, 30	XLFDT, 32
XDRRMRG0, 30	XLFDT1, 32
XDRRMRG1, 30	XLFDT2, 32
XDRRMRG2, 30	XLFDT3, 32
XDRU, 30	XLFDT4, 32
XDRUTL, 30	XLFHYPER, 32
XDRVAL, 28	XLFIPV, 32
XDRVAL1, 28	XLFLTR, 32
XDRVAL2, 28	XLFLTR1, 32
XDRVCHEK, 30	XLFMSMT, 32
XGF, 30	XLFMSMT2, 32
XGFDEMO, 30	XLFMTH, 32
XGFDEMO1, 30	XLFMTH1, 32
XGKB, 30	XLFNAME, 32
XGKB1, 31	XLFNAME1, 32
XGS, 31	XLFNAME2, 32
XGSA, 31	XLFNAME3, 32
XGSBOX, 31	XLFNAME4, 32
XGSETUP, 31	XLFNAME 1, 32
	111111111111111111111111111111111111111

XLFNAME6, 32	XPDIA0, 34
XLFNAME7, 32	XPDIA1, 34
XLFNAME8, 32	XPDIA2, 34
XLFNENV, 32	XPDIA3, 34
XLFNP152, 32	XPDIB, 34
XLFNP176, 32	XPDID, 34
XLFNSLK, 32	XPDIGP, 34
XLFSHAN, 32	XPDIJ, 34
XLFSTR, 32	XPDIJ1, 34
XLFUTL, 32	XPDIK, 34
XPAR, 32	XPDIL, 34
•	*
XPAR1, 33 YPAR2, 22	XPDIL1, 34
XPAR2, 33	XPDIN001, 34
XPAR3, 33	XPDIN002, 34
XPARDD, 33	XPDIN003, 34
XPARDD1, 33	XPDIN004, 34
XPARDD2, 33	XPDIN005, 34
XPARDDAC, 33	XPDIN006, 34
XPAREDIT, 15, 33	XPDIN007, 34
XPAREDT1, 33	XPDIN008, 34
XPAREDT2, 33	XPDIN009, 34
XPAREDT3, 33	XPDIN00A, 34
XPARLIST, 33	XPDIN00B, 34
XPARTPV, 33	XPDIN00C, 34
XPARTPV1, 33	XPDIN00D, 34
XPARY26, 33	XPDIN00E, 34
XPARZUTL, 33	XPDIN00F, 34
XPDB1, 33	XPDIN00G, 35
XPDCOM, 33	XPDIN00H, 35
XPDCOMF, 33	XPDIN00I, 35
XPDCOMG, 33	XPDIN00J, 35
XPDCOML, 33	XPDIN00K, 35
XPDCPU, 33	XPDIN00L, 35
XPDDCS, 33	XPDIN00M, 35
XPDDI, 33	XPDIN00N, 35
XPDDP, 33	XPDIN000, 35
XPDDP1, 33	XPDIN00P, 35
XPDDPCK, 33	XPDIN00Q, 35
XPDE, 33	XPDIN00R, 35
XPDER, 33	XPDIN00S, 35
XPDET, 33	XPDIN00T, 35
XPDGCDEL, 33	XPDINIT, 35
XPDH, 34	XPDINIT1, 35
XPDI, 34 XPDI, 34	XPDINIT1, 35 XPDINIT2, 35
XPDI1, 34 XPDI1, 34	XPDINIT2, 35 XPDINIT3, 35
XPDIA, 34	XPDINIT4, 35
AI DIA, 34	AI DIMIT4, 33

XPDINIT5, 35	XQ72, 37
XPDIP, 35	XQ72A, 37
XPDIPM, 35	XQ73, 37
XPDIQ, 35	XQ74, 37
XPDIR, 35	XQ75, 37
XPDIST, 35	XQ8, 37
XPDIU, 35	XQ81, 37
XPDKEY, 35	XQ81, 37 XQ82, 37
	-
XPDKRN, 35	XQ83, 37
XPDMENU, 35	XQ83A, 37
XPDNTEG, 35	XQ83D, 37
XPDPINIT, 35	XQ83R, 37
XPDPROT, 36	XQ88, 37
XPDR, 36	XQ8A, 37
XPDRSUM, 36	XQ9, 37
XPDT, 36	XQ91, 37
XPDTA, 36	XQ92, 37
XPDTA1, 36	XQ93, 37
XPDTA2, 36	XQA366PO, 37
XPDTC, 36	XQABELOG, 37
XPDTP, 36	XQABERR, 37
XPDUTL, 36	XQABLIST, 37
XPDUTL1, 36	XQABLOAD, 37
XPDV, 36	XQABTMP, 37
·	•
XQ, 36 YO1, 26	XQAL173P, 37
XQ1, 36	XQAL285P, 37
XQ11, 36	XQALBUTL, 37
XQ12, 36, 151, 221	XQALDATA, 37
XQ2, 36	XQALDEL, 38
XQ21, 36	XQALDOIT, 38
XQ3, 36	XQALERT, 38
XQ31, 36	XQALERT1, 38
XQ32, 36	XQALFWD, 38
XQ33, 36	XQALGUI, 38
XQ4, 36	XQALMAKE, 38
XQ41, 36	XQALSET, 38
XQ5, 36	XQALSET1, 38
XQ55, 36	XQALSUR1, 38
XQ55SPEC, 36	XQALSUR2, 38
XQ6, 36	XQALSURO, 38
XQ61, 36	XQARPRT1, 38
	,
XQ62, 36 YO6A 36	XQARPRT2, 38
XQ6A, 36 Y06B, 27	XQCHK, 38
XQ6B, 37	XQCHK1, 38
XQ7, 37	XQCHK2, 38
XQ71, 37	XQCHK3, 38

XQCS, 38	XQSMD5, 40
XQDATE, 38	XQSMD6, 40
XQH, 38	XQSMDCPY, 40
XQH0, 38	XQSMDFM, 40
XQH1, 38	XQSMDP, 40
XQH2, 38	XQSRV, 40
XQH3, 38	XQSRV1, 40
XQH4, 38	XQSRV2, 40
XQH5, 38	XQSRV3, 40
XQHLP, 38	XQSRV4, 40
XQKEY, 38	XQSRV5, 40
XQLOCK, 38	XQSTCK, 40
XQLOCK1, 38	XQSUITE, 40
XQOO, 39	XQSUITE1, 40
XQOO1, 39	
	XQT, 40
XQOO2, 39	XQT1, 40
XQOO3, 39	XQT2, 40
XQOPED, 39	XQT3, 40
XQOR, 39	XQT4, 40
XQOR1, 39	XQT5, 40
XQOR2, 39	XQTOC, 40
XQOR3, 39	XQUIT, 40
XQOR4, 39	XQUSR, 40
XQORD, 39	XQUTL, 40
XQORD1, 39	XT73P113, 40
XQORD101, 39	XT73P129, 40
XQORDD1, 39	XT73P132, 40
XQORM, 39	XT73P133, 40
XQORM1, 39	XT73P136, 40
XQORM2, 39	XT73P33, 41
XQORM3, 39	XT73P34, 41
XQORM4, 39	XT73P44, 41
XQORM5, 39	XT73P94, 41
XQORMX, 39	XT73P98, 41
XQORO, 39	XT95POST, 41
XQOROP, 39	XTDEBUG, 41
XQP46INI, 39	XTDEBUG1, 41
XQP50, 39	XTDEBUG2, 41
XQSET, 39	XTDEBUG3, 41
XQSMD, 39	XTDEBUG4, 41
XQSMD1, 39	XTDEBUG5, 41
XQSMD2, 39	XTDEBUG6, 41
XQSMD21, 39	XTDEBUG7, 41
XQSMD3, 39	XTDEBUG8, 41
XQSMD31, 40	XTECGLO, 41
XQSMD4, 40	XTECLIPS, 41
,	·, · -

XTECROU, 41	XTRCMP, 43
XTEDTVXD, 41	XTRMON, 43
XTER, 41	XTRUTL, 43
XTER1, 41	XTRUTL1, 43
XTER1A, 41	XTRUTL2, 43
XTER1A1, 41	XTSUMBLD, 43
XTER1B, 41	XTSUMCK, 43
XTER2, 41	XTSUMCK1, 43
XTERPUR, 41	XTVNUM, 43
XTERSUM, 41	XTVRC1, 43
XTERSUM1, 41	XTVRC1A, 43
XTERSUM3, 41	XU8343P, 43
XTERSUM4, 41	XU8343Q, 43
XTFC1, 41	XU8343R, 43
XTFCE, 42	XU8343S, 43
•	,
XTFCE1, 42	XU8375P, 43
XTHC, 42	XU8P125, 43
XTHC10, 42	XU8P132, 43
XTHC10A, 42	XU8P1321, 43
XTHCDEM, 42	XU8P1322, 43
XTHCURL, 42	XU8P135, 43
XTHCUTL, 42	XU8P137, 43
XTID, 42	XU8P204, 43
XTID1, 42	XU8P246, 43
XTIDCTX, 42	XU8P260, 43
XTIDSET, 42	XU8P264, 43
XTIDTBL, 42	XU8P264A, 43
XTIDTERM, 42	XU8P292, 43
XTIDTRM, 42	XU8P295, 43
XTKERM1, 42	XU8P297, 44
XTKERM2, 42	XU8P307, 44
XTLATSET, 42	XU8P314, 44
XTMLOG, 42	XU8P317, 44
XTMLOG1, 42	XU8P324, 44
XTMLOPAR, 42	XU8P327, 44
XTMLOSKT, 42	XU8P328, 44
XTMRPAR1, 42	XU8P328A, 44
XTMRPAR2, 42	XU8P328B, 44
XTMRPRNT, 42	XU8P328C, 44
XTMUNIT, 42	XU8P328D, 44
XTPMKPCF, 42	XU8P330X, 44
XTPMKPP, 42	XU8P332, 44
XTPMKPTC, 42	XU8P334, 44
XTPMNEX7, 42	XU8P344, 44
XTPMSTA2, 42, 43	XU8P352, 44
XTPOST, 43	XU8P354, 44
1111 OUI, TJ	21001 JJT, TT

XU8P356, 44	XU8P509A, 46
XU8P360, 44	XU8P509B, 46
XU8P365, 44	XU8P509C, 46
XU8P369, 44	XU8P509D, 46
XU8P370, 44	XU8P511, 46
XU8P373, 44	XU8P514, 46
XU8P377, 44	XU8P518, 46
XU8P377D, 44	XU8P524, 46
XU8P378, 44	XU8P531, 46
XU8P378A, 45	XU8P531A, 46
XU8P378B, 45	XU8P531B, 46
XU8P378C, 45	XU8P536, 46
XU8P378E, 45	XU8P540, 46
XU8P381, 45	XU8P541, 46
XU8P386, 45	XU8P541A, 46
XU8P387, 45	XU8P544, 46
XU8P387X, 45	XU8P545, 46
•	· · · · · · · · · · · · · · · · · · ·
XU8P410, 45	XU8P545A, 46
XU8P413, 45	XU8P546, 46
XU8P42, 45	XU8P560, 46
XU8P420, 45	XU8P571, 46
XU8P426, 45	XU8P572, 46
XU8P432, 45	XU8P580, 46
XU8P436, 45	XU8P581, 46
XU8P43P, 45	XU8P582, 46
XU8P440, 45	XU8P584, 47
XU8P444, 45	XU8P585, 47
XU8P446, 45	XU8P586, 47
XU8P452, 45	XU8P591, 47
XU8P453, 45	XU8P598, 47
XU8P455, 45	XU8P599, 47
XU8P459, 45	XU8P601, 47
XU8P463, 45	XU8P601A, 47
XU8P466, 45	XU8P601B, 47
XU8P467, 45	XU8P604, 47
XU8P467A, 45	XU8P608, 47
XU8P469, 45	XU8P608B, 47
XU8P480, 45	XU8P616, 47
XU8P481, 45	XU8P629, 47
XU8P483, 45	XU8P638, 47
XU8P487, 46	XU8P672E, 47
XU8P497, 46	XU8PATCH661POST, 47
XU8P497A, 46	XUA4A7, 47
XU8P499, 46	XUA4A71, 47
XU8P504, 46	XUA4A72, 47
XU8P509, 46	XUA4A73, 47
120200, 10	

