Kernel 8.0 and Kernel Toolkit 7.3

Technical Manual

January 2024

Department of Veterans Affairs (VA)

Office of Information and Technology (OIT)

Software Product Management (SPM)

Revision History

Date	Revision	Description	Author
01/23/2024	5.13	Updates for Kernel Patch XU*8.0*756: • Table 3: Added the SIGN-ON LOG RETENTION field entry. • Table 9: Updated the **XUSPURGE** routine description. • Table 24: Updated the Purge Sign-On Log [XUSCZONK] option entry.	VistA Infrastructure Shared Services (VISS) Development Team
06/08/2023	5.12	Tech Edits: • Removed all prior content updates for Kernel Patch XU*8.0*663 (03/10/2023), since that patch release was changed to “Released In Error.” • Patch XU*8.0*782, VistA Build Analyzer Utility: o Table 9: Added the following new routines: – **XPDANLYZ1** – **XPDANLYZ2** – **XPDANLYZ3** – **XPDANLYZ4** – **XPDANLYZ5** – **XPDANLYZ6** o Table 24: Added the following new options: – Build Analyzer Main Menu [XPDANLYZ MAIN MENU] menu – **KIDS Build Analyzer** [XPDANLYZ] option – **Delete Build Analyzer Text Files** [XPDANLYZ_DEL] option – **KIDS Build Analyzer - Full SQA Search** [XPDANLYZ_SQA] option	• VistA Infrastructure Shared Services (VISS) Development Team

Date	Revision	Description	Author
		○ Table 24: Modified the **Utilities** [XPD UTILITY] menu to add the Build Analyzer Main Menu [XPDANLYZ MAIN MENU] menu.	
05/24/2023	5.11	Tech Edits for Kernel Patch XU*8.0*689: Pharmacy Operational Updates: • Table 9: Added the following routines: ○ **XU8P689** ○ **XU8PE689** ○ **XUEPCSU1** ○ **XUEPCSUT** ○ **XUEPCSVR** • Table 12: Added **^XTV(8991.6)** and **^XTV(8991.7)** globals. • Table 23: Indicated selected DEA e-Prescribing of Controlled Substances (ePCS) Utility options that were placed out of order. • Table 24: Indicated selected DEA ePCS Utility options that were placed out of order. • "Callable Entry Points" section in Table 27: Updated the following new and modified APIs: ○ $$DEA^XUSER ○ $$DEAXDT^XUSER ○ $$DEASCH^XUSER ○ $$DETOX^XUSER ○ $$PRDEA^XUSER ○ $$PRSCH^XUSER ○ $$PRXDT^XUSER ○ $$SDEA^XUSER • Table 29: Added note to the **XU EPCS EDIT** RPC regarding RPC deprecation.	Pharmacy Operational Updates
03/10/2023	5.8	Updates: • Updated organizational references (e.g., changed "Enterprise Program Management	• Master Veteran Index (MVI) Development Team

Date	Revision	Description	Author
		Office [EPMO]" to "Software Product Management (SPM)") throughout. • Updated references to Kernel and Kernel Toolkit manual file names: from "Kernel 8.0 & Kernel Toolkit 7.3 … " to "Kernel 8.0 and Kernel Toolkit 7.3 … " for all occurrences.	• VISS Development Team
05/09/2022	5.9	Tech Edits for Kernel Patch XU*8.0*765: Pharmacy Operational Update: • Table 9: Updated **XUSER2** routine. • Table 23: Indicated selected DEA ePCS Utility options that were placed out of order. • Table 24: Indicated selected DEA ePCS Utility options that were placed out of order.	Pharmacy Operational Updates
04/06/2022	5.7	General Updates: • Table 30: Sorted entries alphabetically. • Table 30: Added **DILOCKTM** and **U** variables. **Software Versions:** **Kernel 8.0** **Toolkit 7.3**	VISS Development Team
04/05/2022	5.7	Tech Edits for Kernel Patch XU*8.0*688: Pharmacy Operational Updates DEA Enhancements: • Table 9: Added **XUSER3** routine. • Table 12: Added **^XTV(8991.8)** and **^XTV(8991.9)** globals. • Table 15: Added Files #8991.8 and #8991.9.	Pharmacy Operational Updates Team
12/09/2019	5.6	Tech Edits for Kernel Patches XU*8.0*607 and 608: Kernel Lock Manager Utility: • Table 9: Added "**XULM**" routines. • Table 12: Added "**XLM**" global.	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		• Table 15: Added "**XULM**" files. • Figure 10: Updated XUSITEMGR menu diagram for the Lock Manager options. • Table 20: Added "**XULM**" protocols. • Table 24: Added "**XULM**" options to and updated options for **Operations Management** [XUSITEMGR] menu. • Table 27: Added "**XULM**" API. • Table 29: Added "**XULM**" RPC. • Table 36: Added "**XULM**" security key. **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	
07/24/2019	5.5	Tech Edits for Kernel Patch XU*8.0*711: • Table 9: Added the **XUMVIENU** and **XUMVINPA** routine entries. • Table 29: Added the **XUS MVI ENRICH NEW PERSON** RPC entry. Tech Edits for Kernel Patch XU*8.0*693: • Table 35: Updated the **XUSERDEAC** bulletin entry. • Table 35: Added the **XUSERDIS** bulletin entry. **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	VistA Infrastructure (VI)/VistA Kernel Development Team
10/11/2018	5.4	Tech Edits for Kernel Patch XU*8.0*690: • Table 15: Updated the "ALERT CRITICAL TEXT" file entry. • Table 24: Updated the "XQAL ALERT LIST FROM DATE," "XQAL CRITICAL ALERT COUNT," and "XQAL USER ALERTS COUNT" option entries.	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		Software Versions: • **Kernel 8.0** • **Toolkit 7.3**	
10/09/2018	5.3	Tech Edits for Kernel Patch XU*8.0*672: • Table 9: Added the **XU8P672E** routine. • Table 27: Updated the **XPDMENU** entry for Kernel Patch XU*8.0*672: Added the LOCK and RLOCK tags. **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	VistA Infrastructure (VI)/VistA Kernel Development Team
08/22/2018	5.2	Updates for Kernel Patch XU*8.0*679: • Added Section 15.5.1, "Electronic Signature Restrictions." • Table 5: Added the **XU SIG BLOCK DISABLE** parameter. • Table 9: Added the **XUSESIG2** and **XUSESIG3** routines. • Table 24: Modified the **XUSESIG BLOCK** option (Type and Routine columns) and added the **XUSESIG DEG** option. • Table 36: Added the XUSIG security key. **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	VistA Infrastructure (VI)/VistA Kernel Development Team
08/15/2018	5.1	Tech Edits: Final merge of all remaining content in the K*ernel Toolkit Technical Manual* into the *Kernel 8.0 and Kernel Toolkit 7.3 Technical Manual* (this manual): • Added the following sections for Kernel Toolkit: ○ Section 1.1, "Kernel."	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		○ Section 1.2, "Kernel Toolkit." ○ Section 1.2.1, "Multi-Term Look-Up (MTLU)." ○ Section 1.2.2, "Duplicate Resolution Utilities." ○ Section 2.11, "Implementing Multi-Term Look-Up." ○ Section 2.12, "Implementing Duplicate Resolution Utilities." ○ Section 2.13, "Configuring VAX/Alpha Performance Monitor (VPM)." **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	
01/23/2018	5.0	Tech Edits: • Table 29: Changed the **XUS SIGNON SETUP** RPC from "RESTRICTED" to "PUBLIC," as per developer. • Table 29: Added an "ICR #" column to list any known ICRs associated with RPCs. • Table 29: Updated the **XUS GET VISITOR** and **XUS SET VISITOR** RPCs. • 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 Supplement* document (e.g., routines, files, fields, globals, options, etc.). • Modified/Removed VAH and MGR references: ○ Retitled and updated Section 14.1 to "Globals in Production Accounts." ○ Table 34: Removed reference to "VAH and updated.	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		○ Table 34: Merged content from previous table into. ○ 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 from the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide* into this document. • Replaced “Integration Agreement (IA)” with “Integration Control Registration (ICR)” throughout the document. • Added Table 10 in Section 3.2; added routines exported with the Broker Security Enhancement (BSE) software. • Table 29: Updated the **XUS SET VISITOR** RPC. • Figure 10 and Table 24: Kernel Patch XU*8.0*605: Added the IPV tool options (**XLFIPV***). • Table 3: Added the following parameters to the KERNEL SYSTEM PARAMETERS (#8989.3) File: ○ ORGANIZATION (#200.2) ○ ORGANIZATION ID (#200.3) ○ SECURITY TOKEN SERVICE (#200.1) • Table 4: Added the **XUEXISTING USER** parameter to the KERNEL PARAMETERS (#8989.2) File. • Table 5: Added the following parameters to the PARAMETER DEFINITION (#8989.51) File: ○ **XU522** ○ **XU594** ○ **XU645** • Table 9: Added the following routines:	

Date	Revision	Description	Author
		○ **XLFSHAN** ○ **XUCERT** ○ **XUCERT1** ○ **XUESSO1** ○ **XUESSO2** ○ **XUESSO3** ○ **XUESSO4** ○ **XUSAML** • Table 15: Added the REMOTE APPLICATION (#8994.5) file. • Table 24: Added the **RPC Broker Management Menu** [XWB MENU]. • Table 29: Changed the XUS GET USER INFO RPC 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 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.	

Date	Revision	Description	Author
		○ 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: • Table 15: Updated Person Class File #8932.1. 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**	VistA Infrastructure (VI)/VistA Kernel Development Team ManTech Mission Solutions & Services Group
05/31/2013	4.1	Updates: • Updates for Patch XU*8.0*614 based on feedback from developer: ○ "XUMAINT" section and menu tree diagram in Figure 9 and in Table 24: Added the **Single User Menu Tree Rebuild** [XQBUILDUSER] option. It was attached to the Menu Rebuild Menu [XQBUILDMAIN] option. ○ Table 24: Added the XQBUILDMAIN option. ○ Table 24: Added the XQ LIST UNREFERENCED OPTIONS option.	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		○ Table 5: Added the XQ MENUMANAGER PROMPT parameter. • 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. • Table 3: Added the IP SECURITY ON field parameter. • "Callable Entry Points" section: Reviewed and updated any missing APIs. • Added bookmarks (identifiers) to all tables for Section 508 conformance. **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: ○ Table 5: Added the new XUEPCS REPORT DEVICE parameter. ○ Table 9 in the "Routines" section: Added the following new **ePCS** routines: – **XUEPCSED** – **XUEPCSRT** ○ "Files" section in Table 15: Added the following new ePCS files:	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		– XUEPCS DATA (#8991.6) file – XUEPCS PSDRPH AUDIT (#8991.7) file ○ "Exported Options" section in Table 24: Added the new ePCS options. ○ "Callable Entry Points" section in Table 27: Added the following new and modified ePCS APIs: – $$DEA^XUSER – $$DETOX^XUSE – $$SDEA^XUSER – $$VDEA^XUSER ○ "Remote Procedure Calls (RPCs)" section in Table 29: Added the following new and modified RPCs: – XU EPCS EDIT – XUS PKI SET UPN – XUS PKI GET UPN – XWB GET VARIABLE VALUE ○ "Bulletins" section in Table 35: Added the XUSSPKI SAN bulletin. ○ "Security Keys" section in Table 36: Added the XUEPCSEDIT security key. • Reformatted document to follow current style guides and standards. • Replaced references from "*VA FileMan Getting Started Manual*" 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.	

Date	Revision	Description	Author
		• Added the "Remote Procedure Calls (RPCs)" section and Table 29. • Added the "Bulletins" section and Table 35. • 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. • Table 12 and Table 15: Patch XU*8.0*285 added the ALERT RECIPIENT TYPE (#8992.2) file. • Table 12 and Table 15: Patch XU*8.0*513 added the ALERT CRITICAL TEXT (#8992.3) file. • Merging *Toolkit Technical Manual* content into *Kernel 8.0 and 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 *Kernel 8.0 and Kernel Toolkit 7.3 Technical Manual*, all of the Kernel Toolkit references for routines, files, options, APIs, Direct Mode Utilities, etc. have been added to the appropriate chapter/section. • Table 24: Updated option descriptions. • Changed Kernel document title references.	

Date	Revision	Description	Author
		• *Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide* (previously known as the *Kernel Programmer Manual*). • *Kernel 8.0 and 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: • Table 19: Added the "XU USER START-UP" entry. • Table 24: Added the "XU USER START-UP" entry. • 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 *n* styles to use Arial font. • Changed all Heading *n* styles to be left justified. • Added blue font highlighting and 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: ○ Added table bookmarks.	

Date	Revision	Description	Author
		○ Added screen tips for all URL links. ○ Changed all floating callout boxes to in-line, causing reformatting of numerous dialogue screen captures. **Software Versions:** • **Kernel 8.0** • **Toolkit 7.3**	
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**	VistA Infrastructure (VI)/VistA Kernel Development Team
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 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	VistA Infrastructure (VI)/VistA Kernel Development Team

Date	Revision	Description	Author
		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 **Software Version: 8.0**	VistA Infrastructure (VI)/VistA Kernel Development Team

Patch Revisions

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

Table of Contents

Revision History ii
List of Figures xx
List of Tables xxi
Orientation xxiii
1 Introduction 1
1.1 Kernel 1
1.2 Kernel Toolkit 1
1.2.1 Multi-Term Look-Up (MTLU) 1
1.2.2 Duplicate Resolution Utilities 2
1.3 Purpose 2
2 Implementation and Maintenance 3
2.1 Installation 3
2.2 Namespace 3
2.3 Kernel Site Parameters 4
2.4 Kernel 8.0 Site Parameters File Changes 4
2.5 Kernel System Parameters (#8989.3) File 4
2.6 Kernel Parameters (#8989.2) File 10
2.7 Kernel Parameter Definitions (#8989.51) File 11
2.7.1 XPAREDIT Routine 15
2.8 Audit-Related Site Parameters 16
2.9 Spooler Site Parameters 17
2.10 TaskMan Site Parameters 18
2.11 Implementing Multi-Term Look-Up 18
2.12 Implementing Duplicate Resolution Utilities 21
2.12.1 Data Storage 21
2.12.2 Retention 21
2.12.3 Resource Requirements 21
2.12.4 Programmer Notes 21
2.12.5 Merge Process 22
2.13 Configuring VAX/Alpha Performance Monitor (VPM) 23
3 Routines 25
3.1 Manager Account Routines 25
3.2 Production Account Routines 28
3.3 Additional Routines Installed by Virgin Install 65
3.4 Mapping Routines 65

4 Files....66
4.1 Globals....67
4.1.1 Globals—VA-FileMan-Compatible Storage....67
4.1.2 Globals—Non-VA-FileMan-Compatible Storage....70
4.1.3 Globals—Storage Used for Additional Files during Virgin Install....70
4.2 Files....71
4.2.1 Kernel and Kernel Toolkit Export Files....71
4.2.2 Additional Files Installed During Virgin Installation....102
4.3 Fields....103
4.3.1 PERSON CLASS (#8932.1) File....103
5 Exported Options....107
5.1 Menu Tree Roots....107
5.2 Menu Tree Diagrams....107
5.2.1 Generating Menu Diagrams....108
5.2.2 Systems Manager Menu [EVE]....111
5.2.3 XUCORE....111
5.2.4 XUTIO....112
5.2.5 XUMAINT....114
5.2.6 XUSITEMGR....119
5.2.7 XUPROG....124
5.2.8 XU-SPL-MGR....134
5.2.9 XUSPY....135
5.2.10 XUTM MGR....142
5.2.11 XUSER....145
5.2.12 Parent of Queuable Options [ZTMQUEUABLE OPTIONS]....150
5.2.13 SYSTEM COMMAND OPTIONS [XUCOMMAND]....151
5.2.14 Extended-Action Options....156
5.2.15 Protocols....156
5.2.16 Server Options....157
5.2.17 Options Attached to Menus for Other Software....158
5.2.18 DEA ePCS Utility....159
5.3 Options—Listed Alphabetically by Name....164
5.3.1 Kernel....165
5.3.2 Toolkit....312
6 Archiving and Purging....327
6.1 Archiving....327
6.2 Purging....327

7 Callable Entry Points 330
8 Direct Mode Utilities 349
9 Remote Procedure Calls (RPCs) 352
10 External Relations 364
10.1 External Relations with Other VistA Software 364
10.2 External Relations with M Operating Systems 364
10.3 Required Software 365
10.4 DBA Approvals and Integration Control Registration (ICRs) 365
10.4.1 ICRs—Current List for Kernel or Kernel Toolkit as Custodian 366
10.4.2 ICRs—Detailed Information 366
10.4.3 ICRs—Current List for Kernel or Kernel Toolkit as Subscriber 366
11 Internal Relations 368
11.1 Independence of Options 368
12 Software-Wide Variables 369
13 SACC Exemptions 371
14 Global Protection, Translation, and Journaling 374
14.1 Globals in Production Account 374
15 Security 377
15.1 Security Management 377
15.2 Mail Groups, Alerts, and Bulletins 377
15.2.1 Mail Groups 377
15.2.2 Alerts 377
15.2.3 Bulletins 378
15.3 Remote Systems 388
15.4 Interfaces 388
15.5 Electronic Signatures 389
15.5.1 Electronic Signature Restrictions 389
15.6 Security Keys 390
15.7 File Security 393
15.8 Contingency Planning 396
15.9 Official Policies 396
Glossary 397
Index 403

List of Figures

Figure 1: Parameters—Enter/Edit Kernel Site Parameters Menu Option 4
Figure 2: Parameters—XPAREDIT Routine: Editing Parameters in the PARAMETER DEFINITION (#8989.51) File 15
Figure 3: Parameters—Audit-Related Menu Options 16
Figure 4: Spooler Site Parameters Edit Menu Option 17
Figure 5: Multi-Term Look-Up—Sample System Prompts and User Entries: Entering a Cross-Reference on a Field in a File 20
Figure 6: Menus—Generating Menu Diagrams: Sample from OAKTST “Gold” Account 109
Figure 7: XUCORE—Menu Tree Diagram: Sample from OAKTST “Gold” Account 111
Figure 8: XUTIO—Menu Tree Diagram: Sample from OAKTST “Gold” Account 112
Figure 9: XUMAINT—Menu Tree Diagram: Sample from OAKTST “Gold” Account ... 114
Figure 10: XUSITEMGR—Menu Tree Diagram: Sample from OAKTST “Gold” Account 119
Figure 11: XUPROG—Menu Tree Diagram: Sample from OAKTST “Gold” Account .. 124
Figure 12: XU-SPL-MGR—Menu Tree Diagram: Sample from OAKTST “Gold” Account 134
Figure 13: XUSPY—Menu Tree Diagram: Sample from OAKTST “Gold” Account 135
Figure 14: XUTM MGR—Menu Tree Diagram: Sample from OAKTST “Gold” Account 142
Figure 15: XUSER—Menu Tree Diagram: Sample from OAKTST “Gold” Account 145
Figure 16: ZTMQUEUABLE OPTIONS—Menu Tree Diagram: Sample from OAKTST “Gold” Account..... 150
Figure 17: XUCOMMAND—Menu Tree Diagram: Sample from OAKTST “Gold” Account 151
Figure 18: Security Keys—Obtaining Security Key Information for Kernel 390
Figure 19: File Security—Sample User Dialogue to Obtain File Security 394
Figure 20: File Security—Recommended Kernel File Security Access 395

List of Tables

Table 1: Documentation Symbol Descriptions xxiv
Table 2: Parameters—Kernel Site Parameter Files 4
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) 10
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
Table 7: Parameters—Spooler-Related Parameters from the KERNEL SYSTEM PARAMETERS (#8989.3) File (Listed Alphabetically by Field Name) 18
Table 8: Routines—Manager Account Routines 25
Table 9: Routines—Kernel and Toolkit Production Account Routines 28
Table 10: Routines—Kernel and Toolkit Production Account Routines Released with Broker Security Enhancement (BSE) 65
Table 11: Routines—Virgin Installs 65
Table 12: Globals—VA FileMan-Compatible Storage 67
Table 13: Globals—*Not* VA FileMan-Compatible Storage 70
Table 14: Globals—Storage Used for Additional Files during Virgin Installation 70
Table 15: Files—Distributed with Kernel and Kernel Toolkit 71
Table 16: Files—Kernel Virgin Installation Files 102
Table 17: Field List—PERSON CLASS (#8932.1) File (Kernel Patch XU*8.0*27) 103
Table 18: Field List—Assigning Person Class to Providers Software (i.e., Kernel Patches XU*8.0*27, 377, and 531) 106
Table 19: Protocols—Extended-Action Options 156
Table 20: Protocols—Lock Manager Utility 156
Table 21: Options—Server Options 157
Table 22: Options—Attached to Menus for Other Software 158
Table 23: Options—DEA ePCS Utility 159
Table 24: Options—Exported Kernel Options 165
Table 25: Options—Exported Toolkit Options 312
Table 26: Options—Kernel Purging Options 327
Table 27: Kernel and Kernel Toolkit APIs (Callable Entry Points)—Supported and Controlled Subscription 330
Table 28: Direct Mode Utilities 349
Table 29: Remote Procedure Calls (RPCs)—Kernel and Kernel Toolkit 352
Table 30: Software-Wide Variables—Defined at All Times (listed alphabetically) 369
Table 31: Variables—Defined While a User is in the Menu System 370

Table 32: Variables—Defined While a User is in the Menu System with Alpha-Beta Tracking 370
Table 33: SAC Exemptions 371
Table 34: Globals in Production Account—Protection, Translation and Journaling Information 374
Table 35: Bulletins—Kernel and Kernel Toolkit 378
Table 36: Security Keys—Kernel and Kernel Toolkit 391
Table 37: Glossary of Terms and Acronyms 397

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.
- Software Product Management (SPM)—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 and Technology Field Office (OITFO).

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. Table 1 gives a description of each of these symbols:

Table 1: Documentation Symbol Descriptions

Symbol	Description
	NOTE/REF: Used to inform the reader of general information including references to additional reading material.
	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:
  - The first three digits (prefix) of any Social Security Numbers (SSN) will begin with either "**000**" or "**666**".
  - 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., **<Enter>**).
  - 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>**.
  - 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:
  - 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 and Kernel Toolkit 7.3 Systems Management Guide*
- *Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*
- *Kernel 8.0 and 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: Adobe Website

VistA documentation can be downloaded from the VA Software Document Library (VDL) Website: VDL Website

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 site's LOCAL 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 "Mapping Routines" and "Global Protection, 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: VDL Kernel Application Documents

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 *not* 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 *must* 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 defines a default institution that will be assigned to the user's institution [**DUZ(2)**] for any user that does *not* 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 *must* 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 *not* 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 specifies 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 locks 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 *must* choose a new Verify code.
LOG RESOURCE USAGE? (#300)	This **YES/NO** field indicates 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. *Recommended* 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 *not* allowed to spool any more until some of their spooled documents are deleted. This only controls the granting of new spool documents and does *not* 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 (*not* 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 (#9.8)	This field supports routine auditing. It controls how the routine 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: **<REDACTED>.va.gov**

Field	Description
SIGN-ON LOG RETENTION (#221)	This parameter determines the number of entries (number of days) to retain data in the Kernel SIGN-ON LOG (#3.081) file (sign-on log). Larger values will consume more disk space; so, sites should evaluate the impact on data storage *before* changing the default value of **365 days**. **REF:** This parameter was added with Kernel Patch XU*8.0*756.
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).
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.

Table 4 lists the active parameters that Kernel currently stores in the KERNEL PARAMETERS (#8989.2) file 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.

Parameters	Description
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.

Parameters	Description
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
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.

Parameters	Description
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 SYSTEM>**" • " **<CONTINGENCY>**" • " **<READ ONLY>**" • Or any other value from **3** to **20** characters, depending on the purpose of the non-production VistA system. **NOTE:** This parameter was released with Kernel Patch XU*8.0*614.
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
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.

Parameters	Description
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 *not* 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.
XUEPCS REPORT DEVICE	e-Prescribing of Controlled Substances (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.

Parameters	Description
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 specifies 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).

Parameters (Fields)	Description
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).
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

```
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 *not* allowed to spool any more until some of their spooled documents are deleted. This only controls the granting of new spool documents and does *not* terminate the number of lines that are transferred into the spool data file. Valid values range from **1** to **9999999**; *recommended* 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. *Recommended* 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 and 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:
  - LOCAL KEYWORD (#8984.1)
  - LOCAL SHORTCUT (#8984.2)

- 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>
(NO)
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> cities for MTLU

   KL     Delete Entries From Look-up
   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
DD
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:

- Data Storage
- 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:
     - 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.
     - 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 **XUCM TASK NIT** option 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

Table 8 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.
%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?

Routine	Description
%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.
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.

Routine	Description
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** If **5** to **10** merged first, **1** to **10** • **5** to **10** then other entries would **5** to **10** • **5** to **20** be adjusted as follows: **10** to **20** Or, if both **1** to **5** and **1** to **10** existed at the time of the merge, the **1** to **5** entry would be deleted. The STATUS (#.03) field is re-indexed because it sets cross-references based on the values in the **.01** and **.02** fields. Triggers are *not* fired for the **.01**, **.02**, or **.03** fields. Entries previously resolved are ignored. Called by: Cross-reference on MERGE STATUS field of DUPLICATE RECORD (#15) file entry. Calls: **EN^XDRDUP**, **DIK**
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.

Routine	Description
XDRDEDT	TBD.
XDRDEFLG	TBD.
XDRDFPD	Find all potential duplicates for an entry in a file.
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 *not* 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**

Routine	Description
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**
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.

Routine	Description
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. • **10—**The routine defined as the post-merge routine is not present. • **11—**The routine defined as the verified 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.
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**

Routine	Description
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^DIT0**, **DITM2**, **EN^DITMGMRG**, **LOCK^XDRU1**
XDRMRG1	This routine is the error trap for **XDRMRG**. Calls: **%ET**, **DIE**
XDRMSG	This routine is responsible for the sending of the verified and merged messages. Called by: **XDRMAIN** Calls: **XMB**

Routine	Description
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.
XGKB1	Read with escape processing (continued).
XGS	Screen primitives.
XGSA	Screen attribute primitives.
XGSBOX	Screen rectangular region primitives.

Routine	Description
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.
XLFCRC	TBD.
XLFDT	Date/Time functions.
XLFDT1	Date/Time functions (continued).
XLFDT2	Date/Time functions: Schedule.

Routine	Description
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.
XPAR1	TBD.
XPAR2	TBD.
XPAR3	TBD.
XPARDD	TBD.

Routine	Description
XPARDD1	TBD.
XPARDD2	TBD.
XPARDDAC	TBD.
XPAREDIT	TBD.
XPAREDT1	TBD.
XPAREDT2	TBD.
XPAREDT3	TBD.
XPARLIST	TBD.
XPARTPV	TBD.
XPARTPV1	TBD.
XPARY26	TBD.
XPARZUTL	TBD.
XPDANLYZ1	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
XPDANLYZ2	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
XPDANLYZ3	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
XPDANLYZ4	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
XPDANLYZ5	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
XPDANLYZ6	VistA Build Analyzer Utility. Released with Kernel Patch XU*8.0*782.
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.

Routine	Description
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 *not* required.
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.

Routine	Description
XPDIN00B	KIDS: Init routine.
XPDIN00C	KIDS: Init routine.
XPDIN00D	KIDS: Init routine.
XPDIN00E	KIDS: Init routine.
XPDIN00F	KIDS: Init routine.
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.

Routine	Description
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.
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.

Routine	Description
XW55SPEC	TBD.
XQ6	MenuMan: Bulk key distribution.
XQ61	MenuMan: Bulk editorship assignment.
XQ62	MenuMan: Generalized file lookup utility.
XQ6A	MenuMan: Bulk key distribution (continued).
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 OITFO.
XQABLIST	Alpha/Beta: List usage of options in alpha/beta test.

Routine	Description
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.
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.

Routine	Description
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.
XQOO	MenuMan: Out-of-Order, man.
XQOO1	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.

Routine	Description
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.
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].

Routine	Description
XQUTL	TBD.
XT73P113	TBD.
XT73P129	TBD.
XT73P132	TBD.
XT73P133	TBD.
XT73P136	TBD.
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.

Routine	Description
XTERPUR	Error Processing: Delete entries from Error Trap.
XTERSUM	TBD.
XTERSUM1	TBD.
XTERSUM3	TBD.
XTERSUM4	TBD.
XTFC1	TBD.
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.

Routine	Description
XTMUNIT	TBD.
XTPMKPCF	TBD.
XTPMKPP	TBD.
XTPMKPTC	TBD.
XTPMNEX7	TBD.
XTPMSTA2	TBD.
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.

Routine	Description
XU8P246	TBD.
XU8P260	TBD.
XU8P264	TBD.
XU8P264A	TBD.
XU8P292	TBD.
XU8P295	TBD.
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.

Routine	Description
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.
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.

Routine	Description
XU8P466	TBD.
XU8P467	TBD.
XU8P467A	TBD.
XU8P469	TBD.
XU8P480	TBD.
XU8P481	TBD.
XU8P483	TBD.
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.

Routine	Description
XU8P546	TBD.
XU8P560	TBD.
XU8P571	TBD.
XU8P572	TBD.
XU8P580	TBD.
XU8P581	TBD.
XU8P582	TBD.
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	Kernel Patch XU*8.0*672 environment check routine.
XU8P689	Post install routine for Kernel Patch XU*8.0*689.
XU8PATCH661POST	TBD.
XU8PE689	Environment check routine for Kernel Patch XU*8.0*689.
XU8PS629	TBD.
XUA4A7	Give entries into **F6** a Provider key.
XUA4A71	Better Soundex. Extrinsic function call with string, returns converted string.

Routine	Description
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 and 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).
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.

Routine	Description
XUCS1RB	TBD.
XUCS2E	TBD.
XUCS2R	TBD.
XUCS2RB	TBD.
XUCS4E	TBD.
XUCS4R	TBD.
XUCS4RB	TBD.
XUCS6R	TBD.
XUCS8E	TBD.
XUCS8R	TBD.
XUCS8RB	TBD.
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).

Routine	Description
XUEPCSRT	ePCS Utilities and Reports (Released with XU*8.0*580).
XUEPCSU1	Routine supporting the manual entry of DEA information into the DEA Numbers (#8991.9) file. Released with Kernel Patch XU*8.0*689.
XUEPCSUT	Routine supporting the manual entry of DEA information into the DEA Numbers (#8991.9) file. Released with Kernel Patch XU*8.0*689.
XUEPCSVR	Routine supporting the ePCS Graphical User Interface (GUI) version check. Released with Kernel Patch XU*8.0*689.
XUESSO1	Single Sign-On Utilities.
XUESSO2	Enhanced Single Sign-On Utilities. This utility identifies a VistA user for auditing and Health Insurance Portability and Accountability Act (HIPAA) requirements.
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.
XUGOT	TBD.
XUGOT1	TBD.
XUHUI	TBD.
XUHUI236	TBD.
XUHUIHL7	TBD.
XUHUIMSG	TBD.
XUIAMPRU	This routine was initially created/deployed but is no longer needed. Since it exists in some of the patch SQA/PRE-PROD Test accounts, it should be deleted at those sites.
XUIAMXML	IAM Enterprise NEW PERSON probabilistic search.
XUINCON	Builds accessible file multiple.
XUINEACH	Code that needs to be run on each CPU.
XUINEND	Post Install for Kernel 8.0.
XUINENV	TBD.

Routine	Description
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.
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.

Routine	Description
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.
XUMF5AT	TBD.
XUMF5AU	TBD.
XUMF5BYT	TBD.
XUMF5I	TBD.
XUMF5II	TBD.
XUMF654	TBD.
XUMF654P	TBD.
XUMFEIMF	TBD.
XUMFENV	TBD.
XUMFH	TBD.

Routine	Description
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.
XUMFX	TBD.
XUMFXACK	TBD.
XUMFXH	TBD.
XUMFXHL7	TBD.
XUMFXI	TBD.
XUMFXP	TBD.
XUMFXP1	TBD.
XUMFXP2	TBD.
XUMFXR	TBD.
XUMPI	TBD.

Routine	Description
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.
XUMVINPU	TBD.
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.
XUPSGS	TBD.
XUPSHL7B	TBD.
XUPSNAME	TBD.
XUPSNM1	TBD.
XUPSORG	TBD.
XUPSPAID	TBD.
XUPSPD1	TBD.
XUPSPRA	Build PRA segment
XUPSQRY	TBD.

Routine	Description
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.
XUSAML	Kernel SAML Token Implementation.
XUSAP	TBD.
XUSAP1	TBD.
XUSBSE1	TBD.
XUSBSE2	TBD.
XUSC1	TBD.
XUSC1C	TBD.
XUSC1S	TBD.
XUSC1S1	TBD.

Routine	Description
XUSCLEAN	Cleanup before exit.
XUSCNT	TBD.
XUSECAD	TBD.
XUSECBUL	TBD.
XUSER	A common set of user functions.
XUSER1	TBD.
XUSER2	A common set of user functions.
XUSER3	A common set of user functions.
XUSERBLK	Bulk user (NEW PERSON) computer access.
XUSEREDT	This routine was initially created/deployed but is no longer needed. Since it exists in some of the patch SQA/PRE-PROD Test accounts, it should be deleted at those sites.
XUSERNEW	Runs the **Add a New User to the System** [XUSERNEW] option.
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 *cannot* edit the following Electronic Signature fields in the NEW PERSON (#200) file: • DEGREE (#10.6) • SIGNATURE BLOCK PRINTED NAME (#20.2) • SIGNATURE BLOCK TITLE (#20.3)
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).
XUSHSH	Password encryption.
XUSHSHP	Hashing routine for sig block in NEW PERSON (#200) file.
XUSKAAJ	TBD.
XUSKAAJ1	TBD.
XUSMGR	Security utilities.

Routine	Description
XUSNPI	TBD.
XUSNPI1	TBD.
XUSNPIDA	TBD.
XUSNPIE1	TBD.
XUSNPIE2	TBD.
XUSNPIE3	TBD.
XUSNPIED	TBD.
XUSNPIUT	TBD.
XUSNPIX1	NPI extract report.
XUSNPIX2	TBD.
XUSNPIX3	TBD.
XUSNPIX4	TBD.
XUSNPIX5	TBD.
XUSNPIXI	TBD.
XUSNPIXU	TBD.
XUSP557	TBD.
XUSPURGE	Purge routine for **XUSEC**. Kernel Patch XU*8.0*756 enhanced the **SCPURG^XUSPURGE** routine. It updated the **Purge Sign-on Log** [XUSCZONK] option so that it protects sign-on log entries for at least the number of days specified by the ISO or the default **365 days** as defined in the **SIGN-ON LOG RETENTION (#221)** parameter field in the KERNEL SYSTEM PARAMETERS (#8989.3) file.
XUSRA	Remote access control.
XUSRB	TBD.
XUSRB1	TBD.
XUSRB2	TBD.
XUSRB4	TBD.
XUSRB5	TBD.
XUSSPKI	TBD.
XUST	TBD.
XUST01	TBD.
XUST02	TBD.
XUST04	TBD.

Routine	Description
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.
XUTMD	TaskMan: Option: **XUTMDEL**: Part **1**: Single.
XUTMD1	TaskMan: Option: **XUTMDEL**: Part **2**: Bulk Delete.

Routine	Description
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.
XUTMRJD	TBD.
XUTMRJD1	TBD.

Routine	Description
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.
XUTMTZ2	TBD.
XUTMTZ3	TBD.

Routine	Description
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 BSE (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

Table 11 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 Table 15.

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 Table 12, 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

Global Name	File Number	File Name
^XT (Toolkit)	8984.1	LOCAL KEYWORD
	8984.2	LOCAL SHORTCUT
	8984.3	LOCAL SYNONYM
	8984.4	LOCAL LOOKUP
^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
	8991.6	XUEPCS DATA FILE
	8991.7	XUEPCS PSDRPH AUDIT FILE
	8991.8	DEA BUSINESS ACTIVITY CODES
	8991.9	DEA NUMBERS
	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

Global Name	File Number	File Name
	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
^%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 globals listed in Table 13:

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

Table 14 lists the additional global storage 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

Table 15 lists the files exported with Kernel and Kernel Toolkit:

NOTE: In Table 15, 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 *not* match existing codes. This file is *not* cross-referenced.	NO	N/A
3.07	PROGRAMMER 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 *not* cross-referenced.	NO	N/A
3.075	ERROR LOG	^%ZTER(1,	This file maintains 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

File #	File Name	Global Location	Description	Data w/ File	Data Setting
3.076	ERROR MESSAGES	^%ZTER(2,	This file contains a number 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.	YES	Merge
3.077	ERROR TRAP SUMMARY	^%ZTER(3.077,	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	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			no records most of the time.		
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 *not* 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 pre-existing Kernel. The data in this file is cross-	YES	Over-write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			referenced by name and synonym.		
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 associates 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 **$ZIO** on VAX DSM. To establish an association with a Device and Terminal Type, the DEVICE and SUBTYPE fields of this file *must* store the appropriate values that correspond to entries in the DEVICE (#3.5) and TERMINAL TYPE (#3.2) files. This file is cross-referenced by name and device.	NO	N/A
3.5	DEVICE	^%ZIS(1,	This file defines all input/output devices that can be accessed from this CPU (definitions are *not* account-specific). Each device is identified with a unique name. Each is associated with a **$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	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			system status. This file is cross-referenced by name, **$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-	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			referenced by name and job number.		
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 PARAMETERS	^DIC(4.001,	The file holds parameters related to the Master File Server (MFS).	YES	Over-write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			The parameters map HL7 segment data to standard FileMan data files. 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!**		
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 TERMINOLOGY 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	

File #	File Name	Global Location	Description	Data w/ File	Data Setting
4.05	INSTITUTION ASSOCIATION TYPES	^DIC(4.05,	This file links entries in the INSTITUTION (#4) file into associations that are meaningful.	YES	Merge
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	YES	Replace

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			to allow non-US Postal Codes to be added in the future if desired. **CAUTION: Do *not* point directly to this file until you get an Integration Control Registration (ICR).**		
5.13	COUNTY CODE	^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.		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
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 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.	NO	N/A
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	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			System (KIDS). This file should *not* be edited. All information is updated when new software is installed at a site.		
9.8	ROUTINE	^DIC(9.8,	This file documents 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 *not* 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	

File #	File Name	Global Location	Description	Data w/ File	Data Setting
13	RELIGION	^DIC(13,	This file currently contains **84** entries. These entries are determined by VACO 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.	YES	
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	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			can be determined by using the cross-reference in the UCI Association Table file.		
14.6	UCI ASSOCIATION	^%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 PARAMETERS	^%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 *must* wait.	NO	N/A
15 (Toolkit)	DUPLICATE RECORD	^VA(15,	This file is designed to analyze and resolve	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			duplicate record problems from various data files (e.g., PATIENT [#2] file). 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 RESOLUTION	^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 records 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 *not* 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		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			values that were changed during the merge process.		
19	OPTION	^DIC(19,	Information in this file drives 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 *not* inadvertently	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			wasted. This file is cross-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 SCHEDULING	^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 COMPONENTS	^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)	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			• MIDDLE NAME (#3) • 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 *not* considered part of a standard name but can be used to build formatted names for display.		
40.5	HOLIDAY	^HOLIDAY(	This file records institutional holidays. It is referenced by the **XUWORKDY** routine and is *not* 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

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			NOTE: RAI/MDS = Resident Assessment 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 *not* 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 *must* check with the Kernel developers to see that a given number/namespace is available for use.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
201	USER CLASS	^VA(201,	This file is used for identifying the kinds of all other entries in the NEW PERSON (#200) file that are *not* providers identified with PERSON CLASS.	YES	Over-write
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	YES	Over-write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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).		
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(8980.2,	This file stores the Public Key Infrastructure (PKI) digital signatures.	NO	N/A
8980.22	PKI CRL URLS	^XUSSPKI(8980.22,	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	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			database of Certificate Revocation's up to date.		
8984.1 (Toolkit)	LOCAL KEYWORD	^XT(8984.1,	The lookup entry (or code) can be associated with multiple key words or key 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.	NO	N/A
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

File #	File Name	Global Location	Description	Data w/ File	Data Setting
8984.4 (Toolkit)	LOCAL LOOKUP	^XT(8984.4,	This file defines other files that have been configured for Multi-term lookups, along with the name of the file's MTLU cross-reference.	NO	N/A
8989.2	KERNEL PARAMETERS	^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 PARAMETERS	^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 *not* 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 *must* be namespaced.	YES	Replace

File #	File Name	Global Location	Description	Data w/ File	Data Setting
8991 (Toolkit)	XTV ROUTINE CHANGES	^XTV(8991,	This file records the most current version of a routine, and information about changes that have occurred in that routine in prior versions. Routines 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.	NO	N/A
8991.19 (Toolkit)	XTV VERIFICATION PACKAGE	^XTV(8991.19,	This file indicates 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 determines 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

File #	File Name	Global Location	Description	Data w/ File	Data Setting
8991.5	XQAB ERRORS LOGGED	^XTV(8991.5,	This file maintains 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-related fields that have been modified.	NO	N/A
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 de-allocated the PSDRPH security key.	NO	N/A
8991.8	DEA BUSINESS ACTIVITY CODES	^XTV(8991.8,	This file is associated with the DEA numbers and provider information in the DEA NUMBERS (#8991.9) file. This file links a provider with the type of service provided. It contains BUSINESS ACTIVITY CODES that are supplied by the DOJ/DEA web service.	YES	Over-write
8991.9	DEA NUMBERS	^XTV(8991.9,	This file is designed to contain demographic and permission information about a provider related to the ability to order controlled substance prescriptions.	NO	
8992	ALERT	^XTV(8992,	This file keeps 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 field under each user records the: • Date and time an alert was generated.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			• Unique ID associated with the alert. • Text for display. • (Optional) Routine entry point or option for use in processing the alert. • (Optional) Data string associated with the alert.		
8992.1	ALERT TRACKING	^XTV(8992.1,	This file tracks 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 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,	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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** • **NON** **NOTE:** This file was added with Kernel Patch XU*8.0*513. Using this file means that 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	YES	Over-write

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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 text as Critical. Careful analysis is necessary to confirm changes do *not* cause malfunction of any VistA alerts. When creating a 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**		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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 Manager uses it to provide information and guidance to the user about locks found in the lock table.	YES	Over-write
8993.1	XULM LOCK MANAGER PARAMETERS	^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	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			the locks that the process held.		
8994	REMOTE PROCEDURE	^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 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.	NO	N/A

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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 APPLICATION	^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 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-		

File #	File Name	Global Location	Description	Data w/ File	Data Setting
			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 additional files listed in Table 16:

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 names 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	Overwrite
7	PROVIDER CLASS	^DIC(7,	This file identifies 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	Overwrite

File #	File Name	Global Location	Description	Data w/ File	Data Setting
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 *not* distributed by the MAS developers may have a negative impact on the performance of the MAS module as well as other modules.	YES	Overwrite
13	RELIGION	^DIC(13,	This file currently contains **30** entries. These entries are determined by VACO 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.	YES	Overwrite

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 fields in Table 17:

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: NUCC Website
.011	PROVIDER TYPE CODE	This is Level I, Provider Type—**2**-byte alphanumeric, consisting of the **1st** and **2nd**

Field #	Field Name	Description
		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 *must* be from **3** to **65** characters in length.
1.1	CLASSIFICATION CODE	This is Level II, Classification Code—**2**-byte alphanumeric consisting of the **3rd** and **4th** 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 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 *must* be from **2** to **75** characters in length.
2.1	AREA OF SPECIALIZATION CODE	This is Level III, Area of Specialization—**5**-byte alphanumeric consisting of the **5th** through **9th** characters of the **X12 CODE**, which is a code 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 *without* 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

Field #	Field Name	Description
		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, 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 *not* explicitly indicate whether an entry is for an

1 Excerpt taken from the "X12N" topic on the University of Miami; Miller School of Medicine website: University of Miami School of Medicine Glossary Website, last modified May 11, 2005 (RC)

Field #	Field Name	Description
		Individual or for a Non-Individual, either in value or structure definition.

The field in Table 18 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. • 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:
  - **Core Applications** [XUCORE]
  - **Device Management** [XUTIO]
  - **Menu Management** [XUMAINT]
  - **Operations Management** [XUSITEMGR]
  - **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.

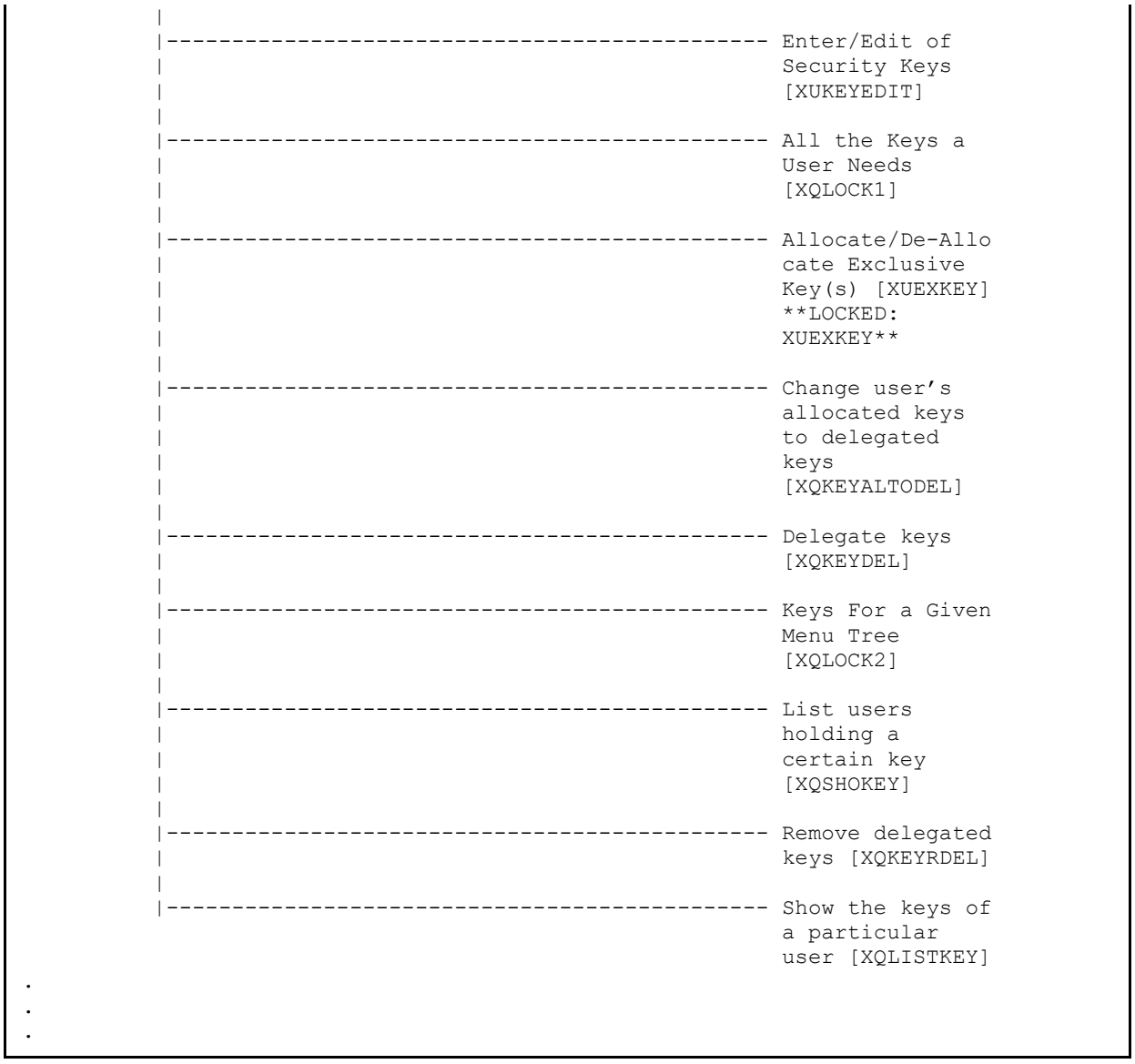
5.2.1 Generating Menu Diagrams

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 ...
   FM     VA FileMan ...
          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 ...
   OPED   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]
```


|
|---------- Enter/Edit of Security Keys [XUKEYEDIT]
|
|---------- All the Keys a User Needs [XQLOCK1]
|
|---------- Allocate/De-Allocate 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]

.
.
.