XUAF4, 47	XUCSXDR, 49
XUAPURGE, 47	XUCSXGR, 49
XUBA, 47	XUCSXRT, 49
XUCERT, 47	XUCSXST, 49
XUCERT1, 47	XUDHGUÍ, 49
XUCIDTM, 24, 48	XUDHRES, 49
XUCIGTM, 48	XUDHSET, 49
XUCIMSM, 24, 48	XUDHUTL, 49
XUCIMSQ, 25, 48	XUEPCSED, 49
XUCIVXD, 25, 48	XUEPCSRT, 49
	,
XUCMNIT, 48	XUESSO1, 49
XUCMNIT1, 48	XUESSO2, 49
XUCMNIT2, 48	XUESSO3, 49
XUCMNIT4, 48	XUESSO4, 49
XUCMNT3A, 48	XUFILE, 49
XUCMPA, 48	XUFILE0, 49
XUCMPR17, 48	XUFILE1, 49
XUCMVPI, 48	XUFILE3, 49
XUCMVPM, 48	XUGET, 49
XUCMVPM1, 48	XUGOT, 50
XUCMXDR, 48	XUGOT1, 50
XUCMXUTL, 48	XUHUI, 50
XUCS1E, 48	XUHUI236, 50
XUCS1R, 48	XUHUIHL7, 50
XUCS1RB, 48	XUHUIMSG, 50
XUCS2E, 48	XUINCON, 50
XUCS2R, 48	XUINEACH, 50
XUCS2RB, 48	XUINEND, 50
XUCS4E, 48	XUINENV, 50
XUCS4R, 48	XUINOK, 50
XUCS4RB, 48	XUINP275, 50
XUCS6R, 48	XUINP313, 50
XUCS8E, 48	XUINP337, 50
XUCS8R, 48	XUINP348, 50
XUCS8RB, 48	XUINPCH, 50
XUCS8RG, 49	XUINPCH2, 50
XUCSCDE, 49	XUINPCH3, 50
	· ·
XUCSCDR, 49	XUINPCH4, 50
XUCSCDR, 49	XUINPRE, 50
XUCSCDRB, 49	XUINPRE1, 50
XUCSPRG, 49	XUINTSK, 50
XUCSRV, 49	XUINTSK1, 50
XUCSTM, 49	XUINTSK2, 50
XUCSTME, 49	XULM, 50
XUCSUTL3, 49	XULM1, 50
XUCSXCD, 49	XULMLD, 50

XULMLOG, 50	XUMFHM, 52
XULMOUT, 50	XUMFHPQ, 52
XULMP, 50	XUMFHPR, 52
XULMRPC, 50	XUMFI, 52
XULMU, 51	XUMFI0, 52
XULMUI, 51	XUMFMD5, 52
XULMUI1, 51	XUMFMFE, 52
•	XUMFMFI, 52
XUMF, 51	· · · · · · · · · · · · · · · · · · ·
XUMF0, 51	XUMFP, 52
XUMF04, 51	XUMFP4, 52
XUMF04H, 51	XUMFP4C, 52
XUMF04P, 51	XUMFP4Z, 52
XUMF04Q, 51	XUMFP512, 52
XUMF1H, 51	XUMFP513, 52
XUMF218, 51	XUMFPFT, 52
XUMF218A, 51	XUMFPMFS, 52
XUMF218Z, 51	XUMFPOST, 52
XUMF261P, 51	XUMFPZL7, 52
XUMF299, 51	XUMFQR, 52
XUMF333, 51	XUMFR, 52
XUMF382, 51	XUMFX, 53
XUMF390, 51	XUMFXACK, 53
XUMF397, 51	XUMFXH, 53
XUMF4, 51	XUMFXHL7, 53
XUMF416, 51	XUMFXI, 53
XUMF479P, 51	XUMFXP, 53
XUMF4A, 51	XUMFXP1, 53
XUMF4H, 51	XUMFXP2, 53
XUMF4L0, 51	XUMFXR, 53
XUMF4L1, 51	XUMPI, 53
XUMF4L2, 51	XUMVIENU, 53
XUMF502, 51	XUMVINPA, 53
XUMF502P, 51	XUOAAHL7, 53
XUMF512F, 51	XUOAAUTL, 53
XUMF555P, 51	XUP, 53
XUMF5AT, 52	XUP468, 53
XUMF5AU, 52	XUP522, 53
XUMF5BYT, 52	XUP569, 53
XUMF5I, 52	XUPARAM, 53
XUMF5II, 52	XUPCF, 53
XUMF654, 52	XUPCH117, 53
XUMF654P, 52	XUPCSRVR, 53
XUMFEIMF, 52	XUPOS259, 53
XUMFENV, 52	XUPRE247, 53
XUMFH, 52	XUPROD, 53
XUMFH4, 52	XUPS, 53
,	,

XUPS309P, 53	XUSECAD, 55
XUPSB01, 53	XUSECBUL, 55
XUPSCLR, 53	XUSER, 55
XUPSGS, 54	XUSER1, 55
XUPSHL7B, 54	XUSER2, 55
XUPSNAME, 54	XUSERBLK, 55
XUPSNM1, 54	XUSERNEW, 55
XUPSORG, 54	XUSERP, 55, 151
XUPSPAID, 54	XUSESIG, 55
XUPSPD1, 54	XUSESIG1, 55
XUPSPRA, 54	XUSESIG2, 55
XUPSQRY, 54	XUSESIG3, 55
XUPSSTF, 54	XUSFACHK, 55
XUPSUTL1, 54	XUSG, 55
XUPSUTQ, 54	XUSG1, 55
XURTL, 54	XUSHSH, 56
XURTL1, 54	XUSHSHP, 56
XURTL2, 54	XUSKAAJ, 56
XURTL3, 54	XUSKAAJ1, 56
XURTLC, 54	XUSMGR, 56
XURTLK, 54	XUSNPI, 56
XUS, 54	XUSNPI1, 56
XUS1, 54	XUSNPIDA, 56
XUS11, 54	XUSNPIE1, 56
XUS1A, 54, 151	XUSNPIE2, 56
XUS1B, 54	XUSNPIE3, 56
XUS2, 54	XUSNPIED, 56
XUS3, 54	XUSNPIUT, 56
XUS3A, 54	XUSNPIX1, 56
XUS4, 54	XUSNPIX2, 56
XUS5, 54	XUSNPIX3, 56
XUS6, 54	XUSNPIX4, 56
XUS9, 54	XUSNPIX5, 56
XUS91, 54	XUSNPIXI, 56
XUSAML, 55	XUSNPIXU, 56
XUSAP, 55	XUSP557, 56
XUSAP1, 55	XUSPURGE, 56
XUSBSE1, 55, 61	XUSRA, 56
XUSBSE2, 55, 61	XUSRB, 56, 61
XUSBSEUT, 61	XUSRB1, 56
XUSC1, 55	XUSRB2, 56
XUSC1C, 55	XUSRB4, 56
XUSC1S, 55	XUSRB5, 56
XUSC1S1, 55	XUSSPKI, 56
XUSCLEAN, 55	XUST, 56
XUSCNT, 55	XUST01, 56
2100CIVI, 33	1100101, 50

XUST02, 57	XUTMKE2, 58
XUST04, 57	XUTMONH, 58
XUST05, 57	XUTMONH1, 58
XUST06, 57	XUTMONH2, 58
XUST08, 57	XUTMOPT, 58
XUST09, 57	XUTMPCH, 58
XUST12, 57	XUTMQ, 58
XUST15, 57	XUTMQ0, 58
XUST15, 57	XUTMQ1, 58
XUST17, 57	XUTMQ2, 58
XUST18, 57	XUTMQ3, 58
XUST19, 57	XUTMQH, 58
XUST20, 57	XUTMR, 58
XUST21, 57	XUTMR1, 58
XUST22, 57	XUTMRJD, 59
XUST24, 57	XUTMRJD1, 59
XUST25, 57	XUTMRP, 59
XUST26, 57	XUTMRP1, 59
XUST27, 57	XUTMSYNC, 59
XUST28, 57	XUTMT, 59
XUST29, 57	XUTMTA, 59
XUST35, 57	XUTMTAL, 59
XUSTAT, 57	XUTMTD, 59
XUSTAT1, 57	XUTMTDL, 59
XUSTAT2, 57	XUTMTED, 59
	·
XUSTAX, 57	XUTMTED, 59
XUSTERM, 57, 151	XUTMTEP, 59
XUSTERM1, 57	XUTMTES, 59
XUSTERM2, 57	XUTMTL, 59
XUSTZ, 57	XUTMTLD, 59
XUSTZIP, 57	XUTMTLU, 59
XUTMD, 58	XUTMTP, 59
XUTMD1, 58	XUTMTP0, 59
XUTMDEVQ, 58	XUTMTP1, 59
XUTMDQ, 58	XUTMTPD, 59
XUTMDQ1, 58	XUTMTPU, 59
XUTMG145, 58	XUTMTR1, 59
XUTMG146, 58	XUTMTR2, 59
XUTMG14P, 58	XUTMTR3, 59
XUTMG19, 58	XUTMTR4, 59
XUTMG43, 58	XUTMTS, 59
XUTMHR, 58	XUTMTU, 59
XUTMK, 58	XUTMTUL, 59
XUTMKA, 58	XUTMTZ, 59
XUTMKE, 58	· ·
	XUTMTZ1, 59
XUTMKE1, 58	XUTMTZ2, 60

XUTMTZ3, 60	ROUTINES
XUTMUSE, 60	XUCIONT, 48
XUTMUSE1, 60	Routines by Patch Number Option, 255
XUTMUSE2, 60	RPCs
XUTMUSE3, 60	XDR ADD POTENTIAL PATIENT
XUTMUTL, 60	DUP, 333
XUVERIFY, 60	XDR UPD SUPPR EMAIL, 333
XUWORKDY, 60	XQAL GUI ALERTS, 334
XUXCTY, 60	XU EPC EDIT, 334
XUXPRT, 60	XUPS PERSONQUERY, 335
XUYDEV, 60	XUS ALLKEYS, 336
XVIRENV, 61	XUS AV CODE, 336
XVIRPOST, 61	XUS AV HELP, 336
ZIS4VXDM, 25	XUS CCOW VAULT PARAM, 336
ZISEDIT, 60	XUS CVC, 336
ZISETDTM, 25	XUS DIVISION GET, 336
ZISETMSM, 25	XUS DIVISION SET, 336
ZISETVXD, 25	XUS GET CCOW TOKEN, 336
ZISFMSM, 25	XUS GET TOKEN, 337
ZISFVXD, 25	XUS GET USER INFO, 337
ZISHMSM, 25	XUS GET VARIABLE VALUE, 343
ZISHVXD, 25	XUS GET VISITOR, 337
ZISPL, 60	XUS INTRO MSG, 337
ZISPL1, 60	XUS KEY CHECK, 337
ZISPL2, 60	XUS PKI GET UPN, 342
ZISX, 25, 60	XUS PKI SET UPN, 342
	· · · · · · · · · · · · · · · · · · ·
ZOSFMSM, 25	XUS SEND KEYS, 342
ZOSFVXD, 25	XUS SET VISITOR, 342
ZOSV2VXD, 25	XUS SIGNON SETUP, 343
ZOSVMSM, 25	RTHIST Data, 23
ZOSVVXD, 25	
ZTBKCDTM, 25	S
ZTBKCMSM, 25	
ZTBKCVXD, 25	SACC Exemptions, 351
ZTMB, 25, 60	Scan Possible Duplicates Option, 163
ZTMCHK, 25, 60	Schedule Process to Merge Verified
ZTMCHK1, 25, 60	Duplicates Option, 161
ZTMDCL, 25	Schedule/Unschedule Options Option, 23,
ZTMGRSET, 25	102, 216, 284, 286, 302
ZTMKU, 25, 60	SCHEDULING RECOMMENDED (#209)
ZTMON, 25, 60	Field, 223, 224
ZTMON1, 25, 60	Screen-based Option Editor Option, 198
ZU, 344	ScreenMan Menu, 348
	Secure Hash Algorithm (SHA), 32
ZUA, 25, 60	Secure Menu Delegation Menu, 202, 203
ZUMSM, 60	Security, 357
ZUVXD, 60	•
	File Access, 373