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]

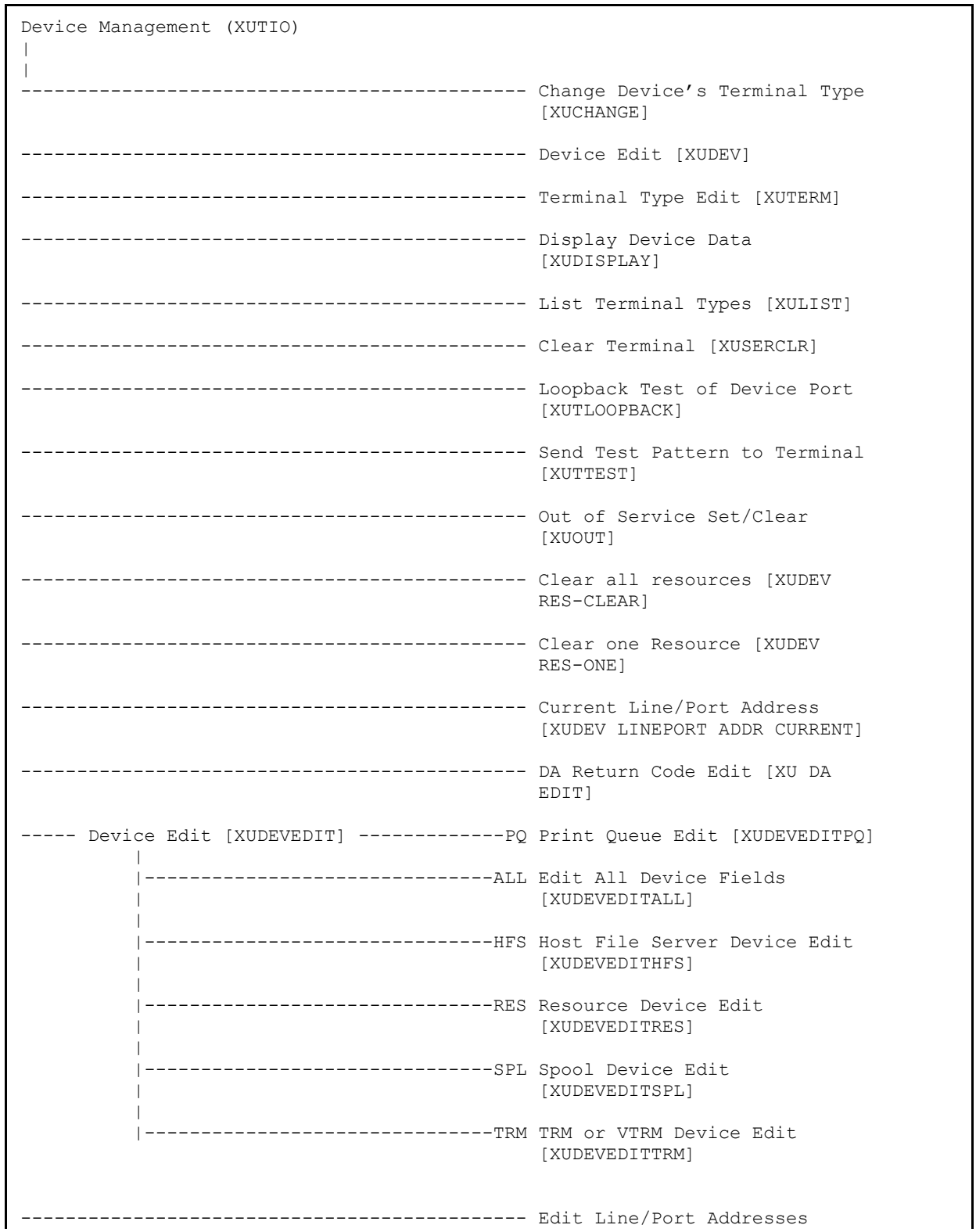
REF: Each of these menu trees is listed individually in the sections that follow.

5.2.3 XUCORE

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

5.2.4 XUTIO

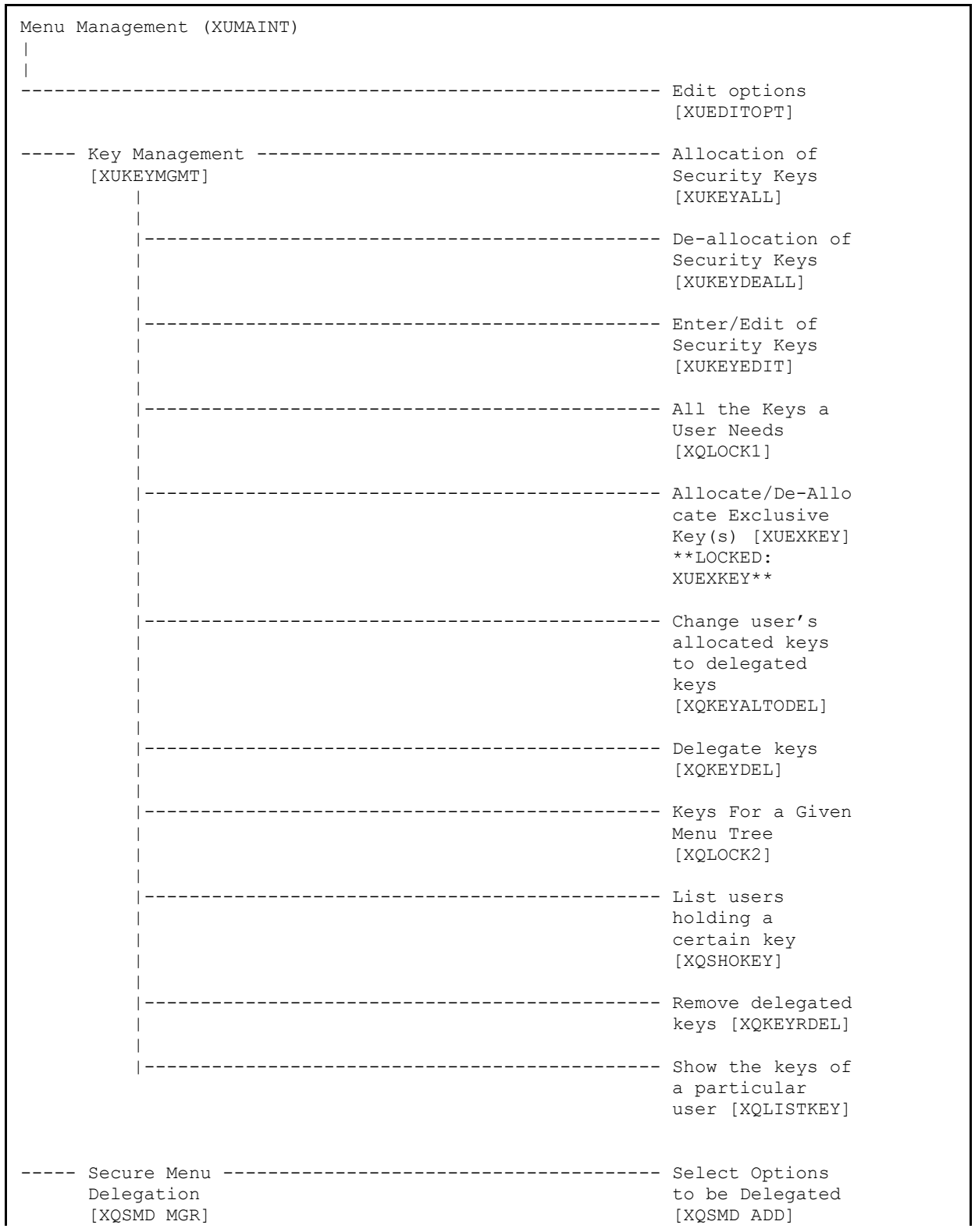
Figure 8: XUTIO—Menu Tree Diagram: Sample from OAKTST "Gold" Account

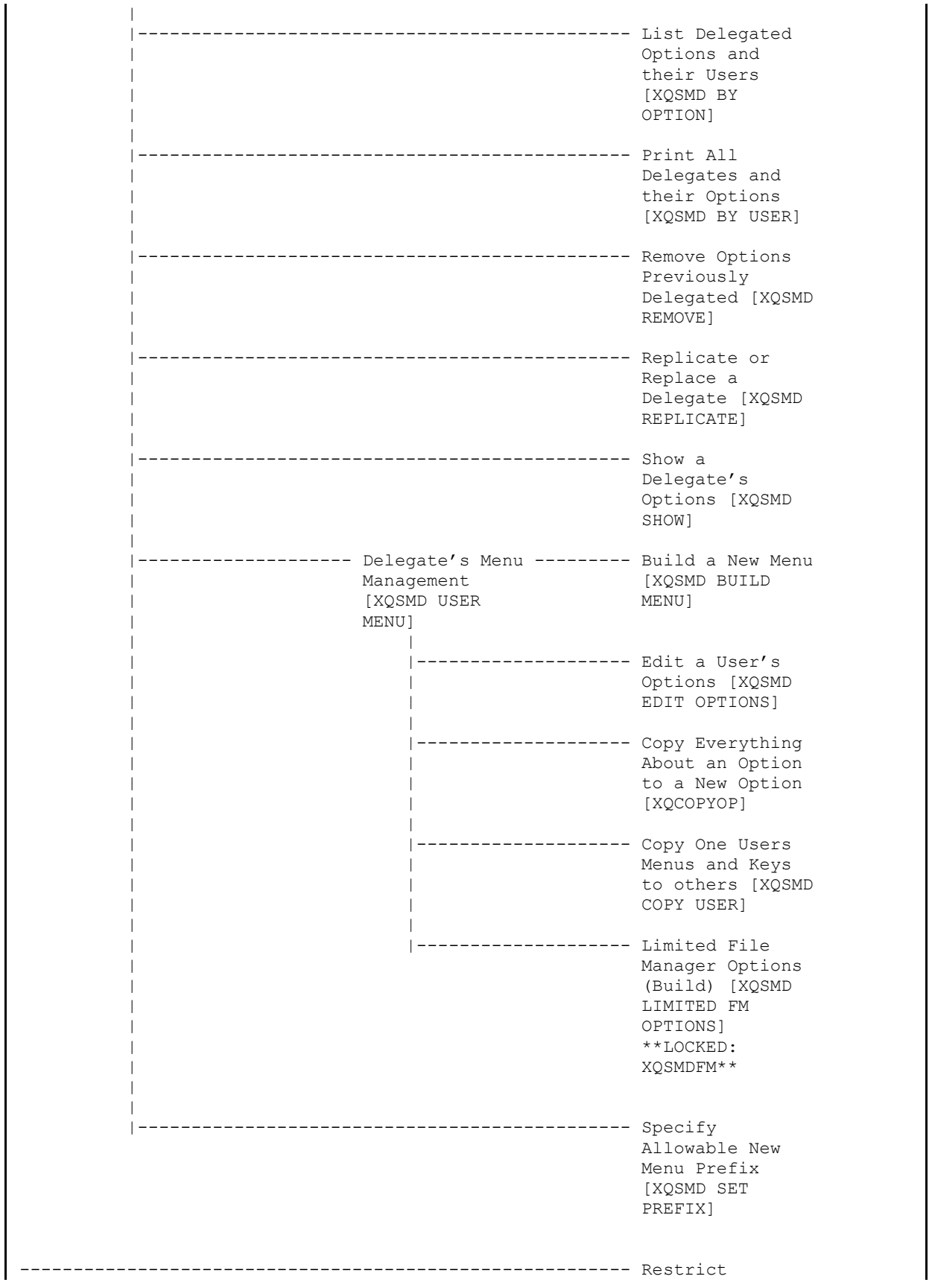


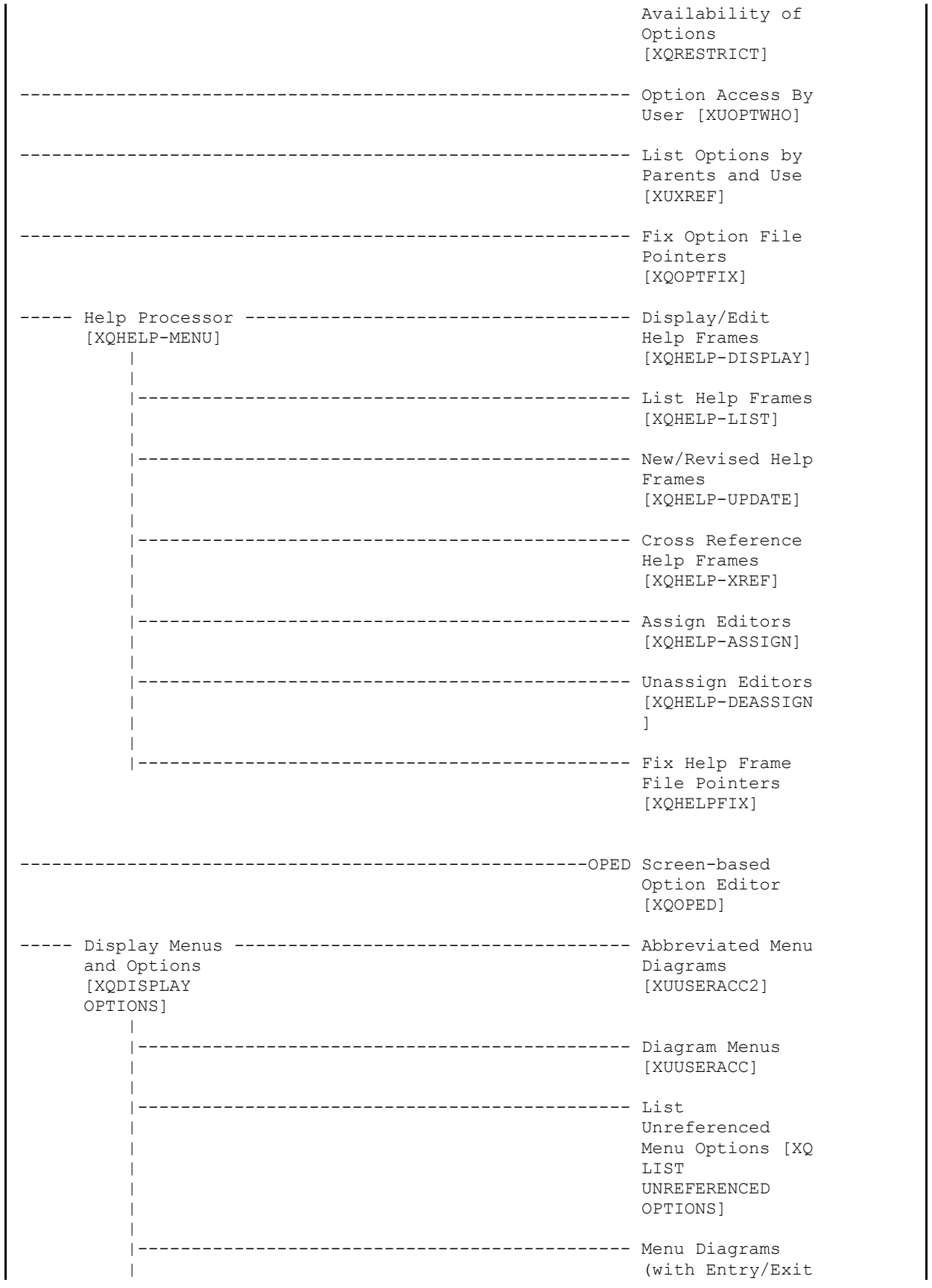
```
                                                [XUDEV LINEPORT ADDR EDIT]

------------------------------------------- Line/Port Address report
                                                [XUDEV LINEPORT ADDR RPT]
```

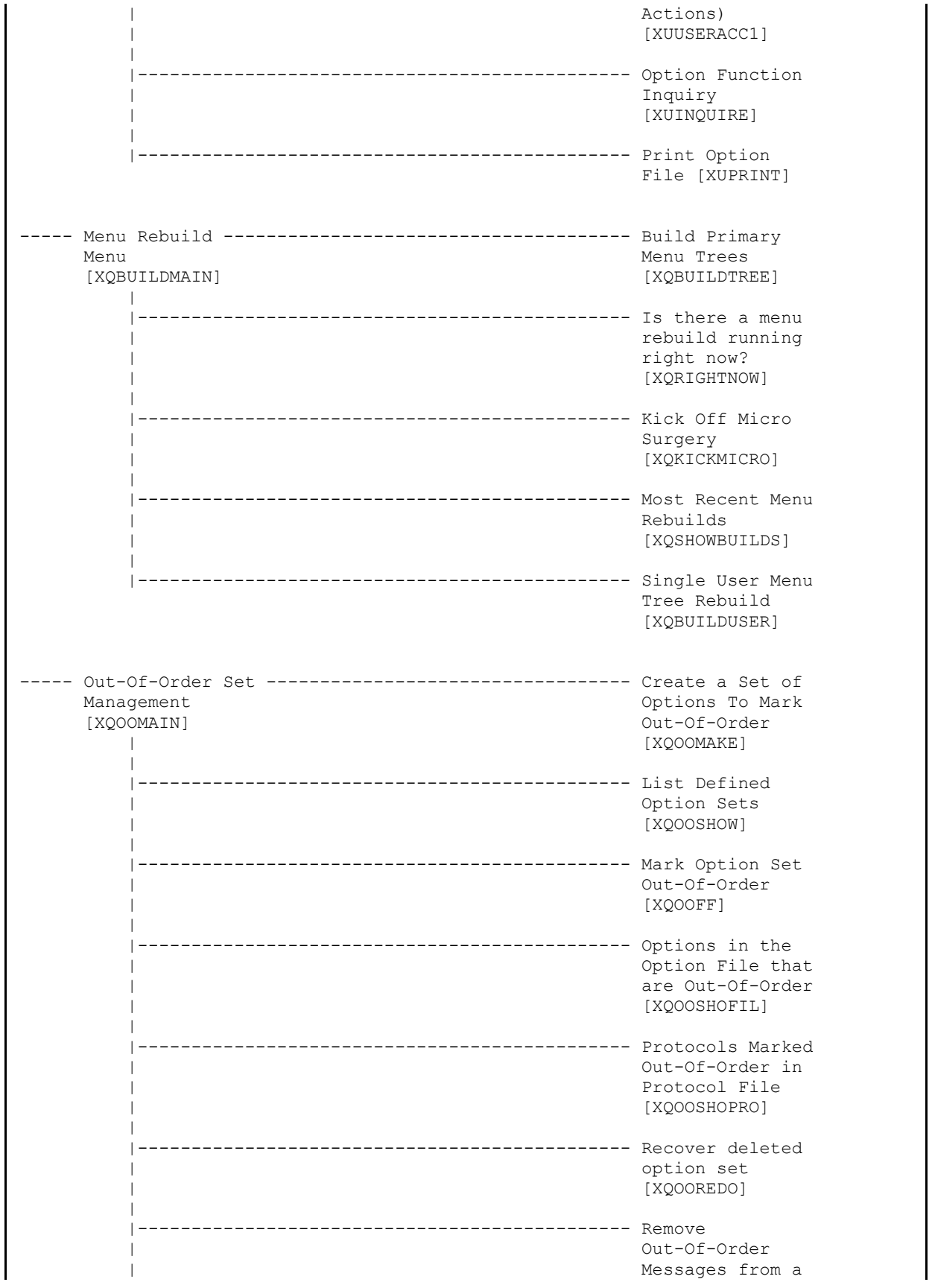
5.2.5 XUMAINT

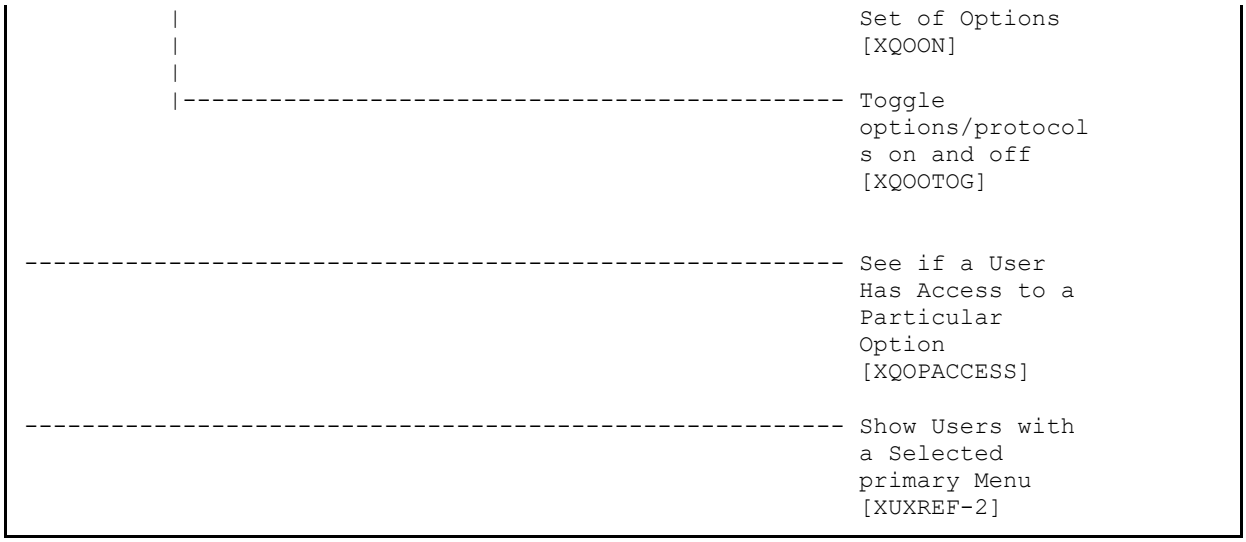
Figure 9: XUMAINT—Menu Tree Diagram: Sample from OAKTST "Gold" Account




List Delegated Options and their Users [XQSMD BY OPTION]
Print All Delegates and their Options [XQSMD BY USER]
Remove Options Previously Delegated [XQSMD REMOVE]
Replicate or Replace a Delegate [XQSMD REPLICATE]
Show a 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]
Copy One Users Menus and Keys to others [XQSMD COPY USER]
Limited File Manager Options (Build) [XQSMD LIMITED FM OPTIONS]
LOCKED: XQSMDFM
Specify Allowable New Menu Prefix [XQSMD SET PREFIX]
Restrict

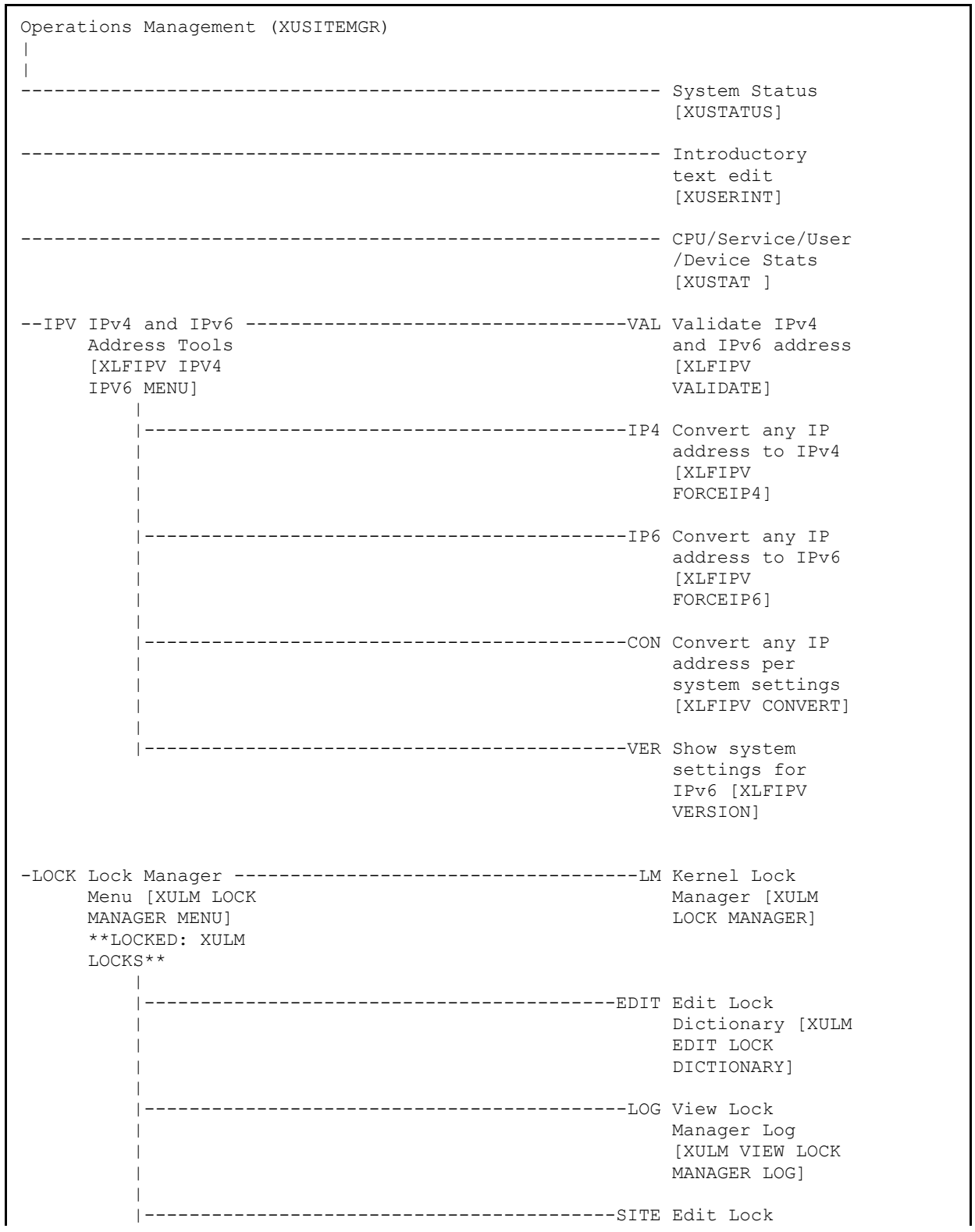

Availability of Options [XQRESTRICT]
Option Access By User [XUOPTWHO]
List Options by Parents and Use [XUXREF]
Fix Option File Pointers [XQOPTFIX]
Help Processor [XQHELP-MENU]
Display/Edit Help Frames [XQHELP-DISPLAY]
List Help Frames [XQHELP-LIST]
New/Revised Help Frames [XQHELP-UPDATE]
Cross Reference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

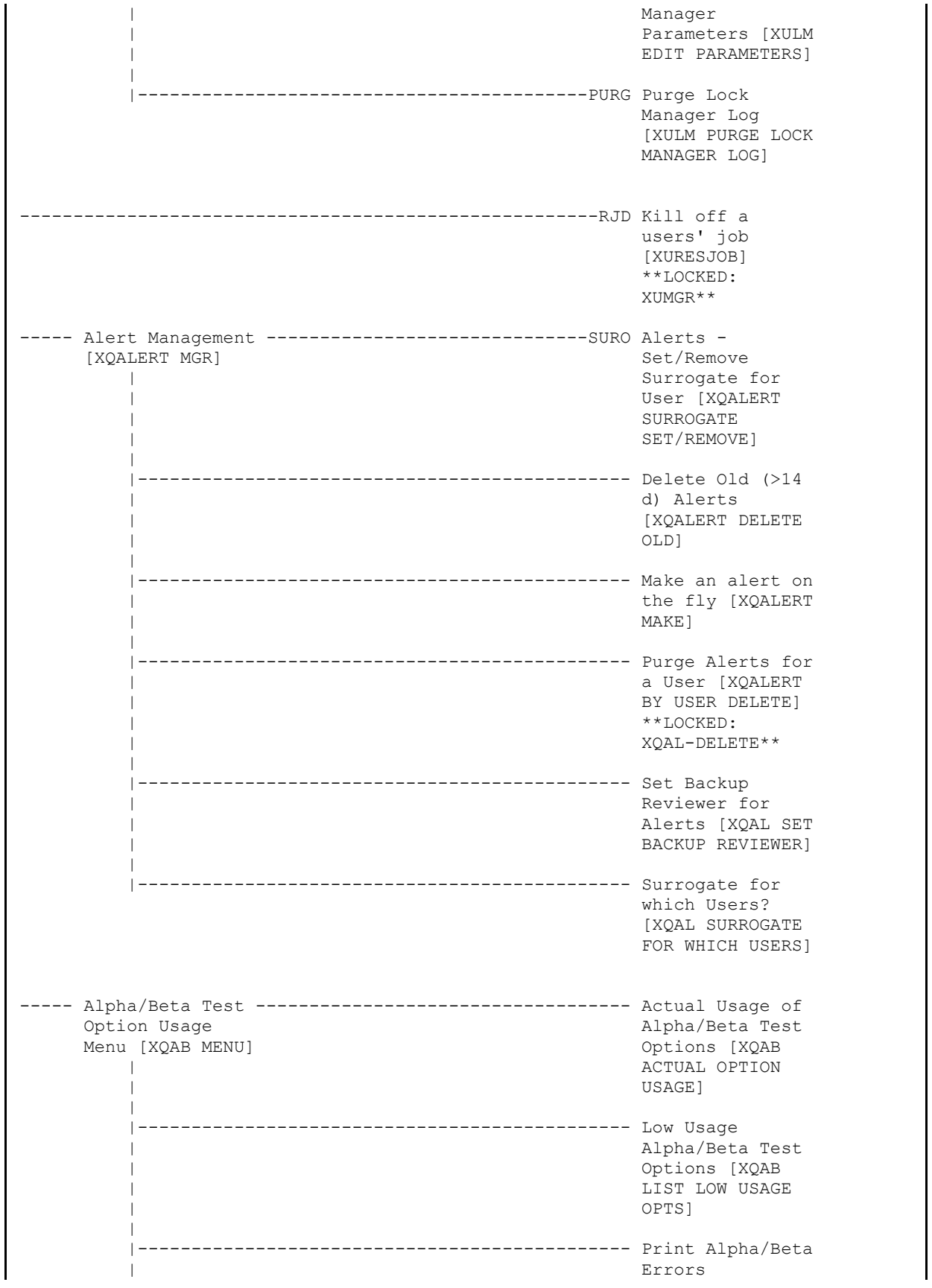

Actions)
[XUUSERACC1]
Option Function Inquiry
[XUINQUIRE]
Print Option File [XUPRINT]
Menu Rebuild
[XQBUILDMAIN]
Build Primary Menu Trees
[XQBUILDTREE]
Is there a menu rebuild running right now?
[XQRIGHTNOW]
Kick Off Micro Surgery
[XQKICKMICRO]
Most Recent Menu Rebuilds
[XQSHOWBUILDS]
Single User Menu Tree Rebuild
[XQBUILDUSER]
Out-Of-Order Set Management
[XQOOMAIN]
Create a Set of Options To Mark Out-Of-Order
[XQOOMAKE]
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 Out-Of-Order Messages from a

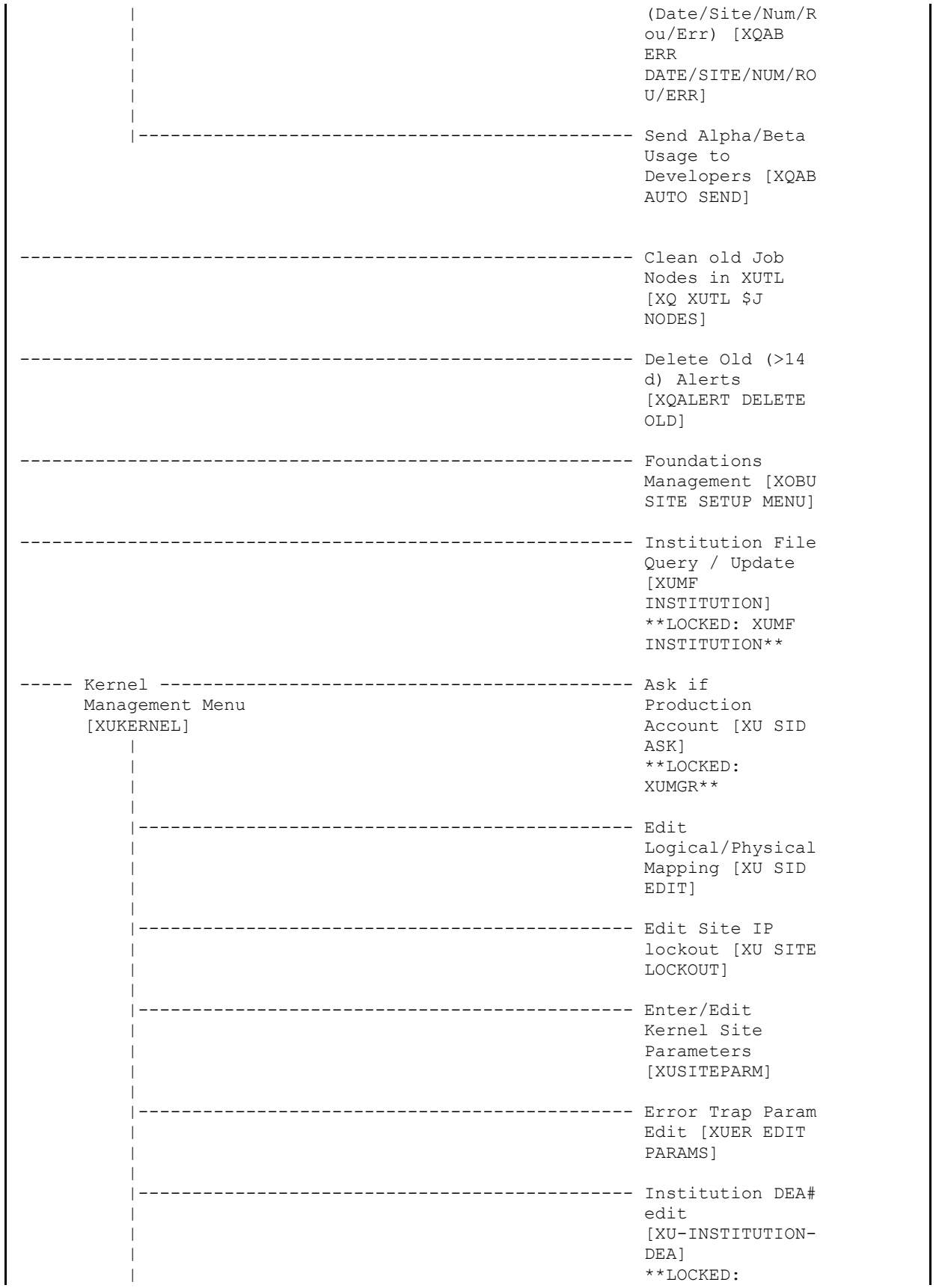

Set of Options
[XQOON]
Toggle
options/protocol
s on and off
[XQOOTOG]
See if a User
Has Access to a
Particular
Option
[XQOPACCESS]
Show Users with
a Selected
primary Menu
[XUXREF-2]

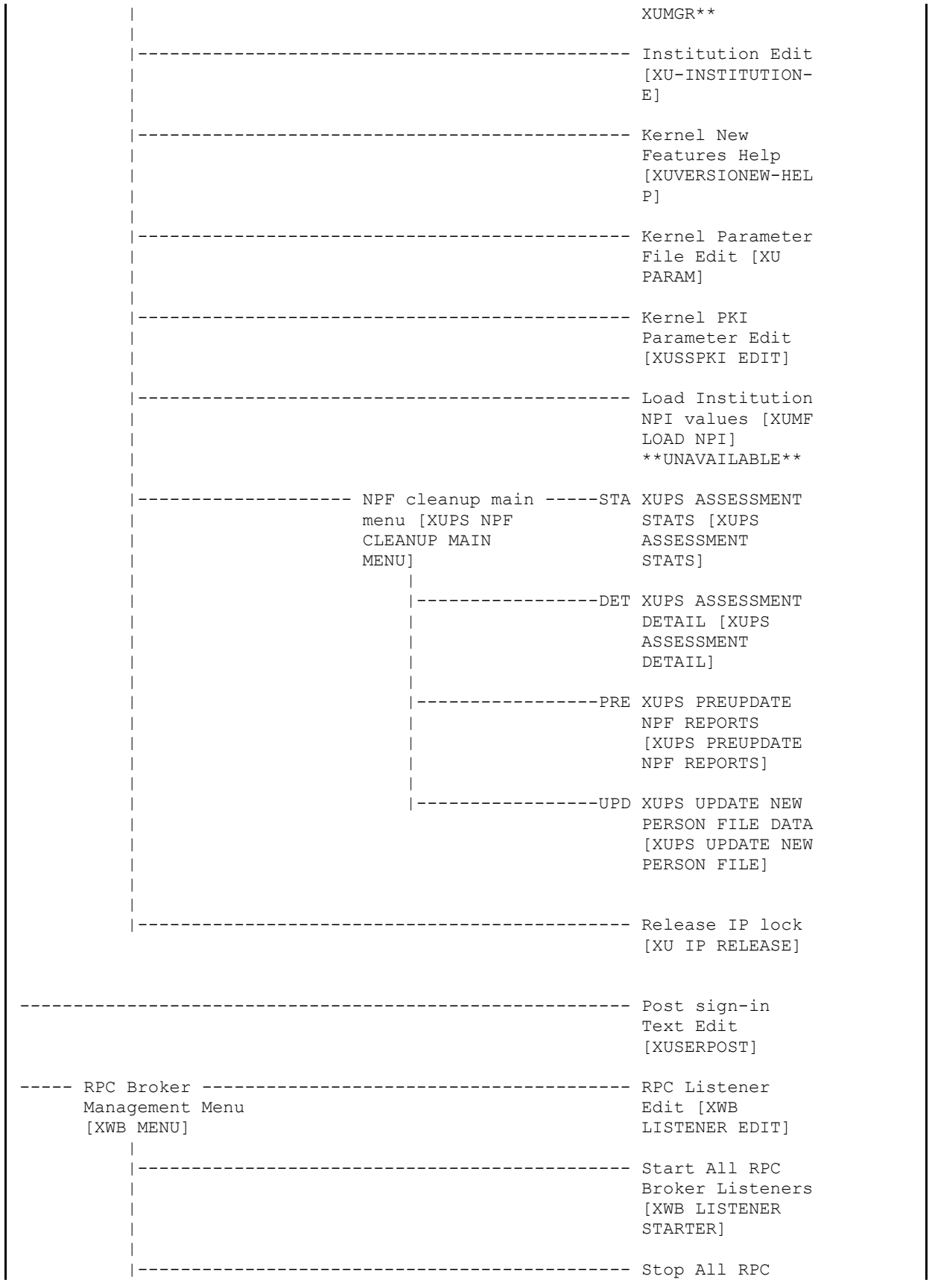
5.2.6 XUSITEMGR

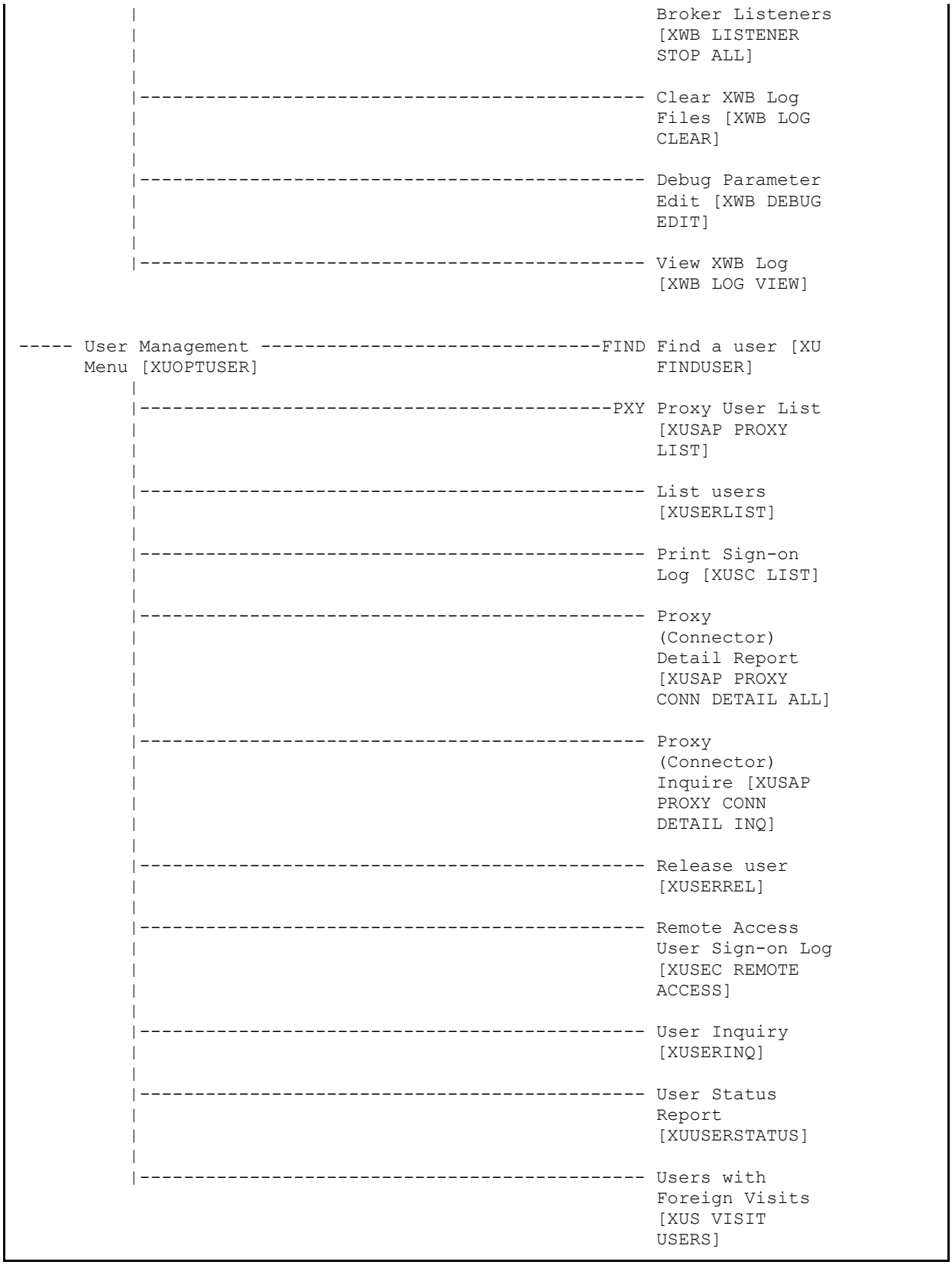
Figure 10: XUSITEMGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account




Manager
Parameters [XULM
EDIT PARAMETERS]
PURG Purge Lock
Manager Log
[XULM PURGE LOCK
MANAGER LOG]
RJD Kill off a
users' job
[XURESJOB]
**LOCKED:
XUMGR**
----- Alert Management -----
[XQALERT MGR]
SURO 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]
----- Alpha/Beta Test
Option Usage
Menu [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

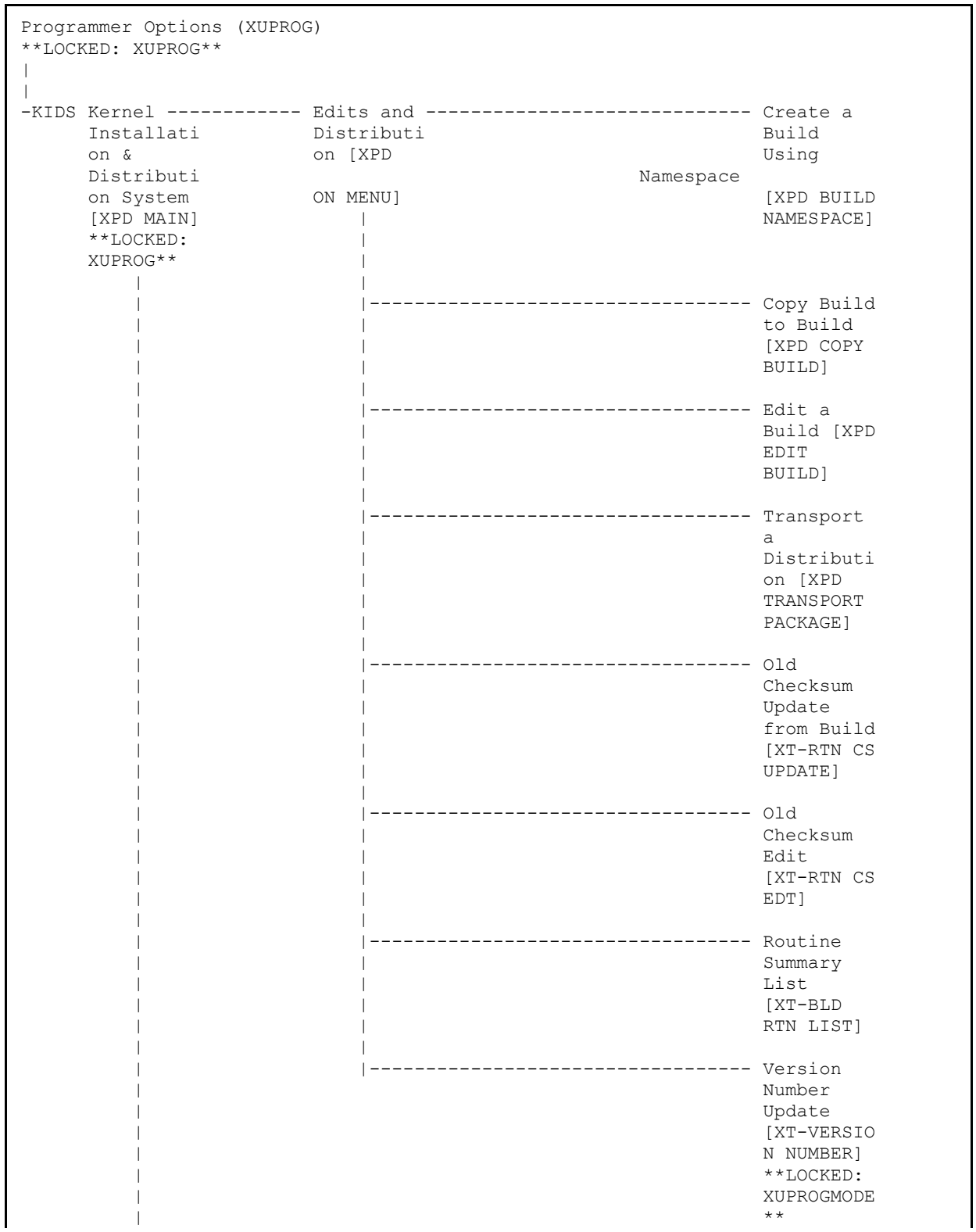

(Date/Site/Num/Rou/Err) [XQAB ERR DATE/SITE/NUM/ROU/ERR]
Send Alpha/Beta Usage to Developers [XQAB AUTO SEND]
Clean old Job Nodes in XUTL [XQ XUTL $J NODES]
Delete Old (>14 d) Alerts [XQALERT DELETE OLD]
Foundations Management [XOBU SITE SETUP MENU]
Institution File Query / Update [XUMF INSTITUTION] **LOCKED: XUMF INSTITUTION**
Kernel Management Menu [XUKERNEL]
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]
Institution DEA# edit [XU-INSTITUTION-DEA] **LOCKED:

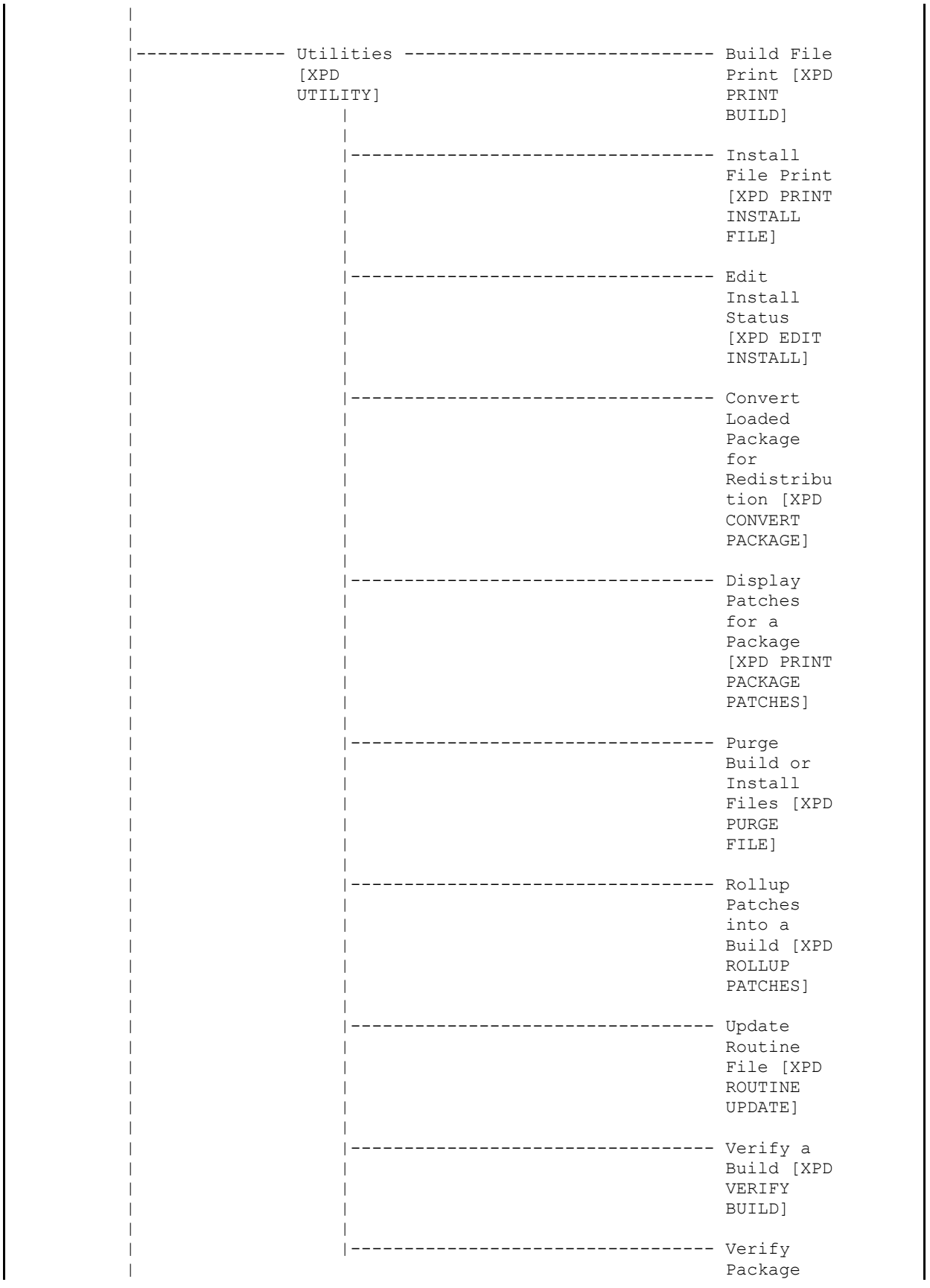

XUMGR**
Institution Edit [XU-INSTITUTION-E]
Kernel New Features Help [XUVERSIONEW-HELP]
Kernel Parameter File Edit [XUPARAM]
Kernel PKI Parameter Edit [XUSSPKI EDIT]
Load Institution NPI values [XUMF LOAD NPI] **UNAVAILABLE**
NPF cleanup main menu [XUPS NPF CLEANUP MAIN MENU]
STA XUPS ASSESSMENT STATS [XUPS ASSESSMENT STATS]
DET XUPS ASSESSMENT DETAIL [XUPS ASSESSMENT DETAIL]
PRE XUPS PREUPDATE NPF REPORTS [XUPS PREUPDATE NPF REPORTS]
UPD XUPS UPDATE NEW PERSON FILE DATA [XUPS UPDATE NEW PERSON FILE]
Release IP lock [XU IP RELEASE]
Post sign-in Text Edit [XUSERPOST]
RPC Broker Management Menu [XWB MENU]
RPC Listener Edit [XWB LISTENER EDIT]
Start All RPC Broker Listeners [XWB LISTENER STARTER]
Stop All RPC

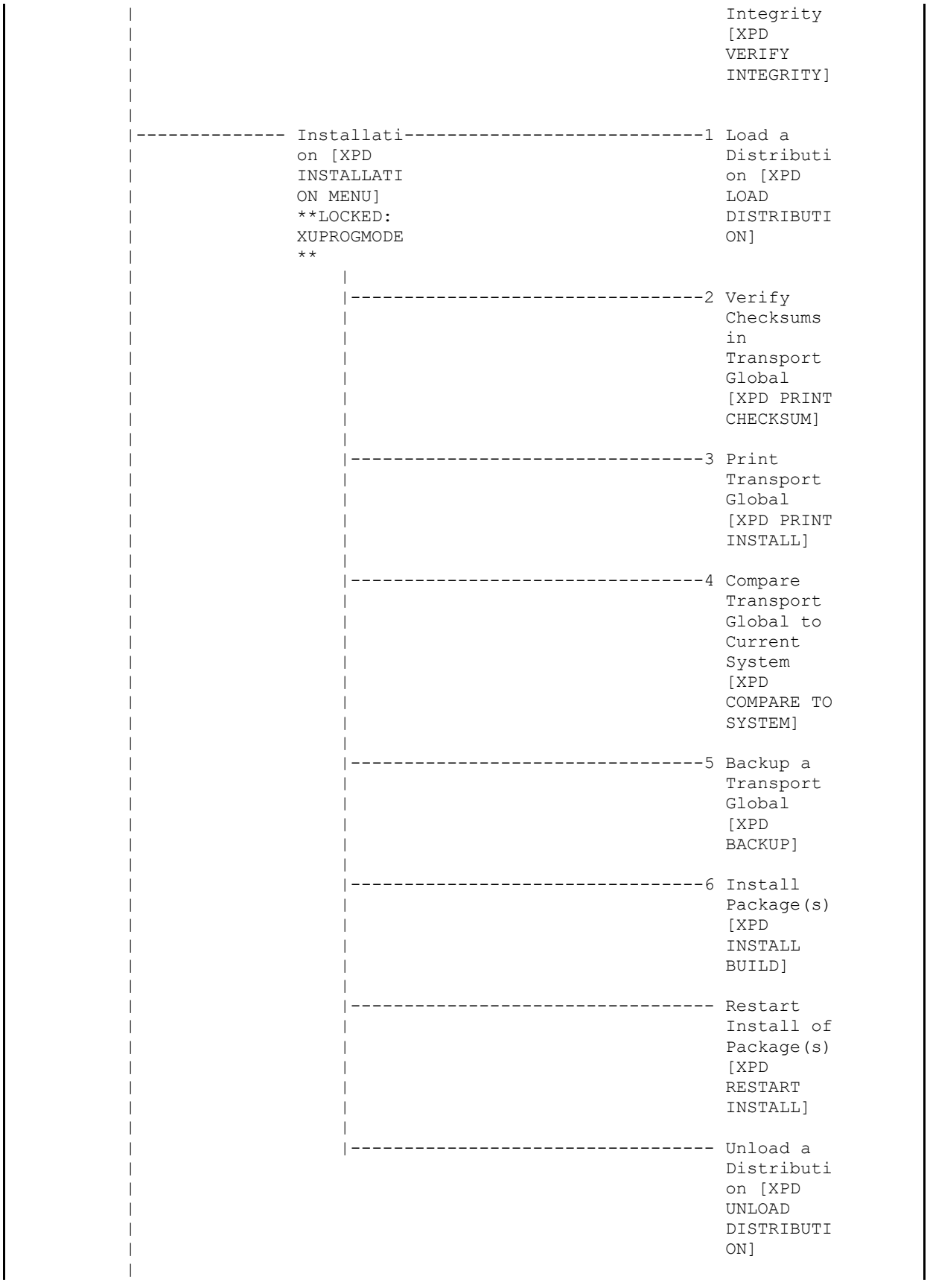

Broker Listeners [XWB LISTENER STOP ALL]
Clear XWB Log Files [XWB LOG CLEAR]
Debug Parameter Edit [XWB DEBUG EDIT]
View XWB Log [XWB LOG VIEW]
----- User Management Menu [XUOPTUSER] ----------
FIND Find a user [XU FINDUSER]
PXY Proxy User List [XUSAP PROXY LIST]
List users [XUSERLIST]
Print Sign-on Log [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]

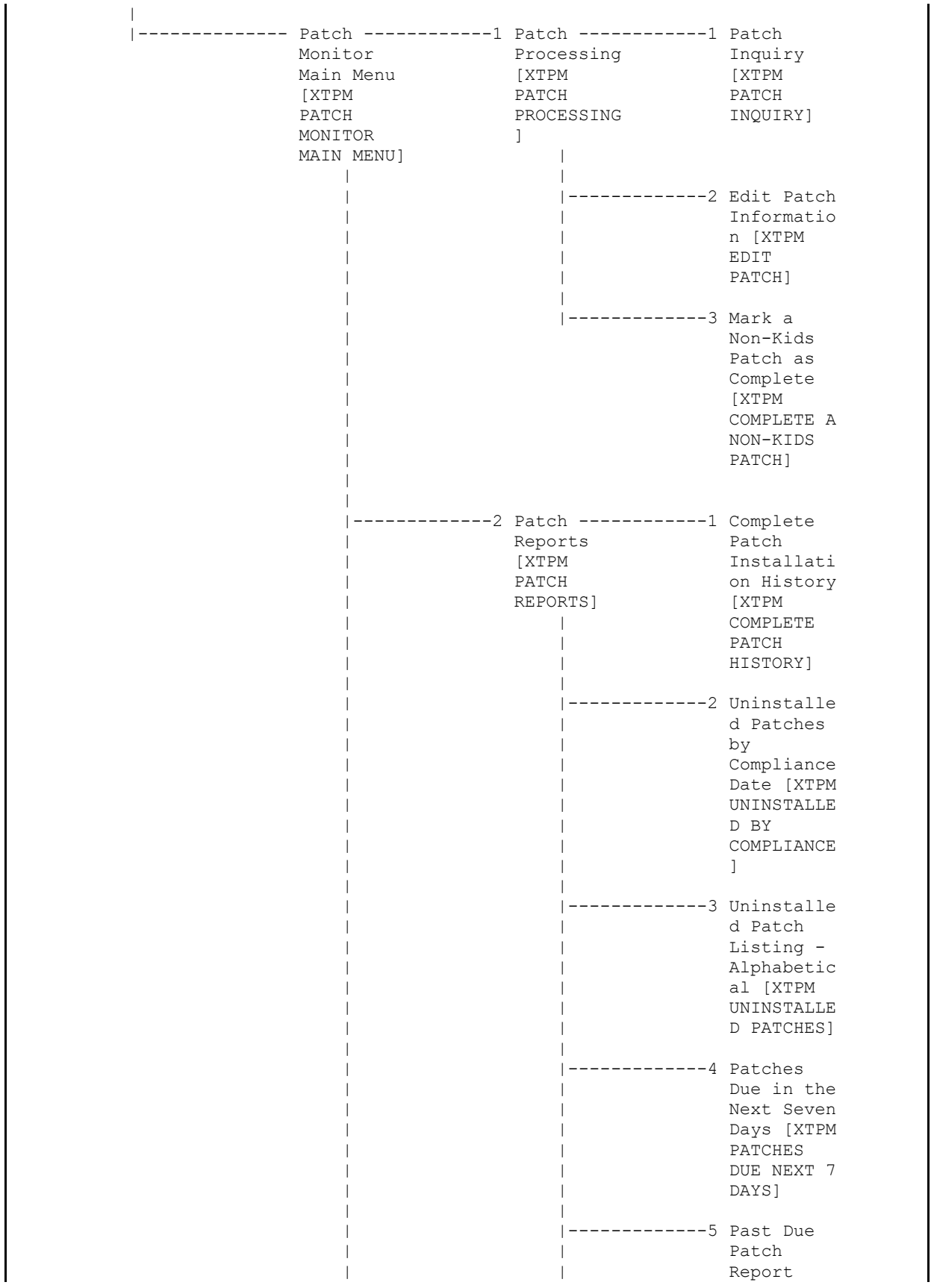
5.2.7 XUPROG

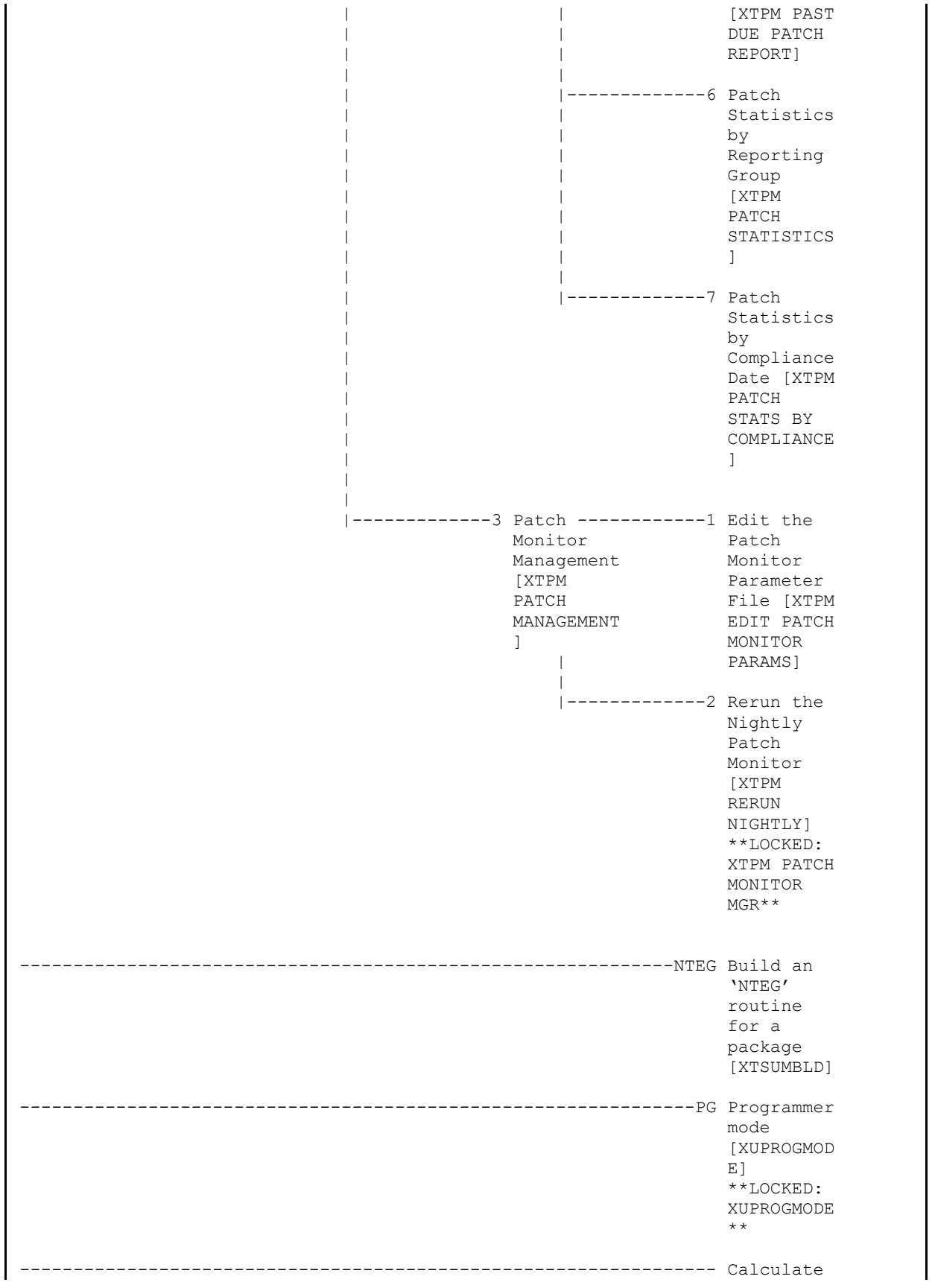
Figure 11: XUPROG—Menu Tree Diagram: Sample from OAKTST "Gold" Account

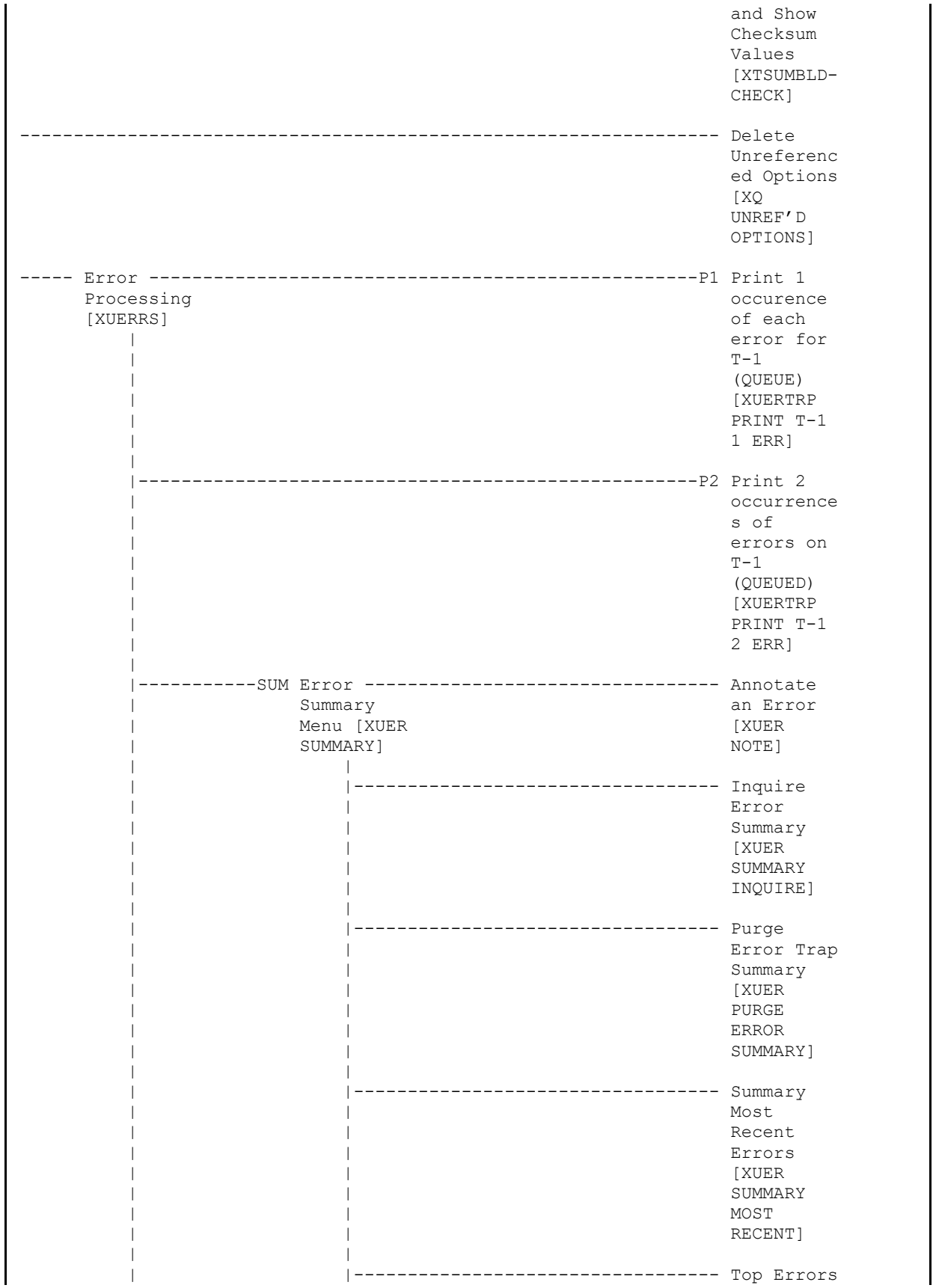


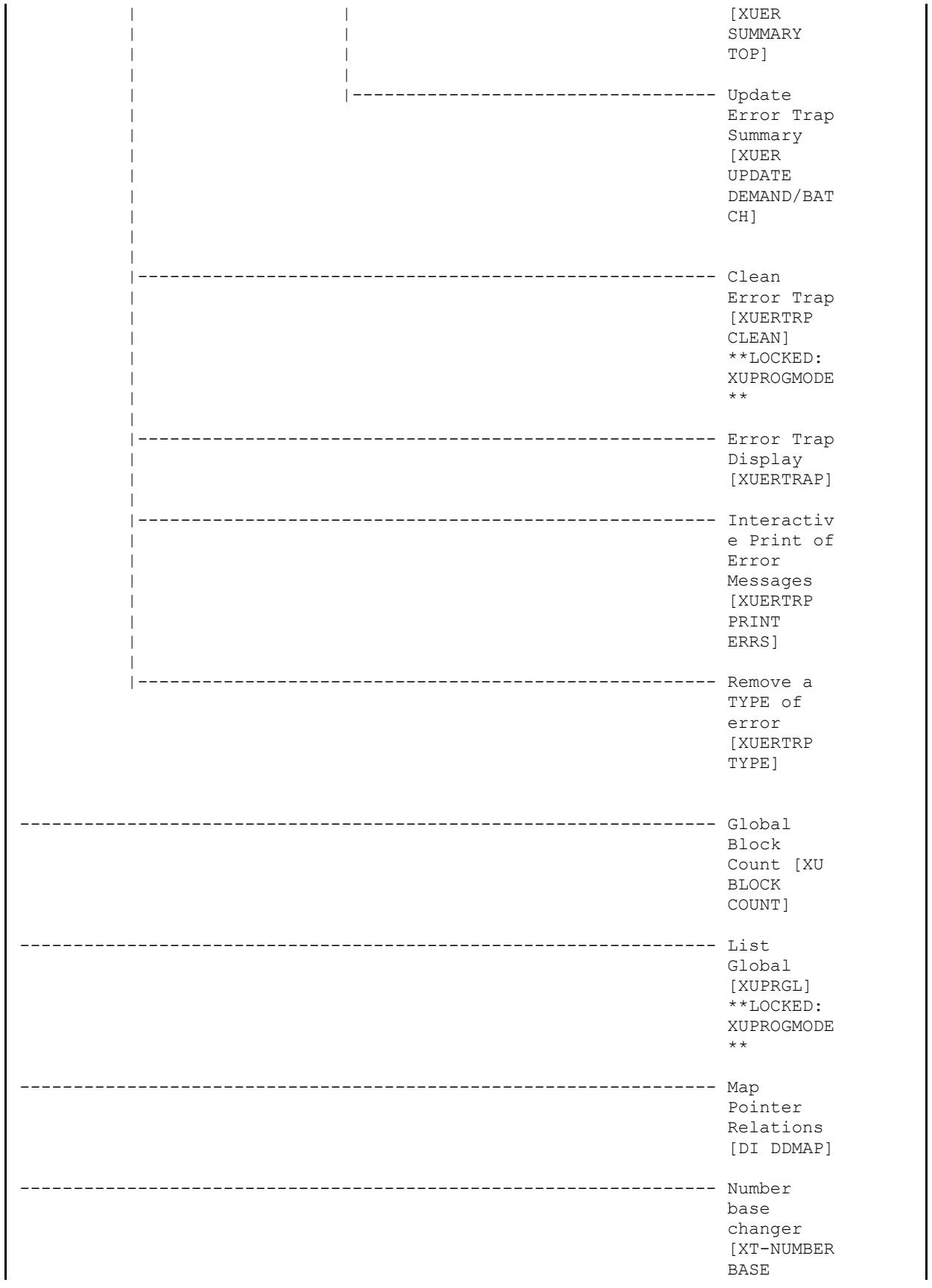

Utilities [XPD UTILITY]
Build File Print [XPD PRINT BUILD]
Install File Print [XPD PRINT INSTALL FILE]
Edit Install Status [XPD EDIT INSTALL]
Convert Loaded Package for Redistribution [XPD CONVERT PACKAGE]
Display Patches for a Package [XPD PRINT PACKAGE PATCHES]
Purge Build or Install Files [XPD PURGE FILE]
Rollup Patches into a Build [XPD ROLLUP PATCHES]
Update Routine File [XPD ROUTINE UPDATE]
Verify a Build [XPD VERIFY BUILD]
Verify Package

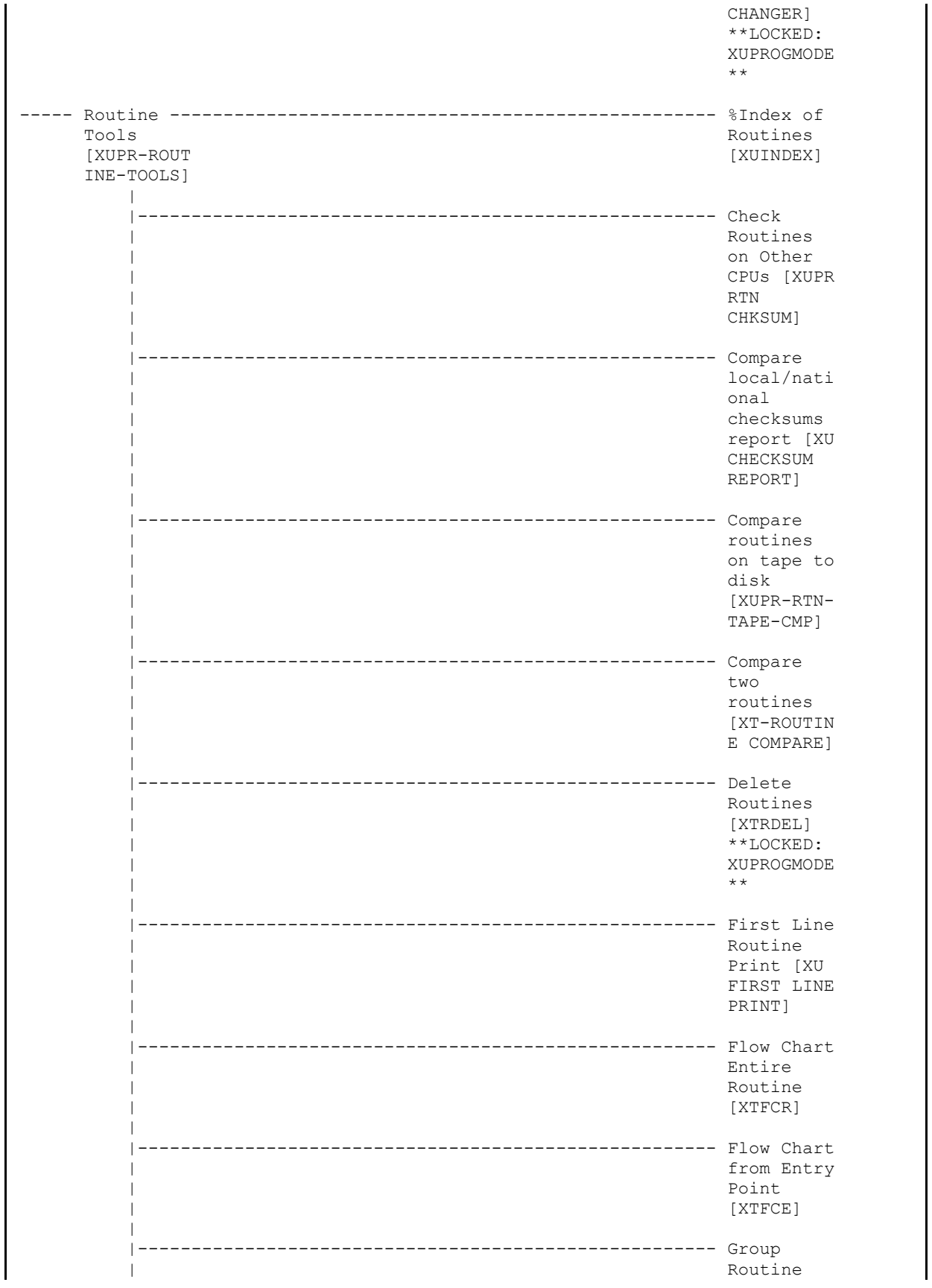

Integrity [XPD VERIFY INTEGRITY]
Installation [XPD INSTALLATION MENU] **LOCKED: XUPROGMODE **
1 Load a Distribution [XPD LOAD DISTRIBUTION]
2 Verify Checksums in Transport Global [XPD PRINT CHECKSUM]
3 Print Transport Global [XPD PRINT INSTALL]
4 Compare Transport Global to Current System [XPD COMPARE 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 Distribution [XPD UNLOAD DISTRIBUTION]

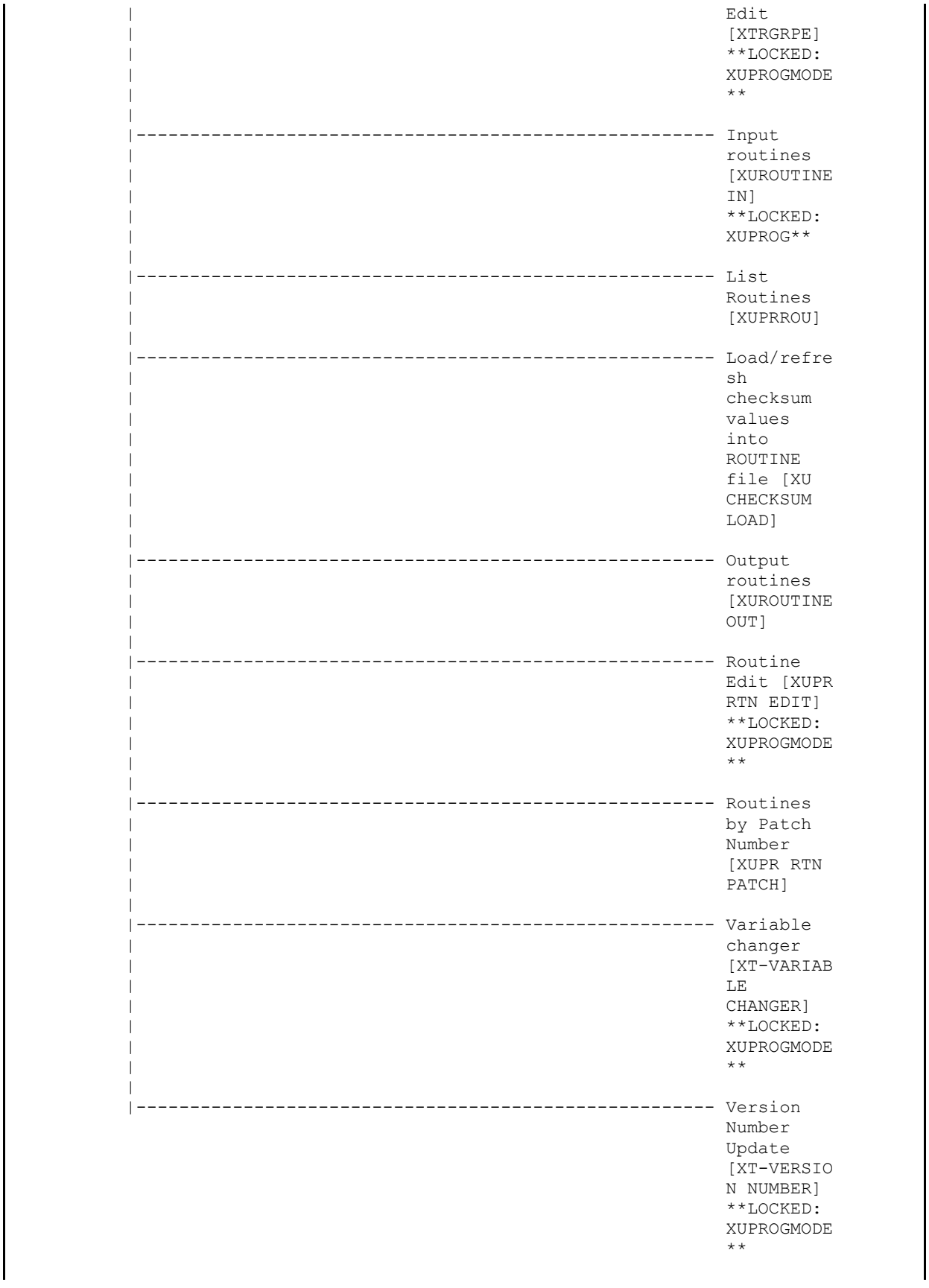

Patch Monitor Main Menu [XTPM PATCH MONITOR MAIN MENU]
1 Patch Processing [XTPM PATCH PROCESSING]
1 Patch Inquiry [XTPM PATCH INQUIRY]
2 Edit Patch Information [XTPM EDIT PATCH]
3 Mark a Non-Kids Patch as Complete [XTPM COMPLETE A NON-KIDS PATCH]
2 Patch Reports [XTPM PATCH REPORTS]
1 Complete Patch Installation History [XTPM COMPLETE PATCH HISTORY]
2 Uninstalled Patches by Compliance Date [XTPM UNINSTALLED BY COMPLIANCE]
3 Uninstalled Patch Listing - Alphabetical [XTPM UNINSTALLED PATCHES]
4 Patches Due in the Next Seven Days [XTPM PATCHES DUE NEXT 7 DAYS]
5 Past Due Patch Report

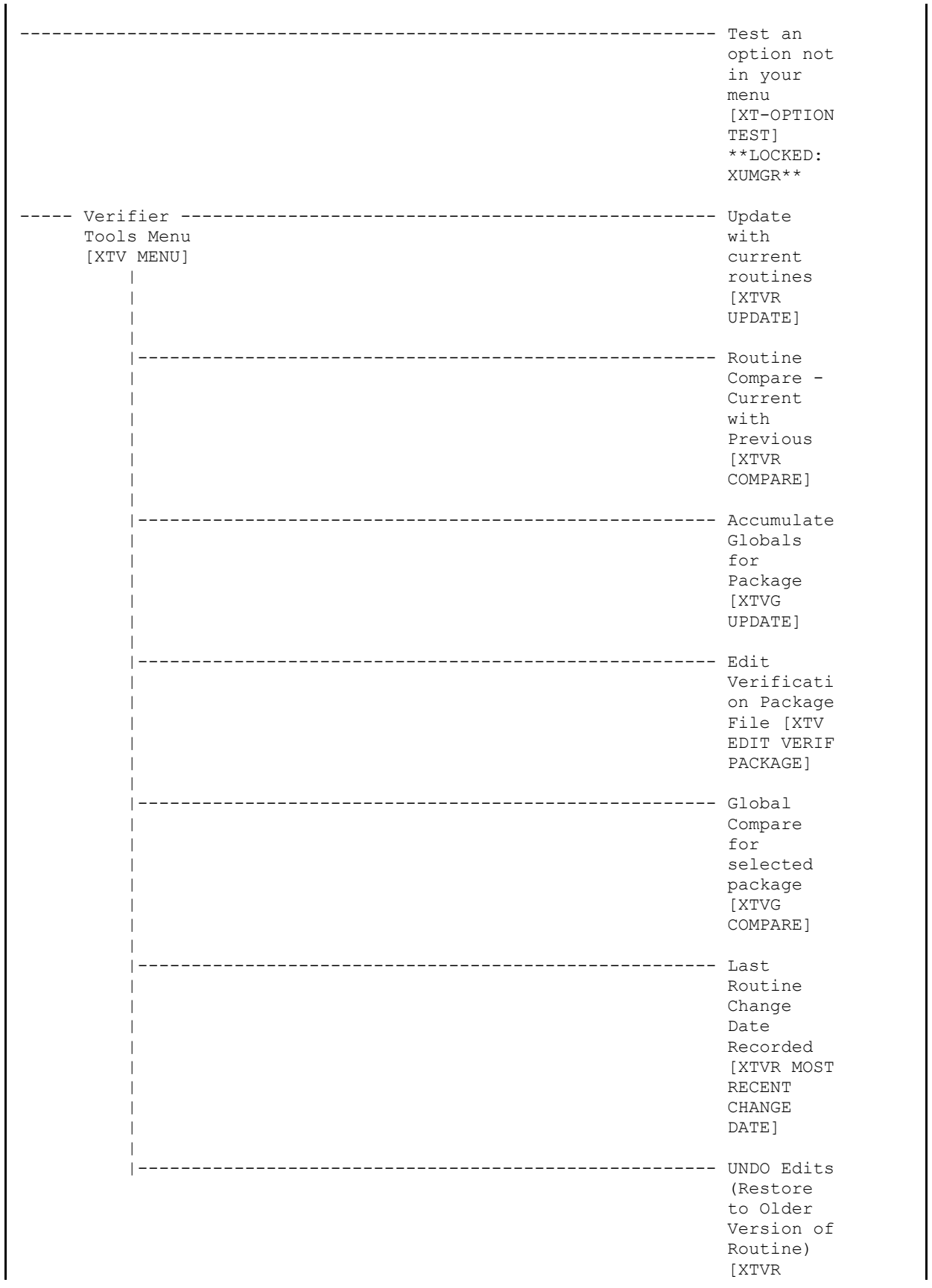

[XTPM PAST DUE PATCH REPORT]
6 Patch Statistics by Reporting Group [XTPM PATCH STATISTICS]
7 Patch Statistics by Compliance Date [XTPM PATCH STATS BY COMPLIANCE]
3 Patch Monitor Management [XTPM PATCH MANAGEMENT]
1 Edit the Patch Monitor Parameter File [XTPM EDIT PATCH MONITOR PARAMS]
2 Rerun the Nightly Patch Monitor [XTPM RERUN NIGHTLY] **LOCKED: XTPM PATCH MONITOR MGR**
NTEG Build an 'NTEG' routine for a package [XTSUMBLD]
PG Programmer mode [XUPROGMODE] **LOCKED: XUPROGMODE **
Calculate


and Show Checksum Values [XTSUMBLD-CHECK]
Delete Unreferenced Options [XQ UNREF'D OPTIONS]
Error Processing [XUERRS]
P1 Print 1 occurence of each error for T-1 (QUEUE) [XUERTRP PRINT T-1 1 ERR]
P2 Print 2 occurrences of errors on T-1 (QUEUED) [XUERTRP PRINT T-1 2 ERR]
SUM Error Summary Menu [XUER SUMMARY]
Annotate an Error [XUER NOTE]
Inquire Error Summary [XUER SUMMARY INQUIRE]
Purge Error Trap Summary [XUER PURGE ERROR SUMMARY]
Summary Most Recent Errors [XUER SUMMARY MOST RECENT]
Top Errors


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


CHANGER]
**LOCKED:
XUPROGMODE
**
----- Routine ----------
Tools
[XUPR-ROUT
INE-TOOLS]
%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]
Flow Chart
from Entry
Point
[XTFCE]
Group
Routine


Edit [XTRGRPE] **LOCKED: XUPROGMODE **
Input routines [XUROUTINE IN] **LOCKED: XUPROG**
List Routines [XUPRROU]
Load/refresh 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-VARIABLE CHANGER] **LOCKED: XUPROGMODE **
Version Number Update [XT-VERSION NUMBER] **LOCKED: XUPROGMODE **


Test an option not in your menu [XT-OPTION TEST] **LOCKED: XUMGR**
Verifier Tools Menu [XTV MENU]
Update with current routines [XTVR UPDATE]
Routine Compare - Current with Previous [XTVR COMPARE]
Accumulate Globals for Package [XTVG UPDATE]
Edit Verification 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]
```

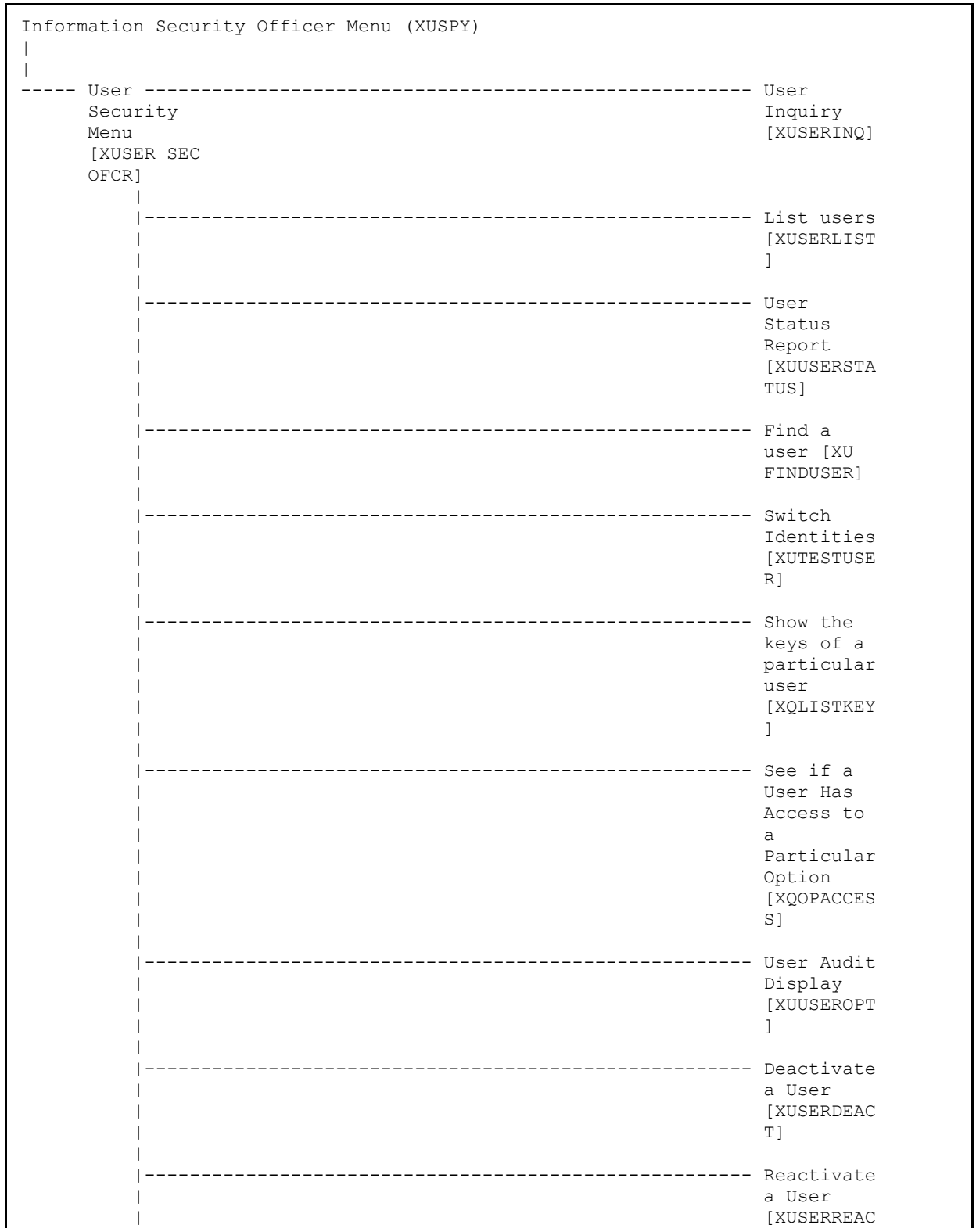
5.2.8 XU-SPL-MGR

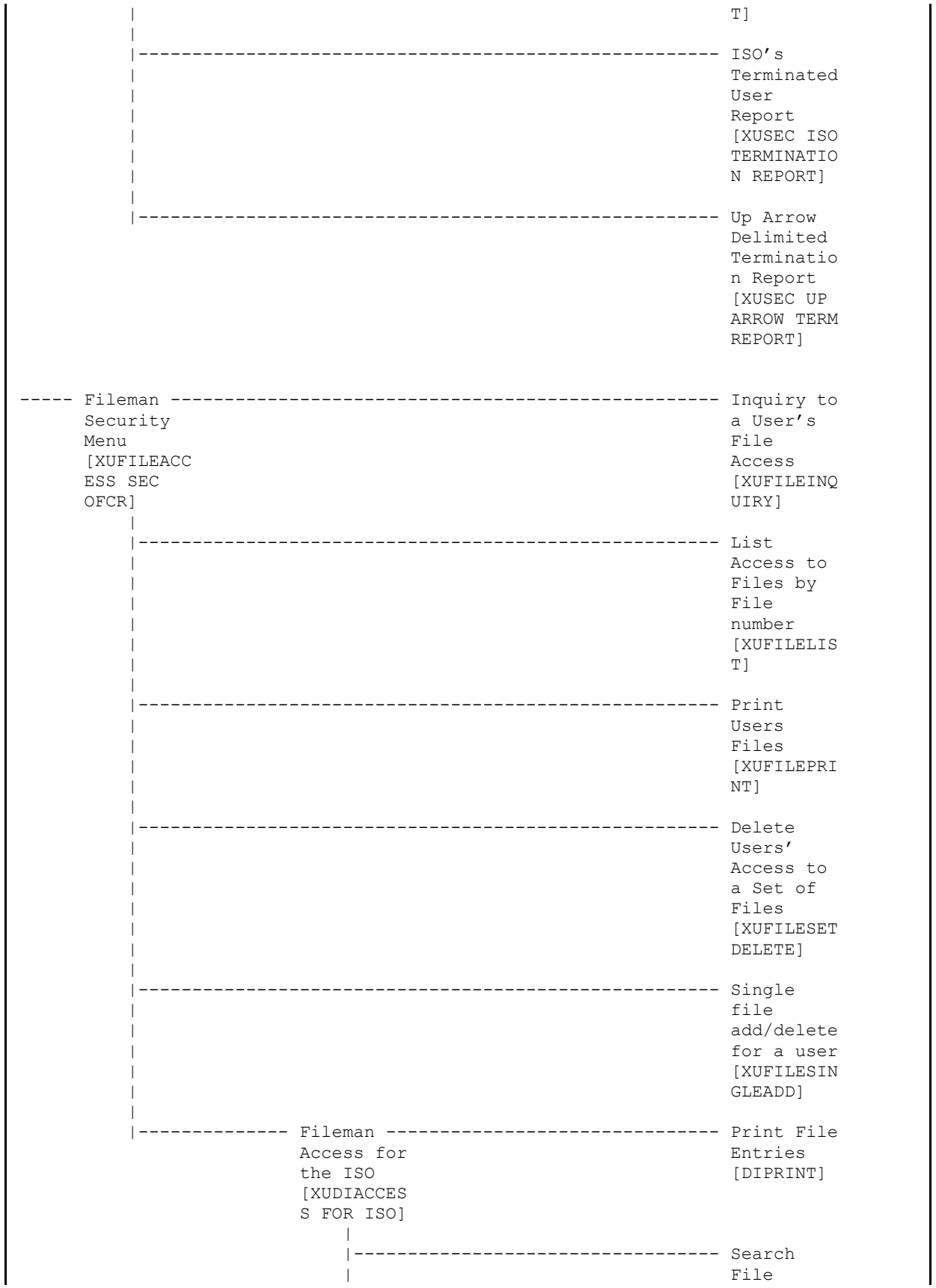
Figure 12: XU-SPL-MGR—Menu Tree Diagram: Sample from OAKTST "Gold" Account

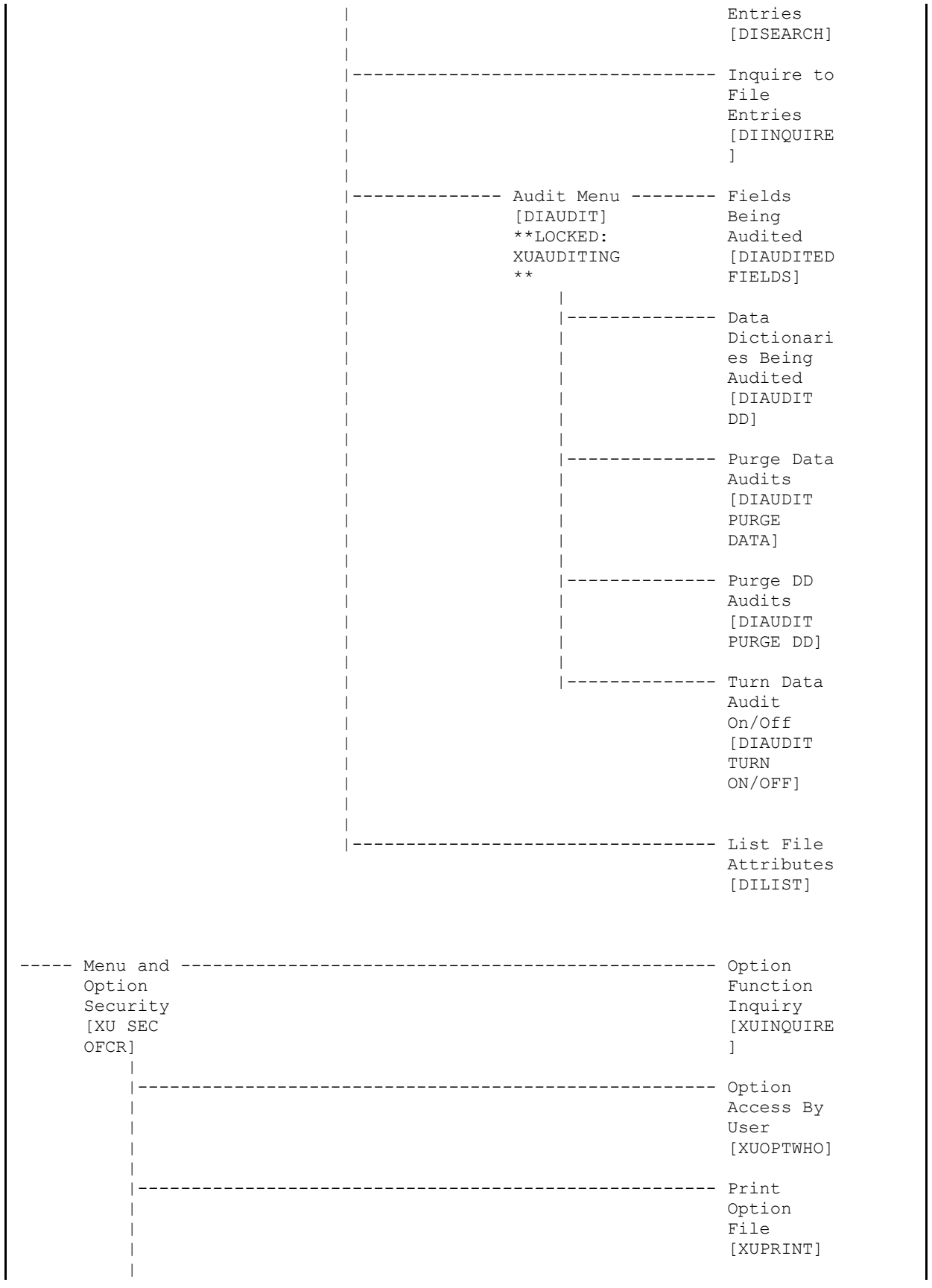
```
Spool Management (XU-SPL-MGR)
|
|
----- Delete A Spool Document
      [XU-SPL-DELETE]