Files, 373	XUEXKEY, 371
Keys, 370	Security Keys
Management, 357	XUFILEGRAM, 371
SECURITY (#15) Field, 5	Security Keys
SECURITY KEY (#19.1) File, 63, 82	XULM LOCKS, 371
Security Keys	Security Keys
XDR, 371	XULM SYSTEM LOCKS, 371
Security Keys	Security Keys
ADP, 195, 196, 197, 199	XUMF INSTITUTION, 371
ORES, 186	Security Keys
PROVIDER, 266	XUMGR, 372
PSDRPH, 90, 155, 156, 211, 212	Security Keys
XQAL-DELETE, 190	XUORES, 372
XTLKZMGR, 299	Security Keys
XUADD, 268	XUPROG, 372
XUAUDITING, 348	Security Keys
XUEPCSEDIT, 156, 208, 213	XUPROGMODE, 372
XUFILEGRAM, 348	Security Keys
XUMF INSTITUTION, 249, 250, 251,	XUSCREENMAN, 372
252	Security Keys
XUMGR, 218, 259, 268, 348	XUSHOWSSN, 372
XUPROG, 348	•
XUPROGMODE, 192, 294, 348	Security Keys XUSIG, 372
XUPROGMODE, 192, 294, 348 XUPROGMODE, 256	•
XUPROGMODE, 257	Security Keys XUSNPIMTL, 372
XUSCREENMAN, 348	Security Keys
XUSIG, 369, 370	XUSPF200, 372
	Security Keys
Security Keys XDRMGR, 371	ZTMQ, 373
Security Keys	SECURITY TOKEN SERVICE (#200.1)
XQAL-DELETE, 371	Field, 9
	See if a User Has Access to a Particular
Security Keys XQSMDFM, 371	Option Option, 198
Security Keys	Select Options to be Delegated Option, 200
XTLKZMGR, 371	Send Alpha/Beta Usage to Developers
Security Keys	Option, 179
XTLKZUSER, 371	Send HL7 PMU message Option, 253
Security Keys	Send KERMIT file Option, 293
XUARCHIVE, 371	Send Test Pattern to Terminal Option, 288
Security Keys	Server audit display Option, 271
XUAUDITING, 371	Server Options, 153
Security Keys	Server-type Option Test Server Option, 200
XUAUTHOR, 371	SERVICE/SECTION (#49) File, 63, 84
Security Keys	Set Backup Reviewer for Alerts Option, 187
XUEPCSEDIT, 371	SHA
Security Keys	Secure Hash Algorithm, 32

Shortcuts Option, 299 Show a Delegate's Options Option, 203 Show all options in a Menu Template Option, 204 Show Error Log Option, 283 Show system settings for IPv6 Option, 168 Show the keys of a particular user Option, 196 Show Users with a Selected primary Menu Option, 290 SIGNATURE BLOCK PRINTED NAME (#20.2) Field, 369 SIGNATURE BLOCK TITLE (#20.3) Field, 369 Signatures, Electronic, 369 SIGN-ON LOG (#3.081) File, 64, 68, 215 Single file add/delete for a user Option, 244 Single User Menu Tree Rebuild Option, 192 Site parameters TaskMan, 18 **Site Parameters** Changeable, 10 Kernel, 4 Site Parameters Edit Option, 278 Software Product Security, 357 Required, 345 Software Disclaimer, xix Software-Wide Variables, 349 Special Active User Excel output Option, 263 Special Active User Excel Output Option, SPECIALITY (#7.1) File, 66, 75, 97 Specify Allowable New Menu Prefix Option, 203 SPOOL DATA (#3.519) File, 71 Spool Device Edit Option, 236 SPOOL DOCUMENT (#3.51) File, 71, 294 Spool Management Menu, 102, 129, 228 Spooler Menu, 228 Spooler Site Parameters, 17 Spooler Site Parameters Edit Option, 17 STANDARD TERMINOLOGY VERSION F (#4.009) File, 73 Start/Halt Duplicate Search Option, 164

Startup PROD check Option, 218 STATE (#5) File, 66, 74, 97, 167 STATUS (#15.01101,.02) Field, 22 STOP an active merge process Option, 164 Stop Task Manager Option, 287 Structured Routine listing Option, 244 SUBJECT ORGANIZATION (#205.2) Field, 8 SUBJECT ORGANIZATION ID (#205.3) Subscriber Package Menu Option, 346 SUBTYPE Field, 70 Summary Most Recent Errors Option, 238 Surrogate for which Users? Option, 187 Switch Identities Option, 276 Switch UCI Option, 218 Symbols Found in the Documentation, xx SYNC flag file control Option, 287 Synonyms Option, 299 System Audit Menu, 229 System Audit Reports Menu, 230 SYSTEM COMMAND OPTIONS Menu, 102, 146, 231 System Parameters, 4, 11 System Security Menu, 102, 130 System Status Option, 276 Systems Manager Menu, 102, 103, 106 System-wide Variables, 345

Т

Table of Contents, xiv

Take away All access to a File Option, 243

Tally STATUS and MERGE STATUS
fields Option, 164

Task Allocation Audit of PSDRPH Key
Report Option, 154, 156, 212

Task Changes to DEA Prescribing
Privileges Report Option, 154, 156, 209

TASK SYNC FLAG (#14.8) File, 64, 79

TaskMan, 71, 78, 79, 88, 102, 345, 351, 356

Taskman Error Log Menu, 279

Taskman Management Menu, 102, 137, 283

Taskman Management Utilities Menu, 287

TASKMAN MONITOR (#14.71) File, 64

TaskMan site parameters, 18

TASKMAN SITE PARAMETERS (#14.7) File, 18, 64, 79, 278	Trainee Transmission Report by Range Option, 225
TASKMAN SNAPSHOT (#14.72) File, 64,	Trainee Transmission Report Selectable
79, 286	Items Option, 225
Taskman snapshot Option, 286	Trainee Transmission Reports to OAA
TaskMan User Option, 287	Menu, 226
TASKS (#14.4) File, 65, 78	Translation
TCP/IP type PING server Option, 227	Globals, 354
TCP/IP Type Ping Server Option, 204	Transport a Distribution Option, 175
Terminal Type, 5	TRM or VTRM Device Edit Option, 236
TERMINAL TYPE (#3.2) File, 64, 69, 70,	TYPE-AHEAD (#51.9) Field, 6
276, 349, 350	
Terminal Type Edit Option, 276	11
TERMINATE AUDIT (#19.5) Field, 6, 8, 9,	U
16, 17	UCI ASSOCIATION (#14.6) File, 18, 58,
Test an option not in your menu Option, 294	64, 79, 287
Time Option, 276	UCI Association Table Edit Option, 287
TIMED READ (# OF SECONDS) (#51.1)	Unassign Editors Option, 194
Field, 6	UNDO Edits (Restore to Older Version of
TITLE (#3.1) File, 63, 69	Routine) Option, 306
Toggle options/protocols on and off Option,	Unload a Distribution Option, 175
198	Up Arrow Delimited Termination Report
Token, 342	Option, 263
Toolkit	Update Error Trap Summary Option, 238
APIs, 311	Update Routine File Option, 175
	Update with current routines Option, 88, 306
Archiving, 308	Update/refresh Institution file with IMF data
Callable Entry Points, 311	Option, 251
Direct Mode Utilities, 330	URLs
Files, 62	
Globals, 63	Acronyms Intranet Website, 382
Internal Relations, 348	Adobe Website, xxiii
Menu Tree Diagrams, 102	Glossary Intranet Website, 382
Menu Tree Roots, 102	Kernel Website, xxiii
Namespace, 3	NUCC Home Page Web Address, 98
Purging, 308	QuadraMed Home Page Web Address,
Routines, 23	368
SACC Exemptions, 351	VHA Software Document Library (VDL)
Software-Wide Variables, 349	Website, xxiii
Toolkit Queuable Options Menu, 302	Use this Manual, How to, xix
Top Errors Option, 238	User Alerts Count Report Option, 187
Total Count of Registered Trainees Option,	User Audit Display Option, 290
224	User Change Event Option, 219
Trainee Registration Inquiry Option, 224	USER CLASS (#201) File, 84
Trainee Reports Menu, 225	User Failed Access Attempts Option, 241
Trainee Transmission Report by Date	User Help Option, 290
Option, 225	User Inquiry Option, 269

User Management Menu, 102, 140, 226,	IOST, 349
253, 264, 291, 370	IOST(0), 350
User PC build Edit Option, 266	IOT, 349
User PC build Print Option, 266	IOXY, 350
User Security Menu, 267	Software-Wide, 349
User sign-on event Option, 151, 219	System-wide, 345
User start-up event Option, 206, 220	XQABTST, 350
User Status Report Option, 290	VAX DSM Device Set-up Option, 296
User terminate event Option, 221	VAX/Alpha Performance Monitor (VPM)
USER TO AUDIT (#19.3) Multiple Field, 8,	Configuring, 22
9, 16	Verifier Tools Menu, 303, 305
USER TO AUDIT (Multiple) Field, 17	Verify a Build Option, 176
User's Toolbox Menu, 271	Verify Checksums in Transport Global
User's Toolbox Menu, 369	Option, 173
Utilities	Verify Code, 7, 151, 221
%INDEX, 77	Verify Package Integrity Option, 177
Direct Mode, 330	Verify Potential Duplicates Option, 165
Utilities for MTLU Menu, 300	Verify Selected Potential Duplicate Pair
Utilities Menu, 164, 176	Option, 166
2 111110 112110, 10 1, 170	VERSION (Multiple) Field, 76
N/	Version Number Update Option, 295
V	VHA Directive 2012-003, Person Class
VA FileMan	Taxonomy, 376
File Protection, 373	VHA Software Document Library (VDL)
Globals Exempt From Compatibility, 351	Website, xxiii
VA FileMan File Protection, 373	View Alerts Option, 189
VA FileMan Management Menu, 348	View Duplicate Record Entries Option, 166
Validate IPv4 and IPv6 address Option, 168	Virgin Installation, 97
Variable changer Option, 295	VOLUME SET (#14.5) File, 18, 58, 64, 78
Variables	VOLUME SET (#41) Multiple Field, 7, 10
DR, 8	Volume Set Edit Option, 288
DT, 349	Volume Set Edit Option, 200
DTIME, 349	
DUZ, 349, 353	W
DUZ("AG"), 349	Web Pages
DUZ("AUTO"), 349	Adobe Website, xxiii
DUZ("LANG"), 6, 349	NUCC Home Page Web Address, 98
DUZ(0), 349, 353	QuadraMed Home Page Web Address,
DUZ(2), 5, 349	368
IO, 349	VHA Software Document Library (VDL)
IO(0), 349	Website, xxiii
IOBS, 350	Websites
IOF, 349	Acronyms Intranet Website, 382
IOM, 349	Glossary Intranet Website, 382
ION, 349	Kernel Website, xxiii
IOS, 350	Where am I? Option, 271
IOSL, 349	There am 1. Option, 2/1
1002,017	