----- Edit User's Spooler Access
      [XU-SPL-USER]

----- List Spool Documents
      [XU-SPL-LIST]

----- Print A Spool Document
      [XU-SPL-PRINT]

----- Spooler Site Parameters Edit
      [XU-SPL-SITE]
```

5.2.9 XUSPY

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




T]
ISO's Terminated User Report [XUSEC ISO TERMINATIO N REPORT]
Up Arrow Delimited Terminatio n Report [XUSEC UP ARROW TERM REPORT]
Fileman Security Menu [XUFILEACC ESS SEC OFCR]
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]
Single file add/delete for a user [XUFILESIN GLEADD]
Fileman Access for the ISO [XUDIACCES S FOR ISO]
Print File Entries [DIPRINT]
Search File


Entries
[DISEARCH]
Inquire to File Entries [DIINQUIRE]
Audit Menu [DIAUDIT] **LOCKED: XUAUDITING **
Fields Being Audited [DIAUDITED FIELDS]
Data Dictionaries Being Audited [DIAUDITDD]
Purge Data Audits [DIAUDITPURGE DATA]
Purge DD Audits [DIAUDITPURGE DD]
Turn Data Audit On/Off [DIAUDITTURN ON/OFF]
List File Attributes [DILIST]
Menu and Option Security [XU SECOFCR]
Option Function Inquiry [XUINQUIRE]
Option Access By User [XUOPTWHO]
Print Option File [XUPRINT]

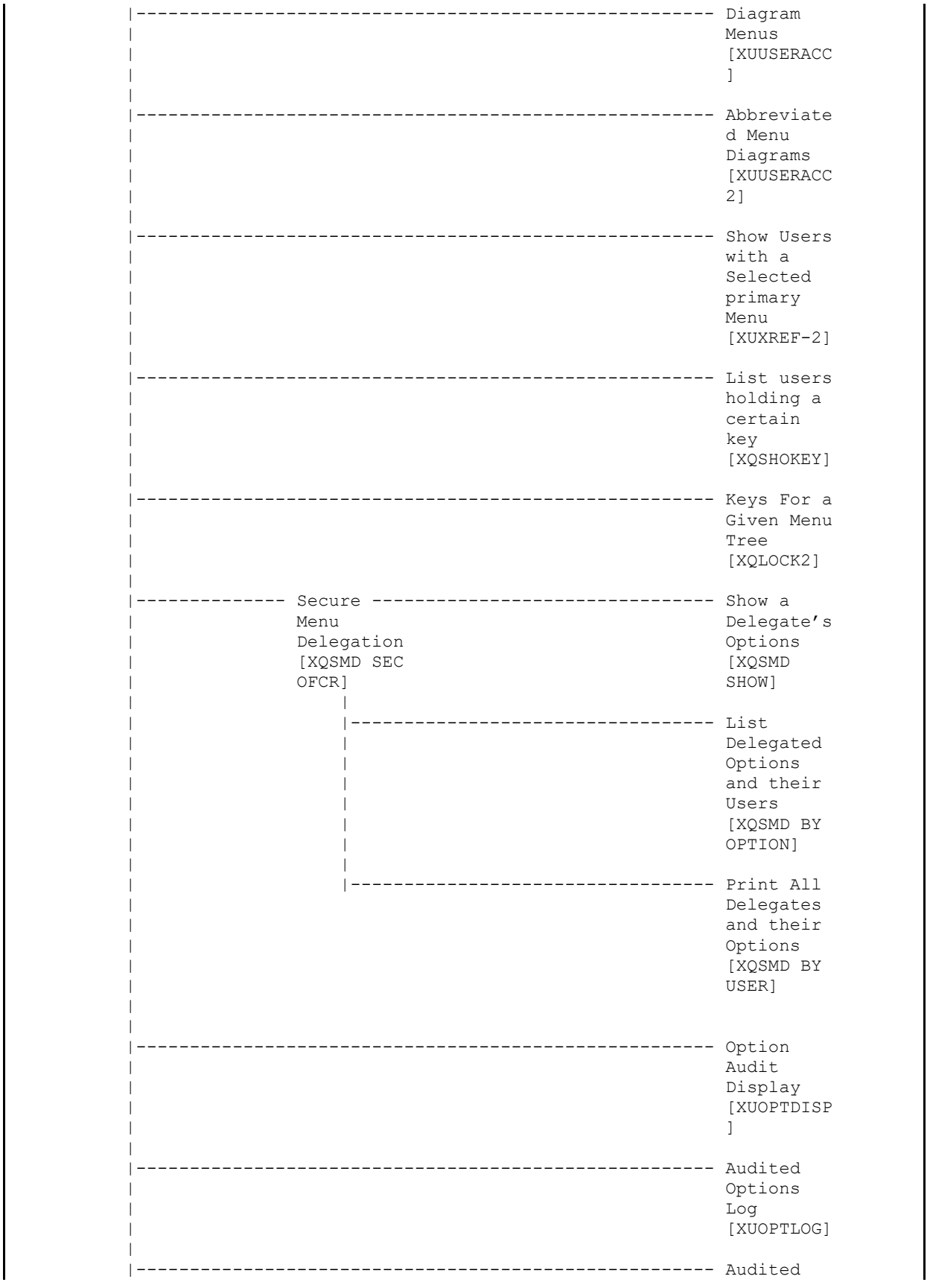
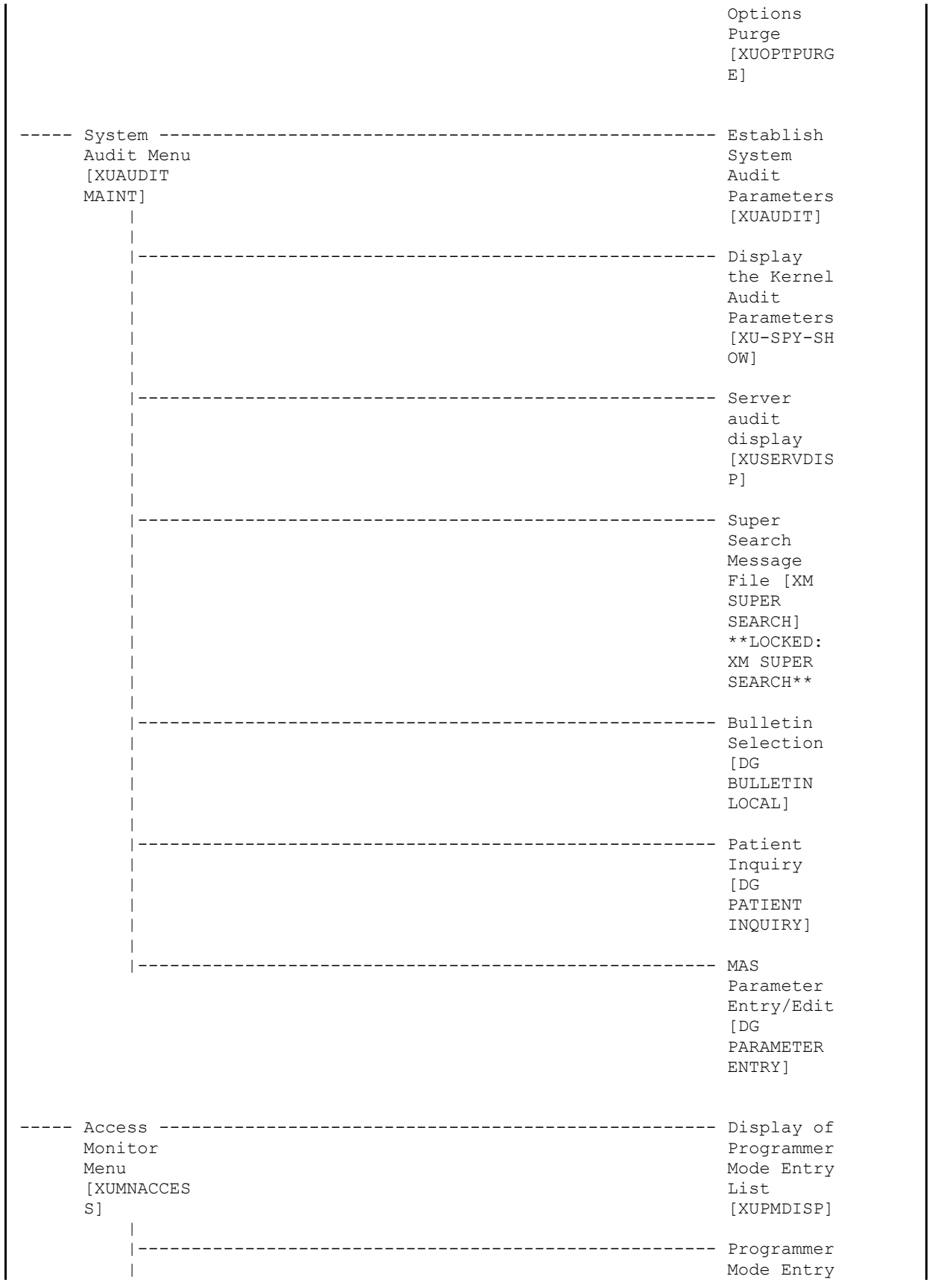
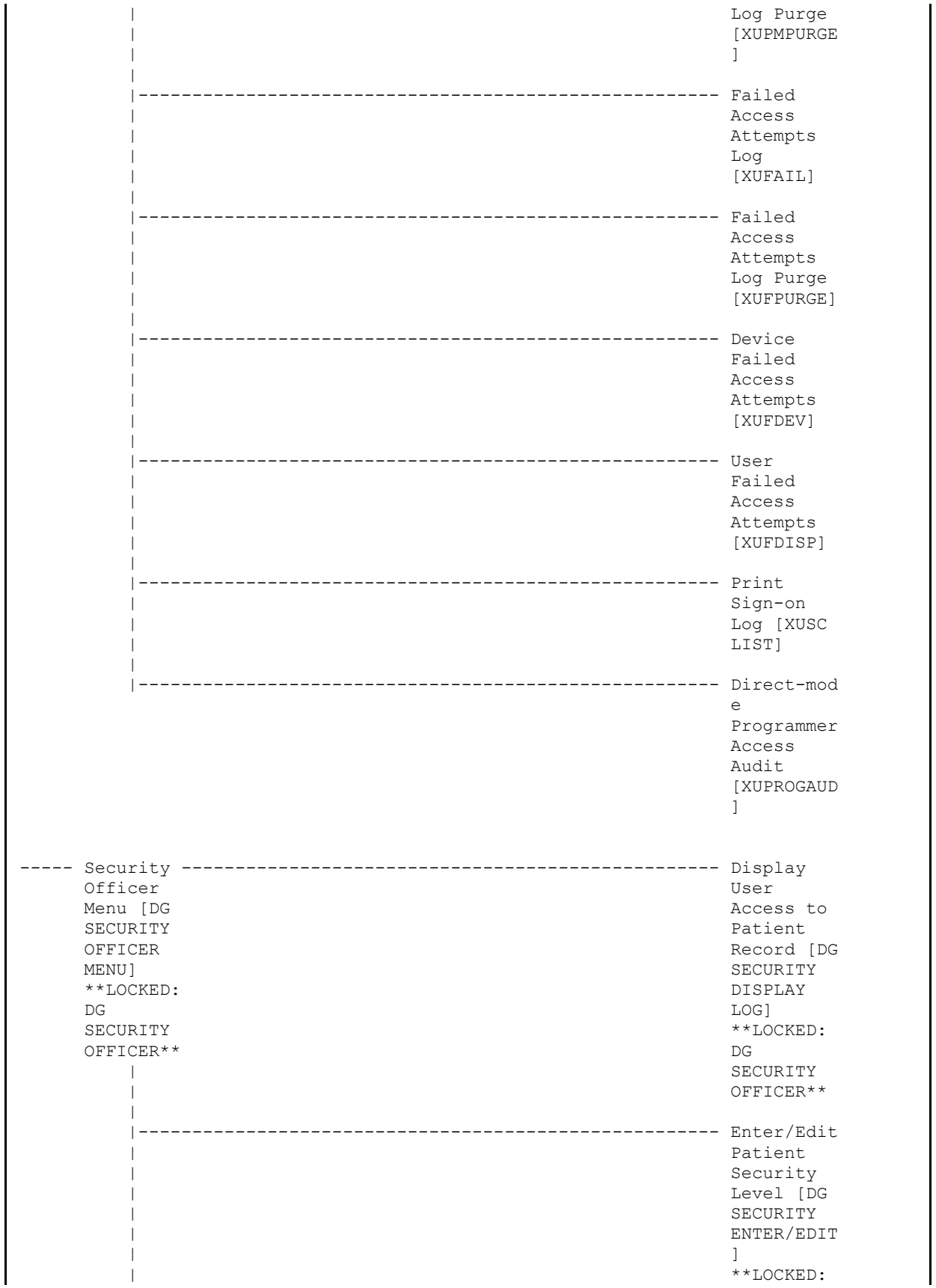


Diagram Menus [XUUSERACC]
Abbreviated Menu Diagrams [XUUSERACC 2]
Show Users with a Selected primary Menu [XUXREF-2]
List users holding a certain key [XQSHOKEY]
Keys For a Given Menu Tree [XQLOCK2]
Secure Menu Delegation [XQSMD SEC OFCR]
Show a Delegate’s Options [XQSMD SHOW]
List Delegated Options and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

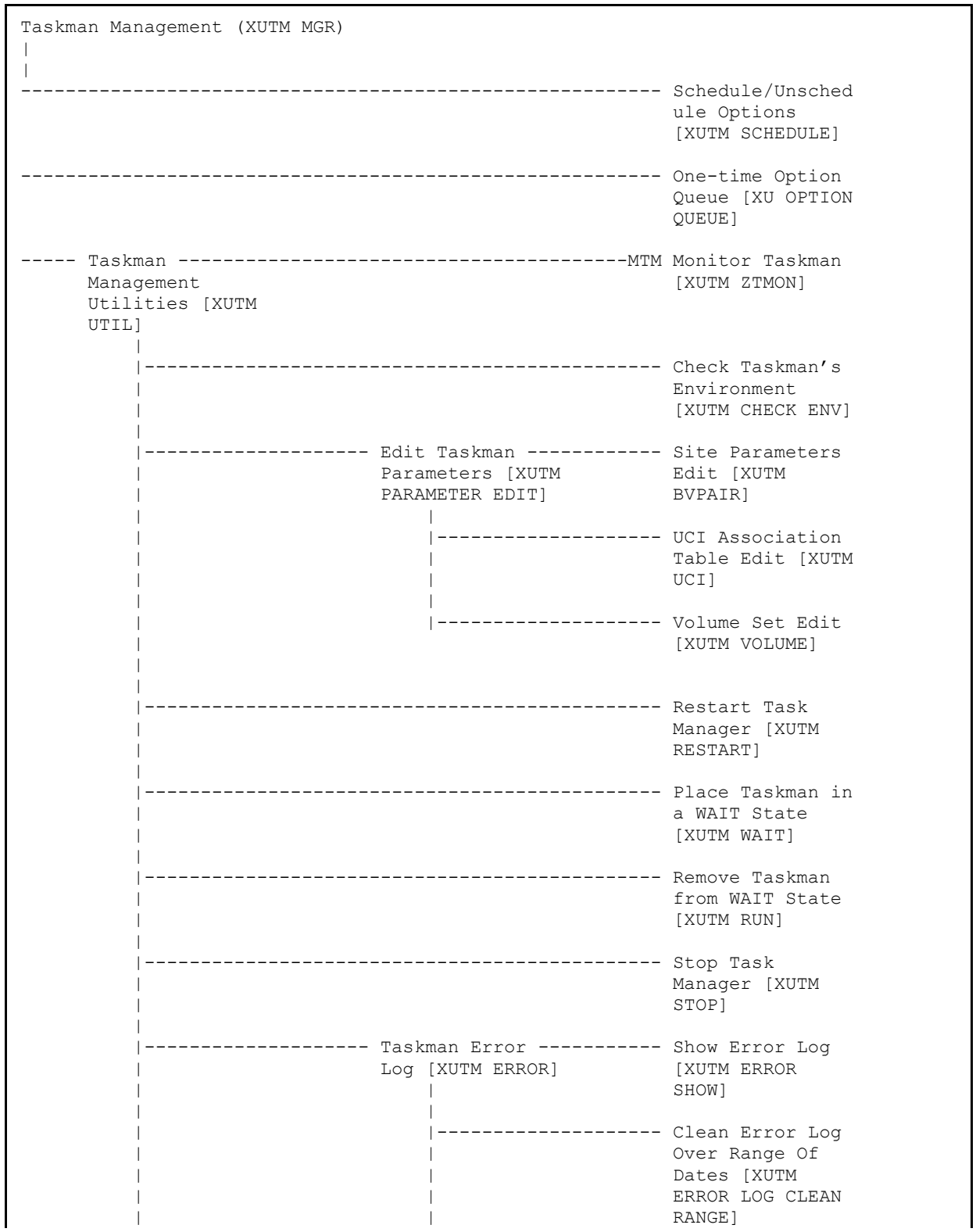

Options
Purge
[XUOPTPURG
E]
----- System Audit Menu [XUAUDIT MAINT] ----- Establish System Audit Parameters [XUAUDIT]
Display the Kernel Audit Parameters [XU-SPY-SH OW]
Server audit display [XUSERVDIS P]
Super Search Message File [XM SUPER SEARCH] **LOCKED: XM SUPER SEARCH**
Bulletin Selection [DG BULLETIN 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]
Programmer Mode Entry

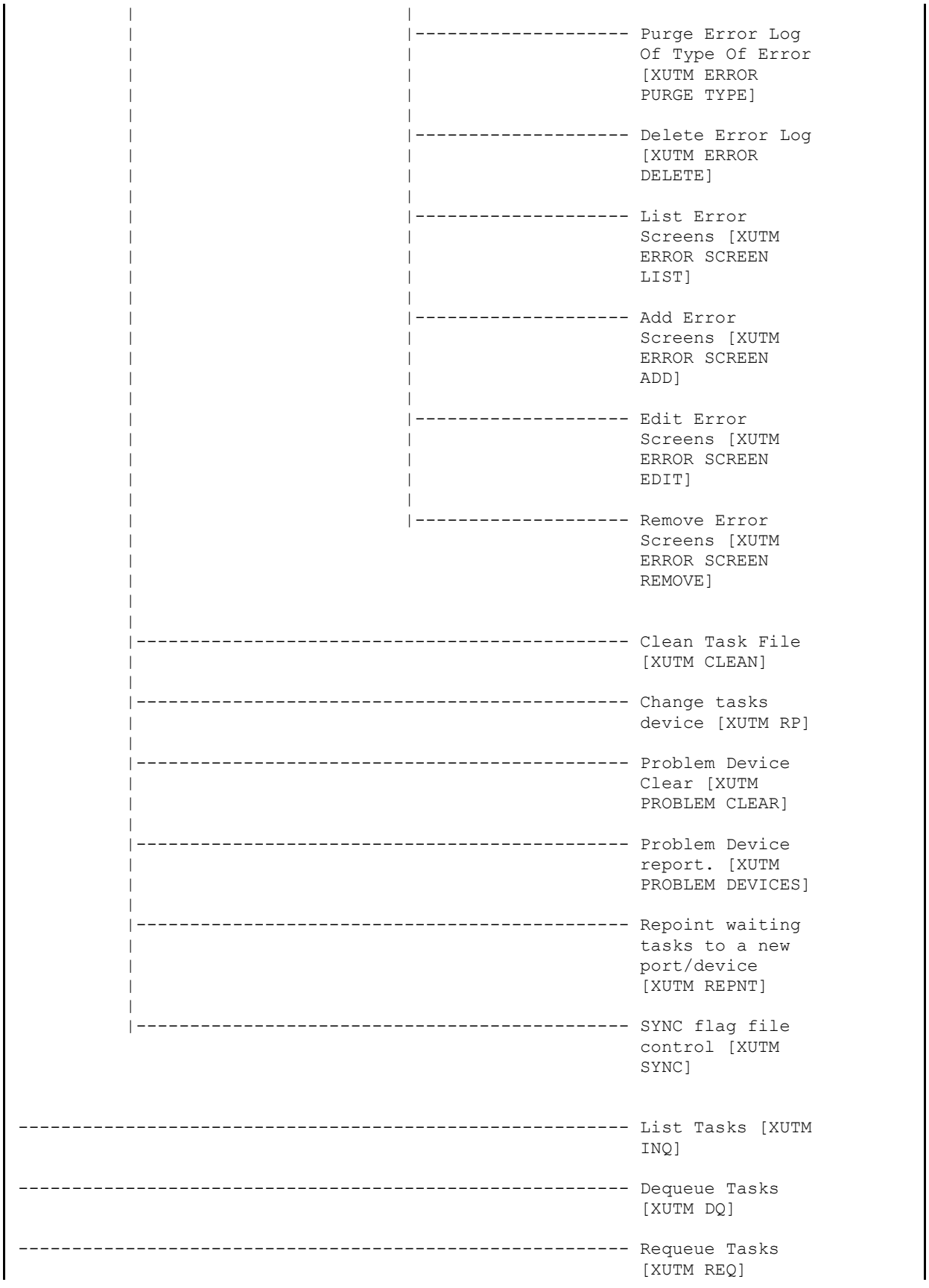

Log Purge [XUPMPURGE]
Failed Access Attempts Log [XUFAIL]
Failed Access Attempts Log Purge [XUFPURGE]
Device Failed Access Attempts [XUFDEV]
User Failed Access Attempts [XUFDISP]
Print Sign-on Log [XUSCLIST]
Direct-mode Programmer Access Audit [XUPROGAUD]
Security Officer Menu [DG SECURITY OFFICER MENU] **LOCKED: DG SECURITY OFFICER**
Display User Access to Patient Record [DG SECURITY DISPLAY LOG] **LOCKED: DG SECURITY OFFICER**
Enter/Edit Patient Security Level [DG SECURITY ENTER/EDIT] **LOCKED:

```
|                                                    DG
|                                                    SENSITIVIT
|                                                    Y**
|
|--------------------------------------------------- Purge
|                                                    Non-sensit
|                                                    ive
|                                                    Patients
|                                                    from
|                                                    Security
|                                                    Log [DG
|                                                    SECURITY
|                                                    PURGE
|                                                    PATIENTS]
|                                                    **LOCKED:
|                                                    DG
|                                                    SECURITY
|                                                    OFFICER**
|
|--------------------------------------------------- Purge
|                                                    Record of
|                                                    User
|                                                    Access
|                                                    from
|                                                    Security
|                                                    Log [DG
|                                                    SECURITY
|                                                    PURGE LOG]
|                                                    **LOCKED:
|                                                    DG
|                                                    SECURITY
|                                                    OFFICER**
|
|-----------------------------------------------EXP ISO
|                                                    Sensitive
|                                                    Records
|                                                    Report-Exp
|                                                    ort [DG
|                                                    SENSITIVE
|                                                    RCDS
|                                                    RPT-EXPORT
|                                                    ]
|
|-----------------------------------------------FMT ISO
                                                     Sensitive
                                                     Records
                                                     Report-For
                                                     matted
                                                     Report [DG
                                                     SENSITIVE
                                                     RCDS
                                                     RPT-FORMAT
                                                     ]
```

5.2.10 XUTM MGR

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

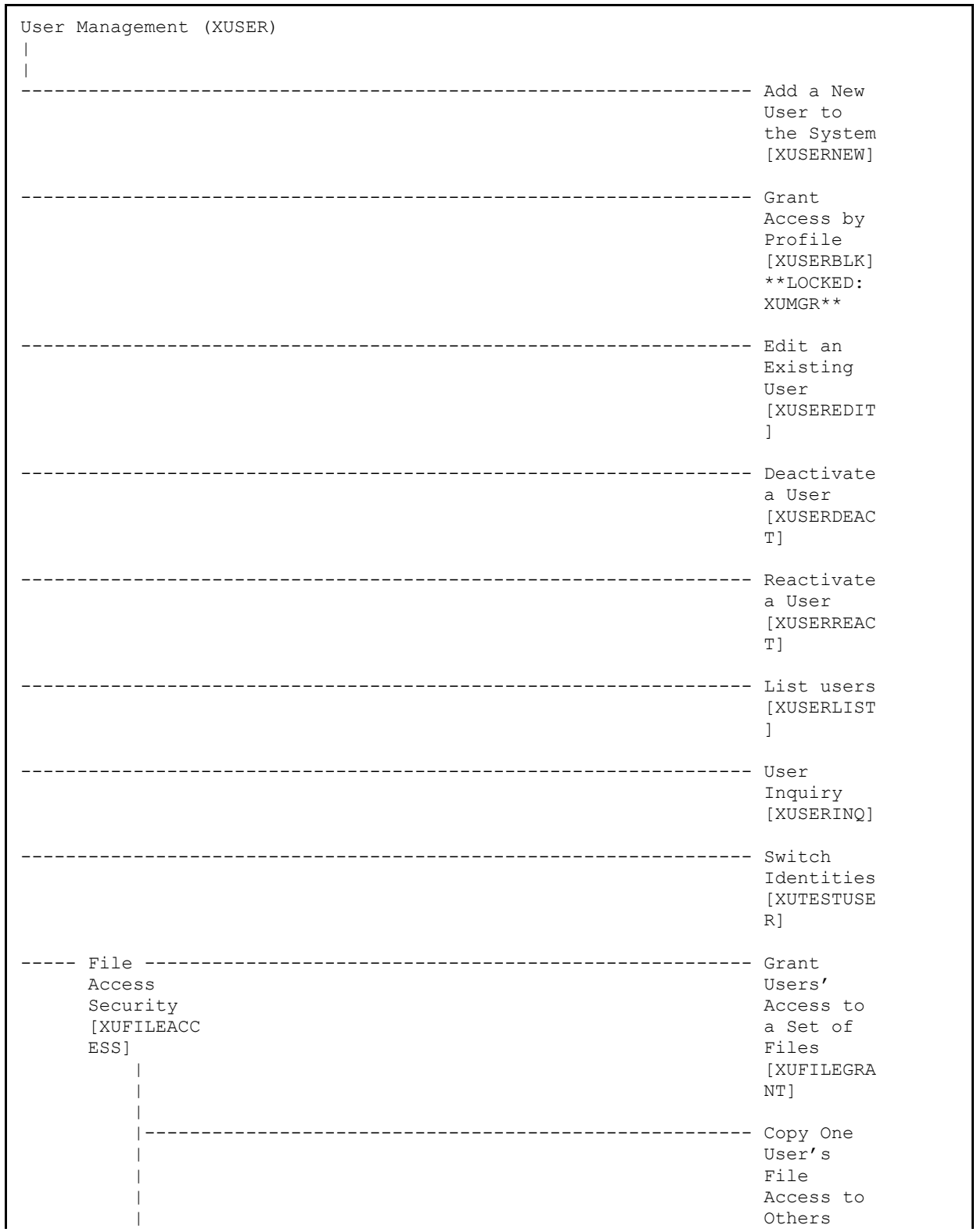


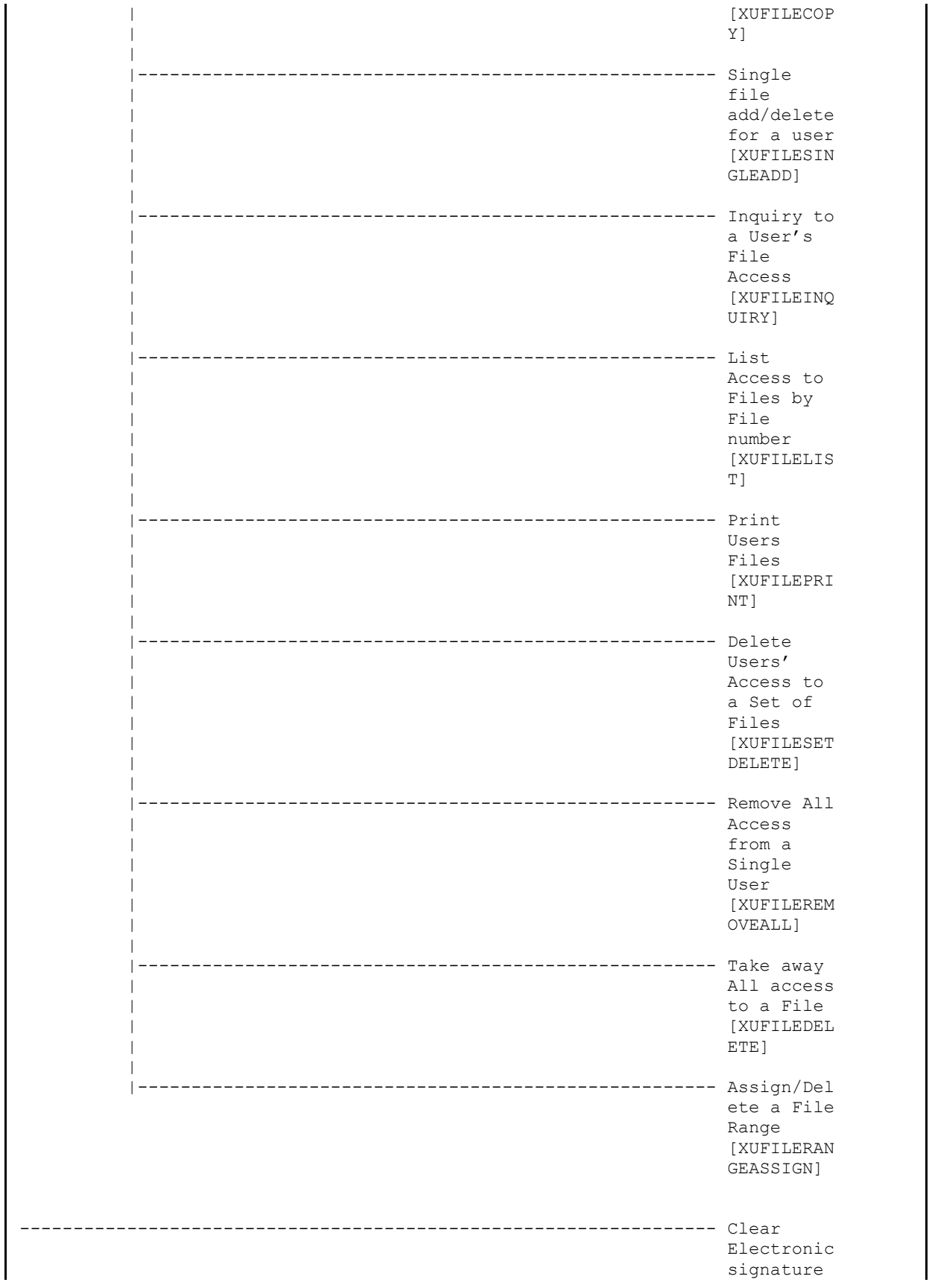

Purge Error Log Of Type Of Error [XUTM ERROR PURGE TYPE]
Delete Error Log [XUTM ERROR DELETE]
List Error Screens [XUTM ERROR SCREEN LIST]
Add Error Screens [XUTM ERROR SCREEN ADD]
Edit Error Screens [XUTM ERROR SCREEN EDIT]
Remove Error Screens [XUTM ERROR SCREEN REMOVE]
Clean Task File [XUTM CLEAN]
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]

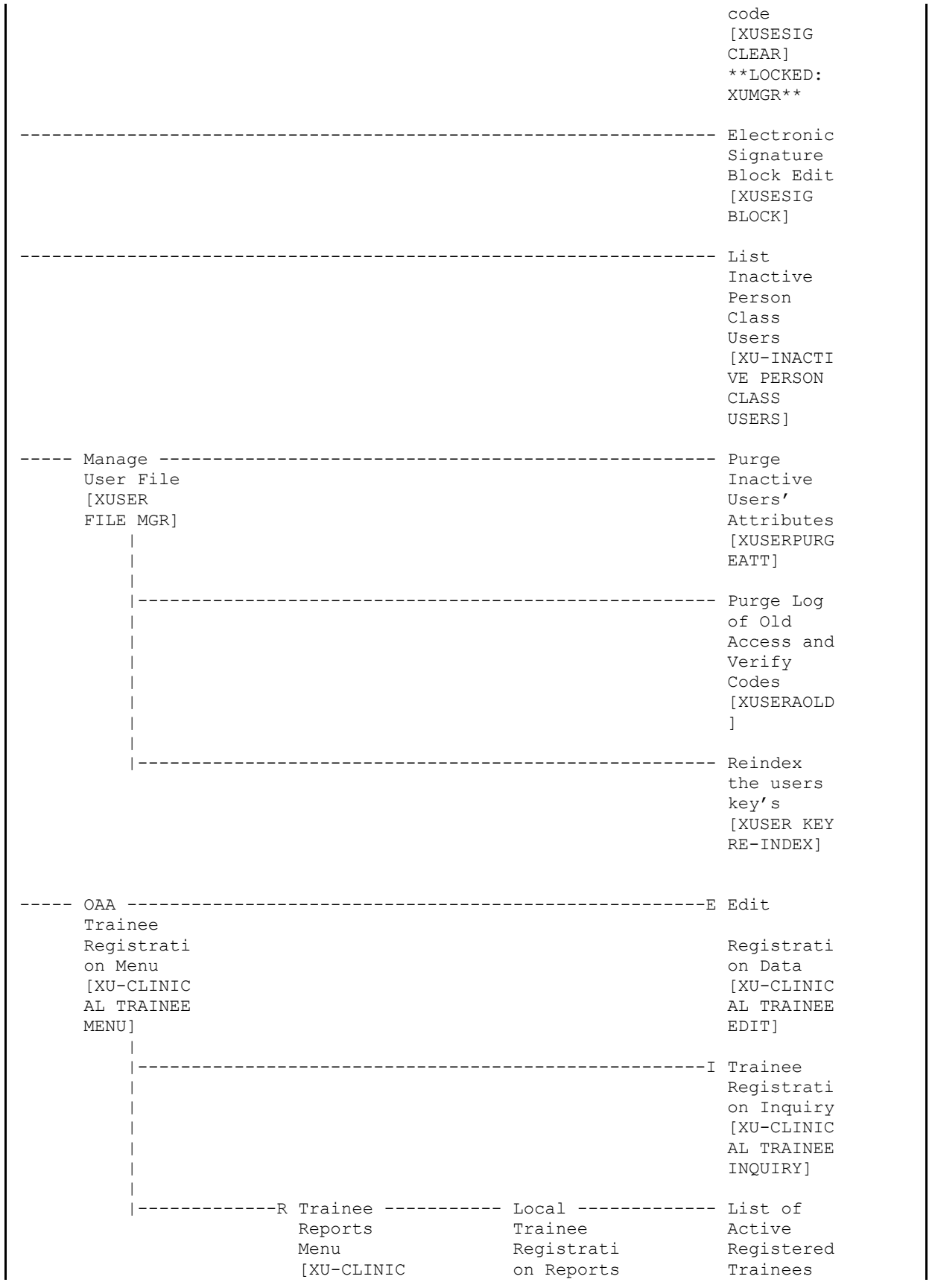
```
---------------------------------------------------------- Delete Tasks
                                                           [XUTM DEL]

---------------------------------------------------------- Print Options
                                                           that are
                                                           Scheduled to run
                                                           [XUTM BACKGROUND
                                                           PRINT]

---------------------------------------------------------- Cleanup Task
                                                           List [XUTM TL
                                                           CLEAN]

---------------------------------------------------------- Print Options
                                                           Recommended for
                                                           Queueing [XUTM
                                                           BACKGROUND
                                                           RECOMMENDED]
```

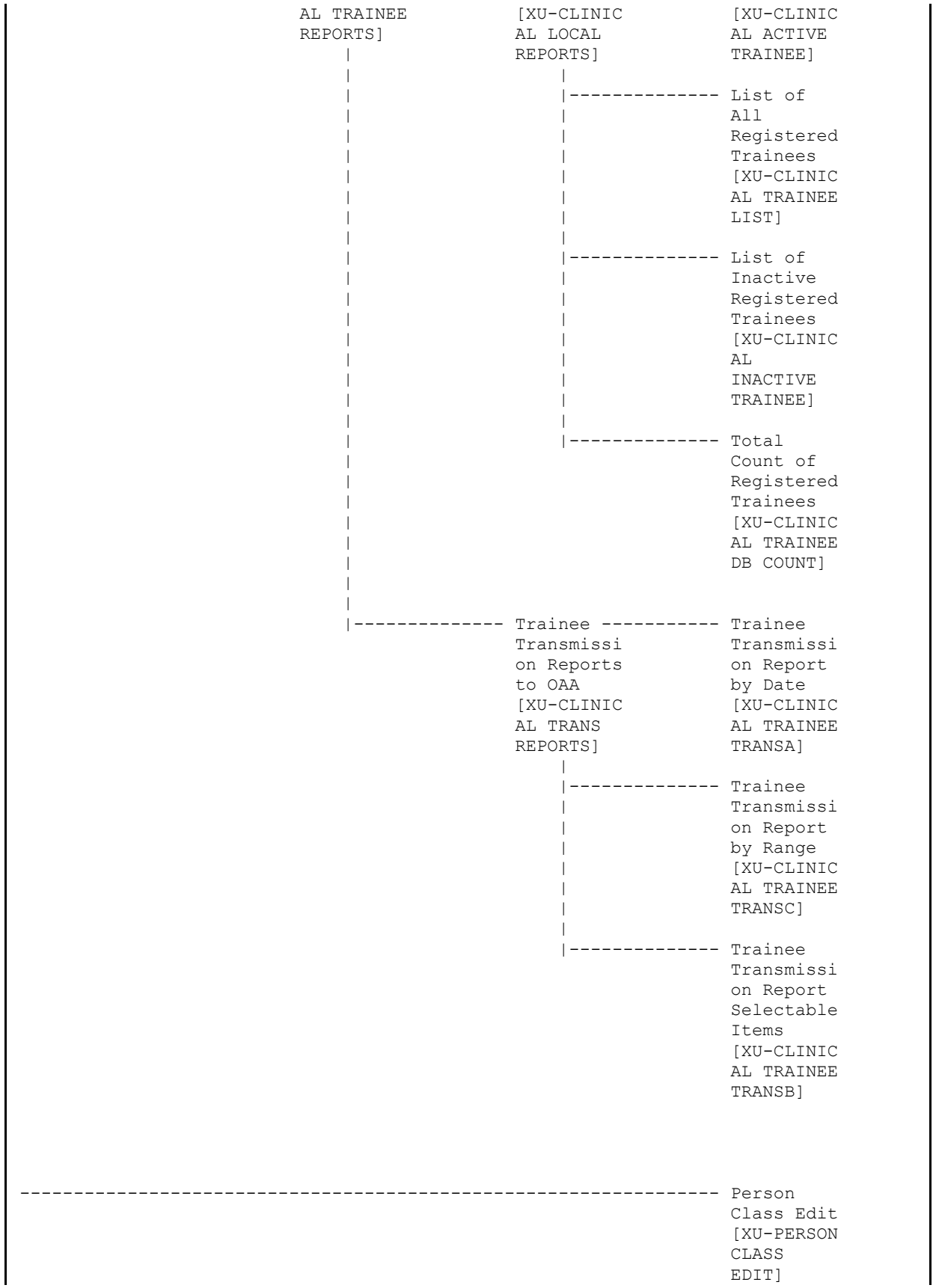
5.2.11 XUSER

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




[XUFILECOPY]
Single file add/delete for a user [XUFILESINGLEADD]
Inquiry to a User's File Access [XUFILEINQUIRY]
List Access to Files by File number [XUFILELIST]
Print Users Files [XUFILEPRINT]
Delete Users' Access to a Set of Files [XUFILESETDELETE]
Remove All Access from a Single User [XUFILEREMOVEALL]
Take away All access to a File [XUFILEDELETE]
Assign/Delete a File Range [XUFILERANGEASSIGN]
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]
Manage
User File
[XUSER
FILE MGR]
Purge
Inactive
Users'
Attributes
[XUSERPURG
EATT]
Purge Log
of Old
Access and
Verify
Codes
[XUSERAOLD
]
Reindex
the users
key's
[XUSER KEY
RE-INDEX]
OAA
E Edit
Trainee
Registrati
on Menu
[XU-CLINIC
AL TRAINEE
MENU]
Registrati
on Data
[XU-CLINIC
AL TRAINEE
EDIT]
I Trainee
Registrati
on Inquiry
[XU-CLINIC
AL TRAINEE
INQUIRY]
R Trainee
Reports
Menu
[XU-CLINIC
Local
Trainee
Registrati
on Reports
List of
Active
Registered
Trainees


AL TRAINEE REPORTS]
[XU-CLINIC AL LOCAL REPORTS]
[XU-CLINIC 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]
Trainee 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 TRANSB]
Person Class Edit [XU-PERSON CLASS EDIT]

```
------------------------------------------------------------------- Reprint
                                                                    Access
                                                                    agreement
                                                                    letter
                                                                    [XUSERREPR
                                                                    INT]
```

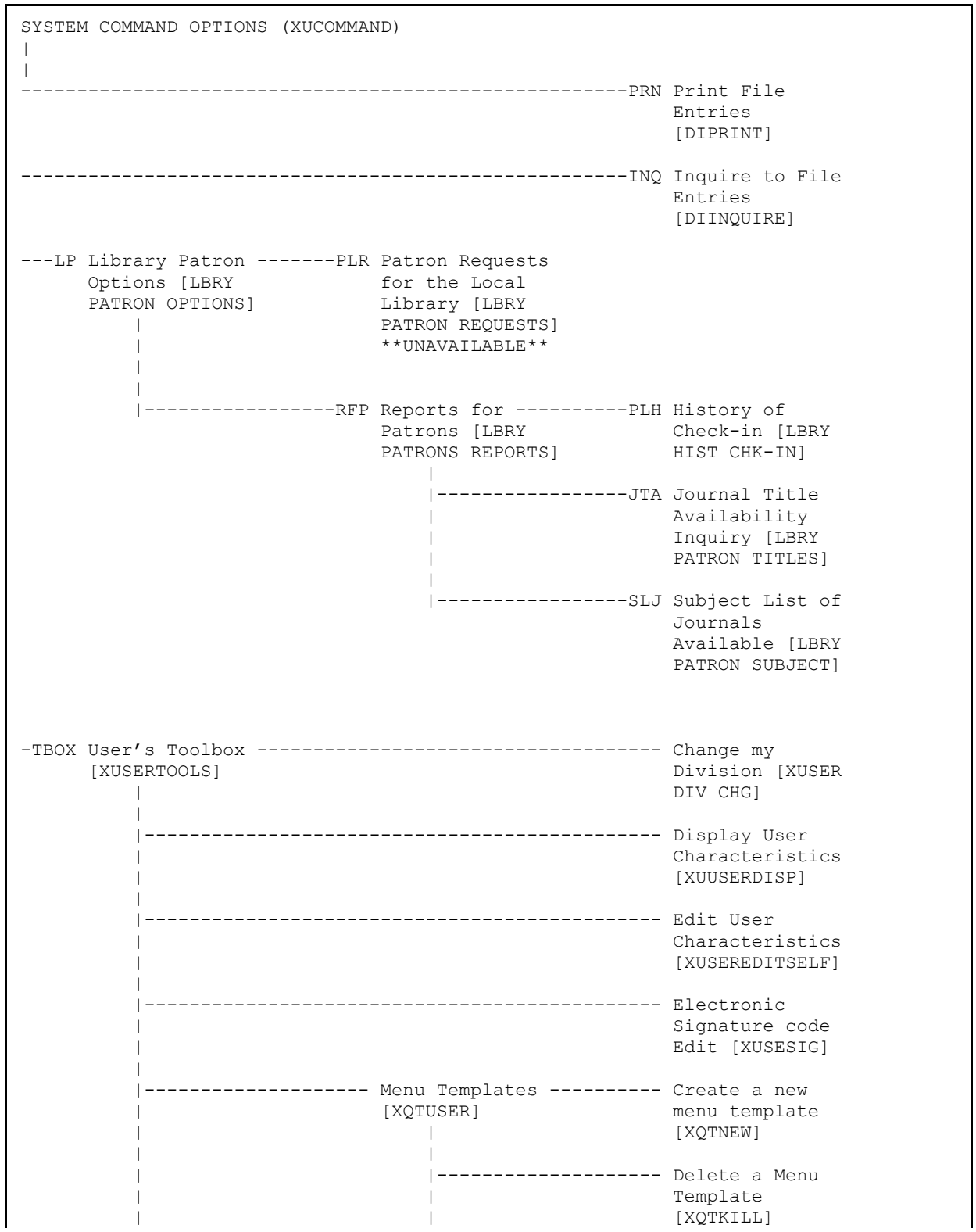
5.2.12 Parent of Queuable Options [ZTMQUEUABLE OPTIONS]

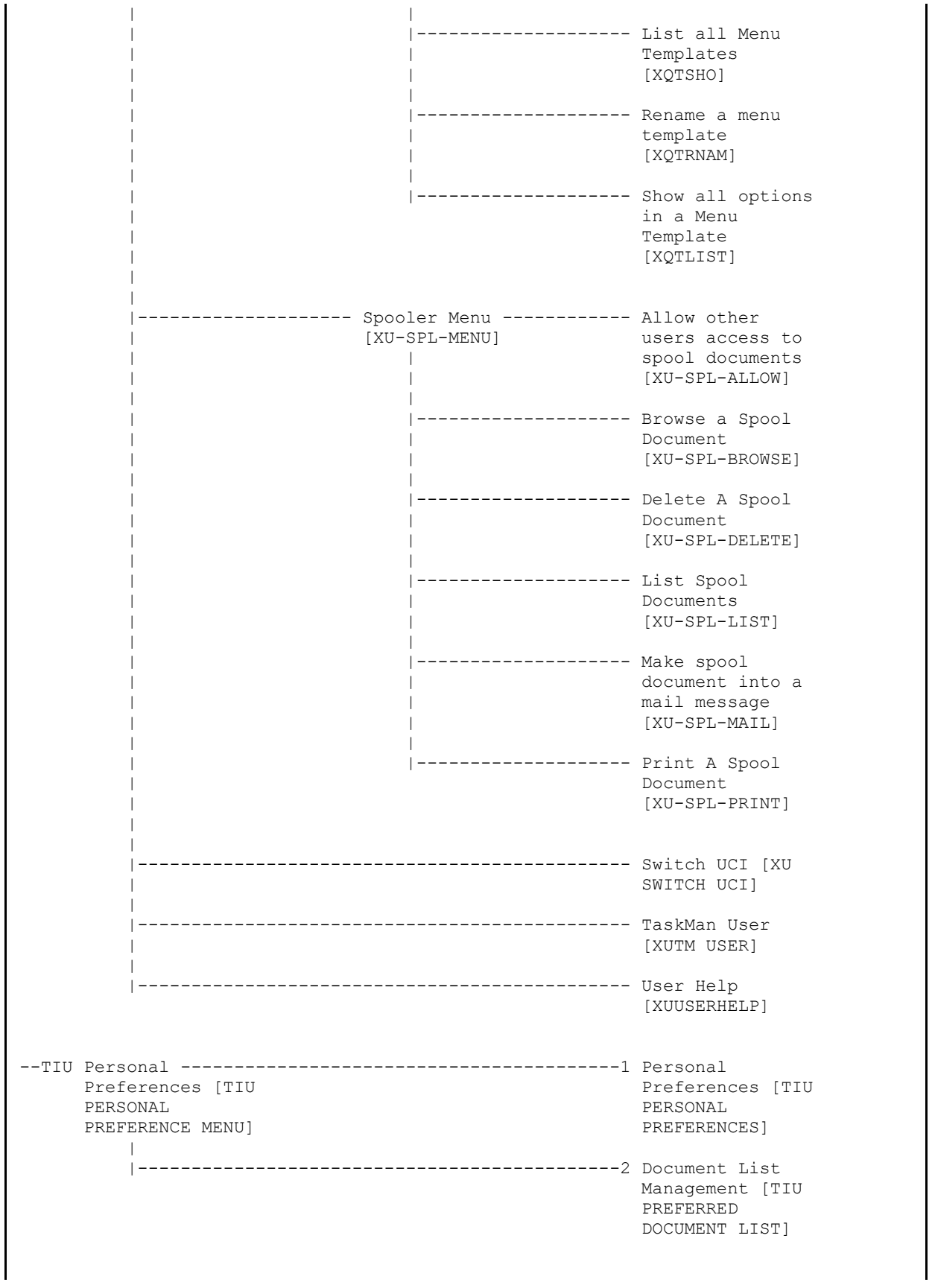
Figure 16: ZTMQUEUABLE OPTIONS—Menu Tree Diagram: Sample from OAKTST "Gold" Account

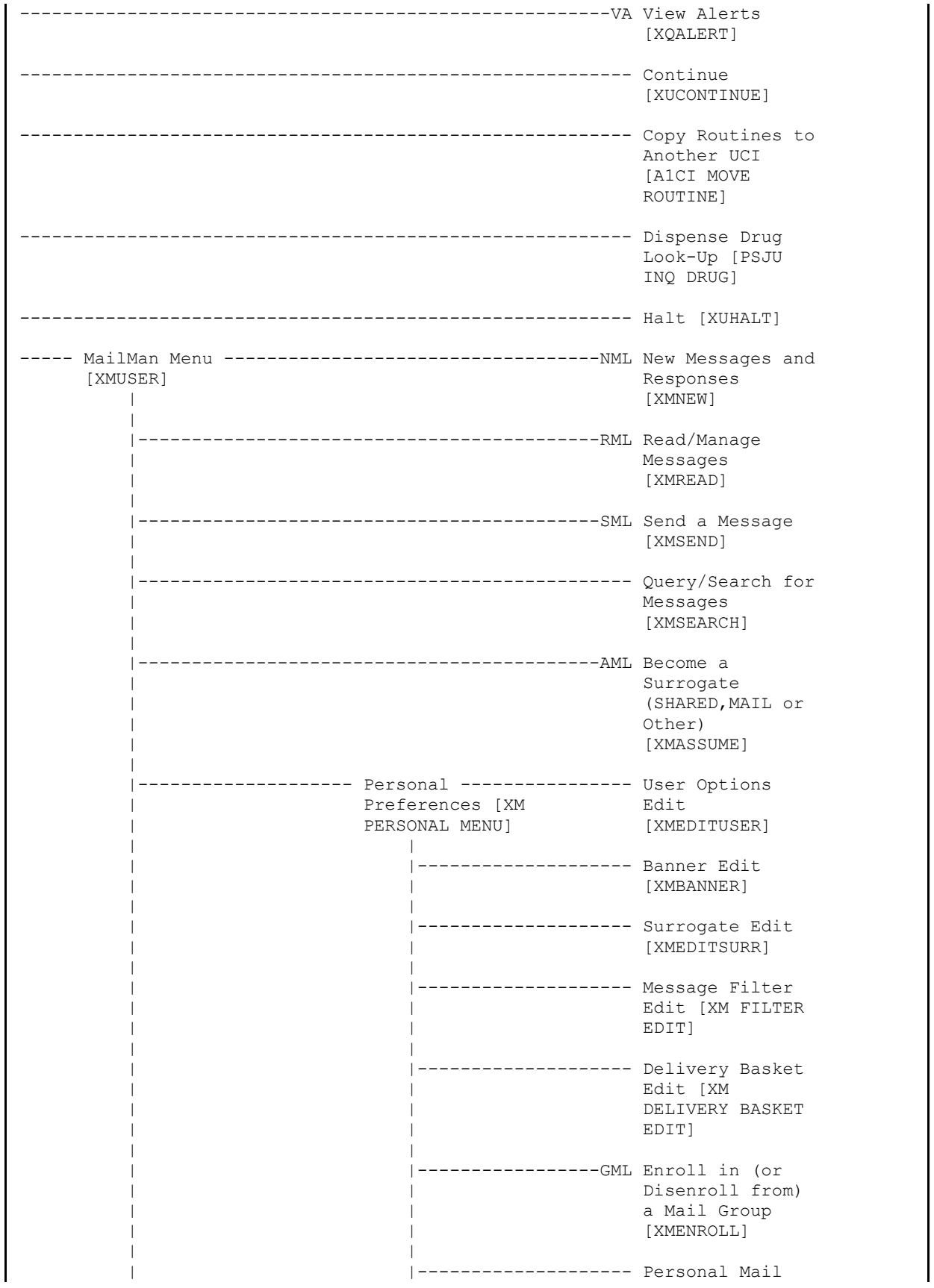
```
Parent of Queuable Options (ZTMQUEUABLE OPTIONS)
|
|
----- Automatic Deactivation of Users
      [XUAUTODEACTIVATE]

----- 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
      ERR]

----- 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]
```

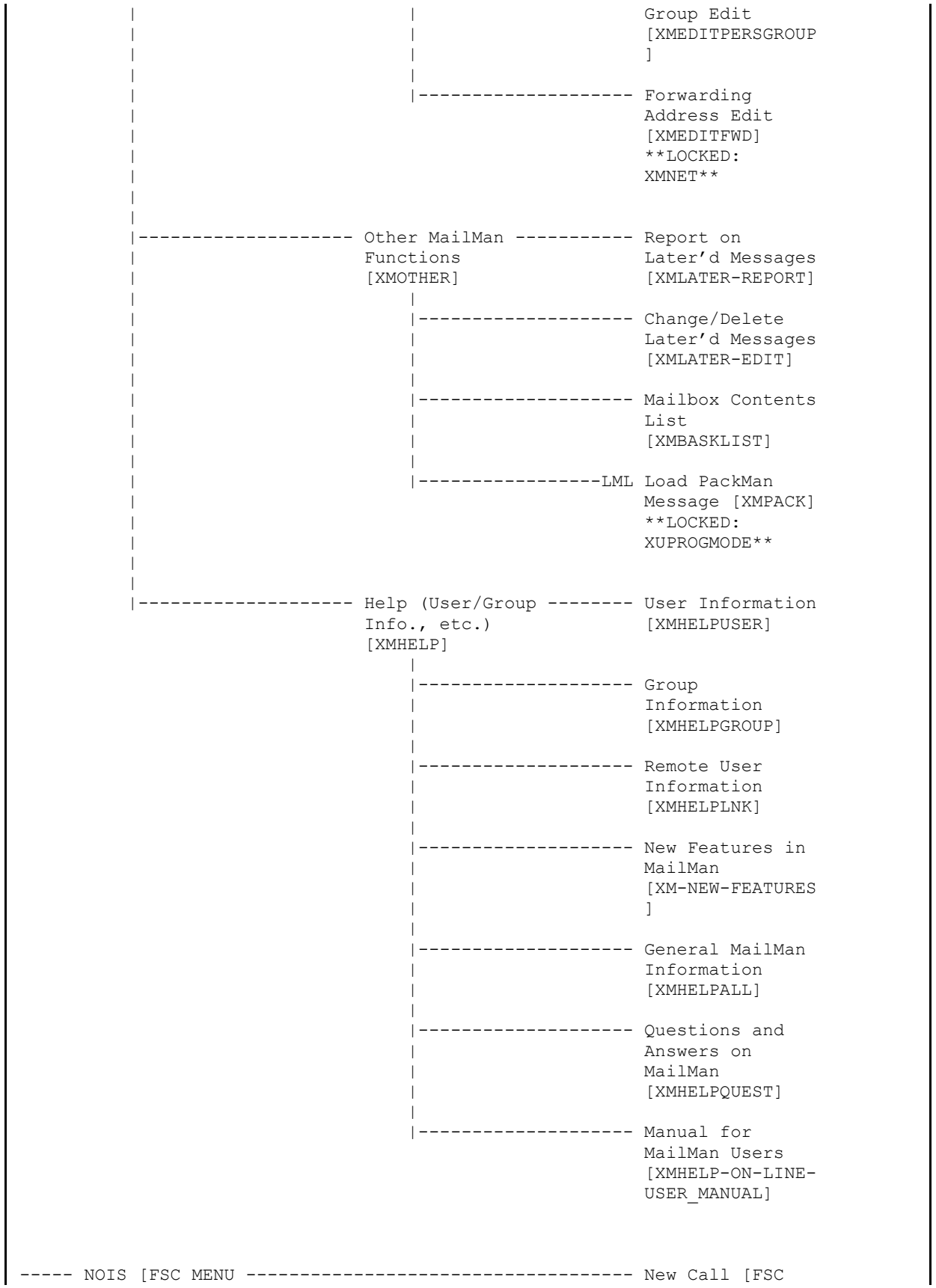
5.2.13 SYSTEM COMMAND OPTIONS [XUCOMMAND]

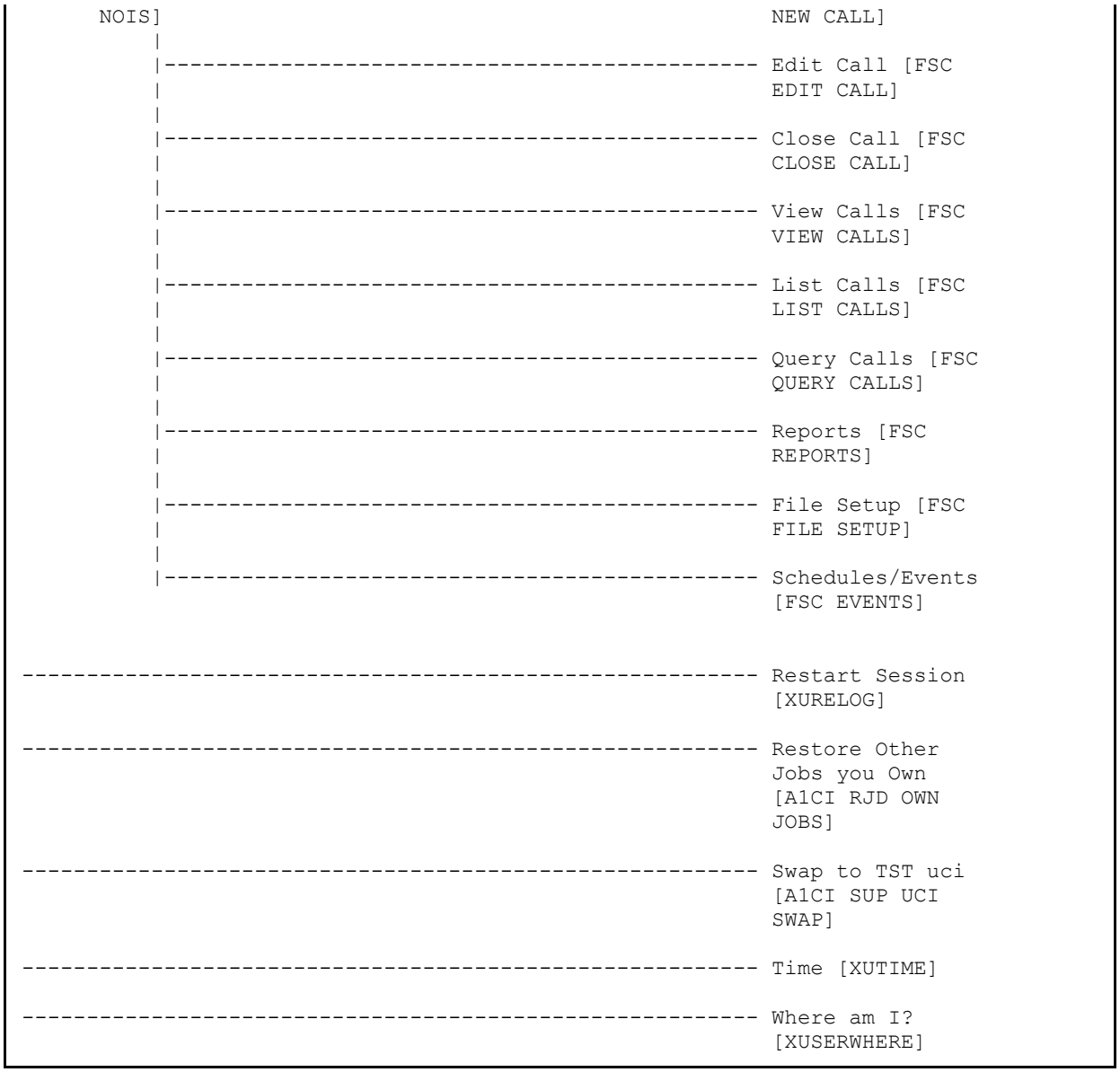
Figure 17: XUCOMMAND—Menu Tree Diagram: Sample from OAKTST "Gold" Account




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]


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


Group Edit [XMEDITPERSGROUP]
Forwarding Address Edit [XMEDITFWD] **LOCKED: XMNET**
Other MailMan Functions [XMOTHER]
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**
Help (User/Group Info., etc.) [XMHELP]
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 *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** will be defined but other variables may *not* 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 *not* 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 stores data sent by the **Errors Logged in Alpha/Beta Test (QUEUED)** [XQAB ERROR LOG XMIT] option back to the developing site (usually an OITFO). 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 tests other server options by examining the host OPTION (#19) file and returning the data associated with the

Option	Description
	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 standalone menu and options listed in Table 23:

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]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** • **Print DISUSER DEA Expiration Date Null** [XU EPCS DISUSER EXP DATE]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** • **Print DEA Expiration Date Expires 30 days** [XU EPCS XDATE EXPIRES]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** • **Print DISUSER DEA Expiration Date Expires 30 days** [XU EPCS DISUSER XDATE EXPIRES]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** • **Print Prescribers with Privilege** [XU EPCS PRIVS]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Print DISUSER Prescribers with Privileges** [XU EPCS DISUSER PRIVS]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Print PSDRPH Key Holders** [XU EPCS PSDRPH]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Print Setting Parameters Privileges** [XU EPCS SET PARMS]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Print Audits for Prescriber Editing** [XU EPCS PRINT EDIT AUDIT]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Task Changes to DEA Prescribing Privileges Report** [XU EPCS LOGICAL ACCESS]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** • **Task Allocation Audit of PSDRPH Key Report** [XU EPCS PSDRPH AUDIT]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.**

Option Name	Description
	• **Allocate/De-Allocate of PSDRPH Key** [XU EPCS PSDRPH KEY]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** • **Edit Facility DEA# and Expiration Date** [XU EPCS EDIT DEA# AND XDATE]. Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.**
XU EPCS EDIT DEA# AND XDATE	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689.** The **Edit Facility DEA# and Expiration Date** [XU EPCS EDIT DEA# AND XDATE] option allows users to edit the facility DEA number and Expiration Date in the Institution file (#4).
XU EPCS EXP DATE	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765.** 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	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765**. 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 prints the following data: • NAME • DEA# • TERMINATION DATE • DEA EXPIRATION DATE
XU EPCS XDATE EXPIRES	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765**. 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

Option Name	Description
XU EPCS DISUSER XDATE EXPIRES	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*765**. 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	Out of Order Message: ****PLACED OUT OF ORDER BY XU*8*689**. 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689.** 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689.** The **Print PSDRPH Key Holders** [XU EPCS PSDRPH] 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) • DATE GIVEN (Date Assigned)

Option Name	Description
XU EPCS SET PARMS	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689.** 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689.** 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765.** 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765.** 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689.** 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

Table 24 lists the options that are distributed with Kernel and Kernel Toolkit for these namespaces: "**XDR***," "**XI***," "**XPAR***," "**XPD***," "**XQ***," and "**XU***" (listed alphabetically by option name):

Table 24: Options—Exported Kernel Options

Option Name	Option Text	Type	Routine / Action / RPC / Other (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 *not* 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 *not* notified by an alert.
XDR APPROVE FOR MERGE	**Approve verified duplicates for merging**	Run Routine	Routine: **APPROVE^XDRMERGA**	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 non-interactively merges 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^XDRMERG2**	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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 (#15) file.
XDR DISPLAY SEARCH STATUS	**Display Search Status**	Run Routine	Routine: **XDRDSTAT**	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**	Run Routine	Routine: **XDRDEDT**	This option edits the STATUS (#.03) field of the DUPLICATE

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Record Status			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 FILE	**Edit Duplicate Resolution File**	ScreenMan		This option edits the values used by the Duplicate Resolution software for determining whether to add an entry or *not*. Once you find the sequence of scores that best fit your facility, it is recommended that you do *not* 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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XDR UTILITIES MENU** • **XDR MANAGER UTILITIES** **REF:** For more information on the XDR* options, see the *Duplicate Record Merge: Patient Merge* documentation located on the VDL at: VDL Duplicate Record Merge: Patient Merge Application documents

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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XDR PRELIMINARY SCAN LIST** • **XDR SEARCH ALL** • **XDR MERGE READY DUPLICATES** • **XDR STOP MERGE PROCESS** • **XDR RESTART MERGE PROCESS** • **XDR PURGE** • **XDR PURGE2**
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 *not* included in another merge process.
XDR MERGE SELECTED PAIR	**Merge Selected Verified Duplicate Pair**	Run Routine	Routine: **EN2^XDRMAIN**	This option selects 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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 generates 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 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XDR PURGE	**Purge Duplicate Record File**	Run Routine	Routine: **XDRDPRGE**	This option purges 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 purges 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^XDRMERGA**	This option schedules 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 *not* queued to a printer, then the data will be 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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^XDRMERGA**	This option stops 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 !,"Duplicate Resolution Utilities Menu",!`
				This menu gives access to various Duplicate Resolution Utilities. It includes the following options:
				• **XDR ADD VERIFIED DUPS**
				• **XDR CHECK MERGE PROCESS STATUS**
				• **XDR CHECK PAIR**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 marks 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, the merge process will also occur.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XDR VERIFY SELECTED PAIR	**Verify Selected Potential Duplicate Pair**	Run Routine	Routine: **EN3^XDRMAIN**	This option selects 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 allows you 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: USPS Zip Code Website
XIPMAILSERVER	**Check file 5.13 & file 5**	Server	Routine: **XIPMAIL**	This is a server option that checks the COUNTY CODE (#5.13) and STATE (#5) files. It also

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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
XIPSRVR	**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
XLFIPV CONVERT	**Convert any IP address**			(Released with Patch XU*8.0*605)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	per system settings			
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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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** • **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: VDL Kernel Toolkit Application Documents
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-

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				based software applications) in this Transport Global. Those components that are *not* routines *must* 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.
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 Redistribution**	Run Routine	Routine: **EN2^XPDIU**	This option changes a package (VistA M-based 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 M-based software application). It includes the following options: • **XPD BUILD NAMESPACE** • **XPD COPY BUILD** • **XPD EDIT BUILD** • **XPD TRANSPORT 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 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:

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 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 M-based 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 M-based 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.
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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 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:

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **Build Analyzer Main Menu [XPDANLYZ MAIN MENU]** (added with Kernel Patch XU*8.0*782) • **Build File Print [XPD PRINT BUILD]** • **Install File Print [XPD PRINT INSTALL FILE]** • **Edit Install Status [XPD EDIT INSTALL]** • **Convert Loaded Package for Redistribution [XPD CONVERT PACKAGE]** • **Display Patches for a Package [XPD PRINT PACKAGE PATCHES]** • **Purge Build or Install Files [XPD PURGE FILE]** • **Rollup Patches into a Build [XPD ROLLUP PATCHES]** • **Update Routine File [XPD ROUTINE UPDATE]** • **Verify a Build [XPD VERIFY BUILD]** • **Verify Package Integrity [XPD VERIFY INTEGRITY]**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 M-based software application).
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.
XPDANLYZ MAIN MENU	**Build Analyzer Main Menu**	Menu		This menu provides options to analyze the components of a VistA build to identify adherence to standards and best practices. **NOTE:** This menu was released with Kernel Patch XU*8.0*782.
XPDANLYZ	**KIDS Build Analyzer**	Run Routine	Routine: **START^XPDANLYZ1(4)**	This option goes through components of a build looking for inconsistencies with standards and practices. **NOTE:** This option was

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				released with Kernel Patch XU*8.0*782.
XPDANLYZ_DEL	**Delete Build Analyzer Text Files**	Run Routine	Routine: **FSHOW^XPDANLYZ5**	This option looks for text files on the system beginning with **XPBA** allowing the user to delete one or more of them. **NOTE:** This option was released with Kernel Patch XU*8.0*782.
XPDANLYZ_SQA	**KIDS Build Analyzer - Full SQA Search**	Run Routine	Routine: **START^XPDANLYZ1(5)**	This option reviews components of a VistA build, checking for inconsistencies with standards and practices. It is similar to the XPDANLYZ option; however, this option shows all lines with the search items in the SQA review. **NOTE:** This option was released with Kernel Patch XU*8.0*782.
XQ LIST UNREFERENCED OPTIONS	**List Unreferenced 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 *not* assigned to any user or attached to any other menu option. It

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				does *not* include options that are assigned in TaskMan or have the KEEP FROM DELETING (#209.2) field set to "**Yes**".
XQ UNREF'D OPTIONS	**Delete Unreferenced Options**	Run Routine	Routine: **XQ33**	This option can be used to examine those options that are *not* on any menu, are *not* used as primary or secondary options, and are *not* tasked to run. The user may then decide in each case whether to delete the unreferenced option.
XQ XUTL $J NODES	**Clean old Job Nodes in XUTL**	Run Routine	Routine: **XQ82**	This option should be scheduled to run once a day after midnight. It can be run from a host system script to get non-global files like **^TMP**. This option cleans up several temporary globals that applications may have left behind or got left because of trapping and error or other abnormal job termination. This option causes old job-related nodes that may remain in the following globals to be removed: • **^XUTL("XQ",$J,** • **^UTILITY($J,** • **^TMP($J,**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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",$J,"KEEPALIVE")** node with a more current date in **$H** format. If it has a **^XUTL("XQ",$J,"ZTSKNUM")** node and a lock of **^%ZTSCH("TASK",tasknumber)** is in place it will *not* be purged. It looks at **^UTILITY($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 **^XTMP(namespace)** entries without a **zero** node or the **zero** node date is less than today. It looks for signon log "**CUR**", "**AS1**" and "**AS2**" cross-reference entries more than seven days old and sets the current date as the signoff value and sets the FORCE CLOSE field to "**Yes**". It clears menu build nodes in

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				^XUTL("XQO",n,"^BUILD"). It clears any **^DISV** data for terminated users.
XQAB ACTUAL OPTION USAGE	**Actual Usage of Alpha/Beta Test Options**	Run Routine	Routine: **ACTUAL^XQABLIST**	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^XQABLIST**	This option is set up to automatically send to the developing OITFO 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/NUM/ROU/ERR	**Print Alpha/Beta Errors (Date/Site/Num/Rou/Err)**	Print		This option prints a listing of 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:

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• 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 IMMEDIATELY** • Server Reply: **NO REPLY (DEFAULT)**	This SERVER option stores data sent by the XQAB ERROR LOG XMIT option back to the developing site (usually an OITFO). 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 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• 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 identifies 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. This option was designed to be tasked. It does *not* require a device and generates a mail message to the developing OITFO. An alpha or beta package is indicated by the presence of the package (and its

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 re-queuing 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 USAGE OPTS** • **XQAB AUTO SEND** • **XQAB ERR DATE/SITE/NUM/ ROU/ERR**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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^XQARPRT1**	This option generates 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 following words: • **ABNL IMA** **NOTE:** This entry was

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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:

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **Name—**User 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 oldest alert.
XQAL GUI ALERTS	**Kernel GUI Alerts**	Broker (Client / Server)		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 LOCK/UNLOCK NODE**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• 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 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^XQARPRT2**	This option obtains 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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: • **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^XQALDEL**	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,

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				Division, up to System.
XQAL SURROGATE FOR WHICH USERS	**Surrogate for which Users?**	Run Routine	Routine: **GETFOR^XQALSURO**	This option provides a view of which users have specified a selected user as surrogates for themselves.
XQAL USER ALERTS COUNT	**User Alerts Count Report**	Run Routine	Routine: **EN1^XQARPRT1**	This option generates 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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. • 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	**View data for Alert**	Run Routine	Routine:	This option can be used to view data for

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
TRACKING ENTRY	**Tracking file entry**		**VIEWTRAK^XQARPRT2**	one or more entries in the ALERT TRACKING (#8992.1) file in captioned format. The internal entry numbers for the entries to be displayed *must* be entered individually.
XQALERT	**View Alerts**	Run Routine	Routine: **DOIT^XQALERT** Exit Action: `K:$D(ORVP) ORVP`	This option selects alerts or notifications produced by application packages for viewing 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^XQALERT**	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^XQALERT**	This option removes 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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** • **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^XQALSURO**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				surrogate for that user. This option is *not* 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** • **XQKICKMICRO** • **XQRIGHTNOW** • **XQBUILDTREE** • **XQBUILDUSER** This option is locked with the XUPROGMODE security key.
XQBUILDTREE	**Build Primary Menu Trees**	Run Routine	Routine: **BUILD^XQ81**	This option can be used to force the rebuilding of the tree structures used for the **^JUMP**. Whenever an item in a menu is modified, the tree *must* 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XQBUILDTREEQUE	**Non-interactive Build Primary Menu Trees**	Run Routine	Routine: **QUE^XQ81** Exit Action: `;S XQSTOP=$$HTE^XLFDT($H),^FINN(DT,"STOP")=XQSTOP K XQSTOP`	This option may be queued to run at a given frequency (e.g., daily) and does *not* require interaction with a user at the time it is run. Other than being non-interactive it does the same job as **XQBUILDTREE** with specification of no verification and queue the job.
XQBUILDUSER	**Single User Menu Tree Rebuild**	Run Routine	Routine: **USER^XQ84**	(Released with Patch XU*8.0*614) This option collects the menus that a user has in the primary and secondary fields of the OPTION (#19) file and 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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.
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-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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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.
XQKEYALTODEL	**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. 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")**.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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.
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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XQOOMAIN	**Out-Of-Order Set Managemen t**	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 option set**	Run Routine	Routine: **REBLD^XQOO1**	This option recovers an option set that has 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**	Run Routine	Routine: **LALL^XQOO3**	This option presents a list of options in the OPTION (#19) file that

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Out-Of-Order			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/protocols on and off**	Run Routine	Routine: **TOG^XQOO1**	This option writes or removes Out-Of-Order messages from individual options or protocols.
XQOPACCESS	**See if a User Has Access to a Particular Option**	Run Routine	Routine: **OPACCES^XQCHK**	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 Editor**	ScreenMan	Entry Action:
			`D EA^XQOPED`
			Exit Action:
			`D XA^XQOPED`
				This option runs the ScreenMan option editor form **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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				to options that no longer exist.
XQORPHANOPTIONS	**Non-queuable options with no parents**	Menu		The options on this menu should *not* be assigned to a user's menu. They are also *not* queueable, so they do *not* appear on the **ZTQUEUABLE OPTIONS** menu. They are collected on this menu, so that they are *not* accidentally deleted from the system.
XQRESTRICT	**Restrict Availability of Options**	Run Routine	Routine: **XQ9**	This option assigns 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 now?**	Run Routine	Routine: **NOW^XQ84**	This option checks the various flags set in **^DIC(19,"AXQ","P0")** to determine if there is menu rebuild activity on your system right now.
XQSCHK	**Server-type Option Test Server**	Server	Routine: **XQSRV5**	This server-type option tests other servers by examining the host OPTION

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			Server Action: **RUN IMMEDIATELY**	(#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 delegates 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.
XQSMD COPY USER	**Copy One Users Menus and Keys to others**	Run Routine	Routine: **XQSMDCPY**	This option copies the primary menu and secondary menu options from one user to one or more others. The only options transferred are those that have been delegated to the

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 *must* have one or more ALLOWABLE MENU PREFIX and the XQSMDFM security keys. • **Edit Option**—To build an edit option, the user *must* have an edit template to use. • **Print Option**—To build a print option, the user *must* have both a sort template and a print template. • **Inquire Option**—To build an inquire option the user can have a print template or can

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 then identifying text.
XQSMD MGR	**Secure Menu Delegation**	Menu		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 REMOVE** • **XQSMD BY OPTION** • **XQSMD BY USER** • **XQSMD USER MENU** • **XQSMD SHOW** • **XQSMD REPLICATE** • **XQSMD SET PREFIX**
XQSMD REMOVE	**Remove Options**	Run Routine	Routine: **EN2^XQSMD**	Removes options from already established delegates.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Previously Delegated		Help Frame: **XQSMD-OPTION**	
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^XQSMD21**	This option shows you who created a delegate, when, and what delegation level they are; as well as all of the options delegated to that person, when each was delegated, and by whom.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 IMMEDIATELY** • 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 template**	Run Routine	Routine: **XQT2**	This option invokes a routine that walks the user through the menu

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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^XUGOT1**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				information *not* on record for a patch (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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				REF: For instructions on how to use this option, see Kernel Patch XU*8.0*593 and the *Kernel 8.0 and 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• VA# • SCHEDULESs
XU EPCS DISUSER XDATE EXPIRES	**Print DISUSER DEA Expiration Date Expires 30 days**	Print		This option prints all DISUSERed 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 EPCS EDIT DATA	**ePCS Edit Prescriber Data**	Broker (Client/ Server)	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689** RPCs: • **XU EPCS EDIT** • **XUS KEY CHECK** • **DDR DELETE ENTRY** • **DDR FILER** • **DDR FIND1** • **DDR FINDER** • **DDR GET DD HELP** • **DDR GETS ENTRY DATA**	This is a Broker-type 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	Type	Routine / Action / RPC / Other (Based on Type)	Description
			• **DDR KEY VALIDATOR** • **DDR LISTER** • **DDR LOCK/UNLOCK NODE** • **DDR VALIDATOR** • **XWB GET VARIABLE VALUE** • **XUS PKI SET UPN** • **XUS PKI GET UPN**	
XU EPCS EDIT DEA# AND XDATE	**Edit Facility DEA# and Expiration Date**	Edit	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689**	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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765**	This option prints all active users with an unpopulated DEA# and DEA EXPIRATION DATE. This option prints the following data: • NAME • DEA# • DEA EXPIRATION DATE

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765** Routine: **RPT1^XUEPCSRT**	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 (#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.**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				To set the parameter, see the "Set the XUEPCS REPORT DEVICE Parameter" section in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*. **NOTE:** This option was released with Kernel Patch XU*8.0*580.
XU EPCS PRINT EDIT AUDIT	**Print Audits for Prescriber Editing**	Run Routine	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689** Routine: **PRINT^XUEPCSED**	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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689**	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#

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• SCHEDULESs **NOTE:** This option was released with Kernel Patch XU*8.0*580.
XU EPCS PSDRPH	**Print PSDRPH Key Holders**	Print	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689**	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) • 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765** Routine: **RPT2^XUEPCSRT**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 and Kernel Toolkit 7.3 Systems Management Guide*.** **NOTE:** This option was released with Kernel Patch XU*8.0*580.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XU EPCS PSDRPH KEY	**Allocate/De-Allocate of PSDRPH Key**	Run Routine	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689** Routine: **PSDKEY^XUEPCSRT**	This option allows users to allocate or de-allocate 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	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*689**	This option prints all active users holding the XUEPCSEDIT security key. This option identifies individuals responsible for setting the parameters. **NOTE:** This option was released with Kernel Patch XU*8.0*580.
XU EPCS UTILITY FUNCTIONS	**ePCS DEA Utility Functions**	Menu		This is DEA ePCS 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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				EXPIRES (4; SYNONYM: 4) • **XU EPCS PRIVS** (5; SYNONYM: 5) • **XU EPCS DISUSER 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: 12) • **XU EPCS EDIT DEA# AND XDATE** (13; SYNONYM: 13)
XU EPCS XDATE EXPIRES	**Print DEA Expiration Date Expires 30 days**	Print	Out of Order Message: **PLACED OUT OF ORDER BY XU*8*765**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• 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 methods. **CAUTION: Do *not* place any new items in the menu multiple.**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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,XQY0 S XQY0=$G(^DIC(19,XUXQM,0)),XQT=$P(XQY0,U,4) I $L(XQT),"APR"[XQT S XQY=XUXQM D ZTSK2^XQ1 Q`	This option works with XU OPTION QUEUE (**One-time Option Queue**) to allow site managers to schedule an option that usually runs on a cycle without disrupting that cycle. **This option should *not* be used directly, either from a menu or through the Schedule/Unschedule Options [XUTM SCHEDULE] option; it is used internally by XU OPTION QUEUE to make that option work correctly.**
XU PROC CNT CLUP	**XUS Process count cleanup**	Run Routine	Routine: **CLEAR^XUSCNT (0)**	This option is only needed for GT.M sites. This is the Kernel process count cleanup routine. It checks the entries in **XUTL("XUSYS",$J)**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				to see if they are still active, and if *not*, 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 security key.
XU SID EDIT	**Edit Logical/Physical 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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="[XUSITEIP]",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 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 about a user signon event. The protocols *must not* **READ/WRITE** to the screen, because it

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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** • **ASL ESIG 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 "**TYPE:action**" options in the OPTION (#19)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 start-up 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				XUIFN points to the NEW PERSON (#200) 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=$O(^%ZIS(14.5,"B",SYS)) Q:SYS'["CS" S UCI="VAH",%X="^XUTL(""XQO"",",%Y="^[UCI,SYS]XUTL(""XQO"",",%=$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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				finished on the print server. As distributed, it only copies the compiled menus to a UCI named **VAH** on compute servers named **CSA,CSB,…** It uses **%RCR** to copy the data.
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(8989.3,",DR="[XUAUDIT]" D XUDIE^XUS5K 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 SEARCH** (4)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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)
XUAUTODEACTIVATE	**Automatic Deactivation of Users**	Run Routine	Routine: **CHECK^XUSTERM1**	This option goes through the NEW PERSON (#200) file, and searches 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 Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				OPTION (#19) file, so other applications can take 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 ACTIVE TRAINEE** • **XU-CLINICAL INACTIVE TRAINEE**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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,",DIC(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="^VA(200," D XUDIE^XUS5 K D0,DA,DIE,DR`	This option edits 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 site decides they want to schedule this report at regular intervals. When manually

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 REPORTS**
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	Type	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 TRANSC**
XUCOMMAND	**SYSTEM COMMAND OPTIONS**	Menu		This is the basic command menu that holds commands executable from 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)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **ZPSOMD DRUG LOOK-UP** (SYNONYM: FORM) • **452 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**
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)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **MRMENU** (DISPLAY ORDER: 7) • **FHMGR** (DISPLAY ORDER: 2) • **YSUSER** (DISPLAY ORDER: 6) • **RADIOLOGY SYSTEM** (DISPLAY ORDER: 13) • **CRMGR** (DISPLAY ORDER: 1) • **LRZMENU** (DISPLAY ORDER: 4) • **VOLMENU** (DISPLAY ORDER: 18) • **SOWK** (DISPLAY ORDER: 15) • **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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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^%ZISUTL`	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^XUDHRES**	This option loops through all entries in the RESOURCE (#3.54) file and removes any slot in use entries. **CAUTION: 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^XUDHRES**	This option clears/resets one entry of one resource. System administrators use this option to clear problems.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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) • **XUDEVEDITTRM** (SYNONYM: TRM) • **XUDEVEDITALL** (SYNONYM: ALL)
XUDEVEDITALL	**Edit All Device Fields**	Edit		This option will allow the editing of all the fields in the DEVICE (#3.5) file.
XUDEVEDITCHAN	**Network Channel Device Edit**	Run Routine	Routine: **CHAN^ZISEDIT**	This is a ScreenMan-oriented edit option for editing synchronous devices.
XUDEVEDITHFS	**Host File Server Device Edit**	Run Routine	Routine: **HFS^ZISEDIT**	This is a ScreenMan-oriented edit option for editing Host file devices.
XUDEVEDITLPD	**LPD/VMS Device Edit**	ScreenMan		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.
XUDEVEDITRES	**Resource Device Edit**	Run Routine	Routine: **RES^ZISEDIT**	This is a ScreenMan-oriented edit option for editing resource devices.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUDEVEDITSPL	**Spool Device Edit**	Run Routine	Routine: **SPL^ZISEDIT**	This is a ScreenMan-oriented edit option for editing spool devices.
XUDEVEDITSYNC	**Network Channel Device Edit**	Run Routine	Routine: **CHAN^ZISEDIT**	This is a ScreenMan oriented edit option for editing synchronous devices.
XUDEVEDITTRM	**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.

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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUER EDIT PARAMS	**Error Trap Param Edit**	ScreenMan		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^XTERSUM1**	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 TOP**
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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				SUMMARY (#3.077) file.
XUER SUMMARY TOP	**Top Errors**	Run Routine	Routine: **SHOW^XTERSUM4**	This option runs a report of the top errors and prints a graph of when they occurred.
XUER UPDATE DEMAND/BATCH	**Update Error Trap Summary**	Run Routine	Routine: **TODAY^XTERSUM**	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** • **XUERTRP PRINT ERRS** • **XUERTRP PRINT T-1 1 ERR** (SYNONYM: P1) • **XUERTRP PRINT T-1 2 ERR** (SYNONYM: P2) • **XUERTRP CLEAN** • **XUERTRP TYPE** • **XUER SUMMARY** (SYNONYM: SUM)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUERTRAP	**Error Trap Display**	Run Routine	Routine: **XTER**	This option displays programmer error messages (operating-system 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^XTER1A**	This option provides an interactive print of the first ***n*** occurrences of an error (where ***n*** 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 queued to run shortly after midnight. If a device is specified, the output is sent to the

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				specified device. If a device is *not* 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 *not* 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 (#19.1) file. This option is locked with the XUEXKEY security key.
XUFAIL	**Failed Access**	Print		This option prints a list by date/time of those users who have failed

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Attempts Log			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.
XUFILEACCESS	**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) • **XUFILESETDELETE** (DISPLAY ORDER: 40) • **XUFILEPRINT** (DISPLAY ORDER: 30)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XUFILELIST** (DISPLAY ORDER: 25) • **XUFILECOPY** (DISPLAY ORDER: 5) • **XUFILEREMOVE ALL** (DISPLAY ORDER: 45) • **XUFILESINGLEA DD** (DISPLAY ORDER: 10) • **XUFILEINQUIRY** (DISPLAY ORDER: 20) • **XUFILEDELETE** (DISPLAY ORDER: 50) • **XUFILERANGEA SSIGN**
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) • **XUFILELIST** (2) • **XUFILEPRINT** (3) • **XUFILESETDELE TE** (4) • **XUFILESINGLEA DD** (5) • **XUDIACCESS FOR OIG** (6)
XUFILECOPY	**Copy One User's File**	Run Routine	Routine: **COPY^XUFILE**	This option copies the file access that one user holds and give

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Access to 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 *not* 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.
XUFILEINQUIRY	**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,DISYS`	This option lists, by user, each file the user has access to, and what that access is. Users who have no access are *not* listed.
XUFILERANGEASSIGN	**Assign/Delete 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				a new file. If the range is present, then the user can only create new files whose numbers are within the range.
XUFILEREMOVEALL	**Remove All Access from a Single User**	Run Routine	Routine: **DELI^XUFILE1**	This option removes all the file access a single user holds.
XUFILESETDELETE	**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.
XUFILESINGLEADD	**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^XUAPURGE**	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 command terminates processing in MenuMan.
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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 given option.
XU-INSTITUTION-DEA	**Institution DEA# edit**	Edit		This option edits the Facility DEA number in the INSTITUTION (#4) file.
XU-INSTITUTION-E	**Institution Edit**	ScreenMan		This option edits a subset of the fields in the INSTITUTION (#4) file.
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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 *must* be in existence and owned by the user of this option.
XUKEYDEALL	**De-allocation of Security Keys**	Run Routine	Routine: **EN2^XQ6**	This option takes away a set of security keys from an individual user or a single security key from a set of users. To be eligible, a security key *must* 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)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XUKEYDEALL** (DISPLAY ORDER: 2) • **XUKEYEDIT** (DISPLAY ORDER: 3) • **XQSHOKEY** • **XQLISTKEY** • **XQKEYDEL** • **XQKEYRDEL** • **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 types known to the system.
XULM EDIT LOCK DICTIONARY	**Edit Lock Dictionary**	Action		This option allows users to add entries to the lock dictionary or edit existing entries.
XULM EDIT PARAMETERS	**Edit Lock Manager Parameters**	Action		This option edits the site parameters for the Kernel Lock Manager.
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 problem locks.
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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				[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 PURGE LOCK MANAGER LOG	**Purge Lock Manager Log**	Action	ENTRY ACTION: `D PURGE^XULMLOG`	This option purges the Lock Manger Log of old entries.
XULM RPC BROKER CONTEXT	**KERNEL LOCK MANAGER**	Broker (Client /Server)	• RPC: **XULM GET LOCK TABLE** RPCKEY: **XULM LOCKS**	This is the "**B**" type option used by the Kernel Lock Manager.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			• RPC: **XULM KILL PROCESS** RPCKEY: **XULM LOCKS**	
XULM VIEW LOCK MANAGER LOG	**View Lock Manager Log**	Inquire		This option allows you to view the Kernel Lock Manager Log.
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: 5) • **XUOPTWHO** (DISPLAY ORDER: 6) • **XQOPTFIX** (DISPLAY ORDER: 11) • **XQSMD MGR** (DISPLAY ORDER: 4) • **XUKEYMGMT** (DISPLAY ORDER: 3) • **XUXREF-2** • **XQOOMAIN**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XQDISPLAY OPTIONS** • **XQOPED** (SYNONYM: OPED) • **XQBUILDMAIN**
XUMF DMIS ID LOAD	**Load DMIS ID's**	Run Routine	Routine: **DMIS^XUMF04Q**	This option queues a background job that: • Queries the Institution Master File (IMF). • Gets the DoD DMIS ID facilities. • Populates 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. **CAUTION: Use extreme care updating this information, because you will be updating not just your own database but the national**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 key.
XUMF LOAD INSTITUTION	**Update/refresh Institution file with IMF data**	Run Routine	Routine: **EN^XUMF04Q**	This option queries the Institution Master File (IMF) to get the gold file of institutions and automatically updates the local INSTITUTION (#4) file.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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) • **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).

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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^XUAPURGE**	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 access this option. The list can be printed with or without the

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				menu paths to the option.
XUOUT	**Out of Service Set/Clear**	Edit		This option controls whether a device is Out of Order or *not*. If set Out of Order by this option, a device *cannot* be used for logon.
XU-PERSON CLASS EDIT	**Person Class Edit**	Action	Entry Action: `S DIC="^VA(200,",DIC(0)="AEMQ",DIC("S")="I $S($P(^(0),U,11):$P(^(0),U,11)'<DT,1:1)" D ^DIC K DIC Q:Y=-1 S DA=+Y,DR="[XU-PERSON CLASS]",DIE="^VA(200," D XUDIE^XUS5 K D0,DA,DIE,DR`	This option edits Person Class data. This option is located under the **User Management** [XUSER] menu. Give this option to any user who needs to edit this data. Users that have been terminated *cannot* be edited.
XU-PERSON CLASS REMOVE	**Remove a person class entry**	Run Routine	Routine: **REMOVE^XUA4A72**	This option should be given only to those persons that the site trusts to remove entries from the Person Class multiple of the NEW PERSON (#200) file. The PERSON CLASS Multiple holds a history, and under normal use, entries should *not* 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.
XUPMDISP	**Display of Programmer**	Print		This option:

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	Mode Entry List			• Displays which users entered into programmer mode. • Sorts data by user name and then date/time. • Prompts for a print device to generate a hard copy if desired. • Gives a count of entries by user.
XUPMPURGE	**Programmer Mode Entry Log Purge**	Run Routine	Routine: **PMPURGE^XUAPURGE**	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. **CAUTION: This option is only for developers.**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUPR RTN PATCH	**Routines by Patch Number**	Run Routine	Routine: **%ZTPTCH**	This option prints routines associated with a patch. You *must* enter a list of routines and then the output displays by patch numbers.
XUPRGL	**List Global**	Action	Routine: **%G** Entry Action: `D @($S(^%ZOSF("OS")["MSM":"^%GL",^%ZOSF("OS")["DTM":"^%g",1:"^%G"))`	This option runs the operating system routine to list specified globals: • For MSM systems: It 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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **XQ UNREF'D OPTIONS** • **XUPR-ROUTINE-TOOLS** • **XTSUMBLD-CHECK** • **XTV MENU** • **XPD MAIN** (SYNONYM: KIDS) • **XUROUTINES**
XUPROGMODE	**Programmer mode**	Run Routine	Routine: **PRGMODE^%ZOSV**	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 $D(NAME) S XQORM=$O(^ORD(101,"B",NAME,0))_";ORD(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.
XUPR-ROUTINE-TOOLS	**Routine Tools**	Menu		This menu includes the group of programmer options that deal with routines. It includes the following options: • **XUINDEX** • **XU FIRST LINE PRINT** • **XTFCR**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 PATCH** • **XUPR RTN CHKSUM** • **XU CHECKSUM REPORT** • **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.
XUPS ASSESSMENT DETAIL	**XUPS ASSESSMENT DETAIL**	Run Routine	Routine: **DETAIL^XUPSCLR**	List NEW PERSON (#200) file entries that have missing DOB, SSN, or SEX, and NEW PERSON (#200) file statistics.
XUPS ASSESSMENT DETAIL	**XUPS ASSESSMENT DETAIL**	Run Routine	Routine: **DETAIL^XUPSCLR**	This option lists NEW PERSON (#200) file entries that have

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				missing DOB, SSN, or SEX, and NEW PERSON (#200) file statistics.
XUPS ASSESSMENT STATS	**XUPS ASSESSMENT STATS**	Run Routine	Routine: **STATS^XUPSCLR**	List NEW PERSON (#200) file statistics for the cleanup.
XUPS ASSESSMENT STATS	**XUPS ASSESSMENT STATS**	Run Routine	Routine: **STATS^XUPSCLR**	This option lists 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 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)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description

XUPS PREUPDATE NPF REPORTS	**XUPS PREUPDATE 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 PREUPDATE NPF REPORTS	**XUPS PREUPDATE 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 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 option is an RPC Broker Client / Server option.
XUPS VISTALINK	**XUPS VISTALINK**	Broker (Client/ Server)	RPC: **XUPS PERSONQUERY**	This is an RPC Broker Client/Server option.
XURELOG	**Restart Session**	Action	Entry Action:	This option returns a user to the signon

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			`S:'$D(XQCH) XQCH="REST" G:$L(XQCH)>2 REST^XQ12 S XQUR="REST" G X PRMP^XQ12`	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:'$D(^%ZOSF("RESJOB")) !,*7,"NOT AVAILABLE" X:$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**	Action	Entry Action: `N % S %=$G(^%ZOSF("OS")) D @$S(%["OpenM":"^%RI",%["DTM":"^%rload",%["GT.M":"^%RI",1:"^%RR")`	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!**
XUROUTINE OUT	**Output routines**	Action	Entry Action: `N % S %=$G(^%ZOSF("OS")) D @$S(%["GT.M":"^ZRO",%["OpenM":"^%RO",%["DTM":"^%rsave",1:"^%RS")`	This routine outputs 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	Type	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^XUSNPIED**	This option lists providers related to the NPI rollout. This list is sent to the Chief Business Office (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^XUSNPIED**	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/Unmark Provider Exempt**	Run Routine	Routine: **CLERXMPT^XUSNPIED**	Support staff use this option to indicate that a provider who has a

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
	from requiring an NPI			Person Class entry relating to a taxonomy value that would normally require and NPI value, as *not* needing one (e.g., if the provider were doing administrative work full time).
XUS NPI EXTRACT REPORT	**XUS NPI EXTRACT REPORT**	Run Routine	Routine: **TASKMAN^XUSNPIX1**	This option compiles the NPI Extract file and emails it to **<*REDACTED*>.VA.GOV**
XUS NPI LOCAL REPORTS	**Print Local NPI Reports**	Run Routine	Routine: **PRINTOPT^XUSNPIED**	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 NPI LOCAL REPORTS** This option is locked with the XUSNPIMTL security key.
XUS NPI PROVIDER SELF ENTRY	**PROVIDER NPI SELF ENTRY**	Run Routine	Routine: **USEREDIT^XUSNPIED**	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 whether the

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				user selecting it has the need to enter an 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 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.
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**	This option is an RPC Broker Client/Server option.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			• **XUS GET TOKEN** • **XUS CCOW VAULT PARAM** • **XUS GET CCOW TOKEN**	
XUSAP PROXY LIST	**Proxy User List**	Print		This option runs a VA FileMan (FM) print to show any users that have a USER CLASS of APPLICATION PROXY or CONNECTOR PROXY.

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^XUSPURGE**	This option purges the SIGN-ON LOG. Kernel Patch XU*8.0*756 enhanced the **SCPURG^XUSPURGE** routine. It updated this option so that it protects sign-on log entries for at least the number of days specified by the ISO or the default **365 days** as defined in the **SIGN-ON LOG RETENTION (#221)** parameter field in the KERNEL SYSTEM

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				PARAMETERS (#8989.3) file.
XUSEC ISO ACTIVE USER EXTRACT	**Special Active User Excel output**	Print		This option produces a special Microsoft® Excel formatted output.
XUSEC ISO ACTIVE USER EXTRACT	**Special Active User Excel Output**	Print		The Information Security Officer (ISO) uses this option 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.
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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				to an **HFS** device. If the screen is used, it requires a **132**-column width.
XUSER	**User Management**	Menu		This menu adds, changes, and deletes users from the NEW PERSON (#200) file, as well as clears devices for signon purposes. It includes the following options: • **XUSERNEW** (DISPLAY ORDER: 5) • **XUSEREDIT** (DISPLAY ORDER: 15) • **XUSERREACT** (DISPLAY ORDER: 25) • **XUSERDEACT** (DISPLAY ORDER: 20) • **XUTESTUSER** (DISPLAY ORDER: 40) • **XUSERINQ** (DISPLAY ORDER: 35) • **XUFILEACCESS** (DISPLAY ORDER: 45) • **XUSESIG CLEAR** (DISPLAY ORDER: 60) • **XUSERBLK** (DISPLAY ORDER: 10) • **XUSESIG BLOCK** • **XUSERREPRINT** • **XUSER FILE MGR**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 from which to select, **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: • **XUSERPURGEATT** • **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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 *not* attached to a menu but 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				on the system. It includes the following options (listed in display order): • **XUSERINQ** (1) • **XUSERLIST** (2) • **XUUSERSTATUS** (3) • **XU FINDUSER** (4) • **XUTESTUSER** (5) • **XQLISTKEY** (6) • **XQOPACCESS** (7) • **XUUSEROPT** (8) • **XUSERDEACT** (9) • **XUSERREACT** (10) • **XUSEC ISO TERMINATION REPORT** (11) • **XUSEC UP ARROW TERM REPORT** (12)
XUSERAOLD	**Purge Log of Old Access and Verify Codes**	Run Routine	Routine: **AOLD^XUSPURGE**	This option purges all inactive Access and Verify codes that are more than **270** to **400** days old. This allows for the recycling of codes after a minimum of **three** (**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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				new users, security forms are generated. (Use the **Help Processor** [XQHELP-MENU] 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.
XUSER-CLEAR-ALL	**Clear all users at startup**	Run Routine	Routine: **XUS6**	This option should be set up in the SPECIAL QUEUING to run whenever TaskMan starts up. It goes through and clears all users signed-on from the multiple signon restriction.
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 is *not* allowed to sign on to the computer.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUSEREDIT	**Edit an Existing User**	Action	Entry Action: `S DIC="^VA(200,",DIC(0)="AEMQ",DIC("S")="I $S($P(^(0),U,11):$P(^(0),U,11)'<DT,1:1)" D ^DIC K DIC Q:Y=-1 S DA=+Y,DR="[XUEXISTING USER]",DIE="^VA(200," D XUDIE^XUS5K D0,DA,DIE,DR`	This option edits a user's characteristics. Users that have been terminated *cannot* be edited.
XUSEREDITSELF	**Edit User Characteristics**	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 the following fields: • VERIFY CODE • AUTO-MENU • TYPE-AHEAD • NICKNAME This can vary at your site. A user can also edit the SUBTYPE of their device.
XUSERINQ	**User Inquiry**	Inquire	Routine: **USERINQ^XUSMGR**	This option displays various user attributes. If the user is currently signed on, it displays the following: • Job and device numbers. • Signon time. • What option is being executed. Otherwise, it displays the last signon time. It

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				also displays which security keys are held by this user.
XUSERINT	**Introductory text edit**	Action	Entry Action: `W !!,"Enter introductory text to be displayed at each logon",!! S DIE="^XTV(8989.3,",DA=1,DR=240 D ^DIE`	This option edits the introductory text that is displayed each time 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 sets up user accounts one-by-one. It presents a standard scrolling-mode editing sequence for user attributes. You can also print security forms for the new user with this option.
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.
XUSERPURGEATT	**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:	This option reactivates a user who has a

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			REACT^XUSERNEW	TERMINATION DATE. You are asked to enter their ACCESS CODE. If you give them an Access code (or if they still have 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 when there is an abnormal exit, such as an error or entry into Programmer Mode.
XUSERREPRINT	**Reprint Access agreement letter**	Run Routine	Routine: **REPRINT^XUSERNEW**	This option allows a site manager to reprint the computer access agreement letter. It does *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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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 allows users to edit the following fields: • INITIALS • SIGNATURE BLOCK TITLE • ELECTRONIC SIGNATURE CODE • 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 *must* 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^XUSESIG**	This option allows the site manager to clear (delete) a user's electronic signature code, so they can enter a new one.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUSESIG DEG	**EDUCATION (Degree) File Edit**	Edit	**DIC(20.11,**	This option edits 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^XUSFACHK**	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 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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** (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`	This option edits the KERNEL SYSTEM PARAMETERS

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			parameters have been moved out of this file.",!,"Use the Edit TaskMan Parameters option to edit those values.",! S DA=1,DR="[XUSITEPARM]",DIE=8989.3 D XUDIE^XUS5 Exit Action: K DA,DIE,DR	(#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.
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.
XU-SPL-MENU	**Spooler Menu**	Menu		This is the menu of options to work with spooled documents

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XU-SPL-SITE	**Spooler Site Parameters Edit**	Edit		Edit the site parameters for the 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.
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** (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** (SYNONYM: SL3)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
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.
XUSSPKI CRL UPLOAD	**PKI CRL Upload**	Run Routine	Routine: **CRLUP^XUSSPKI**	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 the DEA ePCS electronic signature (e-sig) 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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				It was released with Kernel Patch XU*8.0*580.
XUSTAT	**CPU/Service /User/Devic e 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(^%ZOSF("SS")) )#2 ^("SS") D HOME^%ZIS`	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 does *not* 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 Managemen t**	Menu		This menu maintains the DEVICE (#3.5) file, which defines the characteristics of each device attached to the computer. It includes the following options: • **XUTERM** (DISPLAY ORDER: 3) • **XUDEV** (DISPLAY ORDER: 2)

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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**
XUTLOOPBACK	**Loopback Test of Device Port**	Action	Entry Action: `D ^%ZIS Q:POP X ^%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`	This option tests a terminal line with the use of a loopback connection on the line. A loopback connector just ties pins **2**, **3** together.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			`^%ZOSF("EON"),^%ZIS("C")`	
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 RECOMMENDED	**Print Options Recommended 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.
XUTM CLEAN	**Clean Task File**	Run Routine	Routine: **OPTION^XUTMK**	This option cleans out the Task Log for the site manager, removing all entries

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 tasks.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUTM ERROR	**Taskman Error Log**	Menu		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 REMOVE** (8)
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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUTM ERROR PURGE TYPE	**Purge Error Log Of Type Of Error**	Run Routine	Routine: **TYPE^XUTMKE**	This option provides a way to clean 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 **$ZE** value contains an **E**. **NOTE:** This does *not* edit the system's main error log, only TaskMan's Error Log in the **^%ZTSCH** global.
XUTM ERROR SCREEN ADD	**Add Error Screens**	Run Routine	Routine: **SCRAD^XUTMKE2**	This option adds more error screens. An error screen is a string of characters that TaskMan compares to the **$ZE** value of every error it traps. TaskMan only logs those trapped errors whose **$ZE** values do *not* contain an error

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				screen as a substring. The system manager can choose to have the screen count the number of errors it screens out.
XUTM ERROR SCREEN EDIT	**Edit Error Screens**	Run Routine	Routine: **SCRED^XUTMKE2**	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^XUTMKE1**	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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				they prevent from being logged.
XUTM ERROR SCREEN REMOVE	**Remove Error Screens**	Run Routine	Routine: **SCREM^XUTMKE1**	This option removes error screens. Error screens provide the system manager with a way to prevent certain 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**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				PRINT (DISPLAY ORDER: 7) • **XUTM DEL** (DISPLAY ORDER: 6) • **XUTM REQ** (DISPLAY ORDER: 5) • **XUTM DQ** (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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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.
XUTM RESTART	**Restart Task Manager**	Run Routine	Out of Order Message: **Not used in RDP environment** Routine: **RESTART^ZTMB**	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/Unschedule Options**	ScreenMan		This option edits the background job fields in the OPTION SCHEDULING (#19.2) file. The result of this

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 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 *not* 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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** (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 RP** • **XUTM REPNT**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				• **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 *not* process any 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

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
				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 user, including all of the menus and options, according to the user's security and primary menu.
XUUSERDISP	**Display User Characteristics**	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.
XUUSERSTATUS	**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.

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
XUVERSIONEW-HELP	**Kernel New Features Help**	Action	Entry Action: `S XQH="XUDOC NEW FEATURES*" DEN^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 • 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 *not* 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:	This is a basic user management menu. It includes the following options: • **XUSERDEACT**

Option Name	Option Text	Type	Routine / Action / RPC / Other (Based on Type)	Description
			W *27,*43,!!!!!!!!! !!!!!!!!!!!!!!! !!!!!!!!!!	• XUSERINT • XUSERNEW • XUSERREACT • XUSEREDIT

5.3.2 Toolkit

Table 25 lists the options that are distributed with the Kernel Toolkit software "**XT**" namespace; listed alphabetically:

Table 25: Options—Exported Toolkit Options

Option Name	Option Text	Type	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.
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 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.

Option Name	Option Text	Type	Routine	Description
XTFCR	**Flow Chart Entire Routine**	Run Routine	Routine: **XTFCR**	This option produces a flow chart of the processing performed within a routine.
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 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.

Option Name	Option Text	Type	Routine	Description
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!$D(DIRUT) XQUIT=""`	**CAUTION: Do *not* run this option without first understanding how it works and what will result. It assumes the existence of a SYSPRINT.COM file, which is a VMS command file originally distributed by the DHCP Cookbook team. The LAT$STARTUP file is also involved in the process.** 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

Option Name	Option Text	Type	Routine	Description
				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 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.

Option Name	Option Text	Type	Routine	Description
				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 recommendations.
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.
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.
XTLKMODPARK	**Delete Entries From Look-up**	Run Routine	Routine: **DD^XTLKEFOP**	This option deletes entries out of the LOCAL LOOKUP (#8984.4) file. In order to do this, there *cannot* be any Keywords, Shortcuts, or Synonyms associated with the file to be deleted. This option is locked with the XTLKZMGR security key.

Option Name	Option Text	Type	Routine	Description
XTLKMODPARS	**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="Shortcuts" 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) • **XTLKMODSY** (3; SYNONYM: SY)
XTLKPRTUTL	**Print Utility**	Action	Entry Action: `D A^XTLKPRT`	This option prints 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:

Option Name	Option Text	Type	Routine	Description
				• **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** [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**

Option Name	Option Text	Type	Routine	Description
				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.
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.
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** • **XTFCR** (SYNONYM: FCR) • **XTFCE** (SYNONYM: FCE) This menu is locked with the

Option Name	Option Text	Type	Routine	Description
				XUPROGMODE security key.
XT-OPTION TEST	**Test an option not in your menu**	Action	ENTRY ACTION: `S DIC=19,DIC(0)="AEMQZ",DIC("A")="Option entry to test: ",DIC("S")="I $P(^(0),U)'[""XUPROG"" D ^DIC K DIC I Y>0 S XQY=+Y,XQUR=$P(Y,U,2),XQDIC="U",XQY0=^DIC(19,XQY,0),^("T")=^XUTL("XQ",$J,"T")-1 G M0^XQ`	This option is for in-house 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.
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:	This option calls the **XTRGRPE** routine to

Option Name	Option Text	Type	Routine	Description
			XTRGRPE	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 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.
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 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.

Option Name	Option Text	Type	Routine	Description
XT-RTN CS UPDATE	**Old Checksum Update from Build**	Run Routine	Routine: **UPDATE^XTRUTL**	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.
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.
XTSUMBLD-CHECK	**Calculate and Show Checksum Values**	Run Routine	Routine: **CHCKSUM^XTSUMBLD**	This option calls **CHCKSUM^XTSUMBLD** 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 enters or edits files and namespaces in the PACKAGE (#9.4) file.
XTV MENU	**Verifier Tools Menu**	Menu		This menu contains options that are available as tools for verification during program development. It includes the following options:

Option Name	Option Text	Type	Routine	Description
				• **XTVR COMPARE** (DISPLAY ORDER: 20) • **XTVR UPDATE** (DISPLAY ORDER: 5) • **XTVG COMPARE** • **XTVG UPDATE** • **XTV EDIT VERIF PACKAGE** • **XTVR MOST RECENT CHANGE DATE** • **XTVR RESTORE PREV ROUTINE**
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 **DO**s and **GOTO**s 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.
XTVG COMPARE	**Global Compare for selected package**	Run Routine	Routine: **XTVGC2**	This option produces 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).

Option Name	Option Text	Type	Routine	Description
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 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

Option Name	Option Text	Type	Routine	Description
				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. **CAUTION: The 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 *must* specify a routine name to be used for the restored routine that is *not* 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

Option Name	Option Text	Type	Routine	Description
				version entered is kept completely, previous entries reflect only the changes in lines added and/or deleted to make the next version. This option records the current routine structure, so that it can be compared with future versions of the routine using the **Routine Compare - Current with Previous** [XTVR COMPARE] 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. Table 26 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 Table 26; unless otherwise noted, the reference given is to a chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Systems Management Guide and Security Tools Manual*
Automatic Deactivation of Users	**1 day**	Signon/Security: System Management chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Clean Error Log over Range of Dates		TaskMan: System Management—Operation Chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Systems Management Guide*
Clean Task File		TaskMan: System Management—Operation Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Clear All Users at Startup		Signon/Security: System Management Chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Systems Management Guide*
Deactivate a User		Signon/Security: System Management Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Delete Error Log		TaskMan: System Management—Operation Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Delete Old (>14 d) Alerts	**1 day**	Alerts Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Failed Access Attempts Log Purge		Signon/Security: System Management Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide* and *Security Tools Manual*
Programmer Mode Entry Log Purge		Signon/Security: System Management Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide* and *Security Tools Manual*
Purge Error Log of Type of Error		TaskMan: System Management—Operation Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Purge Inactive Users' Attributes		Signon/Security: System Management Chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Systems Management Guide* and *Security Tools Manual*
Purge of ^%ZUA Global	**15 days**	Signon/Security: System Management Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*
Purge Old Spool Documents	**7 days**	Spooling Chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Systems Management Guide* and *Security Tools Manual*
Queuable Task Log Cleanup	**1 day**	TaskMan: System Management—Operation Chapter in the *Kernel 8.0 and Kernel Toolkit 7.3 Systems Management Guide*

REF: The "KIDS: System Management—Installations" chapter in the *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Developer's Guide*.

Table 27 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 and 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 In-memory 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

Routine	Entry Point	ICR #	Description
MXMLPRSE	EN	4149	XML—Event Driven API
MXMLUTL	$$SYMENC	4153	XML—Encoded Strings in Messages
	$$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

Routine	Entry Point	ICR #	Description
	$$FMTH	10103	Convert FM Date to **$H**
	$$FMTHL7	10103	Convert FM Date to HL7 Date
	$$HADD	10103	**$H** Add
	$$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

Routine	Entry Point	ICR #	Description
XLFMSMT	$$BSA	3175 & 10143	Body Surface Area
	$$LENGTH	3175 & 10143	Convert Length
	$$TEMP	3175 & 10143	Convert Temperature
	$$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

Routine	Entry Point	ICR #	Description
	$$E	10105	e—Natural Logarithm
	$$EXP	10105	e—Natural Logarithm to the Nth Power
	$$LN	10105	Natural Log (Base **e**)
	$$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

Routine	Entry Point	ICR #	Description
XLFSHAN	$$AND	6157	Bitwise Logical AND
	$$CPUTIME	6157	Return System and User CPU Time
	$$ETIMEMS	6157	Return Elapsed Time in Milliseconds
	$$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

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

Routine	Entry Point	ICR #	Description
XPDMENU	$$ADD	1157	Add Option to Menu
	DELETE	1157	Delete Menu Item
	LKOPT	1157	Look Up Option IEN
	LOCK	1157	Set LOCK Field in OPTION File
	OUT	1157	Edit Option's Out of Order Message
	RENAME	1157	Rename Option
	RLOCK	1157	Set REVERSE/NEGATIVE Field in OPTION File
	$$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

Routine	Entry Point	ICR #	Description
	$$VERCP	10141	Verify Checkpoint
	$$VERSION	10141	PACKAGE File Current Version
XQ92	NEXT	10077	Restricted Times Check
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
	$$GETSURO	3213	Get Current Surrogate Information
	REMVSURO	2790	Remove Surrogates for Alerts
	SETSURO1	3213	Establish a Surrogate for Alerts
	SUROFOR	3213	Return a Surrogate’s List of Users
	SUROLIST	3213	List Surrogates for a User
XQCHK	$$ACCESS	10078	User Option Access Test
	OP	10078	Current Option Check

Routine	Entry Point	ICR #	Description
XQDATE	^XQDATE	10079	Convert **$H** to VA FileMan Format (Obsolete) (Use $$FMTE^XLFDT or $$HTFM^XLFDT)
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)

Routine	Entry Point	ICR #	Description
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)
	$$RPLCVALS	5078	Get Field Values of Final Replacement Term (Term/Concept)
	$$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
	K	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

Routine	Entry Point	ICR #	Description
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
	$$IDX	2171	Institution IEN (Using Coding System & ID)
	$$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

Routine	Entry Point	ICR #	Description
XUDHSET	$$RES	2232	Set Up Resource Device
XUHUI	OPKG	3589	Monitor New Style Cross-referenced Fields
XULMU	CLEANUP	5832	Lock Manager: Execute the Housecleaning Stack
	SETCLEAN	5832	Lock Manager: Register a Cleanup Routine
	UNCLEAN	5832	Lock Manager: Remove Entries from the Housecleaning Stack
	ADDPAT	5832	Lock Manager: Add Patient Identifiers for a Computable File Reference
	PAT	5832	Lock Manager: Get a Standard Set of Patient Identifiers
XUMF	$$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	H	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

Routine	Entry Point	ICR #	Description
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	Returns a provider's active DEA Number. Modified with Kernel Patches XU*8.0*580 and XU*8.0*689 for ePCS.
	$$DEAXDT	2343	Returns the expiration date of a specific DEA number. Modified with Kernel Patch XU*8.0*689.
	DEASCH	2343	Returns the DEA schedules for a specific DEA number. Modified with Kernel Patch XU*8.0*689.
	$$DETOX	2343	Get Detox/Maintenance ID Number Added with Kernel Patch XU*8.0*580 for ePCS.
	DIV4	2533	Get User Divisions (Controlled Subscription)
	$$LOOKUP	2343	NEW PERSON File Lookup
	$$NAME	2343	Get Name of User
	$$PROVIDER	2343	Providers in NEW PERSON File
	$$PRDEA	2343	Returns a prescriber's default DEA number, that is flagged as USE FOR INPATIENT ORDERS? Modified with Kernel Patch XU*8.0*689.
	$$PRSCH	2343	Returns DEA schedule permissions for a prescriber's active DEA number. Modified with Kernel Patch XU*8.0*689.
	$$PRXDT	2343	Returns the expiration date of a prescriber's default DEA number, which is flagged as USE FOR INPATIENT ORDERS? Modified with Kernel Patch XU*8.0*689.
	$$SDEA	2343	Check for Prescribing Privileges Added with Kernel Patch XU*8.0*580 for ePCS and modified with Kernel Patch XU*8.0*689.

Routine	Entry Point	ICR #	Description
	$$VDEA	2343	Check if User Can Sign Controlled Substance Orders Added with Kernel Patch XU*8.0*580 for ePCS.
XUSERNEW	$$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
XUSNPI	$$CHKDGT	4532	Validate NPI Format
	$$NPI	4532	Get NPI from Files #200 or #4
	$$QI	4532	Get Provider Entities

Routine	Entry Point	ICR #	Description
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)
	$$QQ	1519	Double Queue—Direct Queuing in a Single Call
	$$REQQ	1519	Schedule Second Part of a Task

Routine	Entry Point	ICR #	Description
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
	OPEN	2320	Open Host File
	$$PWD	2320	Get Current Directory
	$$STATUS	2320	Return End-of-File (EOF) Status

Routine	Entry Point	ICR #	Description
%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)
	$$EC	10097	Get Error Code
	GETENV	10097	Current System Information
	GETPEER	4056	VistALink-Get IP Address for Current Session (Controlled Subscription)
	$$LGR	10097	Last Global Reference
	LOGRSRC	10097	Record Resource Usage (RUM)
	$$OS	10097	Get Operating System Information

Routine	Entry Point	ICR #	Description
	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 and Kernel Toolkit 7.3 Systems Management Guide* and *Kernel 8.0 and 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 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Miscellaneous: Developer Tools
(obsolete) `D ^%INDEX` Use: `D ^XINDEX`	To run **%INDEX**	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Routine Tools and Toolkit: Developer Tools
`D ^%RR`	Input Routines option	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Developer Tools
`D ^%RS`	Output Routines option	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Developer Tools
`D ^XQ1`	Test an Option	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Menu Manager: Programmer Tools
`D ^XTER`	Display Error Trap	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Error Processing: Developer Tools
`D ^XTERPUR`	Purge Error Log	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Error Processing: Developer Tools
`D ^XTFCR`	Flow Chart from Entry Point option	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Routine Tools
`D ^XTRCMP`	Compare Two Routines option	*Kernel 8.0 and Kernel Toolkit 7.3 Developer's Guide*; Toolkit: Developer Tools

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

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

9 Remote Procedure Calls (RPCs)

Table 29 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.	Returns: • **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.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
XDR UPD SUPPR EMAIL Availability: **AGREEMENT**	None	**ADD^XDRDADDS**	• **FILE NUMBER:** File 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.	Returns: • **Success: 0—**If no errors occurred. • **Failure: -1^Error Message—**If errors occurred.	This API remotely sets the 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 EPCS EDIT Agreement: **RESTRICTED**	None	**ENTRY^XUEPCSED**	**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.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
					NOTE: This RPC was deprecated with Kernel Patch XU*8.0*689 and ePCS GUI v2.
XULM GET LOCK TABLE	5832	**LOCKS^XULMRPC**	• **LOCKGBL:** This is the global reference of the location where the lock table should be returned. Maximum data length: **245**. • **RESULT:** Global location to place the result. Maximum data length: **200**.	Returns: • **0** on failure. • **1** on success.	The Lock Manager uses this RPC to obtain the lock table on a specific node. The lock table is returned in a global.
XULM KILL PROCESS	5832	**KILLPROC^XULM RPC**	• **PID:** This is the PID of the process to be **KILL**ed. Maximum data length: **250**. • **RETURN:** This is the global location to return the result. The result should be returned in **^XTMP**, since it is translated between nodes. Maximum data length: **200**.		The Lock Manager uses this RPC to terminate a process.
XUPS PERSONQUERY Availability: **PUBLIC**	None	**EN1^XUPSQRY**	• **XUPSLNAM:** Required if lookup by name. • **XUPSFNAM**	Array: Output data stored in a global array.	This RPC performs a person lookup.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			• **XUPSSSN** • **XUPSPROV** • **XUPSSTN** • **XUPSMNM** • **XUPSDATE** • **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_";"_verifyCode 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.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
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 Agreement: **RESTRICTED**	None	**CCOW^XUSRB4**	None	Array	This RPC gets a token to save 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^XUSRB2**	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^XUSBSE1**	**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.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
XUS KEY CHECK Agreement: **PUBLIC**	6286	**OWNSKEY^XUSRB**	**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 list with values that match the status of the key check for each 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 the calling array.
XUS MVI ENRICH NEW PERSON	1059	**UPDATE^XUMVIENU**	• **PARAM:** Input array: **PARAM("WHO")**=Station Number of requesting station **PARAM("NPI")**=National Provider Identifier Required elements only when **FLAG** input parameter is **A**: **PARAM("NAME")**=surname|first name|middle name|suffix|full .01 name Optional elements (only pass those elements you want to update):	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	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.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			PARAM("ADDRESS DATA")=street address 1|street address 2|street address 3|city|state|zip code|office phone|fax number **PARAM("SubjectOrgan")**=subject organization Default: "**Department Of Veterans Affairs**" **PARAM("SubjectOrganID")**=subject organization id Default: "**urn:oid:2.16.840.1.113883.4.349**" **PARAM("ADUPN")**=adupn **PARAM("AuthWriteMedOrders")**=1 or 0 for YES/NO Default if **WHO** is 200PIEV and a DEA# is sent: **1** (for YES) **PARAM("DEA",<seq#>,"DEA")**=Drug Enforcement Agency (DEA) # **PARAM("DEA",<seq#>,"Detox")**= detox number **PARAM("DEA",<seq#>,"DEAExpire")**=expiration date (can	**FLAG="A"**, or entry could *not* be found based on the NPI when **FLAG="U"**.	

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			be future) **PARAM("DEA",<seq#>,"SchedIINarc")**=1 or 0 for YES/NO **PARAM("DEA",<seq#>,"SchedIINonNarc")**=1 or 0 for YES/NO **PARAM("DEA",<seq#>,"SchedIIINarc")**=1 or 0 for YES/NO **PARAM("DEA",<seq#>,"SchedIIINonNarc")**=1 or 0 for YES/NO **PARAM("DEA",<seq#>,"SchedIV")**=1 or 0 for YES/NO **PARAM("DEA",<seq#>,"SchedV")**=1 or 0 for YES/NO **PARAM("DEGREE")**=degrees (codes delimited by a space) **PARAM("EMAIL")**=email address **PARAM("GENDER")**=M or F **PARAM("Inactivate")**=inactive date (can be future) **PARAM("NonVAPrescriber")**=1 or 0 for YES/NO Default if **WHO** is 200PIEV: **1** (for YES) **PARAM("NTUSERNAME")**=network user		

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			name **PARAM("PersonClass",<seq#>,"PersonClass")**=X12 code value **PARAM("PersonClass",<seq#>,"PersonClassActive")**=date Default if not currently active: **TODAY** **PARAM("PersonClass",<seq#>,"PersonClassExpire")**=date **PARAM("ProviderClass")**=a value from the PROVIDER CLASS (#7) file **PARAM("ProviderType")**=provider type code|provider type value **PARAM("Remarks")**=remarks Default if **WHO** is 200PIEV: "**NON-VA PROVIDER**" **PARAM("SECID")**=secid **PARAM("TaxID")**=tax id **PARAM("Termination")**=termination date (*cannot* be future) **PARAM("Title")**=value from TITLE file (#3.1) Default if **WHO** is		

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
			200PIEV: "**NON-VA PROVIDER**" **PARAM("UniqueUserID")**=unique user id • **FLAG:** This flag controls whether the RPC is adding a new entry to the NEW PERSON (#200) file or updating an existing entry. Possible values are: o **U—**Update an existing entry o **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 checks that the correct PIV card has been put into the reader.
XUS SEND KEYS Agreement: **RESTRICTED**	1633	**SENDKEYS^XUSRB**	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**.

RPC	ICR #	Tag^Routine	Input Parameters	Output/ Return Parameters	Description
XUS SET VISITOR Agreement: **PUBLIC**	5501	**SETVISIT^XUSBSE1**	None	Returns: A BSE token string	This RPC is run on the Authenticating VistA M Server. It returns a Kernel Authentication Token that identifies the current user. **NOTE:** This RPC was added with the Broker 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**

- **^CPU**
- **^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

Table 30 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: Software-Wide Variables—Defined at All Times (listed alphabetically)

Variable	Description
DILOCKTM	VA FileMan's LOCK time out value. This variable is defined and set to **5 seconds** when ^XUP is executed and it is part of the standard VistA Symbol table. All incremental LOCKS *must* have a timeout, the timeout *must not* be less than the value of **DILOCKTM**. The developer is *not* responsible for defining nor killing **DILOCKTM**.
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. The developer is *not* responsible for defining nor killing **DTIME**.
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.
IO	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).
IOT	Type of the last selected input/output device, such as **TRM** for terminal.
U	This variable is defined at all times. It is set to the "**^**" character, which is used as the field separator for data stored in VA FileMan files.

In addition to the variables described in Appendix 10-B of the M-11 manual, Table 31 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 (**^%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.

Table 32 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

Table 33 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). Table 33 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 *non*-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	2B	**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** • **XQ12**
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 *non*-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 V*AX 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("XGATR")** = Translated. • **^XUTL("XQKB")** = Translated. • **^XUTL("XQO")** = Translated. • **^XUTL("XQORM")** = 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 and 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 and Technology Field Office (OITFO).

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 group**s,** 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

Table 35 lists the bulletins distributed with 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.

Name	Description	Subject	Message	Parameters
				• **6—**Package 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 **.01** field 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 server.

Name	Description	Subject	Message	Parameters
				• **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 |10| (hh:mm:ss).	

Name	Description	Subject	Message	Parameters
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 (#4) file entry	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|:	• **1—**Message ID. • **2—**Added or Updated. • **3—**Internal Entry Number. • **4—**STATION NUMBER. • **5—**NAME. • **6—**OFFICIAL VA NAME. • **7—**FACILITY TYPE. • **8—**OLD NAME.

Name	Description	Subject	Message	Parameters
	has been added / updated.		IEN: |3| STATION 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| ZIP (MAILING): |26| OLD VALUES ---------- NAME: |8| OFFICIAL VA NAME: |9| FACILITY TYPE: |10| INACTIVE FACILITY FLAG: |15| VISN: |17|	• **9—**OLD OFFICIAL VA NAME. • **10—**OLD FACILITY TYPE. • **11—**INACTIVE FACILITY FLAG. • **12—**STATE. • **13—**VISN. • **14—**PARENT FACILITY. • **15—**OLD INACTIVE FACILITY FLAG. • **16—**OLD STATE. • **17—**OLD VISN. • **18—**OLD PARENT FACILITY. • **19—**STREET ADDR. 1. • **20—**CITY. • **22—**ZIP. • **23—**ST. ADDR. 1 (MAILING). • **24—**CITY (MAILING). • **25—**STATE (MAILING). • **26—**ZIP (MAILING). • **27—**OLD STREET ADDR. 1. • **28—**OLD CITY. • **29—**OLD ZIP. • **30—**OLD ST. ADDR. 1 (MAILING).

Name	Description	Subject	Message	Parameters
			PARENT FACILITY: |18| STREET ADDR. 1: |27| CITY: |28| STATE: |16| ZIP: |29| ST. ADDR. 1 (MAILING): |30| CITY (MAILING): |31| STATE (MAILING): |32| ZIP (MAILING): |33|	• **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	SIGN-ON DISALLOWED ON SECURED TERMINAL	User |1| tried to sign on to device |2|, which has SECURITY code |3|, but |1| has	• **1—**Name of User. • **2—**Device.

Name	Description	Subject	Message	Parameters
	has SECURITY to sign on, and his **DUZ(0)** code is *not* found in the terminal's SECURITY code, as the FILE MANAGER ACCESS CODE attempts to sign on.		security code '|4|'. Use ^UTIO to edit the device's SECURITY, if necessary.	• **3—**Device's security code. • **4—**User's security code.
XUSERDEAC	This bulletin is sent to the ISO SECURITY mail group when a user gets deactivated.	XUSER DEACTIVATIO N	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 TERMINATIO N	USER |1| has been terminated as of |2| The error message was '|3|'.	• **1—**Name of the remote site rejecting the message (may be intermediate relay).

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.			• **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. **NOTE:** Released with Kernel	"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
	Patch XU*8.0*580.			
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 (**$I**). • **2—**User name. • **3—**Access code used for sign-on. • **4—**Time range during which sign-on is prohibited.
XUTM PROBLEM DEVICES	This bulletin is used by the **XUTMKA** routine to report devices that TaskMan is having problems opening.	Problem Devices	This is the **XUTM PROBLEM DEVICE** bulletin; it reports devices that TaskMan is having problems opening. The list shows the **$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	A visitor has been added to your New Person File	|1| 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	• **1—** 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 authenticated. • **5—**Number of the site

Name	Description	Subject	Message	Parameters
	or she may look up patient data.		phone number of |7|. This is the bulletin named XUVISIT.	where the visitor was authenticated. • **6—**Visitors **DUZ** at the authenticating site. • **7—**Visitor's phone number at the authenticating 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 7.3 or higher.
- VA FileMan 22.2 or higher.
- MailMan 8.0 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: Quadramed Website

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