X XDR UPD SUPPR EMAIL RPC, 333 XDR UTILITIES MENU, 164 XDR ADD POTENTIAL PATIENT DUP XDR VALID CHECK Option, 165 RPC, 333 XDR VERIFIED Bulletin, 359 XDR ADD VERIFIED DUPS Option, 157 XDR VERIFY ALL Option, 165 XDR ANCILLARY REVIEW Option, 157 XDR VERIFY SELECTED PAIR Option, XDR APPROVE FOR MERGE Option, 158 XDR AUTO MERGE Option, 158 XDR VIEW DUPLICATE RECORD XDR CHECK MERGE PROCESS Option, 166 STATUS Option, 158 XDR2NULL Routine, 26 XDR CHECK PAIR Option, 158 XDRDADA Routine, 26 XDR DISPLAY SEARCH STATUS XDRDADDS Routine, 26 Option, 159 XDRDADJ Routine, 26 XDR EDIT DUP RECORD STATUS XDRDCNT Routine, 26 Option, 159 XDRDCOMP Routine, 26 XDR EDIT DUP RESOLUTION FILE XDRDDATA Routine, 26 Option, 159 XDRDEDT Routine, 26 XDR ERROR Bulletin, 358 XDRDEFLG Routine, 26 XDR Files XDRDFPD Routine, 26 MERGE PROCESS (#15.2), 163 XDRDLIST Routine, 27 XDR FIND POTENTIAL DUPLICATES XDRDMAIN Routine, 27 Option, 160 XDRDOC Routine, 27 XDR MAIN MENU Menu, 160 XDRDOC1 Routine, 27 XDR MANAGER UTILITIES Menu, 161 XDRDOC2 Routine, 27 XDR MERGE PROCESS (#15.2) File, 163 XDRDPDTI Routine, 27 XDR MERGE READY DUPLICATES XDRDPICK Routine, 27 Option, 161 XDRDPRE1 Routine, 27 XDR MERGE SELECTED PAIR Option, XDRDPREL Routine, 27 162 XDRDPRG2 Routine, 27 XDR MERGED Bulletin, 358 XDRDPRGE Routine, 27 XDR OPERATIONS MENU, 162 XDRDQUE Routine, 27 XDR PRELIMINARY SCAN LIST Option, XDRDSCOR Routine, 28 162 XDRDSHOW Routine, 28 XDR PRELIMINARY SCAN Option, 162 XDRDSTAT Routine, 28 XDR PRINT LIST Option, 163 XDRDUP Routine, 28 XDR PURGE Option, 163 XDREMSG Routine, 28 XDR PURGE2 Option, 80, 163 XDRHLP Routine, 28 XDR RESTART MERGE PROCESS XDRLRFIX Routine, 29 Option, 163 XDRMADD Routine, 29 XDR SCAN POSSIBLE DUPLICATES XDRMAIN Routine, 29 Option, 163 XDRMAINI Routine, 29 XDR SEARCH ALL Option, 164 XDRMERG Routine, 29 XDR Security Key, 371 XDRMERG0 Routine, 29 XDR STOP MERGE PROCESS Option, XDRMERG1 Routine, 29 164 XDRMERG2 Routine, 29 XDR TALLY STATUS FIELDS Option, XDRMERGA Routine, 29

164

XDRMERGB Routine, 29	XINDX51 Routine, 31
XDRMERGC Routine, 29	XINDX52 Routine, 31
XDRMGR Security Key, 371	XINDX53 Routine, 31
XDRMPACK Routine, 29	XINDX6 Routine, 31
XDRMRG Routine, 29	XINDX7 Routine, 31
XDRMRG1 Routine, 29	XINDX8 Routine, 31
XDRMSG Routine, 30	XINDX9 Routine, 31
XDRMVFY Routine, 30	XIP SYNCHRONIZE COUNTY Option,
XDRPREI Routine, 30	166
XDRPREL1 Routine, 30	XIP ZIP CODE LIST Option, 166
XDRPTCAN Routine, 30	XIPENV Routine, 31
XDRPTCLN Routine, 30	XIPMAIL Routine, 31
XDRPTDOB Routine, 30	XIPMAILA Routine, 31
XDRPTDOD Routine, 30	XIPMAILB Routine, 31
XDRPTLSD Routine, 30	XIPMAILSERVER Option, 166
XDRPTMMN Routine, 30	XIPPOST Routine, 31
XDRPTN Routine, 30	XIPSRVR Option, 167
XDRPTSSN Routine, 30	XIPSRVR Routine, 31
XDRPTSX Routine, 30	XIPSYNC Routine, 31
XDRRMRG0 Routine, 30	XIPUTIL Routine, 31
XDRRMRG1 Routine, 30	XIPUTIL1 Routine, 31
XDRRMRG2 Routine, 30	XIPXREF Routine, 31
XDRU Routine, 30	XLFCRC Routine, 32
XDRUTL Routine, 30	XLFDT Routine, 32
XDRVAL Routine, 28	XLFDT1 Routine, 32
XDRVAL1 Routine, 28	XLFDT2 Routine, 32
XDRVAL2 Routine, 28	XLFDT3 Routine, 32
XDRVCHEK Routine, 30	XLFDT4 Routine, 32
XGF Routine, 30	XLFHYPER Routine, 32
XGFDEMO Routine, 30	XLFIPV CONVERT Option, 167
XGFDEMO1 Routine, 30	XLFIPV FORCEIP4 Option, 168
XGKB Routine, 30	XLFIPV FORCEIP6 Option, 168
XGKB1 Routine, 31	XLFIPV IPV4 IPV6 MENU, 168
XGS Routine, 31	XLFIPV Routine, 32
XGSA Routine, 31	XLFIPV VALIDATE Option, 168
XGSBOX Routine, 31	XLFIPV VERSION Option, 168
XGSETUP Routine, 31	XLFLTR Routine, 32
XGSW Routine, 31	XLFLTR1 Routine, 32
XINDX Routine, 31	XLFMSMT Routine, 32
XINDX1 Routine, 31	XLFMSMT2 Routine, 32
XINDX10 Routine, 31	XLFMTH Routine, 32
XINDX11 Routine, 31	XLFMTH1 Routine, 32
XINDX2 Routine, 31	XLFNAME Routine, 32
XINDX3 Routine, 31	XLFNAME1 Routine, 32
XINDX4 Routine, 31	XLFNAME2 Routine, 32
XINDX5 Routine, 31	XLFNAME3 Routine, 32
711 12712 Routine, 31	71LI IVIII IVIII ROutille, 32

VIENAMEAD auting 22	VDADEDTI Dantina 22
XLFNAME4 Routine, 32	XPAREDT1 Routine, 33
XLFNAME5 Routine, 32	XPAREDT2 Routine, 33
XLFNAME6 Routine, 32	XPAREDT3 Routine, 33
XLFNAME7 Routine, 32	XPARLIST Routine, 33
XLFNAME8 Routine, 32	XPARTPV Routine, 33
XLFNENV Routine, 32	XPARTPV1 Routine, 33
XLFNP152 Routine, 32	XPARY26 Routine, 33
XLFNP176 Routine, 32	XPARZUTL Routine, 33
XLFNSLK Routine, 32	XPD BACKUP Option, 170
XLFSHAN Routine, 32	XPD BUILD NAMESPACE Option, 170
XLFSTR Routine, 32	XPD COMPARE TO SYSTEM Option, 171
XLFUTL Routine, 32	XPD CONVERT PACKAGE Option, 171
XPAR ALL ENTITIES Parameter, 11	XPD COPY BUILD Option, 171
XPAR EDIT BY TEMPLATE Option, 168	XPD DISTRIBUTION MENU, 171
XPAR EDIT KEYWORD Option, 168	XPD EDIT BUILD Option, 172
XPAR EDIT PARAMETER Option, 168	XPD EDIT INSTALL Option, 172
XPAR LIST BY ENTITY Option, 169	XPD INSTALL BUILD Option, 172
XPAR LIST BY PACKAGE Option, 169	XPD INSTALLATION MENU, 172
XPAR LIST BY PARAM Option, 169	XPD LOAD DISTRIBUTION Option, 173
XPAR LIST BY TEMPLATE Option, 169	XPD MAIN Menu, 173
XPAR MENU TOOLS Menu, 169	XPD PATCH HFS SERVER Parameter, 12
XPAR MY NEW PARAM Parameter, 11	XPD PRINT BUILD Option, 173
XPAR Routine, 32	XPD PRINT CHECKSUM Option, 173
XPAR TEST DATE/TIME Parameter, 11	XPD PRINT INSTALL FILE Option, 174
XPAR TEST BATE/TIME Farameter, 11	XPD PRINT INSTALL Option, 173
XPAR TEST M CODE Parameter, 11	XPD PRINT PACKAGE PATCHES
XPAR TEST ME Parameter, 11 XPAR TEST MULT FREE TEXT	Option, 174
	XPD PURGE FILE Option, 174
Parameter, 11	XPD RESTART INSTALL Option, 174
XPAR TEST MULTIPLE Parameter, 11	XPD ROLLUP PATCHES Option, 174
XPAR TEST MULTIPTR Parameter, 11	XPD ROUTINE UPDATE Option, 175
XPAR TEST NUMERIC Parameter, 11	XPD TRANSPORT PACKAGE Option,
XPAR TEST POINTER Parameter, 11	175
XPAR TEST PWP Parameter, 11	XPD UNLOAD DISTRIBUTION Option,
XPAR TEST SET OF CODES Parameter,	175
12	XPD UTILITY Menu, 176
XPAR TEST WP Parameter, 12	XPD VERIFY BUILD Option, 176
XPAR TEST YES/NO Parameter, 12	XPD VERIFY INTEGRITY Option, 177
XPAR1 Routine, 33	XPDB1 Routine, 33
XPAR2 Routine, 33	XPDCOM Routine, 33
XPAR3 Routine, 33	XPDCOMF Routine, 33
XPARDD Routine, 33	XPDCOMG Routine, 33
XPARDD1 Routine, 33	XPDCOML Routine, 33
XPARDD2 Routine, 33	XPDCPU Routine, 33
XPARDDAC Routine, 33	XPDDCS Routine, 33
XPAREDIT Routine, 15, 33	XPDDI Routine, 33
• •	·

VDDDD Danting 22	VDDINIOOO Dantina 25
XPDDP1 Routine, 33	XPDIN000 Routine, 35
XPDDP1 Routine, 33	XPDIN00P Routine, 35
XPDDPCK Routine, 33	XPDIN00Q Routine, 35
XPDE Routine, 33	XPDIN00R Routine, 35
XPDER Routine, 33	XPDIN00S Routine, 35
XPDET Routine, 33	XPDIN00T Routine, 35
XPDGCDEL Routine, 33	XPDINIT Routine, 35
XPDH Routine, 34	XPDINIT1 Routine, 35
XPDI Routine, 34	XPDINIT2 Routine, 35
XPDI1 Routine, 34	XPDINIT3 Routine, 35
XPDIA Routine, 34	XPDINIT4 Routine, 35
XPDIA0 Routine, 34	XPDINIT5 Routine, 35
XPDIA1 Routine, 34	XPDIP Routine, 35
XPDIA2 Routine, 34	XPDIPM Routine, 35
XPDIA3 Routine, 34	XPDIQ Routine, 35
XPDIB Routine, 34	XPDIR Routine, 35
XPDID Routine, 34	XPDIST Routine, 35
XPDIGP Routine, 34	XPDIU Routine, 35
XPDIJ Routine, 34	XPDKEY Routine, 35
XPDIJ1 Routine, 34	XPDKRN Routine, 35
XPDIK Routine, 34	XPDMENU Routine, 35
XPDIL Routine, 34	XPDNTEG Routine, 35
XPDIL1 Routine, 34	XPDPINIT Routine, 35
XPDIN001 Routine, 34	XPDPROT Routine, 36
XPDIN002 Routine, 34	XPDR Routine, 36
XPDIN003 Routine, 34	XPDRSUM Routine, 36
XPDIN004 Routine, 34	XPDT Routine, 36
XPDIN005 Routine, 34	XPDTA Routine, 36
XPDIN006 Routine, 34	XPDTA1 Routine, 36
XPDIN007 Routine, 34	XPDTA1 Routine, 36
XPDIN008 Routine, 34	XPDTC Routine, 36
	XPDTP Routine, 36
XPDIN009 Routine, 34 XPDIN00A Routine, 34	XPDUTL Routine, 36
	XPDUTL1 Routine, 36
XPDINOOG Routing, 34	•
XPDIN00C Routine, 34	XPDV Routine, 36
XPDIN00D Routine, 34	XQ LIST UNREFERENCED OPTIONS
XPDIN00E Routine, 34	Option, 177
XPDIN00F Routine, 34	XQ MENUMANAGER PROMPT
XPDIN00G Routine, 35	Parameter, 12
XPDIN00H Routine, 35	XQ Routine, 36
XPDIN00I Routine, 35	XQ UNREF'D OPTIONS Option, 177
XPDIN00J Routine, 35	XQ XUTL \$J NODES Option, 177
XPDIN00K Routine, 35	XQ1 Routine, 36
XPDIN00L Routine, 35	XQ11 Routine, 36
XPDIN00M Routine, 35	XQ12 Routine, 36, 151, 221
XPDIN00N Routine, 35	XQ2 Routine, 36