```
Select OPTION: INQUIRE <Enter>  TO FILE ENTRIES

OUTPUT FROM WHAT FILE: OPTION// SECURITY <Enter>  KEY        (119 entries)
Select SECURITY KEY NAME: XU
```

Enter a Kernel or Kernel Toolkit namespace (e.g., XU or XT).

```
     1   XUARCHIVE
     2   XUAUDITING
     3   XUAUTHOR
     4   XUEXKEY
     5   XUFILEGRAM
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: <Enter>
.
.
.
```

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 *must* 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 *CANNOT* also hold the XUORES security key. They are exclusive keys and should *not* 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.

Security Key	Description
XUMF INSTITUTION	This security key locks the **XUMF INSTITUTION** option.
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 (#19) 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 *not* hold this security key is *not* 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 [XUS NPI MENU] option. This key is normally assigned to the Local NPI Maintenance Team Leader; the person with authority to assign/edit VA Provider NPIs.

Security Key	Description
XUSPF200	This security key allows special privileges in the NEW PERSON (#200) file. The first of these is that holders of this key do *not* have to enter an SSN to add a new person to the file.
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 follow the prompts in Figure 19:

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
     2   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
     1   FILE LIST              (Aug 01, 1990@18:41)          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
```

Figure 20 lists the *recommended* file security settings for access to Kernel and Kernel Toolkit files:

Figure 20: File Security—Recommended Kernel File Security Access

```
FILE SECURITY ACCESS                                May 16,2013  11:32                PAGE 1
                                          DD      RD      WR      DEL     LAYGO    AUDIT
NAME                              NUMBER  ACCESS  ACCESS  ACCESS  ACCESS  ACCESS   ACCESS
-------------------------------------------------------------------------------------------

FAILED ACCESS ATTEMPTS LOG        3.05    @       @       @       @       @
PROGRAMMER MODE LOG               3.07    @       @       @       @       @
ERROR LOG                         3.075
ERROR MESSAGES                    3.076
ERROR TRAP SUMMARY                3.077
SIGN-ON LOG                       3.081   @       @       @       @       @       @
LOCKED IP or DEVICE               3.083   @       @       #       @       @       @
FAILED SIGNON ATTEMPTS            3.084   @       @       #       @       @       @
TITLE                             3.1     #       @       @       #       @       #
TERMINAL TYPE                     3.2     #               #       #       #       #
DA RETURN CODES                   3.22
LINE/PORT ADDRESS                 3.23    @       @       @       @       @       @
DEVICE                            3.5     #       I       #       #       #       #
SPOOL DOCUMENT                    3.51    @       @       @       @       @       @
SPOOL DATA                        3.519
RESOURCE                          3.54
INSTITUTION                       4       @               #       @       #
MASTER FILE PARAMETERS            4.001   @       @       @       @       @       @
MD5 Signature                     4.005
STANDARD TERMINOLOGY VERSION F    4.009   @       @       @       @       @       @
INSTITUTION ASSOCIATION TYPES     4.05    @               @       @       @       @
FACILITY TYPE                     4.1     @               #       @       @       @
AGENCY                            4.11    @               y       @       @       @
STATE                             5       #       @       #       #       #       @
POSTAL CODE                       5.12    @               @       @       @       @
COUNTY CODE                       5.13    @               @       @       @       @
PROVIDER CLASS                    7       #                       #
SPECIALITY                        7.1     #                       #
HELP FRAME                        9.2     #                       #               #
PACKAGE                           9.4     #       I       #       #       #       #
BUILD                             9.6     @       #       #       #       #       #
INSTALL                           9.7     @       #       @       #       @       #
ROUTINE                           9.8     #       I       #       #       #       #
RACE                              10      #               d       d       d
MARITAL STATUS                    11      #               d       d       d
RELIGION                          13      #               d       d       d
TASKS                             14.4    @               ^       @       @       @
VOLUME SET                        14.5
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    @       @       @       @       @       @
NAME COMPONENTS                   20      @       #       #       #       #
HOLIDAY                           40.5    #       #       Dd      Dd      Dd      #
SERVICE/SECTION                   49      #       D       d       d       d
PROTOCOL                          101     @               #       #       #
NEW PERSON                        200     #       #       #       #       #
```

```
PERSON CLASS                    8932.1   @              ^       @       ^       @
PROGRAM OF STUDY                8932.2   @              ^       @       ^       @
KERMIT HOLDING                  8980             #      #       #
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
XUEPCS DATA FILE                8991.6   @       @      @       @       @       @
XUEPCS PSDRPH AUDIT FILE        8991.7   @       @      @       @       @       @
DEA BUSINESS ACTIVITY CODES     8991.8
DEA NUMBERS                     8991.9
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 and Technology Field Office (OITFO).

User should refer to VHA Directive 2012-003, Person Class File Taxonomy, 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 *not* in effect, the user *must* 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 displays 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 *not*, 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, *not* 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	The **Help Processor** [XQHELP-MENU] menu is 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 *must* be executable activities and *not* 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 *must* 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 *must* 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 *not* 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, *not* 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 *not* 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

#

OF ATTEMPTS (#51.2) Field, 5

%

%Index of Routines Option, 257
%INDEX Utility, 81
%XUCI Routine, 364
%Z Editor, 81
%ZIS Routine, 25, 346
%ZIS1 Routine, 25
%ZIS2 Routine, 25
%ZIS3 Routine, 25
%ZIS4 Routine, 364
%ZIS5 Routine, 25
%ZIS6 Routine, 25
%ZIS7 Routine, 25
%ZISC Routine, 25, 346
%ZISH Routine, 346
%ZISP Routine, 25, 347
%ZISS Routine, 25, 347
%ZISS1 Routine, 25
%ZISS2 Routine, 25
%ZISTCP Routine, 347
%ZISUTL Routine, 25, 347
%ZOSF Routine, 347
%ZOSF("TEST") Node, 81
%ZOSV Routine, 347, 364
%ZTER Routine, 25, 348
%ZTER1 Routine, 25
%ZTLOAD Routine, 25, 348
%ZTLOAD1 Routine, 25
%ZTLOAD2 Routine, 25
%ZTLOAD3 Routine, 25
%ZTLOAD4 Routine, 25
%ZTLOAD5 Routine, 26
%ZTLOAD6 Routine, 26
%ZTLOAD7 Routine, 26
%ZTM Routine, 26, 364
%ZTM0 Routine, 26
%ZTM1 Routine, 26
%ZTM2 Routine, 26
%ZTM3 Routine, 26
%ZTM4 Routine, 26
%ZTM5 Routine, 26
%ZTM6 Routine, 26
%ZTMOVE Routine, 26
%ZTMS Routine, 26
%ZTMS0 Routine, 26
%ZTMS1 Routine, 26
%ZTMS2 Routine, 26
%ZTMS3 Routine, 26
%ZTMS4 Routine, 26
%ZTMS7 Routine, 26
%ZTMSH Routine, 26

]

]], 107

^

^%ET Global, 365
^%IS Global, 365
^%SY Global, 365
^%Z Global, 365, 371
^%ZIS Global, 27, 68, 375
^%ZIS("C") Global, 371
^%ZIS("H") Global, 371
^%ZISL Global, 69, 75, 375
^%ZOSF Global, 70, 330, 364, 365, 371, 372, 375
^%ZTER Global, 69, 375
^%ZTSCH Global, 70, 365, 371, 376
^%ZTSH Global, 375
^%ZTSK Global, 69, 82, 365, 371, 376
^%ZUA Global, 69, 328, 365, 376
^CPU Global, 366
^DIC Global, 67, 374
^DIC Global;, 70
^DIZ Global, 67
^HOLIDAY Global, 67, 374
^RTH Global, 366
^SPOOL Global, 366

^SYS Global, 366
^TMP Global, 70, 374
^USC Global, 374
^UTILITY Global, 374
^VA Global, 68, 374
^XLM Global, 67
^XMB Global, 70, 374
^XMBS Global, 374
^XPD Global, 67, 374
^XT Global, 68
^XTMP Global, 70, 183, 210, 375
^XTV Global, 68, 374
^XUCM Global, 23
^XUSEC Global, 68, 375
^XUTL Global, 70, 371, 375

A

Abbreviated Menu Diagrams Option, 309
Access Code, 156, 235
Access Monitor Menu, 265
Accounts
  Manager, 365
  Manger Account Routines, 25
  Production Account Routines, 28
Accumulate Globals for Package Option, 324
Acronyms
  Intranet Website, 402
ACTIVE by Custodial Package Option, 366
Actual Usage of Alpha/Beta Test Options Option, 191
Add a New User to the System, 11
Add a New User to the System Option, 106, 286
Add Entries To Look-Up File Option, 19, 317
Add Error Screens Option, 300
Add Verified Duplicate Pair Option, 165
Add/Edit NPI values for Providers Option, 275
Add/Modify Utility Menu, 317
Additional
  Files Installed During Virgin Installation, 102
  Routines Installed by Virgin Install, 65
ADP Security Key, 208, 210, 211, 212
AFFECTS RECORD MERGE (#20) Field, 23
AGENCY (#4.11) File, 67, 78
AGENCY CODE (#9) Field, 5
ALERT (#8992) File, 68, 94, 197, 200, 201, 202
ALERT CRITICAL TEXT (#8992.3) file, 96
ALERT CRITICAL TEXT (#8992.3) File, 68, 96, 195, 200
Alert Management Menu, 203
ALERT RECIPIENT TYPE (#8992.2) file, 96
ALERT RECIPIENT TYPE (#8992.2) File, 68
ALERT TRACKING (#8992.1) File, 68, 95, 195, 198, 202
Alert Tracking file entry Option, 201
Alerts, 377
Alerts - Set/Remove Surrogate for User Option, 203
All the Keys a User Needs Option, 209
Allocate/De-Allocate Exclusive Key(s) Option, 252
Allocate/De-Allocate of PSDRPH Key Option, 162, 164, 227
Allocation of Security Keys Option, 258
Allow other users access to spool documents Option, 291
ALLOWABLE ENTITIES (#51, 30) Multiple Field, 11
ALLOWABLE MENU PREFIX Security Key, 214
Alpha/Beta Test Option Usage Menu, 194
ALPHA/BETA TEST PACKAGE (#32) Multiple Field, 194
Ancillary Data Review Option, 166
Annotate an Error Option, 249
Application Program Interfaces (APIs), 330
Application Utilities Menu, 318
Approve verified duplicates for merging Option, 166
Archiving, 327
ASK DEVICE TYPE AT SIGN-ON (#205) Field, 5
Ask if Production Account Option, 231

Assign Editors Option, 206
Assign/Delete a File Range Option, 255
Assumptions, xxvii
Attributes
  Users, 286
Audit Display Menu, 237
Audit Features Menu, 238
AUDIT LOG FOR OPTIONS (#19.081) File, 68, 85
Audit Menu, 368
Audited Options Log Option, 266
Audited Options Purge Option, 266, 327
Audit-Related site parameters, 16
Authentication
  Kernel Authentication Token, 362
AUTO MENU (#51.6) Field, 5
AUTO-GENERATE ACCESS CODES (#11) Field, 5
Automatic Deactivation of Users Option, 238, 327
Automatically Merge all Ready Verified Duplicates Option, 166

B

Backup a Transport Global Option, 179
BINARY OBJECT (#8995.9) File, 68
Bring in Sent Routines Option, 318
Browse a Spool Document Option, 291
BUILD (#9.6) File, 37, 67, 80, 180, 181, 183, 184, 185, 329
Build a New Menu Option, 213
Build an 'NTEG' routine for a package Option, 322
Build Analyzer Main Menu, 187
Build File Print Option, 183
Build Primary Menu Trees Option, 204
BULLETIN (#3.6) File, 76
Bulletins, 378
  XDR ERROR, 378
  XDR MERGED, 378
  XDR VERIFIED, 379
  XQSERVER, 379
  XTRMON, 380
  XU-INSTALL-DONE, 380
  XUMF ERROR, 381
  XUMF INSTITUTION, 381
  XUPROGMODE, 383
  XUS ACCESS CODE VIOLATION, 383
  XUSECURITY, 383
  XUSERDEAC, 384
  XUSERDIS, 384
  XUSERTERM, 384
  XUSIGNON, 385
  XUSLOCK, 385
  XUSSPKI CRL SERVER, 386
  XUSSPKI SAN, 386
  XUSTIME, 387
  XUTM PROBLEM DEVICES, 387
  XUVISIT, 387
BYPASS DEVICE LOCK-OUT (#211) Field, 5, 6

C

Calculate and Show Checksum Values Option, 322
Callable Entry Points, 330
Callout Boxes, xxv
Capacity Planning Menu, 312
Change Device's Terminal Type Option, 239
Change my Division Option, 281
Change tasks device Option, 305
Change user's allocated keys to delegated keys Option, 208
Check Failed Access Log Option, 289
Check file 5.13 & file 5 Option, 175
Check Merge Process Status (reverse order) Option, 166
Check Pair of Records to see if Duplicates Option, 167
Check Routines on Other CPUs Option, 268
Check Taskman's Environment Option, 297
CHECKSUM REPORT Field, 219
Clean Error Log over Range of Dates Option, 327
Clean Error Log Over Range Of Dates Option, 299
Clean Error Trap Option, 251, 320, 328
Clean Old Job Nodes in ^XUTL Option, 327
Clean old Job Nodes in XUTL Option, 189
Clean Task File Option, 297, 327
Cleanup Task List Option, 306

Clear all resources Option, 246
Clear all users at startup Option, 284
Clear All Users at Startup Option, 327
Clear Electronic signature code Option, 288
Clear one Resource Option, 246
Clear Terminal Option, 284
CM DAILY STATISTICS (#8986.6) File, 24
CM DISK DRIVE RAW DATA, 24
CM NODENAME RAW DATA, 24
CM SITE NODENAMES file, 24
CM SITE PARAMETERS file, 24
Codes
  Access, 156, 235
  Verify, 7, 156, 235
Compare local/national checksums report Option, 218
Compare routines on tape to disk Option, 271
Compare Transport Global to Current System Option, 180
Compare two routines Option, 321
Configuring VAX/Alpha Performance Monitor (VPM), 23
Contingency Planning, 396
Continue Option, 244
Convert any IP address per system settings Option, 176
Convert any IP address to IPv4 Option, 177
Convert any IP address to IPv6 Option, 177
Convert Loaded Package for Redistribution Option, 180
Copy Build to Build Option, 181
Copy Everything About an Option to a New Option Option, 205
Copy One User's File Access to Others Option, 254
Copy One Users Menus and Keys to others Option, 213
Copy the compiled menus from the print server Option, 236
Core Applications Menu, 107, 111, 244
Count of Clinical Trainee's Option, 241
COUNTY CODE (#5.13) File, 79, 175
CPT (#81) File, 1
CPU/Service/User/Device Stats Option, 295
Create a Build Using Namespace Option, 180
Create a new menu template Option, 217
Create a Set of Options To Mark Out-Of-Order Option, 210
Critical Alerts Count Report Option, 195
Cross Reference Help Frames Option, 208
Cross-References
  MUMPS, 19
Current Line/Port Address Option, 246
Custodial Package Menu, 366

D

DA Return Code Edit Option, 219
DA RETURN CODES (#3.22) File, 68, 74
DA RETURNS CODE (#3.22) File, 219
Data
  RTHIST, 24
Data Dictionary
  Data Dictionary Utilities Menu, xxvii
  Listings, xxvii
DBA Approvals, 365
DBA IA CUSTODIAL MENU, 366
DBA IA CUSTODIAL Option, 366
DBA IA INQUIRY Option, 366
DBA IA ISC Menu, 366
DBA IA SUBSCRIBER MENU, 366
DBA IA SUBSCRIBER Option, 366, 367
DBA Menu, 366
DEA BUSINESS ACTIVITY CODES (#8991.8) File, 68, 94
DEA NUMBERS (#8991.9) File, 68, 94
Deactivate a User Option, 284, 328
De-allocation of Security Keys Option, 258
DEFAULT # OF ATTEMPTS (#202) Field, 5
DEFAULT (#3) Field, 10
DEFAULT AUTO-MENU (#206) Field, 5
DEFAULT Field, 4
DEFAULT INSTITUTION (#217) Field, 5
DEFAULT LANGUAGE (#207) Field, 6
DEFAULT LOCK-OUT TIME (#203) Field, 6
DEFAULT MULTIPLE SIGN-ON (#204) Field, 6

DEFAULT TIMED-READ (SECONDS) (#210) Field, 6
DEFAULT TYPE-AHEAD (#209) Field, 6
DEGREE (#10.6) Field, 389, 390
DEGREE (#6) Field, 390
Delegate keys Option, 208
Delegate's Menu Management Menu, 217
Delete a Menu Template Option, 217
Delete A Spool Document Option, 291
Delete Build Analyzer Text Files Option, 188
Delete Entries From Look-up Option, 316
Delete Error Log Option, 299, 328
Delete Old (>14 d) Alerts Option, 202, 328
Delete Routines Option, 320
Delete Tasks Option, 298
Delete Unreferenced Options Option, 189
Delete Users' Access to a Set of Files Option, 256
Dequeue Tasks Option, 298
DEVICE (#3.5) File, 5, 6, 26, 69, 73, 74, 247, 295, 314, 315, 369, 370
DEVICE ATTRIBUTES Message, 5
Device Edit Option, 246
Device Failed Access Attempts Option, 253
DEVICE Field, 74
Device Handler, 75, 365, 370, 372
Device Management Menu, 107, 112, 295
DEVICE TO AUDIT (#212.1) Multiple Field, 6, 16
DI DDU Menu, xxvii
Diagram Menus Option, 108, 308
DIALOG (#.84) File, 370
DIEDIT Option, 21
DIINQUIRE Option, 390
DILIST Option, xxvii
DILOCKTM Variable, 369
Direct Mode Utilities, 349
Directives
  2012-003, Person Class Taxonomy, 396
Disclaimers
  Software, xxiii
Display Device Data Option, 248
Display Menus and Options Option, 108, 206
Display of Programmer Mode Entry List Option, 267
Display Patches for a Package Option, 183
Display Search Status Option, 167
Display the Kernel Audit Parameters Option, 294
Display User Characteristics Option, 43, 309
Display/Edit Help Frames Option, 206
Do nothing menu, 229
Documentation
  History, ii
  Information Sources
    Files
      Security Access, 393
  Symbols, xxiv
Documentation Conventions, xxiv
Documentation Navigation, xxvi
DOMAIN (#4.2) File, 70, 102
Download a Spool file entry Option, 313
DR Variable, 8
DT Variable, 369
DTIME Variable, 369
DUPLICATE RECORD (#15) file, 28
DUPLICATE RECORD (#15) File, 2, 21, 23, 28, 29, 31, 33, 68, 83, 84, 165, 167, 168, 169, 171, 352
DUPLICATE RESOLUTION (#15.1) File, 2, 21, 31, 33, 68, 84, 169, 353, 378
Duplicate Resolution System Menu, 168
Duplicate Resolution Utilities
  DUPLICATE RECORD (#15) File, 23
  Implementing
    Data Storage, 21
    Programmer Notes, 21
    Resource Requirements, 21
    Retention, 21
Duplicate Resolution Utilities,, 2, 23
DUZ, 372
DUZ Variable, 369, 373
DUZ("AG") Variable, 369
DUZ("AUTO") Variable, 370
DUZ("LANG") Variable, 6, 370
DUZ(0) Variable, 369, 373
DUZ(2) Variable, 5, 369

E

Edit a Build Option, 181
Edit a Protocol Option, 270
Edit a User's Options Option, 214
Edit All Device Fields Option, 247
Edit an Existing User Option, 10, 106, 285
Edit Devices by Specific Types Menu, 247
Edit Duplicate Record Status Option, 167
Edit Duplicate Resolution File Option, 168
Edit Error Screens Option, 301
Edit Facility DEA# and Expiration Date Option, 162, 222
Edit File Option, 21
EDIT HISTORY (Multiple) Field, 81
Edit Install Status Option, 181
Edit KERMIT holding file Option, 313
Edit Line/Port Addresses Option, 246
Edit Lock Dictionary Option, 259
Edit Lock Manager Parameters Option, 259
Edit Logical/Physical Mapping Option, 231
Edit Option Option, 39
Edit options Option, 248
Edit Options Option, 85
Edit Parameter Definition Keyword Option, 177
Edit Parameter Values Option, 178
Edit Parameter Values with Template Option, 177
Edit Site IP lockout Option, 7, 232
Edit Taskman Parameters Menu, 303
Edit Trainee Registration Data Option, 241
Edit User Characteristics Option, 10, 285
Edit User's Spooler Access Option, 293
Edit Verification Package File Option, 322
Editors
  %Z, 81
Edits and Distribution Menu, 181
EDUCATION (#20.11) File, 390
EDUCATION (Degree) File Edit Option, 289, 390
Electronic Signature Block Edit Option, 288, 389, 390, 392
Electronic Signature code Edit Option, 288, 392
Electronic Signature Code Edit Option, 389
Electronic Signature Restrictions, 389
Electronic Signatures, 389
Enter/Edit Kernel Site Parameters Option, 16, 17, 290
Enter/Edit of Security Keys Option, 258
ePCS DEA Utility Functions Menu, 161, 227
ePCS Edit Prescriber Data Option, 221
ePCS Set SAN from PIV Card Option, 294
ERROR LOG (#3.075) File, 69, 71
ERROR MESSAGES (#3.076) File, 69, 72
Error Processing Menu, 250
Error Summary Menu, 249
Error trap Auto clean Option, 251
Error Trap Display Option, 44, 251
Error Trap Param Edit Option, 249
ERROR TRAP SUMMARY (#3.077) File, 72, 249, 250
Errors Logged in Alpha/Beta Test (QUEUED) Option, 157, 193
Establish System Audit Parameters Option, 16, 237
EVE Menu, 107, 108, 111
Exemptions
  SACC, 371
Exported Options, 107
Extended-Action Options, 156
External Relations, 364
  Kernel
    Other VistA Software, 364
  M Operating Systems, 364

F

FACILITY TYPE (#4.1) File, 67, 78, 265
FAILED ACCESS ATTEMPT AUDIT (#212.5) Field, 6, 16
FAILED ACCESS ATTEMPTS LOG (#3.05) File, 69, 71
Failed Access Attempts Log Option, 252
Failed Access Attempts Log Purge Option, 256, 328
FAILED SIGNON ATTEMPTS (#3.084) File, 72
Fields, 103
  # OF ATTEMPTS (#51.2), 5
  AFFECTS RECORD MERGE (#20), 23
  AGENCY CODE (#9), 5

ALLOWABLE ENTITIES (#51, 30) Multiple, 11
ALPHA/BETA TEST PACKAGE multiple (#32), 194
ASK DEVICE TYPE AT SIGN-ON (#205), 5
AUTO MENU (#51.6), 5
AUTO-GENERATE ACCESS CODES (#11), 5
BYPASS DEVICE LOCK-OUT (#211), 5, 6
CHECKSUM REPORT, 219
DEFAULT, 4
DEFAULT # OF ATTEMPTS (#202), 5
DEFAULT (#3), 10
DEFAULT AUTO-MENU (#206), 5
DEFAULT INSTITUTION (#217), 5
DEFAULT LANGUAGE (#207), 6
DEFAULT LOCK-OUT TIME (#203), 6
DEFAULT MULTIPLE SIGN-ON (#204), 6
DEFAULT TIMED-READ (SECONDS) (#210), 6
DEFAULT TYPE-AHEAD (#209), 6
DEGREE (#10.6), 389, 390
DEGREE (#6), 390
DEVICE, 74
DEVICE TO AUDIT (#212.1) Multiple, 6, 16
EDIT HISTORY (Multiple), 81
FAILED ACCESS ATTEMPT AUDIT (#212.5), 6, 16
FILE MANAGER ACCESS CODE, 369
INDEX (#.03), 19
INITIATE AUDIT (#19.4), 6, 8, 10, 16, 17
INTERACTIVE USER'S PRIORITY (#216), 7
IP SECURITY ON (#405.1), 7
LAST SIGN-ON, 5
LIFETIME OF VERIFY CODE (#214), 7
LOCK-OUT TIME (#51.3), 6
LOG RESOURCE USAGE? (#300), 7
LOG SYSTEM RT? (#41, 6), 7, 10
MAX SIGNON ALLOWED (#41, 2), 7, 10
MAX SPOOL DOCUMENT LIFE-SPAN (#31.3), 7, 18
MAX SPOOL DOCUMENTS PER USER (#31,2), 7
MAX SPOOL DOCUMENTS PER USER (#31.2), 18
MAX SPOOL LINES PER USER (#31.1), 8, 18
MERGE PACKAGES (#15,1101) Multiple, 23
MULTIPLE SIGN-ON (#200.04), 6
NAME OF MERGE ROUTINE (#9.402,3), 23
NAMESPACE TO AUDIT (#19.2), 8
NAMESPACE TO AUDIT (#19.2) Multiple, 8, 16, 17
NEW PERSON IDENTIFIERS (#21), 8
OPTION AUDIT (#19, 16
OPTION AUDIT (#19), 6, 8, 10, 16, 17
OPTION TO AUDIT (#19.1) Multiple, 8, 17
ORGANIZATION (#200.2), 8
ORGANIZATION ID (#200.3), 9
OUT-OF-SERVICE DATE (#6), 5
PATCH APPLICATION HISTORY (Multiple), 80
PERFORM DEVICE CHECKING (#59.91), 5
PROHIBITED TIMES FOR SIGN-ON (#2009), 5
RECORD HAS PACKAGE DATA (#9.402,4), 23
REPLACEMENT, 4
REPLACEMENT (#4), 10, 11
ROUTINE MONITORING (#9.8), 9
ROUTINE N-SPACE TO MONITOR (#9.81) Multiple, 9
SCHEDULING RECOMMENDED (#209), 240, 241
SECURITY (#15), 5
SECURITY TOKEN SERVICE (#200.1), 9
SIGNATURE BLOCK PRINTED NAME (#20.2), 389
SIGNATURE BLOCK TITLE (#20.3), 389, 390

SIGN-ON LOG RETENTION (#221), 10
STATUS (#15.01101,.02), 23
SUBJECT ORGANIZATION (#205.2), 8
SUBJECT ORGANIZATION ID (#205.3), 9
SUBTYPE, 74
TERMINATE AUDIT (#19.5), 6, 8, 10, 16, 17
TIMED READ (# OF SECONDS) (#51.1), 6
TYPE-AHEAD (#51.9), 6
USER TO AUDIT (#19.3) Multiple, 8, 10, 17
USER TO AUDIT (Multiple), 17
VERSION (Multiple), 80
VOLUME SET (#41) Multiple, 7, 10
File Access Security Option, 253
FILE MANAGER ACCESS CODE Field, 369
Filegrams Menu, 368
FileMan
File Protection, 393
Fileman Access for the ISO Menu, 248
Fileman Security Menu, 254
Files
PATIENT (#2), 174
Files, 66, 71
AGENCY (#4.11), 67, 78
ALERT (#8992), 68, 94
ALERT CRITICAL TEXT (#8992.3), 96
ALERT CRITICAL TEXT (8992.3), 68, 96
ALERT RECIPIENT TYPE (8992.2), 68, 96
ALERT TRACKING (#8992.1), 68, 95
AUDIT LOG FOR OPTIONS (#19.081), 68, 85
BINARY OBJECT (#8995.9), 68
BUILD (#9.6), 37, 67, 80
BULLETIN (#3.6), 76
CM DAILY STATISTICS (#8986.6), 24
CM SITE NODENAMES, 24
CM SITE PARAMETERS, 24
COUNTY CODE (#5.13), 79
CPT (#81), 1
DA RETURN CODES (#3.22), 68, 74
DEA BUSINESS ACTIVITY CODES (#8991.8), 68, 94
DEA NUMBERS (#8991.9), 68, 94
DEVICE (#3.5), 5, 6, 26, 69, 73, 74
DEVICE (#3.5) file., 6
DOMAIN (#4.2), 70, 102
DUPLICATE RECORD (#15), 2, 21, 23, 28, 29, 31, 33, 68, 83, 84, 165, 167, 168, 169, 171
DUPLICATE RESOLUTION (#15.1), 2, 21, 31, 33, 68, 84, 169
ERROR LOG (#3.075), 69, 71
ERROR MESSAGES (#3.076), 69, 72
ERROR TRAP SUMMARY (#3.077), 72
FACILITY TYPE (#4.1), 67, 78
FAILED ACCESS ATTEMPTS LOG (#3.05), 69, 71
FAILED SIGNON ATTEMPTS (#3.084), 72
Globals, 67
HELP FRAME (#9.2), 67, 80
HOLIDAY (#40.5), 67, 87
ICD DIAGNOSIS (#80), 1, 19
ICD OPERATIONS/PROCEDURE (#80.1), 1
INSTALL (#9.7), 37, 67, 80
INSTITUTION (#4), 67, 76, 78
INSTITUTION ASSOCIATION TYPES (#4.05), 78
KERMIT HOLDING (#8980), 67, 90
Kernel
Site Parameters File Changes, 4
KERNEL PARAMETERS (#8989.2), 4, 10, 68, 92
KERNEL SYSTEM PARAMETERS (#8989.3), 4, 17, 60, 62, 68, 85, 92
KERNEL SYSTEM PARAMETERS (#8989.3) file, 16
LINE/PORT ADDRESS (#3.23), 68, 74
LOCAL KEYWORD (#8984.1), 18, 68, 91
LOCAL LOOKUP (#8984.4), 2, 19, 68, 92
LOCAL SHORTCUT (#8984.2), 18, 68, 91

LOCAL SYNONYM (#8984.3), 19, 68, 91
LOCKED IP or DEVICE (#3.083), 72
MAIL GROUP (#3.8), 70, 102
MAILMAN SITE PARAMETERS (#4.3), 4
MARITAL STATUS (#11), 70, 81, 103
MASTER FILE PARAMETERS (#4.001), 76
MD5 Signature (#4.005), 77
MENUMAN QUICK HELP (#19.8), 86
MUMPS OPERATING SYSTEM (#.7), 62
NEW PERSON (#200), 5, 6, 8, 9, 59, 68, 71, 73, 88, 89, 94, 106, 156
OPTION (#19), 67, 85, 86, 156, 157
OPTION SCHEDULING (#19.2), 62, 67, 86
OPTION TOTALS (#20), 86
PACKAGE (#9.4), 23, 32, 38, 67, 80
PARAMETER DEFINITION (#8989.51), 4, 11, 15
PATIENT (#2), 83, 172
PERSON CLASS (#8932.1), 89, 103, 106
PKI CRL URLS (#8980.22), 90
PKI Digital Signatures (#8980.2), 90
POSTAL CODE (#5), 78
PROGRAM OF STUD (#8932.2), 90
PROGRAMMER MODE LOG (#3.07), 69, 71
PROTOCOL (#101), 88
PROVIDER CLASS (#7), 70, 79, 102
RACE (#10), 70, 81, 102
RAI MDS MONITOR (#46.11), 87
RELIGION (#13), 70, 82, 103
REMOTE APPLICATION (#8994.5), 100
REMOTE PROCEDURE (#8994), 99
RESOURCE (#3.54), 69, 75
ROUTINE (#9.8), 38, 67, 81
SECURITY KEY (#19.1), 67, 86
SERVICE/SECTION (#49), 67, 88
SIGN-ON LOG (#3.081), 68, 72
SPECIALITY (#7.1), 70, 79, 102
SPOOL DATA (#3.519), 75
SPOOL DOCUMENT (#3.51), 75
STANDARD TERMINOLOGY VERSION F (#4.009), 77
STATE (#5), 70, 78, 102
TASK SYNC FLAG (#14.8), 69, 83
TASKMAN MONITOR (#14.71), 69
TASKMAN SITE PARAMETERS (#14.7), 18, 69, 83
TASKMAN SNAPSHOT (#14.72), 69, 83
TASKS (#14.4), 69, 82
TERMINAL TYPE (#3.2), 68, 73, 74
TITLE (#3.1), 67, 73
UCI ASSOCIATION (#14.6), 18, 62, 69, 83
USER CLASS (#201), 89
Virgin Installations, 102
VOLUME SET (#14.5), 18, 62, 69, 82
XQAB ERRORS LOGGED (#8991.5), 68, 94, 157
XTV GLOBAL CHANGES (#8991.2), 68, 93
XTV ROUTINE CHANGES (#8991), 68, 93
XTV VERIFICATION PACKAGE (#8991.19), 68, 93
XUEPCS DATA (#8991.6), 94, 164
XUEPCS DATA FILE (#8991.6), 68
XUEPCS PSDRPH AUDIT (#8991.7), 94, 164
XUEPCS PSDRPH AUDIT FILE (#8991.7), 68
XULM LOCK DICTIONARY (#8993), 67
XULM LOCK MANAGER LOG (#8993.2), 67
XULM LOCK MANAGER PARAMETERS (#8993.1), 67
Files
COUNTY CODE (#5.13), 175
Files
STATE (#5), 175
Files
STATE (#5), 175
Files
POSTAL CODE (#5.12), 176
Files

PARAMETER DEFINITION (#8989.51), 177
Files
BUILD (#9.6), 180
Files
INSTALL (#9.7), 180
Files
BUILD (#9.6), 180
Files
BUILD (#9.6), 181
Files
BUILD (#9.6), 181
Files
INSTALL (#9.7), 181
Files
BUILD (#9.6), 183
Files
INSTALL (#9.7), 183
Files
PACKAGE (#9.4), 183
Files
BUILD (#9.6), 184
Files
INSTALL (#9.7), 184
Files
BUILD (#9.6), 184
Files
BUILD (#9.6), 184
Files
ROUTINE (#9.8), 184
Files
ROUTINE (#9.8), 184
Files
BUILD (#9.6), 185
Files
INSTALL (#9.7), 185
Files
BUILD (#9.6), 185
Files
ROUTINE (#9.8), 185
Files
OPTION (#19), 188
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 194
Files
ALERT TRACKING (#8992.1), 195
Files
ALERT TRACKING (#8992.1), 195
Files
ALERT CRITICAL TEXT (#8992.3), 195
Files
ALERT (#8992), 197
Files
ALERT TRACKING (#8992.1), 198
Files
ALERT TRACKING (#8992.1), 198
Files
PARAMETERS (#8989.5), 199
Files
PARAMETERS (#8989.5), 199
Files
ALERT (#8992), 200
Files
ALERT CRITICAL TEXT (#8992.3), 200
Files
ALERT (#8992), 201
Files
ALERT TRACKING (#8992.1), 202
Files
ALERT (#8992), 202
Files
OPTION (#19), 205
Files
HELP FRAME (#9.2), 207
Files
OPTION (#19), 208
Files
OPTION (#19), 209
Files
OPTION (#19), 210
Files
PROTOCOL (#101), 210
Files
OPTION (#19), 210
Files
PROTOCOL (#101), 211
Files
OPTION (#19), 211
Files
OPTION (#19), 213
Files

NEW PERSON (#200), 217
Files
ROUTINE (#9.8), 218
Files
ROUTINE (#9.8), 218
Files
ROUTINE (#9.8), 219
Files
ROUTINE (#9.8), 219
Files
DA RETURNS CODE (#3.22), 219
Files
OPTION (#19), 219
Files
INSTITUTION (#4), 222
Files
XUEPCS DATA (#8991.6), 223
Files
XUEPCS PSDRPH AUDIT (#8991.7), 225
Files
SIGN-ON LOG (#3.081), 229
Files
OPTION (#19), 230
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 231
Files
OPTION SCHEDULING (#19.2), 232
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 232
Files
NEW PERSON (#200), 232
Files
NEW PERSON (#200), 233
Files
OPTION (#19), 235
Files
NEW PERSON (#200), 236
Files
OPTION (#19), 239
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 239
Files
NEW PERSON (#200), 241
Files
NEW PERSON (#200), 241
Files
DEVICE (#3.5), 247
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 249
Files
ERROR TRAP SUMMARY (#3.077), 249
Files
ERROR TRAP SUMMARY (#3.077), 250
Files
ERROR TRAP SUMMARY (#3.077), 250
Files
SECURITY KEY (#19.1), 252
Files
INSTITUTION (#4), 257
Files
INSTITUTION (#4), 257
Files
INSTITUTION (#4), 262
Files
INSTITUTION (#4), 263
Files
INSTITUTION (#4), 263
Files
INSTITUTION (#4), 263
Files
INSTITUTION (#4), 264
Files
INSTITUTION (#4), 264
Files
INSTITUTION (#4), 265
Files
FACILITY TYPE (#4.1), 265
Files
INSTITUTION (#4), 265
Files
OPTION (#19), 269
Files
NEW PERSON (#200), 271
Files

NEW PERSON (#200), 271
Files
NEW PERSON (#200), 271
Files
NEW PERSON (#200), 272
Files
NEW PERSON (#200), 272
Files
NEW PERSON (#200), 272
Files
NEW PERSON (#200), 272
Files
NEW PERSON (#200), 273
Files
NEW PERSON (#200), 273
Files
NEW PERSON (#200), 273
Files
NEW PERSON (#200), 273
Files
NEW PERSON (#200), 273
Files
NEW PERSON (#200), 273
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 279
Files
NEW PERSON (#200), 280
Files
NEW PERSON (#200), 281
Files
NEW PERSON (#200), 281
Files
NEW PERSON (#200), 281
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 285
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 289
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 289
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 291
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 292
Files
NEW PERSON (#200), 293
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 294
Files
NEW PERSON (#200), 294
Files
TERMINAL TYPE (#3.2), 295
Files
DEVICE (#3.5), 295
Files
OPTION SCHEDULING (#19.2), 297
Files
TASKMAN SITE PARAMETERS (#14.7), 297
Files
OPTION SCHEDULING (#19.2), 305
Files
OPTION SCHEDULING (#19.2), 305
Files
TASKMAN SNAPSHOT (#14.72), 306
Files
UCI ASSOCIATION (#14.6), 306
Files
SPOOL DOCUMENT (#3.51), 313
Files
DEVICE (#3.5), 314
Files
DEVICE (#3.5), 315
Files
DEVICE (#3.5), 315
Files
LOCAL KEYWORD (#8984.1), 316
Files
LOCAL LOOKUP (#8984.4), 316
Files
LOCAL LOOKUP (#8984.4), 317
Files
LOCAL SHORTCUT (#8984.2), 317
Files
LOCAL SYNONYM (#8984.3), 317
Files

OPTION (#19), 320
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 321
Files
ROUTINE (#9.8), 321
Files
ROUTINE (#9.8), 321
Files
ROUTINE (#9.8), 321
Files
PACKAGE (#9.4), 322
Files
PACKAGE (#9.4), 322
Files
PACKAGE (#9.4), 324
Files
Purging, 327
Files
INSTALL (#9.7), 329
Files
BUILD (#9.6), 329
Files
REMOTE PROCEDURE (#8994), 352
Files
PATIENT (#2), 352
Files
PATIENT (#2), 352
Files
DUPLICATE RECORD (#15), 352
Files
DUPLICATE RECORD (#15), 352
Files
DUPLICATE RESOLUTION (#15.1), 353
Files
DUPLICATE RESOLUTION (#15.1), 353
Files
NEW PERSON (#200), 353
Files
KERNEL SYSTEM PARAMETERS (#8989.3), 356
Files
NEW PERSON (#200), 361
Files
NEW PERSON (#200), 361
Files
NEW PERSON (#200), 369
Files
DEVICE (#3.5), 369
Files
TERMINAL TYPE (#3.2), 369
Files
LANGUAGE (#.85), 370
Files
DIALOG (#.84), 370
Files
DEVICE (#3.5), 370
Files
TERMINAL TYPE (#3.2), 370
Files
TERMINAL TYPE (#3.2), 370
Files
DUPLICATE RESOLUTION (#15.1), 378
Files
INSTITUTION (#4), 381
Files
NEW PERSON (#200), 386
Files
NEW PERSON (#200), 387
Files
NEW PERSON (#200), 389
Files
NEW PERSON (#200), 389
Files
PARAMETER DEFINITION (#8989.51), 389
Files
PARAMETER (#8989.5), 389
Files
NEW PERSON (#200), 389
Files
EDUCATION (#20.11) file, 390
Files
EDUCATION (#20.11) file, 390
Files
NEW PERSON (#200), 390
Files
NAME COMPONENTS (#20), 390
Files

NAME COMPONENTS (#20), 390
Files
EDUCATION (#20.11) file, 390
Files
NEW PERSON (#200), 392
Files
NEW PERSON (#200), 392
Files
NEW PERSON (#200), 393
Files
Security, 393
Files
Security Access, 393
Files
NEW PERSON (#200), 396
Find a user Option, 229
Find Potential Duplicates for an Entry in a File Option, 168
First Line Routine Print Option, 229
Fix Help Frame File Pointers Option, 207
Fix Option File Pointers Option, 211
Flow Chart Entire Routine Option, 313
Flow Chart from Entry Point Option, 312

G

General Parameter Tools Menu, 179
Global Block Count Option, 218
Global Compare for selected package Option, 323
Globals, 67
^%ET, 365
^%IS, 365
^%SY, 365
^%Z, 365, 371
^%ZIS, 27, 68, 375
^%ZIS("C"), 371
^%ZIS("H"), 371
^%ZISL, 69, 75, 375
^%ZOSF, 70, 330, 364, 365, 371, 372, 375
^%ZTER, 69, 375
^%ZTSCH, 70, 365, 371, 376
^%ZTSH, 375
^%ZTSK, 69, 82, 365, 371, 376
^%ZUA, 69, 328, 365, 376
^CPU, 366
^DIC, 67, 70, 374
^DIZ, 67
^HOLIDAY, 67, 374
^RTH, 366
^SPOOL, 366
^SYS, 366
^TMP, 70, 374
^USC, 374
^UTILITY, 374
^VA, 68, 374
^XLM, 67
^XMB, 70, 374
^XMBS, 374
^XPD, 67, 374
^XT, 68
^XTMP, 70, 183, 210, 375
^XTV, 68, 374
^XUCM, 23
^XUSEC, 68, 375
^XUTL, 70, 371, 375
Cleanup, 327
Exempt From VA FileMan Compatibility, 371
Journaling, 374
Management, 374
Manager Account, 365
Non-VA-FileMan-Compatible Storage, 67, 70
Operating System, 365
Production Account, 374
Protection, 374
Storage
Used for Additional Files During Virgin Install, 70
Translation, 374
XTMP, 180
Glossary, 397
Intranet Website, 402
Grant Access by Profile Option, 283
Grant Users' Access to a Set of Files Option, 255
Group Routine Edit Option, 320

H

Halt Option, 256

Handle Alpha/Beta Errors Logged at Sites Option, 192
Help
  At Prompts, xxvii
  Online, xxvii
  Question Marks, xxvii
HELP FRAME (#9.2) File, 67, 80, 207
Help Processor Menu, 207
History, Revisions to Documentation and Patches, ii
HOLIDAY (#40.5) File, 67, 87
Home Pages
  Acronyms Intranet Website, 402
  Adobe Website, xxviii
  Glossary Intranet Website, 402
  Kernel Website, xxvii
  NUCC Home Page Web Address, 103
  QuadraMed Web Address, 388
  VHA Software Document Library (VDL) Website, xxviii
Host File Server Device Edit Option, 247
How to
  Obtain
    Files Security Access, 393
  Obtain Technical Information Online, xxvi
  Use this Manual, xxiii

I

ICD DIAGNOSIS (#80) File, 1, 19
ICD OPERATIONS/PROCEDURE (#80.1) File, 1
Identify Potential Merge Problems Option, 174
IMF Display Cleanup Status Option, 263
IMF edit Option, 262
Implementation, 3
Independence of Options, 368
INDEX (#.03) Field, 19
Information Security Officer Menu, 293
Information Sources
  Documentation
    Files
      Security Access, 393
INITIATE AUDIT (#19.4) Field, 6, 8, 10, 16, 17
Input routines Option, 274
Inquire Error Summary Option, 249
Inquire Option, 366
Inquire to File Entries Option, 390
Inquiry to a User's File Access Option, 255
INSTALL (#9.7) File, 37, 67, 80, 180, 181, 183, 184, 185, 329
Install File Print Option, 183
Install Package(s) Option, 181
Installation, 3
Installation Menu, 182
Installations
  Virgin Files, 102
INSTITUTION (#4) File, 67, 76, 78, 222, 257, 262, 263, 264, 265, 381
INSTITUTION ASSOCIATION TYPES (#4.05) File, 78
Institution DEA# edit Option, 257
Institution Edit Option, 257
Institution File Query / Update Option, 263
Integration Agreements Menu Option, 366
Integration Control Registrations, 365
  Current List for Kernel or Kernel Toolkit
    Custodian, 366
    Subscriber, 366
  Detailed Information, 366
Intended Audience, xxiii
Interactive Print of Error Messages Option, 251
INTERACTIVE USER'S PRIORITY (#216) Field, 7
Interfaces, 388
Internal Relations, 368
Introduction, 1
Introductory text edit Option, 286
IO Variable, 369
IO(0) Variable, 370
IOBS Variable, 370
IOF Variable, 369
IOM Variable, 369
ION Variable, 369
IOS Variable, 370
IOSL Variable, 369
IOST Variable, 369
IOST(0) Variable, 370
IOT Variable, 369

IOXY Variable, 370
IP SECURITY ON (#405.1) Field, 7
IPV—IPv4 and IPv6 Address Tools Menu, 177
Is there a menu rebuild running right now? Option, 212
ISO's Terminated User Report Option, 279

J

Journaling
  Globals, 374

K

KAAJEE BROKER CONTEXT Option, 275
KAAJEE PROXY BROKER CONTEXT Option, 275
KERMIT HOLDING (#8980) File, 67, 90
Kermit menu, 158, 313
Kernel
  APIs, 330
  Archiving, 327
  Authentication
    Token, 362
  Callable Entry Points, 330
  Direct Mode Utilities, 349
  External Relations
    Other VistA Software, 364
  Files, 66
  Globals, 67
  Interfaces, 388
  Internal Relations, 368
  Menu Tree Diagrams, 107
  Menu Tree Roots, 107
  Namespace, 3
  Purging, 327
  Remote Systems, 388
  Routines, 25
  SACC Exemptions, 371
  Site Parameters File Changes, 4
  Software-Wide Variables, 369
  Website, xxvii
Kernel GUI Alerts Option, 197
Kernel Installation & Distribution System Menu, 182
Kernel Lock Manager Option, 259
KERNEL LOCK MANAGER Option, 260
Kernel Management Menu, 257
Kernel New Features Help Option, 310
KERNEL PARAMETERS (#8989.2) File, 4, 10, 68, 92
Kernel PKI Parameter Edit Option, 294
Kernel sign-on context Option, 277
KERNEL SYSTEM PARAMETER (#8989.3)S File, 294
KERNEL SYSTEM PARAMETERS (#8989.3) File, 4, 16, 17, 60, 62, 68, 85, 92, 194, 231, 232, 239, 249, 279, 285, 289, 291, 292, 321, 356
Key Management Menu, 258
Keys, 390
Keys For a Given Menu Tree Option, 209
Keywords Option, 316
Kick Off Micro Surgery Option, 208
KIDS Build Analyzer - Full SQA Search Option, 188
KIDS Build Analyzer Option, 187
KIDS Installation Menu, 368
KIDS Main Menu, 368
Kill off a users' job Option, 274

L

LANGUAGE (#.85) File, 370
Last Routine Change Date Recorded Option, 324
LAST SIGN-ON Field, 5
LIFETIME OF VERIFY CODE (#214) Field, 7
Limited File Manager Options (Build) Option, 214
LINE/PORT ADDRESS (#3.23) File, 68, 74
Line/Port Address report Option, 246
List Access to Files by File number Option, 255
List Alerts for a user from a specified Option, 195
List all Menu Templates Option, 218
List Defined Option Sets Option, 211
List Delegated Options and their Users Option, 213
List Error Screens Option, 301

List File Attributes Option, xxvii
List file entries identified in preliminary scan Option, 171
List Global Option, 269
List Help Frames Option, 207
List Inactive Person Class Users Option, 256
List of Active Registered Trainees Option, 240
List of All Registered Trainees Option, 241
List of Inactive Registered Trainees Option, 240
List of NPI data for CBO Option, 275
List Options by Parents and Use Option, 310
List Routines Option, 270
List Spool Documents Option, 291
List Tasks Option, 302
List Terminal Types Option, 259
List Unreferenced Menu Options Option, 188
List users holding a certain key Option, 213
List users Option, 286
List Values for a Selected Entity Option, 178
List Values for a Selected Package Option, 178
List Values for a Selected Parameter Option, 178
List Values for a Selected Template Option, 178
Load a Distribution Option, 182
Load DMIS ID's Option, 262
Load Institution NPI values Option, 265
Load/refresh checksum values into ROUTINE file Option, 218
LOCAL KEYWORD (#8984.1) File, 18, 68, 91, 316
LOCAL LOOKUP (#8984.4) File, 2, 19, 68, 92, 316, 317
LOCAL SHORTCUT (#8984.2) File, 18, 68, 91, 317
LOCAL SYNONYM (#8984.3) File, 19, 68, 91, 317
Local Trainee Registration Reports Menu, 240
Lock Manager Menu, 259
Lock Manger Utility Protocols, 156
LOCKED IP or DEVICE (#3.083) File, 72
LOCK-OUT TIME (#51.3) Field, 6
LOG RESOURCE USAGE? (#300) Field, 7
LOG SYSTEM RT? (#41, 6) Field, 7, 10
Loopback Test of Device Port Option, 296
Low Usage Alpha/Beta Test Options Option, 194
LPD/VMS Device Edit Option, 247

M

Magtape Device Edit Option, 247
MAIL GROUP (#3.8) File, 70, 102
Mail Groups, 377
MAILMAN SITE PARAMETERS (#4.3) File, 4
Maintenance, 3
Make an alert on the fly Option, 203
Make spool document into a mail message Option, 291
Manage User File Menu, 281
Manager Account, 365
Routines, 25
Manager Utilities Menu, 169
Mapping Routines, 65
MARITAL STATUS (#11) File, 70, 81, 103
Mark Option Set Out-Of-Order Option, 209
Mark/Unmark Provider Exempt from requiring an NPI Option, 275
MASTER FILE PARAMETERS (#4.001) File, 76
MAX SIGNON ALLOWED (#41, 2) Field, 7, 10
MAX SPOOL DOCUMENT LIFE-SPAN (#31.3) Field, 7, 18
MAX SPOOL DOCUMENTS PER USER (#31,2) Field, 7
MAX SPOOL DOCUMENTS PER USER (#31.2) Field, 18
MAX SPOOL LINES PER USER (#31.1) Field, 8, 18
MD5 Signature (#4.005) File, 77
Menu and Option Security Menu, 231
Menu Diagrams Menu, 206
Menu Diagrams Option, 308

Menu Management Menu, 85, 107, 108, 114, 261
Menu Rebuild Menu, 204
Menu Structure, 107
Menu Templates Menu, 218
MENUMAN QUICK HELP (#19.8) File, 86
Menus
  Access Monitor Menu, 265
  Add/Modify Utility, 317
  Alert Management, 203
  Alpha/Beta Test Option Usage Menu, 194
  Application Utilities, 318
  Audit Display, 237
  Audit Features, 238
  Audit Menu, 368
  Build Analyzer Main Menu, 187
  Capacity Planning, 312
  Core Applications, 107, 111, 244
  Custodial Package Menu, 366
  Data Dictionary Utilities, xxvii
  DBA, 366
  DBA IA CUSTODIAL MENU, 366
  DBA IA ISC, 366
  DBA IA SUBSCRIBER MENU, 366
  DBA Option, 366
  Delegate's Menu Management, 217
  Device Management, 107, 112, 295
  DI DDU, xxvii
  Display Menus and Options, 206
  Do nothing menu, 229
  Duplicate Resolution System, 168
  Edit Devices by Specific Types, 247
  Edit Taskman Parameters, 303
  Edits and Distribution, 181
  ePCS DEA Utility Functions, 161, 227
  Error Processing, 250
  Error Summary Menu, 249
  EVE, 107, 108, 111
  Exported, 107
  Filegrams, 368
  Fileman Access for the ISO, 248
  Fileman Security Menu, 254
  General Parameter Tools, 179
  Help Processor, 207
  Information Security Officer Menu, 293
  Installation, 182
  Integration Agreements Menu, 366
  IPV—IPv4 and IPv6 Address Tools, 177
  Kermit menu, 158, 313
  Kernel Installation & Distribution System, 182
  Kernel Management Menu, 257
  Key Management, 258
  KIDS Installation Menu, 368
  KIDS Main Menu, 368
  Local Trainee Registration Reports, 240
  Lock Manager Menu, 259
  Locked, 368
  Manage User File, 281
  Manager Utilities, 169
  Menu and Option Security, 231
  Menu Diagrams, 206
  Menu Management, 85, 107, 108, 114, 261
  Menu Rebuild Menu, 204
  Menu Templates, 218
  Menu Tree Diagrams, 107
  Menu Tree Roots, 107
  Multi-Term Lookup Main Menu, 317
  Non-queuable options with no parents, 212
  NPF cleanup main menu, 272
  NPI (National Provider ID) Menu, 276
  OAA Trainee Registration Menu, 242
  Operations, 170
  Operations Management, 107, 119, 290
  Out-Of-Order Set Management, 210
  Parent of Queuable Options, 107, 150
  Programmer Options, 107, 124, 269, 368
  Programmer tools, 319
  Report Menu for Alerts, 199
  Routine Management Menu, 274
  Routine Tools, 270
  ScreenMan, 368
  Secure Menu Delegation, 215, 216
  Spool Management, 107, 134, 292
  Spooler Menu, 291
  Subscriber Package Menu, 366
  System Audit Menu, 237
  System Audit Reports, 238
  SYSTEM COMMAND OPTIONS, 107, 151, 243

System Security, 107, 135
Systems Manager Menu, 107, 108, 111