XQ21 Routine, 36	XQAB ERRORS LOGGED (#8991.5) File,
XQ3 Routine, 36	64, 89, 153
XQ31 Routine, 36	XQAB LIST LOW USAGE OPTS Option,
XQ32 Routine, 36	182
XQ33 Routine, 36	XQAB MENU Menu, 182
XQ4 Routine, 36	XQABELOG Routine, 37
XQ41 Routine, 36	XQABERR Routine, 37
XQ5 Routine, 36	XQABLIST Routine, 37
XQ55 Routine, 36	XQABLOAD Routine, 37
XQ55SPEC Routine, 36	XQABTMP Routine, 37
XQ6 Routine, 36	XQABTST Variable, 350
XQ61 Routine, 36	XQAL ALERT LIST FROM DATE Option,
XQ62 Routine, 36	183
XQ6A Routine, 36	XQAL BACKUP REVIEWER Parameter,
XQ6B Routine, 37	12
XQ7 Routine, 37	XQAL CRITICAL ALERT COUNT
	~
XQ71 Routine, 37	Option, 183
XQ72 Routine, 37	XQAL GUI ALERTS Option, 185
XQ72A Routine, 37	XQAL GUI ALERTS RPC, 334
XQ73 Routine, 37	XQAL NO BACKUP REVIEWER Option,
XQ74 Routine, 37	185
XQ75 Routine, 37	XQAL PATIENT ALERT LIST Option,
XQ8 Routine, 37	186
XQ81 Routine, 37	XQAL REPORTS MENU, 186
XQ82 Routine, 37	XQAL SET BACKUP REVIEWER Option,
XQ83 Routine, 37	187
XQ83A Routine, 37	XQAL SURROGATE FOR WHICH
XQ83D Routine, 37	USERS Option, 187
XQ83R Routine, 37	XQAL USER ALERTS COUNT Option,
XQ88 Routine, 37	187
XQ8A Routine, 37	XQAL VIEW ALERT TRACKING
XQ9 Routine, 37	ENTRY Option, 189
XQ91 Routine, 37	XQAL173P Routine, 37
XQ92 Routine, 37	XQAL285P Routine, 37
XQ93 Routine, 37	XQALBUTL Routine, 37
XQA366PO Routine, 37	XQALDATA Routine, 37
XQAB ACTUAL OPTION USAGE Option,	XQALDEL Routine, 38
179	XQAL-DELETE Security Key, 190, 371
XQAB AUTO SEND Option, 179	XQALDOIT Routine, 38
XQAB ERR DATE/SITE/NUM/ROU/ERR	XQALERT BY USER DELETE Option,
Option, 179	190
XQAB ERROR LOG SERVER Option,	XQALERT DELETE OLD Option, 190
153, 180	XQALERT MAKE Option, 190
XQAB ERROR LOG XMIT Option, 153,	XQALERT MGR Menu, 190
181	XQALERT Option, 189
101	XQALERT Option, 189 XQALERT Routine, 38
	AVALERT ROutille, 30

XQALERT SURROGATE SET/REMOVE XQKEYRDEL Option, 196 Option, 191 XQKICKMICRO Option, 196 XQALERT1 Routine, 38 XQLISTKEY Option, 196 XQALFWD Routine, 38 XQLOCK Routine, 38 XQALGUI Routine, 38 XQLOCK1 Option, 197 XQALMAKE Routine, 38 XQLOCK1 Routine, 38 XQLOCK2 Option, 197 XQALSET Routine, 38 XQOO Routine, 39 XQALSET1 Routine, 38 XQALSUR1 Routine, 38 XQOO1 Routine, 39 XQOO2 Routine, 39 XQALSUR2 Routine, 38 XQALSURO Routine, 38 XQOO3 Routine, 39 XQARPRT1 Routine, 38 XQOOFF Option, 197 XOOOMAIN M Menu, 197 XQARPRT2 Routine, 38 XQBUILDMAIN Menu, 191 XQOOMAKE Option, 197 XQBUILDTREE Option, 192 XQOON Option, 197 XQBUILDTREEQUE Option, 192 XQOOREDO Option, 197 **XOBUILDUSER Option, 192** XOOOSHOFIL Option, 198 XQOOSHOPRO Option, 198 XQCHK Routine, 38 XQCHK1 Routine, 38 XQOOSHOW Option, 198 XQCHK2 Routine, 38 XQOOTOG Option, 198 XQCHK3 Routine, 38 **XQOPACCESS Option, 198** XOOPED Option, 198 XOCOPYOP Option, 193 XOCS Routine, 38 XQOPED Routine, 39 XQDATE Routine, 38 XQOPTFIX Option, 199 XQOR Routine, 39 XQDIAGMENU Menu, 193 XQDISPLAY OPTIONS Menu, 193 XQOR1 Routine, 39 XQDISPLAY OPTIONS Option, 103 XOOR2 Routine, 39 XOH Routine, 38 XOOR3 Routine, 39 XQOR4 Routine, 39 XQH0 Routine, 38 XOH1 Routine, 38 XOORD Routine, 39 XQH2 Routine, 38 XQORD1 Routine, 39 XOH3 Routine, 38 XOORD101 Routine, 39 XQH4 Routine, 38 XQORDD1 Routine, 39 XQH5 Routine, 38 XQORM Routine, 39 XQHELP-ASSIGN Option, 194 XOORM1 Routine, 39 XQHELP-DEASSIGN Option, 194 XOORM2 Routine, 39 XQORM3 Routine, 39 XQHELP-DISPLAY Option, 194 XOORM4 Routine, 39 XQHELPFIX Option, 195 XQHELP-LIST Option, 194 XQORM5 Routine, 39 XOORMX Routine, 39 XOHELP-MENU, 194 XQORO Routine, 39 XQHELP-UPDATE Option, 195 XOHELP-XREF Option, 195 XOOROP Routine, 39 XQHLP Routine, 38 XQORPHANOPTIONS Menu, 199 XQKEY Routine, 38 XOP46INI Routine, 39 XQKEYALTODEL Option, 195 XOP50 Routine, 39

XQKEYDEL Option, 195

XQRESTRICT Option, 199

XQRIGHTNOW Option, 199 XQT3 Routine, 40 XQSCHK Option, 153, 200 XQT4 Routine, 40 XQSERVER Bulletin, 359 XQT5 Routine, 40 XQSET Routine, 39 XQTKILL Option, 204 XQSHOKEY Option, 200 XQTLIST Option, 204 XQSMD ADD Option, 200 XQTNEW Option, 204 XOSMD BUILD MENU Option, 200 XQTOC Routine, 40 XQSMD BY OPTION Option, 200 XQTRNAM Option, 205 XQSMD BY USER Option, 200 XQTSHO Option, 205 XQSMD COPY USER Option, 201 XQTUSER Menu, 205 XQSMD EDIT OPTIONS Option, 201 XQUIT Routine, 40 XQSMD LIMITED FM OPTIONS Option, XQUSR Routine, 40 201 XOUTL Routine, 40 XQSMD MGR Menu, 202 XT73P113 Routine, 40 XQSMD REMOVE Option, 203 XT73P129 Routine, 40 **XQSMD REPLICATE Option, 203** XT73P132 Routine, 40 XOSMD Routine, 39 XT73P133 Routine, 40 XQSMD SEC OFCR Menu, 203 XT73P136 Routine, 40 XQSMD SET PREFIX Option, 203 XT73P33 Routine, 41 XQSMD SHOW Option, 203 XT73P34 Routine, 41 XQSMD USER MENU, 204 XT73P44 Routine, 41 XOSMD1 Routine, 39 XT73P94 Routine, 41 XQSMD2 Routine, 39 XT73P98 Routine, 41 XQSMD21 Routine, 39 XT95POST Routine, 41 XQSMD3 Routine, 39 XT-BLD RTN LIST Option, 293 XQSMD31 Routine, 40 XTCM MAIN Menu, 295 XQSMD4 Routine, 40 XTDEBUG Routine, 41 XOSMD5 Routine, 40 XTDEBUG1 Routine, 41 XQSMD6 Routine, 40 XTDEBUG2 Routine, 41 **XOSMDCPY** Routine, 40 XTDEBUG3 Routine, 41 XQSMDFM Routine, 40 XTDEBUG4 Routine, 41 XOSMDFM Security Key, 371 XTDEBUG5 Routine, 41 XQSMDP Routine, 40 XTDEBUG6 Routine, 41 XQSPING Option, 153, 204 XTDEBUG7 Routine, 41 XQSRV Routine, 40 XTDEBUG8 Routine, 41 XQSRV1 Routine, 40 XTECGLO Routine, 41 XQSRV2 Routine, 40 XTECLIPS Routine, 41 XQSRV3 Routine, 40 XTECROU Routine, 41 XQSRV4 Routine, 40 XTEDTVXD Routine, 41 XOSRV5 Routine, 40 XTER Routine, 41 **XQSTCK** Routine, 40 XTER1 Routine, 41 **XOSUITE** Routine, 40 XTER1A Routine, 41 XQSUITE1 Routine, 40 XTER1A1 Routine, 41 XQT Routine, 40 XTER1B Routine, 41 XQT1 Routine, 40 XTER2 Routine, 41 XQT2 Routine, 40 XTERPUR Routine, 41

XTERSUM Routine, 41 XTMLOPAR Routine, 42 XTERSUM1 Routine, 41 XTMLOSKT Routine, 42 XTERSUM3 Routine, 41 XTMOVE Option, 300 XTERSUM4 Routine, 41 XTMOVE-IN Option, 301 XTFC1 Routine, 41 XTMP Global, 171 XTFCE Option, 296 XTMRPAR1 Routine, 42 XTFCE Routine, 42 XTMRPAR2 Routine, 42 XTFCE1 Routine, 42 XTMRPRNT Routine, 42 XTFCR Option, 296 XTMUNIT Routine, 42 XTHC Routine, 42 XT-NUMBER BASE CHANGER Option, XTHC10 Routine, 42 294 XTHC10A Routine, 42 XTOOLS Menu, 301 XTHCDEM Routine, 42 XT-OPTION TEST Option, 294 XTHCURL Routine, 42 XTPMKPCF Routine, 42 XTHCUTL Routine, 42 XTPMKPP Routine, 42 XTID Routine, 42 XTPMKPTC Routine, 42 XTID1 Routine, 42 XTPMNEX7 Routine, 42 XTIDCTX Routine, 42 XTPMSTA2 Routine, 42, 43 XTIDSET Routine, 42 XTPOST Routine, 43 XTIDTBL Routine, 42 XT-PURGE ERRORS Option, 294 XTIDTERM Routine, 42 XTQUEUABLE OPTIONS Menu, 302 XTIDTRM Routine, 42 XTRCMP Routine, 43 XTKERM1 Routine, 42 XTRDEL Option, 302 XTKERM2 Routine, 42 XTRGRPE Option, 302 XT-KERMIT EDIT Option, 293 XTRMON Bulletin, 360 **XT-KERMIT MENU, 153, 293** XTRMON Routine, 43 XTRMONITOR Option, 302 XT-KERMIT RECEIVE Option, 293 XT-KERMIT SEND Option, 293 XT-ROUTINE COMPARE Option, 294 XT-KERMIT SPOOL DL Option, 153, 294 XT-RTN CS EDT Option, 295 XTLATSET Option, 296 XT-RTN CS UPDATE Option, 295 XTLATSET Routine, 42 XTRUTL Routine, 43 XTLKLKUP Option, 298 XTRUTL1 Routine, 43 XTLKMODKY Option, 299 XTRUTL2 Routine, 43 XTLKMODPARK Option, 299 XTSUMBLD Option, 303 XTLKMODPARS Option, 18, 299 XTSUMBLD Routine, 43 XTLKMODSH Option, 299 XTSUMBLD-CHECK Option, 303 XTLKMODSY Option, 299 XTSUMCK Routine, 43 XTLKMODUTL Menu, 299 XTSUMCK1 Routine, 43 XTLKPRTUTL Option, 300 XTV EDIT VERIF PACKAGE Option, 303 XTLKUSER2 Menu, 300 XTV GLOBAL CHANGES (#8991.2) File, XTLKUTILITIES Menu, 300 64, 89 XTLKZMGR Security Key, 299, 371 XTV MENU, 303 XTLKZUSER Security Key, 371 XTV ROUTINE CHANGES (#8991) File, XTMENU Menu, 300 64, 88 XTMLOG Routine, 42 XTV VERIFICATION PACKAGE XTMLOG1 Routine, 42 (#8991.19) File, 64, 89

XT-VARIABLE CHANGER Option, 295	XU FINDUSER Option, 215
XT-VERSION NUMBER Option, 295	XU FIRST LINE PRINT Option, 215
XTVG COMPARE Option, 304	XU IP RELEASE Option, 7, 215
XTVG UPDATE Option, 304	XU NOP MENU, 215
XTVNUM Routine, 43	XU OPTION QUEUE Option, 216
XTVR COMPARE Option, 88, 305	XU OPTION START Option, 216
XTVR MENU, 305	XU PROC CNT CLUP Option, 217
XTVR MOST RECENT CHANGE DATE	XU SEC OFCR Menu, 217
Option, 305	XU SID ASK Option, 217
XTVR RESTORE PREV ROUTINE	XU SID EDIT Option, 218
Option, 306	XU SID STARTUP Option, 218
XTVR UPDATE Option, 88, 306	XU SIG BLOCK DISABLE Parameter, 13,
XTVRC1 Routine, 43	369, 370
XTVRC1A Routine, 43	XU SITE LOCKOUT Option, 7, 218
XU BLOCK COUNT Option, 205	XU SWITCH UCI Option, 218
XU CHECKSUM LOAD Option, 205	XU USER ADD Option, 218
XU CHECKSUM REPORT Option, 205	XU USER CHANGE Option, 219
XU DA EDIT Option, 206	XU USER SIGN-ON Option, 151, 219
XU EPC EDIT RPC, 334	XU USER START-UP Option, 151, 220
XU EPCS DISUSER EXP DATE Option,	XU USER TERMINATE Option, 151, 221
154, 207	XU-486 MENU COPY Option, 222
XU EPCS DISUSER PRIVS Option, 154,	XU522 Parameter, 13
155, 207	XU594 Parameter, 13
XU EPCS DISUSER XDATE EXPIRES	XU645 Parameter, 13
Option, 154, 155, 207	XU8343P Routine, 43
XU EPCS EDIT DATA Option, 208	XU8343Q Routine, 43
XU EPCS EDIT DEA# AND XDATE	XU8343R Routine, 43
Option, 154, 209	XU8343S Routine, 43
XU EPCS EXP DATE Option, 154, 209	XU8375P Routine, 43
XU EPCS LOGICAL ACCESS Option,	XU8P125 Routine, 43
154, 156, 209	XU8P132 Routine, 43
XU EPCS Option, 206	XU8P1321 Routine, 43
XU EPCS PRINT EDIT AUDIT Option,	XU8P1322 Routine, 43
154, 156, 211	XU8P135 Routine, 43
XU EPCS PRIVS Option, 154, 155, 211	XU8P137 Routine, 43
XU EPCS PSDRPH AUDIT Option, 154,	XU8P204 Routine, 43
156, 212	XU8P246 Routine, 43
XU EPCS PSDRPH KEY Option, 154, 156,	XU8P260 Routine, 43
213	XU8P264 Routine, 43
XU EPCS PSDRPH Option, 154, 155, 211	XU8P264A Routine, 43
XU EPCS SET PARMS Option, 154, 156,	XU8P292 Routine, 43
213	XU8P295 Routine, 43
XU EPCS UTILITY FUNCTIONS Menu,	XU8P297 Routine, 44
154, 213	XU8P307 Routine, 44
XU EPCS XDATE EXPIRES Option, 154,	XU8P314 Routine, 44
155, 215	XU8P317 Routine, 44

XU8P324 Routine, 44	XU8P466 Routine, 45
XU8P327 Routine, 44	XU8P467 Routine, 45
XU8P328 Routine, 44	XU8P467A Routine, 45
XU8P328A Routine, 44	XU8P469 Routine, 45
XU8P328B Routine, 44	XU8P480 Routine, 45
XU8P328C Routine, 44	XU8P481 Routine, 45
XU8P328D Routine, 44	XU8P483 Routine, 45
XU8P330X Routine, 44	XU8P487 Routine, 46
XU8P332 Routine, 44	XU8P497 Routine, 46
XU8P334 Routine, 44	XU8P497A Routine, 46
XU8P344 Routine, 44	XU8P499 Routine, 46
XU8P352 Routine, 44	XU8P504 Routine, 46
XU8P354 Routine, 44	XU8P509 Routine, 46
XU8P356 Routine, 44	XU8P509A Routine, 46
XU8P360 Routine, 44	XU8P509B Routine, 46
XU8P365 Routine, 44	XU8P509C Routine, 46
XU8P369 Routine, 44	XU8P509D Routine, 46
XU8P370 Routine, 44	XU8P511 Routine, 46
XU8P373 Routine, 44	XU8P514 Routine, 46
XU8P377 Routine, 44	XU8P518 Routine, 46
·	-
XU8P377D Routine, 44	XU8P524 Routine, 46
XU8P378 Routine, 44	XU8P531 Routine, 46
XU8P378A Routine, 45	XU8P531A Routine, 46
XU8P378B Routine, 45	XU8P531B Routine, 46
XU8P378C Routine, 45	XU8P536 Routine, 46
XU8P378E Routine, 45	XU8P540 Routine, 46
XU8P381 Routine, 45	XU8P541 Routine, 46
XU8P386 Routine, 45	XU8P541A Routine, 46
XU8P387 Routine, 45	XU8P543 Routine, 46
XU8P387X Routine, 45	XU8P545 Routine, 46
XU8P410 Routine, 45	XU8P545A Routine, 46
XU8P413 Routine, 45	XU8P546 Routine, 46
XU8P420 Routine, 45	XU8P560 Routine, 46
XU8P426 Routine, 45	XU8P571 Routine, 46
XU8P428 Routine, 45	XU8P572 Routine, 46
XU8P432 Routine, 45	XU8P580 Routine, 46
XU8P436 Routine, 45	XU8P581 Routine, 46
XU8P43P Routine, 45	XU8P582 Routine, 46
XU8P440 Routine, 45	XU8P584 Routine, 47
XU8P444 Routine, 45	XU8P585 Routine, 47
XU8P446 Routine, 45	XU8P586 Routine, 47
XU8P452 Routine, 45	XU8P591 Routine, 47
XU8P453 Routine, 45	XU8P598 Routine, 47
XU8P455 Routine, 45	XU8P599 Routine, 47
XU8P459 Routine, 45	XU8P601 Routine, 47
XU8P463 Routine, 45	XU8P601A Routine, 47
12001 100 1000000, 10	11001 00111 Roume, 47

XU-CLINICAL TRAINEE EDIT DB XU8P601B Routine, 47 XU8P604 Routine, 47 COUNT Option, 224 **XU-CLINICAL TRAINEE INQUIRY** XU8P608 Routine, 47 XU8P608B Routine, 47 Option, 224 XU-CLINICAL TRAINEE LIST Option, XU8P616 Routine, 47 XU8P629 Routine, 47 224 XU8P638 Routine, 47 XU-CLINICAL TRAINEE MENU, 225 XU8P672E Routine, 47 **XU-CLINICAL TRAINEE REPORTS** XU8PATCH661POST Routine, 47 Menu, 225 **XU-CLINICAL TRAINEE TRANSA** XUA4A7 Routine, 47 XUA4A71 Routine, 47 Option, 225 XUA4A72 Routine, 47 **XU-CLINICAL TRAINEE TRANSB** XUA4A73 Routine, 47 Option, 225 **XU-CLINICAL TRAINEE TRANSC** XUADD Security Key, 268 XUADISP Menu, 229 Option, 225 XU-CLINICAL TRANS REPORTS Menu, XUAF4 Routine, 47 XUAPURGE Routine, 47 226 XUARCHIVE Security Key, 371 XUCM TASK NIT, 23 XUAUDIT MAINT Menu, 229 XUCM TASK VPM, 23 XUAUDIT MENU, 230 XUCMNIT Routine, 48 XUAUDIT Option, 15, 229 XUCMNIT1 Routine, 48 XUAUDIT RPT Menu, 230 XUCMNIT2 Routine, 48 XUAUDITING Security Key, 348, 371 XUCMNIT4 Routine, 48 XUAUTHOR Security Key, 371 XUCMNT3A Routine, 48 XUAUTODEACTIVATE Option, 230 XUCMPA Routine, 48 XUBA Routine, 47 XUCMPR17 Routine, 48 XUCERT Routine, 47 XUCMVPI Routine, 48 XUCERT1 Routine, 47 XUCMVPM Routine, 48 XUCHANGE Option, 231 XUCMVPM1 Routine, 48 XUCIDTM Routine, 24, 48 XUCMXDR Routine, 48 XUCMXUTL Routine, 48 XUCIGTM Routine, 48 XUCIMSM Routine, 24, 48 XUCOMMAND Menu, 102, 146, 231 XUCIMSQ Routine, 25, 48 XUCONTINUE Option, 233 XUCIONT Routine, 48 XUCORE Menu, 102, 106, 233 XUCIVXD Routine, 25, 48 XUCS1E Routine, 48 XU-CLINICAL ACTIVE TRAINEE XUCS1R Routine, 48 Option, 223 XUCS1RB Routine, 48 **XU-CLINICAL INACTIVE TRAINEE** XUCS2E Routine, 48 Option, 223 XUCS2R Routine, 48 XUCS2RB Routine, 48 XU-CLINICAL LOCAL REPORTS Menu, XUCS4E Routine, 48 XU-CLINICAL TRAINEE COUNT Option, XUCS4R Routine, 48 224 XUCS4RB Routine, 48 XU-CLINICAL TRAINEE DB COUNT XUCS6R Routine, 48 Option, 224 XUCS8E Routine, 48 XUCS8R Routine, 48

VIICOODD D 4: 40	VIJEDOG DODDIJ ALIDJE (#0001 7) E'I
XUCS8RB Routine, 48	XUEPCS PSDRPH AUDIT (#8991.7) File,
XUCS8RG Routine, 49	90, 156, 212
XUCSCDE Routine, 49	XUEPCS REPORT DEVICE parameter,
XUCSCDR Routine, 49	210, 212
XUCSCDR Routine, 49	XUEPCS REPORT DEVICE Parameter, 14
XUCSCDRB Routine, 49	XUEPCSED Routine, 49
XUCSPRG Routine, 49	XUEPCSEDIT Security Key, 156, 208, 213,
XUCSRV Routine, 49	371 YUEDCSDT Banting 40
XUCSTM Routine, 49	XUEPCSRT Routine, 49
XUCSTME Routine, 49	XUER EDIT PARAMS Option, 237
XUCSUTL3 Routine, 49	XUER NOTE Option, 237
XUCSXCD Routine, 49	XUER PURGE ERROR SUMMARY
XUCSXDR Routine, 49	Option, 237
XUCSXGR Routine, 49	XUER SUMMARY INQUIRE Option, 238
XUCSXRT Routine, 49	XUER SUMMARY Menu, 237
XUCSXST Routine, 49	XUER SUMMARY MOST RECENT
XUDEV LINEPORT ADDR CURRENT	Option, 238
Option, 234	XUER SUMMARY TOP Option, 238
XUDEV LINEPORT ADDR EDIT Option,	XUER UPDATE DEMAND/BATCH
234	Option, 238
XUDEV LINEPORT ADDR RPT Option,	XUERRS Menu, 238
234	XUERTRAP Option, 41, 239
XUDEV Option, 234	XUERTRP AUTO CLEAN Option, 239
XUDEV RES-CLEAR Option, 234	XUERTRP CLEAN Option, 239
XUDEV RES-ONE Option, 235	XUERTRP PRINT ERRS Option, 239
XUDEVEDIT Menu, 235	XUERTRP PRINT T-1 1 ERR Option, 239
XUDEVEDITALL Option, 235	XUERTRP PRINT T-1 2 ERR Option, 240
XUDEVEDITCHAN Option, 235	XUERTRP TYPE Option, 240
XUDEVEDITHFS Option, 235	XUESSO1 Routine, 49
XUDEVEDITLPD Option, 236	XUESSO2 Routine, 49
XUDEVEDITMT Option, 236	XUESSO3 Routine, 49
XUDEVEDITRES Option, 236	XUESSO4 Routine, 49
XUDEVEDITSPL Option, 236	XUEXISTING USER Parameter, 10
XUDEVEDITSYNC Option, 236	XUEXKEY Option, 240
XUDEVEDITTRM Option, 236	XUEXKEY Security Key, 371
XUDHGUI Routine, 49	XUFAIL Option, 241
XUDHRES Routine, 49	XUFDEV Option, 241
XUDHSET Routine, 49	XUFDISP Option, 241
XUDHUTL Routine, 49	XUFILE Routine, 49
XUDIACCESS FOR ISO Menu, 236	XUFILE0 Routine, 49
XUDISPLAY Option, 236	XUFILE1 Routine, 49
XUEDIT CHARACTERISTICS Parameter,	XUFILE3 Routine, 49
10	XUFILEACCESS Option, 241
XUEDITOPT Option, 36, 81, 237	XUFILEACCESS SEC OFCR Menu, 242
XUEPCS DATA (#8991.6) File, 89, 156,	XUFILECOPY Option, 242
210	XUFILEDELETE Option, 243

XUFILEGRAM Security Key, 348, 371 XUKEYDEALL Option, 245 **XUFILEGRANT Option, 243** XUKEYEDIT Option, 246 XUFILEINQUIRY Option, 243 XUKEYMGMT Menu, 246 XUFILELIST Option, 243 XULIST Option, 246 XUFILEPRINT Option, 243 XULM DISPLAY SYSTEM LOCKS **XUFILERANGEASSIGN Option, 243** Protocol, 151 XUFILEREMOVEALL Option, 244 XULM GO TO Protocol, 152 XUFILESETDELETE Option, 244 XULM LOCK DICTIONARY (#8993) File, XUFILESINGLEADD Option, 244 XUFPURGE Option, 244 XULM LOCK MANAGER LOG (#8993.2) XUGET Routine, 49 File, 63 XUGOT Routine, 50 XULM LOCK MANAGER XUGOT1 Routine, 50 PARAMETERS (#8993.1) File, 63 XUHALT Option, 244 XULM LOCK MANAGER Protocol, 151 XUHUI Routine, 50 XULM LOCKS Security Key, 371 XULM REFRESH LOCKS Protocol, 151 XUHUI236 Routine, 50 XUHUIHL7 Routine, 50 XULM Routine, 50 XUHUIMSG Routine, 50 XULM SELECT LOCK Protocol, 152 XU-INACTIVE PERSON CLASS USERS XULM SELECT NODE Protocol, 152 Option, 226 XULM SINGLE LOCK MENU Protocol, XUINCON Routine, 50 XUINDEX Option, 244 XULM SORT/SCREEN LOCKS Protocol, XUINDEX2 Option, 244 XUINEACH Routine, 50 XULM SYSTEM LOCKS Security Key, XUINEND Routine, 50 XUINENV Routine, 50 XULM TERMINATE PROCESS Protocol, XUINOK Routine, 50 XUINP275 Routine, 50 XULM1 Routine, 50 XUINP313 Routine, 50 XULMLD Routine, 50 XULMLOG Routine, 50 XUINP337 Routine, 50 XUINP348 Routine, 50 XULMOUT Routine, 50 XUINPCH Routine, 50 XULMP Routine, 50 XUINPCH2 Routine, 50 XULMRPC Routine, 50 XUINPCH3 Routine, 50 XULMU Routine, 51 XUINPCH4 Routine, 50 XULMUI Routine, 51 XUINPRE Routine, 50 XULMUI1 Routine, 51 XUINPRE1 Routine, 50 XUMAINT Menu, 81, 102, 103, 109, 248 XUINQUIRE Option, 244 XUMF DMIS ID LOAD Option, 249 XU-INSTALL-DONE Bulletin, 360 XUMF ERROR Bulletin, 361 XU-INSTITUTION-DEA Option, 226 XUMF IMF ADD EDIT Option, 249 XU-INSTITUTION-E Option, 226 XUMF IMF EDIT STATUS Option, 250 XUINTSK Routine, 50 XUMF INSTITUTION Bulletin, 361 XUINTSK1 Routine, 50 XUMF INSTITUTION Option, 250 XUINTSK2 Routine, 50 XUMF INSTITUTION Security Key, 249, XUKERNEL Menu, 245 250, 251, 252, 371 XUKEYALL Option, 245 XUMF LOAD INSTITUTION Option, 251

XUMF LOAD NPI Option, 252	XUMFMD5 Routine, 52
XUMF Routine, 51	XUMFMFE Routine, 52
XUMF0 Routine, 51	XUMFMFI Routine, 52
XUMF04 Routine, 51	XUMFP Routine, 52
XUMF04H Routine, 51	XUMFP4 Routine, 52
XUMF04P Routine, 51	XUMFP4C Routine, 52
XUMF04Q Routine, 51	XUMFP4Z Routine, 52
XUMF1H Routine, 51	XUMFP512 Routine, 52
XUMF218 Routine, 51	XUMFP513 Routine, 52
XUMF218A Routine, 51	XUMFPFT Routine, 52
XUMF218Z Routine, 51	XUMFPMFS Routine, 52
XUMF261P Routine, 51	XUMFPOST Routine, 52
XUMF299 Routine, 51	XUMFPZL7 Routine, 52
XUMF333 Routine, 51	XUMFQR Routine, 52
XUMF335 clean 4.1 and 4 Option, 252	XUMFR Routine, 52
XUMF382 Routine, 51	XUMFX Routine, 53
XUMF390 Routine, 51	XUMFXACK Routine, 53
XUMF397 Routine, 51	XUMFXH Routine, 53
XUMF4 Routine, 51	XUMFXHL7 Routine, 53
XUMF416 Routine, 51	XUMFXI Routine, 53
XUMF479P Routine, 51	XUMFXP Routine, 53
XUMF4A Routine, 51	XUMFXP1 Routine, 53
XUMF4H Routine, 51	XUMFXP2 Routine, 53
XUMF4L0 Routine, 51	XUMFXR Routine, 53
XUMF4L1 Routine, 51	XUMGR Security Key, 218, 259, 268, 348,
XUMF4L2 Routine, 51	372
XUMF502 Routine, 51	XUMNACCESS Menu, 252
XUMF502P Routine, 51	XUMPI Routine, 53
XUMF512F Routine, 51	XUMVIENU Routine, 53
XUMF555P Routine, 51	XUMVINPA Routine, 53
XUMF5AT Routine, 52	XUNEW USER Parameter, 10
XUMF5AU Routine, 52	XUOAA SEND HL7 MESSAGE Option,
XUMF5BYT Routine, 52	253
XUMF5I Routine, 52	XUOAAHL7 Routine, 53
XUMF5II Routine, 52	XUOAAUTL Routine, 53
XUMF654 Routine, 52	XUOPTDISP Option, 253
XUMF654P Routine, 52	XUOPTLOG Option, 253
XUMFEIMF Routine, 52	XUOPTPURGE Option, 253
XUMFENV Routine, 52	XUOPTUSER Menu, 253
XUMFH Routine, 52	XUOPTWHO Option, 253
XUMFH4 Routine, 52	XUORES Security Key, 372
XUMFHM Routine, 52	XUOUT Option, 254
XUMFHPQ Routine, 52	XUP Routine, 53
XUMFHPR Routine, 52	XUP468 Routine, 53
XUMFI Routine, 52	XUP522 Routine, 53
XUMFI0 Routine, 52	XUP569 Routine, 53
	

XUPARAM Routine, 53 XUPSHL7B Routine, 54 XUPCF Routine, 53 XUPSNAME Routine, 54 XUPCH117 Routine, 53 XUPSNM1 Routine, 54 XUPCSRVR Routine, 53 XUPSORG Routine, 54 XU-PERSON CLASS EDIT Option, 226 XUPSPAID Routine, 54 XU-PERSON CLASS REMOVE Option, XUPSPD1 Routine, 54 226 XUPSPRA Routine, 54 XU-PING-SERVER Option, 153, 227 XUPSQRY Routine, 54 XUPMDISP Option, 254 XUPSSTF Routine, 54 XUPMPURGE Option, 254 XUPSUTL1 Routine, 54 XUPOS259 Routine, 53 XUPSUTQ Routine, 54 XUREACT USER Parameter, 10 XUPR RTN CHKSUM Option, 254 XURELOG Option, 259 XUPR RTN EDIT Option, 254 XUPR RTN PATCH Option, 255 XURESJOB Option, 259 XUPRE247 Routine, 53 XUROUTINE IN Option, 259 XUPRGL Option, 256 XUROUTINE OUT Option, 259 XUPRINT Option, 256 XUROUTINES Menu, 259 XUPROD Routine, 53 XURTL Routine, 54 XUPROG Menu, 102, 119, 256 XURTL1 Routine, 54 XUPROG Security Key, 348, 372 XURTL2 Routine, 54 XUPROGMODE Bulletin, 363 XURTL3 Routine, 54 XUPROGMODE Option, 257 XURTLC Routine, 54 XUPROGMODE Security Key, 192, 256, XURTLK Routine, 54 257, 294, 348, 372 XUS ACCESS CODE VIOLATION XUPROTOCOL EDIT Option, 257 Bulletin, 363 XUPRROU Option, 257 XUS ALLKEYS RPC, 336 XUPR-ROUTINE-TOOLS Menu, 255 XUS AV CODE RPC, 336 XUPR-RTN-TAPE-CMP Option, 256 XUS AV HELP RPC, 336 XUPS ASSESSMENT DETAIL Option, XUS CCOW VAULT PARAM Parameter, 257, 291 XUPS ASSESSMENT STATS Option, 257, XUS CCOW VAULT PARAM RPC, 336 291 XUS CVC RPC, 336 XUPS NPF CLEANUP MAIN MENU, 257 XUS DIVISION GET RPC, 336 XUPS PERSONQUERY RPC, 335 XUS DIVISION SET RPC, 336 **XUPS PREUPDATE NPF REPORTS** XUS GET CCOW TOKEN RPC, 336 Option, 258, 291 XUS GET TOKEN RPC, 337 XUPS Routine, 53 XUS GET USER INFO RPC, 337 **XUPS UPDATE NEW PERSON FILE** XUS GET VARIABLE VALUE RPC, 343 DATA Option, 258, 292 XUS GET VISITOR RPC, 337 XUPS UPDATE NEW PERSON FILE XUS INTRO MSG RPC, 337 Option, 258, 292 XUS KAAJEE PROXY LOGON Option, XUPS VISTALINK Option, 258, 292 XUPS309P Routine, 53 XUS KAAJEE WEB LOGON Option, 260 XUS KEY CHECK RPC, 337 XUPSB01 Routine, 53 XUPSCLR Routine, 53 XUS NPI CBO LIST Option, 260 XUPSGS Routine, 54

XUS NPI ENTER NPI FOR PROVIDER XUSC1S Routine, 55 Option, 260 XUSC1S1 Routine, 55 XUS NPI EXEMPT PROVIDER Option, XUSCLEAN Routine, 55 XUSCNT Routine, 55 XUS NPI EXTRACT Option, 261 XUSCREENMAN Security Key, 348, 372 XUS NPI EXTRACT REPORT Option, XUSCZONK Option, 263 XUSEC ISO ACTIVE USER EXTRACT 261, 292 XUS NPI LOCAL REPORTS Option, 261 Option, 263, 264 XUS NPI MENU, 261 XUSEC ISO Q TERMINATION REPORT XUS NPI PROVIDER SELF ENTRY Option, 263 Option, 261 **XUSEC ISO TERMINATION REPORT** XUS NPI SIGNON CHECK Option, 262 Option, 263 XUSEC UP ARROW TERM REPORT XUS PKI GET UPN RPC, 342 XUS PKI SET UPN RPC, 342 Option, 263 XUS PROC CNT CLUP Option, 292 XUSECAD Routine, 55 XUS Process count cleanup Option, 217, XUSECBUL Routine, 55 292 XUSECURITY Bulletin, 363 XUS Routine, 54 XUSER COMPUTER ACCOUNT XUS SEND KEYS RPC, 342 Parameter, 10 XUS SET VISITOR RPC, 342 XUSER DIV CHG Option, 265 XUSER FILE MGR Menu, 265 XUS SIGNON Option, 262 XUS SIGNON SETUP RPC, 343 XUSER KEY RE-INDEX Option, 266 XUSER Menu, 102, 140, 226, 264, 370 XUS1 Routine, 54 XUS11 Routine, 54 XUSER PC BUILD EDIT Option, 266 XUS1A Routine, 54, 151 XUSER PC BUILD Option, 266 XUS1B Routine, 54 XUSER Routine, 55 XUS2 Routine, 54 XUSER SEC OFCR Menu, 267 XUS3 Routine, 54 XUSER1 Routine, 55 XUS3A Routine, 54 XUSER2 Routine, 55 XUS4 Routine, 54 XUSERAOLD Option, 267 XUS5 Routine, 54 XUSERBLK Option, 268 XUS6 Routine, 54 XUSERBLK Routine, 55 XUS9 Routine, 54 XUSER-CLEAR-ALL Option, 267 XUS91 Routine, 54 XUSERCLR Option, 268 XUSAML Routine, 55 XUSERDEAC Bulletin, 364 XUSAP PROXY LIST Option, 262 XUSERDEACT Option, 268 XUSAP Routine, 55 XUSERDIS Bulletin, 364 XUSAP1 Routine, 55 XUSEREDIT Option, 10, 101, 269 XUSAZONK Option, 263 XUSEREDITSELF Option, 10, 269 XUSBSE1 Routine, 55, 61 XUSERINO Option, 269 XUSBSE2 Routine, 55, 61 XUSERINT Option, 269 XUSBSEUT Routine, 61 XUSERLIST Option, 270 XUSC LIST Option, 263 XUSERNEW Option, 10, 101, 270 XUSC1 DEBUG Parameter, 14 XUSERNEW Routine, 55 XUSC1 Routine, 55 XUSERP Routine, 55, 151

XUSC1C Routine, 55

XUSERPOST Option, 270

XUSERPURGEATT Option, 270 XUSNPIX4 Routine, 56 XUSNPIX5 Routine, 56 XUSERREACT Option, 10, 101, 270 XUSERREL Option, 270 XUSNPIXI Routine, 56 XUSERREPRINT Option, 271 XUSNPIXU Routine, 56 XUSERTERM Bulletin, 364 XUSP557 Routine, 56 XUSERTOOLS Menu, 271, 369 XUSPF200 Security Key, 372 XU-SPL-ALLOW Option, 227 XUSERVDISP Option, 271 XUSERWHERE Option, 271 XU-SPL-BROWSE Option, 227 XUSESIG BLOCK Option, 272, 369, 370, XU-SPL-DELETE Option, 227 XU-SPL-LIST Option, 227 XUSESIG CLEAR Option, 272 XU-SPL-MAIL Option, 227 XUSESIG DEG Option, 272 XU-SPL-MENU, 228 XUSESIG Option, 271, 369, 372 XU-SPL-MGR Menu, 102, 129, 228 XUSESIG Routine, 55 XU-SPL-PRINT Option, 228 XUSESIG1 Routine, 55 XU-SPL-PURGE Option, 7, 17, 228 XUSESIG2 Routine, 55 XU-SPL-SITE Option, 17, 228 XUSESIG3 Routine, 55 XU-SPL-USER Option, 229 XUSFACHK Option, 272 XUSPURGE Routine, 56 XUSFACHK Routine, 55 XUSPY Menu, 102, 130, 274 XUSG Routine, 55 XU-SPY-SHOW Option, 229 XUSG1 Routine, 55 XUSRA Routine, 56 XUSHOWSSN Security Key, 372 XUSRB Routine, 56, 61 XUSHSH Routine, 56 XUSRB1 Routine, 56 XUSHSHP Routine, 56 XUSRB2 Routine, 56 XUSIG Security Key, 369, 370, 372 XUSRB4 Routine, 56 XUSIGNON Bulletin, 365 XUSRB5 Routine, 56 XUSITEMGR Menu, 102, 114, 273 XUSSPKI CRL SERVER Bulletin, 366 XUSITEPARM Option, 15, 17, 274 XUSSPKI CRL UPLOAD Option, 275 XUSSPKI EDIT Option, 275 XUSKAAJ Routine, 56 XUSSPKI Routine, 56 XUSKAAJ1 Routine, 56 XUSLOCK Bulletin, 365 XUSSPKI SAN Bulletin, 366 XUSMGR Routine, 56 XUSSPKI UPN SET Option, 275 XUSNPI QUALIFIED IDENTIFIER XUST Routine, 56 Parameter, 14 XUST01 Routine, 56 XUSNPI Routine, 56 XUST02 Routine, 57 XUSNPI1 Routine, 56 XUST04 Routine, 57 XUSNPIDA Routine, 56 XUST05 Routine, 57 XUSNPIE1 Routine, 56 XUST06 Routine, 57 XUSNPIE2 Routine, 56 XUST08 Routine, 57 XUSNPIE3 Routine, 56 XUST09 Routine, 57 XUSNPIED Routine, 56 XUST12 Routine, 57 XUSNPIMTL Security Key, 372 XUST13 Routine, 57 XUSNPIUT Routine, 56 XUST15 Routine, 57 XUSNPIX1 Routine, 56 XUST17 Routine, 57 XUSNPIX2 Routine, 56 XUST18 Routine, 57 XUSNPIX3 Routine, 56 XUST19 Routine, 57

XUST20 Routine, 57	XUTM ERROR SCREEN EDIT Option,
·	281
XUST21 Routine, 57 XUST22 Routine, 57	XUTM ERROR SCREEN LIST Option,
XUST24 Routine, 57	282
XUST25 Routine, 57	XUTM ERROR SCREEN REMOVE
XUST26 Routine, 57	Option, 282
XUST27 Routine, 57	XUTM ERROR SHOW Option, 283
XUST28 Routine, 57	XUTM INQ Option, 283
XUST29 Routine, 57	XUTM MGR Menu, 102, 137, 283 XUTM PARAMETER EDIT Menu, 284
XUST35 Routine, 57	
XUSTAT Deptine 57	XUTM PROBLEM CLEAR Option, 284
XUSTAT Routine, 57	XUTM PROBLEM DEVICES Bulletin, 367
XUSTAT1 Routine, 57	XUTM PROBLEM DEVICES Option, 284
XUSTATUS Outline, 57	XUTM QCLEAN Option, 78, 284
XUSTATUS Option, 276	XUTM QPROBLEM DEVICES Option,
XUSTAX Routine, 57	285
XUSTERM Routine, 57, 151	XUTM REPORT Option, 285
XUSTERM1 Routine, 57	XUTM REQ Option, 285
XUSTERM2 Routine, 57	XUTM RESTART Option, 285
XUSTIME Bulletin, 367	XUTM RP Option, 285
XUSTZ Routine, 57	XUTM RUN Option, 286
XUSTZIP Routine, 57	XUTM SCHEDULE Option, 23, 102, 216,
XUS-XUP SET ERROR TRAP Parameter,	284, 286, 302
14	XUTM SNAPSHOT Option, 286
XUS-XUP VPE Parameter, 14	XUTM STOP Option, 287
XUTERM Option, 276	XUTM SYNC Option, 287
XUTESTUSER Option, 276	XUTM TL CLEAN Option, 287
XUTIME Option, 276	XUTM UCI Option, 287
XUTIO Menu, 102, 107, 276	XUTM USER Option, 287
XUTLOOPBACK Option, 277	XUTM UTIL Menu, 287
XUTM BACKGROUND PRINT Option,	XUTM VOLUME Option, 288
277	XUTM WAIT Option, 288
XUTM BACKGROUND	XUTM ZTMON Option, 288
RECOMMENDED Option, 278	XUTMD Routine, 58
XUTM BVPAIR Option, 278	XUTMD1 Routine, 58
XUTM CHECK ENV Option, 278	XUTMDEVQ Routine, 58
XUTM CLEAN Option, 278	XUTMDQ Routine, 58
XUTM DEL Option, 279	XUTMDQ1 Routine, 58
XUTM DQ Option, 279	XUTMG146 Routine, 58
XUTM ERROR DELETE Option, 280	XUTMG146 Routine, 58
XUTM ERROR LOG CLEAN RANGE	XUTMG14P Routine, 58
Option, 280	XUTMG19 Routine, 58
XUTM ERROR Menu, 279	XUTMG43 Routine, 58
XUTM ERROR PURGE TYPE Option, 280	XUTMHR Routine, 58
XUTM ERROR SCREEN ADD Option, 281	XUTMK A Poutine 58
201	XUTMKA Routine, 58

XUTMKE Routine, 58 XUTMKE1 Routine, 58 XUTMKE2 Routine, 58 XUTMONH Routine, 58 XUTMONH1 Routine, 58 XUTMONH2 Routine, 58 XUTMOPT Routine, 58 XUTMPCH Routine, 58 XUTMQ Routine, 58 XUTMQ0 Routine, 58 XUTMQ1 Routine, 58 XUTMQ2 Routine, 58 XUTMO3 Routine, 58 XUTMQH Routine, 58 XUTMR Routine, 58 XUTMR1 Routine, 58 XUTMRJD Routine, 59 XUTMRJD1 Routine, 59 XUTMRP Routine, 59 XUTMRP1 Routine, 59 XUTMSYNC Routine, 59 XUTMT Routine, 59 XUTMTA Routine, 59 XUTMTAL Routine, 59 XUTMTD Routine, 59 XUTMTDL Routine, 59 XUTMTED Routine, 59 XUTMTEIO Routine, 59 XUTMTEP Routine, 59 XUTMTES Routine, 59 XUTMTL Routine, 59 XUTMTLD Routine, 59 XUTMTLU Routine, 59 XUTMTP Routine, 59 XUTMTP0 Routine, 59 XUTMTP1 Routine, 59 XUTMTPD Routine, 59 XUTMTPU Routine, 59 XUTMTR1 Routine, 59 XUTMTR2 Routine, 59 XUTMTR3 Routine, 59 XUTMTR4 Routine, 59 XUTMTS Routine, 59 XUTMTU Routine, 59 XUTMTUL Routine, 59 XUTMTZ Routine, 59

XUTMTZ1 Routine, 59 XUTMTZ2 Routine, 60 XUTMTZ3 Routine, 60 XUTMUSE Routine, 60 XUTMUSE1 Routine, 60 XUTMUSE2 Routine, 60 XUTMUSE3 Routine, 60 XUTMUTL Routine, 60 XUTTEST Option, 288 XUUSERACC Option, 103, 289 XUUSERACC1 Option, 289 XUUSERACC2 Option, 289 XUUSERDISP Option, 40, 289 XUUSERHELP Option, 290 XUUSEROPT Option, 290 XUUSERSTATUS Option, 290 XUVERIFY Routine, 60 XUVERSIONEW-HELP Option, 290 XUVISIT Bulletin, 367 XUWORKDY Routine, 60 XUXCTY Routine, 60 XUXPRT Routine, 60 XUXREF Option, 290 XUXREF-2 Option, 290 XUYDEV Routine, 60 XUZUSER Menu, 291 XVIRENV Routine, 61 XVIRPOST Routine, 61

Ζ

ZIP Code List Option, 166 ZIS4VXD Routine, 25 ZISEDIT Routine, 60 ZISETDTM Routine, 25 ZISETMSM Routine, 25 ZISETVXD Routine, 25 ZISFMSM Routine, 25 ZISFVXD Routine, 25 ZISHMSM Routine, 25 ZISHVXD Routine, 25 ZISPL Routine, 60 ZISPL1 Routine, 60 ZISPL2 Routine, 60 ZISX Routine, 25, 60 **ZOSFMSM Routine**, 25 **ZOSFVXD** Routine, 25

ZOSV2VXD Routine, 25 ZOSVMSM Routine, 25 ZOSVVXD Routine, 25 ZTBKCDTM Routine, 25 ZTBKCMSM Routine, 25 ZTBKCVXD Routine, 25 ZTMB Routine, 25, 60 ZTMCHK Routine, 25, 60 ZTMCHK1 Routine, 25, 60 ZTMDCL Routine, 25 ZTMGRSET Routine, 25

ZTMKU Routine, 25, 60
ZTMON Routine, 25, 60
ZTMON1 Routine, 25, 60
ZTMQ Security Key, 373
ZTMQUEUABLE OPTIONS Menu, 102, 145
ZU Routine, 344
ZUA Routine, 25, 60
ZUMSM Routine, 60
ZUVXD Routine, 60