Taskman Error Log, 299
Taskman Management, 107, 142, 302
Taskman Management Utilities, 307
Toolkit Queuable Options, 320
Trainee Reports Menu, 242
Trainee Transmission Reports to OAA, 243
Trees
Systems Manager Menu [EVE], 107
User Management, 107, 145, 267, 280, 310, 390
User Management Menu, 266
User Security Menu, 282
User's Toolbox, 287
User's Toolbox, 389
Utilities, 173, 185
Utilities for MTLU, 317
VA FileMan Management, 368
Verifier Tools Menu, 322, 324
XDR MAIN MENU, 168
XDR MANAGER UTILITIES, 169
XDR OPERATIONS MENU, 170
XDR UTILITIES MENU, 173
XLFIPV IPV4 IPV6 MENU, 177
XPAR MENU TOOLS, 179
XPD DISTRIBUTION MENU, 181
XPD INSTALLATION MENU, 182
XPD MAIN, 182
XPD UTILITY, 185
XPDANLYZ MAIN MENU, 187
XQAB MENU, 194
XQAL REPORTS MENU, 199
XQALERT MGR, 203
XQBUILDMAIN, 204
XQDIAGMENU, 206
XQDISPLAY OPTIONS, 206
XQHELP-MENU, 207
XQOOMAIN, 210
XQORPHANOPTIONS, 212
XQSMD MGR, 215
XQSMD SEC OFCR, 216
XQSMD USER MENU, 217
XQTUSER, 218
XTCM MAIN, 312
XT-KERMIT MENU, 158, 313
XTLKMODUTL, 317
XTLKUSER2, 317
XTLKUTILITIES, 317
XTMENU, 318
XTOOLS, 319
XTQUEUABLE OPTIONS, 320
XTV MENU, 322
XTVR MENU, 324
XU EPCS UTILITY FUNCTIONS, 161, 227
XU NOP MENU, 229
XU SEC OFCR, 231
XUADISP, 237
XUAUDIT MAINT, 237
XUAUDIT MENU, 238
XUAUDIT RPT, 238
XU-CLINICAL LOCAL REPORTS, 240
XU-CLINICAL TRAINEE MENU, 242
XU-CLINICAL TRAINEE REPORTS, 242
XU-CLINICAL TRANS REPORTS, 243
XUCOMMAND, 107, 151, 243
XUCORE, 107, 111, 244
XUDEVEDIT, 247
XUDIACCESS FOR ISO, 248
XUER SUMMARY, 249
XUERRS, 250
XUFILEACCESS SEC OFCR, 254
XUKERNEL, 257
XUKEYMGMT, 258
XULM LOCK MANAGER MENU, 259
XUMAINT, 85, 107, 108, 114, 261
XUMNACCESS, 265
XUOPTUSER, 266
XUPROG, 107, 124, 269
XUPR-ROUTINE-TOOLS, 270
XUPS NPF CLEANUP MAIN MENU, 272
XUROUTINES, 274
XUS NPI MENU, 276
XUSER, 107, 145, 267, 280, 390
XUSER FILE MGR, 281
XUSER SEC OFCR, 282
XUSERTOOLS, 287, 389
XUSITEMGR, 107, 119, 290

XU-SPL-MENU, 291
XU-SPL-MGR, 107, 134, 292
XUSPY, 107, 135, 293
XUTIO, 107, 112, 295
XUTM ERROR, 299
XUTM MGR, 107, 142, 302
XUTM PARAMETER EDIT, 303
XUTM UTIL, 307
XUZUSER, 310
ZTMQUEUABLE OPTIONS, 107, 150
Merge
Description, 22
MERGE PACKAGES (#15,1101) Multiple Field, 23
Merge Selected Verified Duplicate Pair Option, 170
Messages
DEVICE ATTRIBUTES, 5
Monitor Routines for Changes Option, 321
Monitor Taskman Option, 308
Move Routines across Volume Sets Option, 318
MULTIPLE SIGN-ON (#200.04) Field, 6
Multi-Term Look-Up (MTLU), 1
Implementing, 18
Multi-Term Lookup (MTLU) Option, 316
Multi-Term Lookup Main Menu, 317
MUMPS Cross-reference, 28
MUMPS Cross-Reference, 19
MUMPS OPERATING SYSTEM (#.7) File, 62
MXMLDOM Routine, 330
MXMLPRSE Routine, 331
MXMLUTL Routine, 331

N

NAME COMPONENTS (#20) File, 86, 390
NAME OF MERGE ROUTINE (#9.402,3) Field, 23
Namespace
Kernel, 3
Toolkit, 3
NAMESPACE TO AUDIT (#19.2) Field, 8
NAMESPACE TO AUDIT (#19.2) Multiple Field, 8, 16, 17
Network Channel Device Edit Option, 247, 248
NEW PERSON (#200) File, 5, 6, 8, 9, 59, 68, 71, 73, 88, 89, 94, 106, 156, 217, 232, 233, 236, 241, 271, 272, 273, 280, 281, 293, 294, 353, 361, 369, 386, 387, 389, 390, 392, 393, 396
NEW PERSON IDENTIFIERS (#21) Field, 8
New User Event Option, 232
New/Revised Help Frames Option, 207
No Alert Backup Reviewer Option, 198
Nodes
%ZOSF("TEST"), 81
Non-interactive Build Primary Menu Trees Option, 205
Non-queuable options with no parents Menu, 212
NPF cleanup main menu, 272
NPI (National Provider ID) Menu, 276
NPI Signon Check Option, 277
NUCC Home Page Web Address, 103
Number base changer Option, 319

O

OAA Trainee Registration Menu, 242
Obtaining
Data Dictionary Listings, xxvii
Official Policies, 396
Old Checksum Edit Option, 321
Old Checksum Update from Build Option, 322
One-time Option Queue Option, 230
One-time Option Start Option
Internal Use Only, 230
Online
Documentation, xxvii
Technical Information, How to Obtain, xxvi
Operating System Globals, 365
Operations Management Menu, 107, 119, 290
Operations Menu, 170
OPTION (#19) File, 67, 85, 86, 156, 157, 188, 205, 208, 209, 210, 211, 213, 219, 230, 235, 239, 269, 320

Option Access By User Option, 266
OPTION AUDIT (#19) Field, 6, 8, 10, 16, 17
Option Audit Display Option, 266
Option Function Inquiry Option, 257
OPTION SCHEDULING (#19.2) File, 62, 67, 86, 232, 297, 305
OPTION TO AUDIT (#19.1) Multiple Field, 8, 17
Options
  Rollup Patches into a Build, 184
Options
  Add a New User to the System, 106
  Add Entries To Look-Up File, 19
  Add Verified Duplicate Pair, 165
  Allocate/De-Allocate of PSDRPH Key, 162, 164
  Ancillary Data Review, 166
  Approve verified duplicates for merging, 166
  Attached to Menus for Other Software, 158
  Automatically Merge all Ready Verified Duplicates, 166
  Backup a Transport Global, 179
  Build File Print, 183
  Check file 5.13 & file 5, 175
  Check Merge Process Status (reverse order), 166
  Check Pair of Records to see if Duplicates, 167
  Compare Transport Global to Current System, 180
  Convert any IP address per system settings, 176
  Convert any IP address to IPv4, 177
  Convert any IP address to IPv6, 177
  Convert Loaded Package for Redistribution, 180
  Copy Build to Build, 181
  Core Applications, 107, 111
  Create a Build Using Namespace, 180
  Data Dictionary Utilities, xxvii
  Device Management, 107, 112
  DI DDU, xxvii
  Diagram Menus, 108
DIEDIT, 21
DILIST, xxvii
Display Menus and Options, 108
Display Patches for a Package, 183
Display Search Status, 167
Display User Characteristics, 43
Duplicate Resolution System, 168
Edit a Build, 181
Edit an Existing User, 10, 106
Edit Duplicate Record Status, 167
Edit Duplicate Resolution File, 168
Edit Facility DEA# and Expiration Date, 162
Edit File, 21
Edit Install Status, 181
Edit Option, 39
Edit Options, 85
Edit Parameter Definition Keyword, 177
Edit Parameter Values, 178
Edit Parameter Values with Template, 177
Edit Site IP lockout, 7
Edit User Characteristics, 10
Edits and Distribution, 181
Enter/Edit Kernel Site Parameters, 16, 17
ePCS DEA Utility Functions, 161
Error Trap Display, 44
Errors Logged in Alpha/Beta Test (QUEUED), 157
Establish System Audit Parameters, 16
EVE, 107, 108, 111
Exported, 107
Extended-Action Options, 156
Find Potential Duplicates for an Entry in a File, 168
General Parameter Tools, 179
Identify Potential Merge Problems, 174
Install File Print, 183
Install Package(s), 181
Installation, 182
IPV—IPv4 and IPv6 Address Tools, 177
Kermit menu, 158
Kernel Installation & Distribution System, 182
Kernel Options Listed Alphabetically by Name, 165
List File Attributes, xxvii

List file entries identified in preliminary scan, 171
List Values for a Selected Entity, 178
List Values for a Selected Package, 178
List Values for a Selected Parameter, 178
List Values for a Selected Template, 178
Load a Distribution, 182
Manager Utilities, 169
Menu Management, 85, 107, 108, 114
Menu Tree Diagrams, 107
Menu Tree Roots, 107
Merge Selected Verified Duplicate Pair, 170
Operations, 170
Operations Management, 107, 119
Options Listed Alphabetically by Name, 164
Parent of Queuable Options, 107, 150
Postal Code Update Server, 176
Preliminary Scan of File for errors, 171
Print Audits for Prescriber Editing, 161, 164
Print DEA Expiration Date Expires 30 days, 161, 162
Print DEA Expiration Date Null, 161, 162
Print DISUSER DEA Expiration Date Expires 30 days, 161, 163
Print DISUSER DEA Expiration Date Null, 161, 162
Print DISUSER Prescribers with Privileges, 161, 163
Print List of File Duplicates, 171
Print Prescribers with Privilege, 161
Print Prescribers with Privileges, 163
Print PSDRPH Key Holders, 161, 163
Print Setting Parameters Privileges, 161, 164
Print Transport Global, 183
Programmer Options, 107, 124
Purge Build or Install Files, 184
Purge Duplicate Record File, 171
Purge Merge Process File, 84, 172
Purge old spool documents, 7
Queuable Synchronize County Multiple With 5.13, 175
Queuable Task Log Cleanup, 82
Reactivate a User, 11, 106
Release IP lock, 7
Restart a merge process, 172
Restart Install of Package(s), 184
Routine Compare - Current with Previous, 93
Scan Possible Duplicates, 172
Schedule Process to Merge Verified Duplicates, 170
Schedule/Unschedule Options, 24, 107
Server, 157
Show system settings for IPv6, 177
Spool Management, 107, 134
Spooler Site Parameters Edit, 17
Start/Halt Duplicate Search, 172
STOP an active merge process, 173
SYSTEM COMMAND OPTIONS, 107, 151
System Security, 107, 135
Systems Manager Menu, 107, 108, 111
Tally STATUS and MERGE STATUS fields, 173
Task Allocation Audit of PSDRPH Key Report, 161, 164
Task Changes to DEA Prescribing Privileges Report, 161, 164
Taskman Management, 107, 142
Update with current routines, 93
User Management, 107, 145
User sign-on event, 156
Utilities, 173
Validate IPv4 and IPv6 address, 177
Verify Checksums in Transport Global, 183
Verify Potential Duplicates, 174
Verify Selected Potential Duplicate Pair, 174
View Duplicate Record Entries, 175
XDR ADD VERIFIED DUPS, 165
XDR ANCILLARY REVIEW, 166
XDR APPROVE FOR MERGE, 166
XDR AUTO MERGE, 166
XDR CHECK MERGE PROCESS STATUS, 166
XDR CHECK PAIR, 167
XDR DISPLAY SEARCH STATUS, 167

XDR EDIT DUP RECORD STATUS, 167
XDR EDIT DUP RESOLUTION FILE, 168
XDR FIND POTENTIAL DUPLICATES, 168
XDR MAIN MENU, 168
XDR MANAGER UTILITIES, 169
XDR MERGE READY DUPLICATES, 170
XDR MERGE SELECTED PAIR, 170
XDR OPERATIONS MENU, 170
XDR PRELIMINARY SCAN, 171
XDR PRELIMINARY SCAN LIST, 171
XDR PRINT LIST, 171
XDR PURGE, 171
XDR PURGE2, 84, 172
XDR RESTART MERGE PROCESS, 172
XDR SCAN POSSIBLE DUPLICATES, 172
XDR SEARCH ALL, 172
XDR STOP MERGE PROCESS, 173
XDR TALLY STATUS FIELDS, 173
XDR UTILITIES MENU, 173
XDR VALID CHECK, 174
XDR VERIFY ALL, 174
XDR VERIFY SELECTED PAIR, 174
XDR VIEW DUPLICATE RECORD, 175
XIP SYNCHRONIZE COUNTY, 175
XIP ZIP CODE LIST, 175
XIPMAILSERVER, 175
XIPSRVR, 176
XLFIPV CONVERT, 176
XLFIPV FORCEIP4, 177
XLFIPV FORCEIP6, 177
XLFIPV IPV4 IPV6 MENU, 177
XLFIPV VALIDATE, 177
XLFIPV VERSION, 177
XPAR EDIT BY TEMPLATE, 177
XPAR EDIT KEYWORD, 177
XPAR EDIT PARAMETER, 178
XPAR LIST BY ENTITY, 178
XPAR LIST BY PACKAGE, 178
XPAR LIST BY PARAM, 178
XPAR LIST BY TEMPLATE, 178
XPAR MENU TOOLS, 179
XPD BACKUP, 179
XPD BUILD NAMESPACE, 180
XPD COMPARE TO SYSTEM, 180
XPD CONVERT PACKAGE, 180
XPD COPY BUILD, 181
XPD DISTRIBUTION MENU, 181
XPD EDIT BUILD, 181
XPD EDIT INSTALL, 181
XPD INSTALL BUILD, 181
XPD INSTALLATION MENU, 182
XPD LOAD DISTRIBUTION, 182
XPD MAIN, 182
XPD PRINT BUILD, 183
XPD PRINT CHECKSUM, 183
XPD PRINT INSTALL, 183
XPD PRINT INSTALL FILE, 183
XPD PRINT PACKAGE PATCHES, 183
XPD PURGE FILE, 184
XPD RESTART INSTALL, 184
XPD ROLLUP PATCHES, 184
XQAB ERROR LOG SERVER, 157
XQAB ERROR LOG XMIT, 157
XQDISPLAY OPTIONS, 108
XQSCHK, 157
XQSPING, 158
XT-KERMIT MENU, 158
XT-KERMIT SPOOL DL, 158
XTLKMODPARS, 19
XTVR COMPARE, 93
XTVR UPDATE, 93
XU EPCS DISUSER EXP DATE, 161, 162
XU EPCS DISUSER PRIVS, 161, 163
XU EPCS DISUSER XDATE EXPIRES, 161, 163
XU EPCS EDIT DEA# AND XDATE, 162
XU EPCS EXP DATE, 161, 162
XU EPCS LOGICAL ACCESS, 161, 164
XU EPCS PRINT EDIT AUDIT, 161, 164
XU EPCS PRIVS, 161, 163
XU EPCS PSDRPH, 161, 163
XU EPCS PSDRPH AUDIT, 161, 164
XU EPCS PSDRPH KEY, 162, 164

XU EPCS SET PARMS, 161, 164
XU EPCS UTILITY FUNCTIONS, 161
XU EPCS XDATE EXPIRES, 161, 162
XU IP RELEASE, 7
XU SITE LOCKOUT, 7
XU USER SIGN-ON, 156
XU USER START-UP, 156
XU USER TERMINATE, 156
XUAUDIT, 16
XUCM TASK NIT, 24
XUCOMMAND, 107, 151
XUCORE, 107, 111
XUEDITOPT, 39, 85
XUERTRAP, 44
XULM DISPLAY SYSTEM LOCKS, 156
XULM GO TO, 157
XULM LOCK MANAGER, 156
XULM REFRESH LOCKS, 156
XULM SELECT LOCK, 157
XULM SELECT NODE, 157
XULM SINGLE LOCK MENU, 157
XULM SORT/SCREEN LOCKS, 157
XULM TERMINATE PROCESS, 157
XUMAINT, 85, 107, 108, 114
XU-PING-SERVER, 158
XUPROG, 107, 124
XUSER, 107, 145
XUSEREDIT, 10, 106
XUSEREDITSELF, 10
XUSERNEW, 11, 106
XUSERREACT, 11, 106
XUSITEMGR, 107, 119
XUSITEPARM, 16, 17
XU-SPL-MGR, 107, 134
XU-SPL-PURGE, 7, 18
XU-SPL-SITE, 17
XUSPY, 107, 135
XUTIO, 107, 112
XUTM MGR, 107, 142
XUTM QCLEAN, 82
XUTM SCHEDULE, 24, 107
XUUSERACC, 108
XUUSERDISP, 43
ZIP Code List, 175
ZTMQUEUABLE OPTIONS, 107, 150
Options
  XPD ROUTINE UPDATE, 184
Options
  Update Routine File, 184
Options
  XPD TRANSPORT PACKAGE, 185
Options
  Transport a Distribution, 185
Options
  XPD UNLOAD DISTRIBUTION, 185
Options
  Unload a Distribution, 185
Options
  XPD UTILITY, 185
Options
  Utilities, 185
Options
  XPD VERIFY BUILD, 187
Options
  Verify a Build, 187
Options
  XPD VERIFY INTEGRITY, 187
Options
  Verify Package Integrity, 187
Options
  XPDANLYZ MAIN MENU, 187
Options
  Build Analyzer Main Menu, 187
Options
  XPDANLYZ, 187
Options
  KIDS Build Analyzer, 187
Options
  XPDANLYZ_DEL, 188
Options
  Delete Build Analyzer Text Files, 188
Options
  XPDANLYZ_SQA, 188
Options
  KIDS Build Analyzer - Full SQA Search, 188
Options
  XQ LIST UNREFERENCED OPTIONS, 188
Options
  List Unreferenced Menu Options, 188

Options
XQ UNREF'D OPTIONS, 189
Options
Delete Unreferenced Options, 189
Options
XQ XUTL $J NODES, 189
Options
Clean old Job Nodes in XUTL, 189
Options
XQAB ACTUAL OPTION USAGE, 191
Options
Actual Usage of Alpha/Beta Test Options, 191
Options
XQAB AUTO SEND, 191
Options
Send Alpha/Beta Usage to Developers, 191
Options
XQAB ERR DATE/SITE/NUM/ROU/ERR, 191
Options
Print Alpha/Beta Errors (Date/Site/Num/Rou/Err), 191
Options
XQAB ERROR LOG SERVER, 192
Options
Handle Alpha/Beta Errors Logged at Sites, 192
Options
XQAB ERROR LOG XMIT, 193
Options
Errors Logged in Alpha/Beta Test (QUEUED), 193
Options
XQAB LIST LOW USAGE OPTS, 194
Options
Low Usage Alpha/Beta Test Options, 194
Options
XQAB MENU, 194
Options
Alpha/Beta Test Option Usage Menu, 194
Options
XQAL ALERT LIST FROM DATE, 195
Options
List Alerts for a user from a specified, 195
Options
XQAL CRITICAL ALERT COUNT, 195
Options
Critical Alerts Count Report, 195
Options
XQAL GUI ALERTS, 197
Options
Kernel GUI Alerts, 197
Options
XQAL NO BACKUP REVIEWER, 198
Options
No Alert Backup Reviewer, 198
Options
XQAL PATIENT ALERT LIST, 198
Options
Patient Alert List for specified date, 198
Options
XQAL REPORTS MENU, 199
Options
Report Menu for Alerts, 199
Options
XQAL SET BACKUP REVIEWER, 199
Options
Set Backup Reviewer for Alerts, 199
Options
XQAL SURROGATE FOR WHICH USERS, 200
Options
Surrogate for which Users?, 200
Options
XQAL USER ALERTS COUNT, 200
Options
User Alerts Count Report, 200
Options
XQAL VIEW ALERT TRACKING ENTRY, 201
Options
Alert Tracking file entry, 201
Options
XQALERT, 202
Options
View Alerts, 202
Options
XQALERT BY USER DELETE, 202
Options
Purge Alerts for a User, 202

Options
XQALERT DELETE OLD, 202
Options
Delete Old (>14 d) Alerts, 202
Options
XQALERT MAKE, 203
Options
Make an alert on the fly, 203
Options
XQALERT MGR, 203
Options
Alert Management, 203
Options
XQALERT SURROGATE SET/REMOVE, 203
Options
Alerts - Set/Remove Surrogate for User, 203
Options
XQBUILDMAIN, 204
Options
Menu Rebuild Menu, 204
Options
XQBUILDTREE, 204
Options
Build Primary Menu Trees, 204
Options
XQBUILDTREEQUE, 205
Options
Non-interactive Build Primary Menu Trees, 205
Options
XQBUILDUSER, 205
Options
Single User Menu Tree Rebuild, 205
Options
XQCOPYOP, 205
Options
Copy Everything About an Option to a New Option, 205
Options
XQDIAGMENU, 206
Options
Menu Diagrams, 206
Options
XQDISPLAY OPTIONS, 206
Options
Display Menus and Options, 206
Options
XQHELP-ASSIGN, 206
Options
Assign Editors, 206
Options
XQHELP-DEASSIGN, 206
Options
Unassign Editors, 206
Options
XQHELP-DISPLAY, 206
Options
Display/Edit Help Frames, 206
Options
XQHELPFIX, 207
Options
Fix Help Frame File Pointers, 207
Options
XQHELP-LIST, 207
Options
List Help Frames, 207
Options
XQHELP-MENU, 207
Options
Help Processor, 207
Options
XQHELP-UPDATE, 207
Options
New/Revised Help Frames, 207
Options
XQHELP-XREF, 208
Options
Cross Reference Help Frames, 208
Options
XQKEYALTODEL, 208
Options
Change user’s allocated keys to delegated keys, 208
Options
XQKEYDEL, 208
Options
Delegate keys, 208
Options
XQKEYRDEL, 208
Options

Remove delegated keys, 208
Options
XQKICKMICRO, 208
Options
Kick Off Micro Surgery, 208
Options
XQLISTKEY, 209
Options
Show the keys of a particular user, 209
Options
XQLOCK1, 209
Options
All the Keys a User Needs, 209
Options
XQLOCK2, 209
Options
Keys For a Given Menu Tree, 209
Options
XQOOFF, 209
Options
Mark Option Set Out-Of-Order, 209
Options
XQOOMAIN, 210
Options
Out-Of-Order Set Management, 210
Options
XQOOMAKE, 210
Options
Create a Set of Options To Mark Out-Of-Order, 210
Options
XQOON, 210
Options
Remove Out-Of-Order Messages from a Set of Options, 210
Options
XQOOREDO, 210
Options
Recover deleted option set, 210
Options
XQOOSHOFIL, 210
Options
Options in the Option File that are Out-Of-Order, 210
Options
XQOOSHOPRO, 211
Options
Protocols Marked Out-Of-Order in Protocol File, 211
Options
XQOOSHOW, 211
Options
List Defined Option Sets, 211
Options
XQOOTOG, 211
Options
Toggle options/protocols on and off, 211
Options
XQOPACCESS, 211
Options
See if a User Has Access to a Particular Option, 211
Options
XQOPED, 211
Options
Screen-based Option Editor, 211
Options
XQOPTFIX, 211
Options
Fix Option File Pointers, 211
Options
XQORPHANOPTIONS, 212
Options
Non-queuable options with no parents, 212
Options
XQRESTRICT, 212
Options
Restrict Availability of Options, 212
Options
XQRIGHTNOW, 212
Options
Is there a menu rebuild running right now?, 212
Options
XQSCHK, 212
Options
Server-type Option Test Server, 212
Options
XQSHOKEY, 213
Options
List users holding a certain key, 213

Options
XQSMD ADD, 213
Options
Select Options to be Delegated, 213
Options
XQSMD BUILD MENU, 213
Options
Build a New Menu, 213
Options
XQSMD BY OPTION, 213
Options
List Delegated Options and their Users, 213
Options
XQSMD BY USER, 213
Options
Print All Delegates and their Options, 213
Options
XQSMD COPY USER, 213
Options
Copy One Users Menus and Keys to others, 213
Options
XQSMD EDIT OPTIONS, 214
Options
Edit a User's Options, 214
Options
XQSMD LIMITED FM OPTIONS, 214
Options
Limited File Manager Options (Build), 214
Options
XQSMD MGR, 215
Options
Secure Menu Delegation, 215
Options
XQSMREMOVE, 215
Options
Remove Options Previously Delegated, 215
Options
XQSMD REPLICATE, 216
Options
Replicate or Replace a Delegate, 216
Options
XQSMD SEC OFCR, 216
Options
Secure Menu Delegation, 216
Options
XQSMD SET PREFIX, 216
Options
Specify Allowable New Menu Prefix, 216
Options
XQSMD SHOW, 216
Options
Show a Delegate's Options, 216
Options
XQSMD USER MENU, 217
Options
Delegate's Menu Management, 217
Options
XQSPING, 217
Options
TCP/IP Type Ping Server, 217
Options
XQTKILL, 217
Options
Delete a Menu Template, 217
Options
XQTLIST, 217
Options
Show all options in a Menu Template, 217
Options
XQTLNEW, 217
Options
Create a new menu template, 217
Options
XQTRNAM, 218
Options
Rename a menu template, 218
Options
XQTSHO, 218
Options
List all Menu Templates, 218
Options
XQTUSER, 218
Options
Menu Templates, 218
Options
XU BLOCK COUNT, 218
Options
Global Block Count, 218

Options
XU CHECKSUM LOAD, 218
Options
Load/refresh checksum values into ROUTINE file, 218
Options
XU CHECKSUM REPORT, 218
Options
Compare local/national checksums report, 218
Options
XU DA EDIT, 219
Options
DA Return Code Edit, 219
Options
XU EPCS, 219
Options
User start-up event, 219
Options
XU EPCS DISUSER EXP DATE, 220
Options
Print DISUSER DEA Expiration Date Null, 220
Options
XU EPCS DISUSER PRIVS, 220
Options
Print DISUSER Prescribers with Privileges, 220
Options
XU EPCS DISUSER XDATE EXPIRES, 221
Options
Print DISUSER DEA Expiration Date Expires 30 days, 221
Options
XU EPCS EDIT DATA, 221
Options
ePCS Edit Prescriber Data, 221
Options
XU EPCS EDIT DEA# AND XDATE, 222
Options
Edit Facility DEA# and Expiration Date, 222
Options
XU EPCS EXP DATE, 222
Options
Print DEA Expiration Date Null, 222
Options
XU EPCS LOGICAL ACCESS, 223
Options
Task Changes to DEA Prescribing Privileges Report, 223
Options
XU EPCS PRINT EDIT AUDIT, 224
Options
Print Audits for Prescriber Editing, 224
Options
XU EPCS PRIVS, 224
Options
Print Prescribers with Privileges, 224
Options
XU EPCS PSDRPH, 225
Options
Print PSDRPH Key Holders, 225
Options
XU EPCS PSDRPH AUDIT, 225
Options
Task Allocation Audit of PSDRPH Key Report, 225
Options
XU EPCS PSDRPH KEY, 227
Options
Allocate/De-Allocate of PSDRPH Key, 227
Options
XU EPCS SET PARMS, 227
Options
Print Setting Parameters Privileges, 227
Options
XU EPCS UTILITY FUNCTIONS, 227
Options
ePCS DEA Utility Functions, 227
Options
XU EPCS XDATE EXPIRES, 228
Options
Print DEA Expiration Date Expires 30 days, 228
Options
XU FINDUSER, 229
Options
Find a user, 229

Options
XU FIRST LINE PRINT, 229
Options
First Line Routine Print, 229
Options
XU IP RELEASE, 229
Options
Release IP lock, 229
Options
XU NOP MENU, 229
Options
Do nothing menu, 229
Options
XU OPTION QUEUE, 230
Options
One-time Option Queue, 230
Options
XU OPTION START, 230
Options
One-time Option Start
Internal Use Only, 230
Options
Schedule/Unschedule Options, 230
Options
XUTM SCHEDULE, 230
Options
XU PROC CNT CLUP, 230
Options
XUS Process count cleanup, 230
Options
XU SEC OFCR, 231
Options
Menu and Option Security, 231
Options
XU SID ASK, 231
Options
Ask if Production Account, 231
Options
XU SID EDIT, 231
Options
Edit Logical/Physical Mapping, 231
Options
XU SID STARTUP, 232
Options
Startup PROD check, 232
Options
XU SITE LOCKOUT, 232
Options
Edit Site IP lockout, 232
Options
XU SWITCH UCI, 232
Options
Switch UCI, 232
Options
XU USER ADD, 232
Options
New User Event, 232
Options
XU USER CHANGE, 233
Options
User Change Event, 233
Options
XU USER SIGN-ON, 233
Options
User sign-on event, 233
Options
XU USER START-UP, 234
Options
User start-up event, 234
Options
XU USER TERMINATE, 235
Options
User terminate event, 235
Options
XU-486 MENU COPY, 236
Options
Copy the compiled menus from the print server, 236
Options
XUADISP, 237
Options
Audit Display, 237
Options
XUAUDIT, 237
Options
Establish System Audit Parameters, 237
Options
XUAUDIT MAINT, 237
Options
System Audit Menu, 237
Options
XUAUDIT MENU, 238

Options
Audit Features, 238
Options
XUAUDIT RPT, 238
Options
System Audit Reports, 238
Options
XUAUTODEACTIVATE, 238
Options
Automatic Deactivation of Users, 238
Options
XUCHANGE, 239
Options
Change Device's Terminal Type, 239
Options
XU-CLINICAL ACTIVE TRAINEE, 240
Options
List of Active Registered Trainees, 240
Options
XU-CLINICAL INACTIVE TRAINEE, 240
Options
List of Inactive Registered Trainees, 240
Options
XU-CLINICAL LOCAL REPORTS, 240
Options
Local Trainee Registration Reports, 240
Options
XU-CLINICAL TRAINEE COUNT, 241
Options
Count of Clinical Trainee's, 241
Options
XU-CLINICAL TRAINEE DB COUNT, 241
Options
Total Count of Registered Trainees, 241
Options
XU-CLINICAL TRAINEE EDIT DB COUNT, 241
Options
Edit Trainee Registration Data, 241
Options
XU-CLINICAL TRAINEE INQUIRY, 241
Options
Trainee Registration Inquiry, 241
Options
XU-CLINICAL TRAINEE LIST, 241
Options
List of All Registered Trainees, 241
Options
XU-CLINICAL TRAINEE MENU, 242
Options
OAA Trainee Registration Menu, 242
Options
XU-CLINICAL TRAINEE REPORTS, 242
Options
Trainee Reports Menu, 242
Options
XU-CLINICAL TRAINEE TRANSA, 242
Options
Trainee Transmission Report by Date, 242
Options
XU-CLINICAL TRAINEE TRANSB, 242
Options
Trainee Transmission Report Selectable Items, 242
Options
XU-CLINICAL TRAINEE TRANSC, 242
Options
Trainee Transmission Report by Range, 242
Options
XU-CLINICAL TRANS REPORTS, 243
Options
Trainee Transmission Reports to OAA, 243
Options
XUCOMMAND, 243
Options
SYSTEM COMMAND OPTIONS, 243
Options
XUCONTINUE, 244
Options
Continue, 244
Options
XUCORE, 244
Options

Core Applications, 244
Options
XUDEV, 246
Options
Device Edit, 246
Options
XUDEV LINEPORT ADDR CURRENT, 246
Options
Current Line/Port Address, 246
Options
XUDEV LINEPORT ADDR EDIT, 246
Options
Edit Line/Port Addresses, 246
Options
XUDEV LINEPORT ADDR RPT, 246
Options
Line/Port Address report, 246
Options
XUDEV RES-CLEAR, 246
Options
Clear all resources, 246
Options
XUDEV RES-ONE, 246
Options
Clear one Resource, 246
Options
XUDEVEDIT, 247
Options
Edit Devices by Specific Types, 247
Options
XUDEVEDITALL, 247
Options
Edit All Device Fields, 247
Options
XUDEVEDITCHAN, 247
Options
Network Channel Device Edit, 247
Options
XUDEVEDITHFS, 247
Options
Host File Server Device Edit, 247
Options
XUDEVEDITLPD, 247
Options
LPD/VMS Device Edit, 247
Options
XUDEVEDITMT, 247
Options
Magtape Device Edit, 247
Options
XUDEVEDITRES, 247
Options
Resource Device Edit, 247
Options
XUDEVEDITSPL, 248
Options
Spool Device Edit, 248
Options
XUDEVEDITSYNC, 248
Options
Network Channel Device Edit, 248
Options
XUDEVEDITTRM, 248
Options
TRM or VTRM Device Edit, 248
Options
XUDIACCESS FOR ISO, 248
Options
Fileman Access for the ISO, 248
Options
XUDISPLAY, 248
Options
Display Device Data, 248
Options
XUEDITOPT, 248
Options
Edit options, 248
Options
XUER EDIT PARAMS, 249
Options
Error Trap Param Edit, 249
Options
XUER NOTE, 249
Options
Annotate an Error, 249
Options
XUER PURGE ERROR SUMMARY, 249
Options
Purge Error Trap Summary, 249
Options

XUER SUMMARY, 249
Options
Error Summary Menu, 249
Options
XUER SUMMARY INQUIRE, 249
Options
Inquire Error Summary, 249
Options
XUER SUMMARY MOST RECENT, 249
Options
Summary Most Recent Errors, 249
Options
XUER SUMMARY TOP, 250
Options
Top Errors, 250
Options
XUER UPDATE DEMAND/BATCH, 250
Options
Update Error Trap Summary, 250
Options
XUERRS, 250
Options
Error Processing, 250
Options
XUERTRAP, 251
Options
Error Trap Display, 251
Options
XUERTRP AUTO CLEAN, 251
Options
Error trap Auto clean, 251
Options
XUERTRP CLEAN, 251
Options
Clean Error Trap, 251
Options
XUERTRP PRINT ERRS, 251
Options
Interactive Print of Error Messages, 251
Options
XUERTRP PRINT T-1 1 ERR, 251
Options
Print 1 occurence of each error for T-1 (QUEUE), 251
Options
XUERTRP PRINT T-1 2 ERR, 252
Options
Print 2 occurrences of errors on T-1 (QUEUED), 252
Options
XUERTRP TYPE, 252
Options
Remove a TYPE of error, 252
Options
XUEXKEY, 252
Options
Allocate/De-Allocate Exclusive Key(s), 252
Options
XUFAIL, 252
Options
Failed Access Attempts Log, 252
Options
XUFDEV, 253
Options
Device Failed Access Attempts, 253
Options
XUFDISP, 253
Options
User Failed Access Attempts, 253
Options
XUFILEACCESS, 253
Options
File Access Security, 253
Options
XUFILEACCESS SEC OFCR, 254
Options
Fileman Security Menu, 254
Options
XUFILECOPY, 254
Options
Copy One User’s File Access to Others, 254
Options
XUFILEDELETE, 255
Options
Take away All access to a File, 255
Options
XUFILEGRANT, 255
Options

Grant Users' Access to a Set of Files, 255
Options
XUFILEINQUIRY, 255
Options
Inquiry to a User's File Access, 255
Options
XUFILELIST, 255
Options
List Access to Files by File number, 255
Options
XUFILEPRINT, 255
Options
Print Users Files, 255
Options
XUFILERANGEASSIGN, 255
Options
Assign/Delete a File Range, 255
Options
XUFILEREMOVEALL, 256
Options
Remove All Access from a Single User, 256
Options
XUFILESETDELETE, 256
Options
Delete Users' Access to a Set of Files, 256
Options
XUFILESINGLEADD, 256
Options
Single file add/delete for a user, 256
Options
XUFPURGE, 256
Options
Failed Access Attempts Log Purge, 256
Options
XUHALT, 256
Options
Halt, 256
Options
XU-INACTIVE PERSON CLASS USERS, 256
Options
List Inactive Person Class Users, 256
Options
XUINDEX, 257
Options
%Index of Routines, 257
Options
XUINDEX2, 257
Options
Structured Routine listing, 257
Options
XUINQUIRE, 257
Options
Option Function Inquiry, 257
Options
XU-INSTITUTION-DEA, 257
Options
Institution DEA# edit, 257
Options
XU-INSTITUTION-E, 257
Options
Institution Edit, 257
Options
XUKERNEL, 257
Options
Kernel Management Menu, 257
Options
XUKEYALL, 258
Options
Allocation of Security Keys, 258
Options
XUKEYDEALL, 258
Options
De-allocation of Security Keys, 258
Options
XUKEYEDIT, 258
Options
Enter/Edit of Security Keys, 258
Options
XUKEYMGMT, 258
Options
Key Management, 258
Options
XULIST, 259
Options
List Terminal Types, 259
Options
XULM EDIT LOCK DICTIONARY, 259
Options
Edit Lock Dictionary, 259
Options

XULM EDIT PARAMETERS, 259
Options
Edit Lock Manager Parameters, 259
Options
XULM LOCK MANAGER, 259
Options
Kernel Lock Manager, 259
Options
XULM LOCK MANAGER MENU, 259
Options
Lock Manager Menu, 259
Options
XULM PURGE LOCK MANAGER LOG, 260
Options
Purge Lock Manager Log, 260
Options
XULM RPC BROKER CONTEXT, 260
Options
KERNEL LOCK MANAGER, 260
Options
XULM VIEW LOCK MANAGER LOG, 261
Options
View Lock Manager Log, 261
Options
XUMAINT, 261
Options
Menu Management, 261
Options
XUMF DMIS ID LOAD, 262
Options
Load DMIS ID's, 262
Options
XUMF IMF ADD EDIT, 262
Options
IMF edit, 262
Options
XUMF IMF EDIT STATUS, 263
Options
IMF Display Cleanup Status, 263
Options
XUMF INSTITUTION, 263
Options
Institution File Query / Update, 263
Options
XUMF LOAD INSTITUTION, 264
Options
Update/refresh Institution file with IMF data, 264
Options
XUMF LOAD NPI, 265
Options
Load Institution NPI values, 265
Options
XUMF335 clean 4.1 and 4, 265
Options
Patch XU*8*335 clean 4.1 and 4, 265
Options
XUMNACCESS, 265
Options
Access Monitor Menu, 265
Options
XUOAA SEND HL7 MESSAGE, 265
Options
Send HL7 PMU message, 265
Options
XUOPTDISP, 266
Options
Option Audit Display, 266
Options
XUOPTLOG, 266
Options
Audited Options Log, 266
Options
XUOPTPURGE, 266
Options
Audited Options Purge, 266
Options
XUOPTUSER, 266
Options
User Management Menu, 266
Options
XUOPTWHO, 266
Options
Option Access By User, 266
Options
XUOUT, 267
Options
Out of Service Set/Clear, 267
Options
XU-PERSON CLASS EDIT, 267

Options
Person Class Edit, 267
Options
User Management, 267
Options
XUSER, 267
Options
XU-PERSON CLASS REMOVE, 267
Options
Remove a person class entry, 267
Options
XU-PING-SERVER, 267
Options
TCP/IP type PING server, 267
Options
XUPMDISP, 267
Options
Display of Programmer Mode Entry List, 267
Options
XUPMPURGE, 268
Options
Programmer Mode Entry Log Purge, 268
Options
XUPR RTN CHKSUM, 268
Options
Check Routines on Other CPUs, 268
Options
XUPR RTN EDIT, 268
Options
Routine Edit, 268
Options
XUPR RTN PATCH, 269
Options
Routines by Patch Number, 269
Options
XUPRGL, 269
Options
List Global, 269
Options
XUPRINT, 269
Options
Print Option File, 269
Options
XUPROG, 269
Options
Programmer Options, 269
Options
XUPROGMODE, 270
Options
Programmer mode, 270
Options
XUPROTOCOL EDIT, 270
Options
Edit a Protocol, 270
Options
XUPRROU, 270
Options
List Routines, 270
Options
XUPR-ROUTINE-TOOLS, 270
Options
Routine Tools, 270
Options
XUPR-RTN-TAPE-CMP, 271
Options
Compare routines on tape to disk, 271
Options
XUPS ASSESSMENT DETAIL, 271
Options
XUPS ASSESSMENT DETAIL, 271
Options
XUPS ASSESSMENT DETAIL, 271
Options
XUPS ASSESSMENT DETAIL, 271
Options
XUPS ASSESSMENT STATS, 272
Options
XUPS ASSESSMENT STATS, 272
Options
XUPS ASSESSMENT STATS, 272
Options
XUPS ASSESSMENT STATS, 272
Options
XUPS NPF CLEANUP MAIN MENU, 272
Options
NPF cleanup main menu, 272
Options
XUPS PREUPDATE NPF REPORTS, 273
Options

XUPS PREUPDATE NPF REPORTS, 273
Options
XUPS PREUPDATE NPF REPORTS, 273
Options
XUPS PREUPDATE NPF REPORTS, 273
Options
XUPS UPDATE NEW PERSON FILE, 273
Options
XUPS UPDATE NEW PERSON FILE DATA, 273
Options
XUPS UPDATE NEW PERSON FILE, 273
Options
XUPS UPDATE NEW PERSON FILE DATA, 273
Options
XUPS VISTALINK, 273
Options
XUPS VISTALINK, 273
Options
XUPS VISTALINK, 273
Options
XUPS VISTALINK, 273
Options
XURELOG, 273
Options
Restart Session, 273
Options
XURESJOB, 274
Options
Kill off a users' job, 274
Options
XUROUTINE IN, 274
Options
Input routines, 274
Options
XUROUTINE OUT, 274
Options
Output routines, 274
Options
XUROUTINES, 274
Options
Routine Management Menu, 274
Options
XUS KAAJEE PROXY LOGON, 275
Options
KAAJEE PROXY BROKER CONTEXT, 275
Options
XUS KAAJEE WEB LOGON, 275
Options
KAAJEE BROKER CONTEXT, 275
Options
XUS NPI CBO LIST, 275
Options
List of NPI data for CBO, 275
Options
XUS NPI ENTER NPI FOR PROVIDER, 275
Options
Add/Edit NPI values for Providers, 275
Options
XUS NPI EXEMPT PROVIDER, 275
Options
Mark/Unmark Provider Exempt from requiring an NPI, 275
Options
XUS NPI EXTRACT REPORT, 276
Options
XUS NPI EXTRACT REPORT, 276
Options
XUS NPI LOCAL REPORTS, 276
Options
Print Local NPI Reports, 276
Options
XUS NPI MENU, 276
Options
NPI (National Provider ID) Menu, 276
Options
XUS NPI PROVIDER SELF ENTRY, 276
Options
PROVIDER NPI SELF ENTRY, 276
Options
XUS NPI SIGNON CHECK, 277
Options
NPI Signon Check, 277

Options
XUS PROC CNT CLUP, 277
Options
XUS Process count cleanup, 277
Options
XUS SIGNON, 277
Options
Kernel sign-on context, 277
Options
XUSAP PROXY LIST, 278
Options
Proxy User List, 278
Options
XUSAZONK, 278
Options
Purge of the %ZUA global, 278
Options
XUSC LIST, 278
Options
Print Sign-on Log, 278
Options
XUSCZONK, 278
Options
Purge Sign-On log, 278
Options
XUSEC ISO ACTIVE USER EXTRACT, 279
Options
Special Active User Excel output, 279
Options
XUSEC ISO ACTIVE USER EXTRACT, 279
Options
Special Active User Excel Output, 279
Options
XUSEC ISO Q TERMINATION REPORT, 279
Options
Queueable ISO Terminated User Report, 279
Options
XUSEC ISO TERMINATION REPORT, 279
Options
ISO's Terminated User Report, 279
Options
XUSEC UP ARROW TERM REPORT, 279
Options
Up Arrow Delimited Termination Report, 279
Options
XUSER, 280
Options
User Management, 280
Options
XUSER DIV CHG, 281
Options
Change my Division, 281
Options
XUSER FILE MGR, 281
Options
Manage User File, 281
Options
XUSER KEY RE-INDEX, 281
Options
Reindex the users key's, 281
Options
XUSER PC BUILD, 281
Options
User PC build Print, 281
Options
XUSER PC BUILD EDIT, 282
Options
User PC build Edit, 282
Options
XUSER SEC OFCR, 282
Options
User Security Menu, 282
Options
XUSERAOLD, 283
Options
Purge Log of Old Access and Verify Codes, 283
Options
XUSERBLK, 283
Options
Grant Access by Profile, 283
Options
XUSER-CLEAR-ALL, 284
Options
Clear all users at startup, 284

Options
XUSERCLR, 284
Options
Clear Terminal, 284
Options
XUSERDEACT, 284
Options
Deactivate a User, 284
Options
XUSEREDIT, 285
Options
Edit an Existing User, 285
Options
XUSEREDITSELF, 285
Options
Edit User Characteristics, 285
Options
XUSERINQ, 285
Options
User Inquiry, 285
Options
XUSERINT, 286
Options
Introductory text edit, 286
Options
XUSERLIST, 286
Options
List users, 286
Options
XUSERNEW, 286
Options
Add a New User to the System, 286
Options
XUSERPOST, 286
Options
Post sign-in Text Edit, 286
Options
XUSERPURGEATT, 286
Options
Purge Inactive Users' Attributes, 286
Options
XUSERREACT, 286
Options
Reactivate a User, 286
Options
XUSERREL, 287
Options
Release user, 287
Options
XUSERREPRINT, 287
Options
Reprint Access agreement letter, 287
Options
XUSERTOOLS, 287
Options
User's Toolbox, 287
Options
XUSERVDISP, 287
Options
Server audit display, 287
Options
XUSERWHERE, 288
Options
Where am I?, 288
Options
XUSESIG, 288
Options
Electronic Signature code Edit, 288
Options
XUSESIG BLOCK, 288
Options
Electronic Signature Block Edit, 288
Options
XUSESIG CLEAR, 288
Options
Clear Electronic signature code, 288
Options
XUSESIG DEG, 289
Options
EDUCATION (Degree) File Edit, 289
Options
XUSFACHK, 289
Options
Check Failed Access Log, 289
Options
XUSITEMGR, 290
Options
Operations Management, 290
Options
XUSITEPARM, 290
Options
Enter/Edit Kernel Site Parameters, 290

Options
XU-SPL-ALLOW, 291
Options
Allow other users access to spool documents, 291
Options
XU-SPL-BROWSE, 291
Options
Browse a Spool Document, 291
Options
XU-SPL-DELETE, 291
Options
Delete A Spool Document, 291
Options
XU-SPL-LIST, 291
Options
List Spool Documents, 291
Options
XU-SPL-MAIL, 291
Options
Make spool document into a mail message, 291
Options
XU-SPL-MENU, 291
Options
Spooler Menu, 291
Options
XU-SPL-MGR, 292
Options
Spool Management, 292
Options
XU-SPL-PRINT, 292
Options
Print A Spool Document, 292
Options
XU-SPL-PURGE, 292
Options
Purge old spool documents, 292
Options
XU-SPL-SITE, 293
Options
Purge old spool documents, 293
Options
XU-SPL-USER, 293
Options
Edit User's Spooler Access, 293
Options
XUSPY, 293
Options
Information Security Officer Menu, 293
Options
XU-SPY-SHOW, 294
Options
Display the Kernel Audit Parameters, 294
Options
XUSSPKI CRL UPLOAD, 294
Options
PKI CRL Upload, 294
Options
XUSSPKI EDIT, 294
Options
Kernel PKI Parameter Edit, 294
Options
XUSSPKI UPN SET, 294
Options
ePCS Set SAN from PIV Card, 294
Options
XUSTAT, 295
Options
CPU/Service/User/Device Stats, 295
Options
XUSTATUS, 295
Options
System Status, 295
Options
XUTERM, 295
Options
Terminal Type Edit, 295
Options
XUTESTUSER, 295
Options
Switch Identities, 295
Options
XUTIME, 295
Options
Time, 295
Options
XUTIO, 295
Options
Device Management, 295
Options
XUTLOOPBACK, 296

Options
Loopback Test of Device Port, 296
Options
XUTM BACKGROUND PRINT, 297
Options
Print Options that are Scheduled to run, 297
Options
XUTM BACKGROUND RECOMMENDED, 297
Options
Print Options Recommended for Queueing, 297
Options
XUTM BVPAIR, 297
Options
Site Parameters Edit, 297
Options
XUTM CHECK ENV, 297
Options
Check Taskman's Environment, 297
Options
XUTM CLEAN, 297
Options
Clean Task File, 297
Options
XUTM DEL, 298
Options
Delete Tasks, 298
Options
XUTM DQ, 298
Options
Dequeue Tasks, 298
Options
XUTM ERROR, 299
Options
Taskman Error Log, 299
Options
XUTM ERROR DELETE, 299
Options
Delete Error Log, 299
Options
XUTM ERROR LOG CLEAN RANGE, 299
Options
Clean Error Log Over Range Of Dates, 299
Options
XUTM ERROR PURGE TYPE, 300
Options
Purge Error Log Of Type Of Error, 300
Options
XUTM ERROR SCREEN ADD, 300
Options
Add Error Screens, 300
Options
XUTM ERROR SCREEN EDIT, 301
Options
Edit Error Screens, 301
Options
XUTM ERROR SCREEN LIST, 301
Options
List Error Screens, 301
Options
XUTM ERROR SCREEN REMOVE, 302
Options
Remove Error Screens, 302
Options
XUTM ERROR SHOW, 302
Options
Show Error Log, 302
Options
XUTM INQ, 302
Options
List Tasks, 302
Options
XUTM MGR, 302
Options
Taskman Management, 302
Options
XUTM PARAMETER EDIT, 303
Options
Edit Taskman Parameters, 303
Options
XUTM PROBLEM CLEAR, 303
Options
Problem Device Clear, 303
Options
XUTM PROBLEM DEVICES, 303
Options

Problem Device report, 303
Options
XUTM QCLEAN, 304
Options
Queuable Task Log Cleanup, 304
Options
Schedule/Unschedule Options, 304
Options
XUTM SCHEDULE, 304
Options
XUTM QPROBLEM DEVICES, 304
Options
Queuable Problem Device report, 304
Options
XUTM REPNT, 304
Options
Repoint waiting tasks to a new port/device, 304
Options
XUTM REQ, 304
Options
Requeue Tasks, 304
Options
XUTM RESTART, 305
Options
Restart Task Manager, 305
Options
XUTM RP, 305
Options
Change tasks device, 305
Options
XUTM RUN, 305
Options
Remove Taskman from WAIT State, 305
Options
XUTM SCHEDULE, 305
Options
Schedule/Unschedule Options, 305
Options
XUTM SNAPSHOT, 306
Options
Taskman snapshot, 306
Options
XUTM STOP, 306
Options
Stop Task Manager, 306
Options
XUTM SYNC, 306
Options
SYNC flag file control, 306
Options
XUTM TL CLEAN, 306
Options
Cleanup Task List, 306
Options
XUTM UCI, 306
Options
UCI Association Table Edit, 306
Options
XUTM USER, 306
Options
TaskMan User, 306
Options
XUTM UTIL, 307
Options
Taskman Management Utilities, 307
Options
XUTM VOLUME, 308
Options
Volume Set Edit, 308
Options
XUTM WAIT, 308
Options
Place Taskman in a WAIT State, 308
Options
XUTM ZTMON, 308
Options
Monitor Taskman, 308
Options
XUTTEST, 308
Options
Send Test Pattern to Terminal, 308
Options
XUUSERACC, 308
Options
Diagram Menus, 308
Options
XUUSERACC1, 308
Options
Menu Diagrams, 308
Options
XUUSERACC2, 309

Options
Abbreviated Menu Diagrams, 309
Options
XUUSERDISP, 309
Options
Display User Characteristics, 309
Options
XUUSERHELP, 309
Options
User Help, 309
Options
XUUSEROPT, 309
Options
User Audit Display, 309
Options
XUUSERSTATUS, 309
Options
User Status Report, 309
Options
XUVERSIONEW-HELP, 310
Options
Kernel New Features Help, 310
Options
XUXREF, 310
Options
List Options by Parents and Use, 310
Options
XUXREF-2, 310
Options
Show Users with a Selected primary Menu, 310
Options
XUZUSER, 310
Options
User Management, 310
Options
Kernel Toolkit Options Listed Alphabetically by Name, 312
Options
XT-BLD RTN LIST, 312
Options
Routine Summary List, 312
Options
XTCM MAIN, 312
Options
Capacity Planning, 312
Options
XTFCE, 312
Options
Flow Chart from Entry Point, 312
Options
XTFCR, 313
Options
Flow Chart Entire Routine, 313
Options
XT-KERMIT EDIT, 313
Options
Edit KERMIT holding file, 313
Options
XT-KERMIT MENU, 313
Options
Kermit menu, 313
Options
XT-KERMIT RECEIVE, 313
Options
Receive KERMIT file, 313
Options
XT-KERMIT SEND, 313
Options
Send KERMIT file, 313
Options
XT-KERMIT SPOOL DL, 313
Options
Download a Spool file entry, 313
Options
XTLATSET, 314
Options
VAX DSM Device Set-up, 314
Options
XTLKLKUP, 316
Options
Multi-Term Lookup (MTLU), 316
Options
XTLKMODKY, 316
Options
Keywords, 316
Options
XTLKMODPARK, 316
Options
Delete Entries From Look-up, 316
Options
XTLKMODPARS, 317

Options
Add Entries To Look-Up File, 317
Options
XTLKMODSH, 317
Options
Shortcuts, 317
Options
XTLKMODSY, 317
Options
Synonyms, 317
Options
XTLKMODUTL, 317
Options
Add/Modify Utility, 317
Options
XTLKPRTUTL, 317
Options
Print Utility, 317
Options
XTLKUSER2, 317
Options
Multi-Term Lookup Main Menu, 317
Options
XTLKUTILITIES, 317
Options
Utilities for MTLU, 317
Options
XTMENU, 318
Options
Application Utilities, 318
Options
XTMOVE, 318
Options
Move Routines across Volume Sets, 318
Options
XTMOVE-IN, 318
Options
Bring in Sent Routines, 318
Options
XT-NUMBER BASE CHANGER, 319
Options
Number base changer, 319
Options
XTOOLS, 319
Options
Programmer tools, 319
Options
XT-OPTION TEST, 320
Options
Test an option not in your menu, 320
Options
XT-PURGE ERRORS, 320
Options
Clean Error Trap, 320
Options
XTQUEUABLE OPTIONS, 320
Options
Toolkit Queuable Options, 320
Options
Schedule/Unschedule Options, 320
Options
XUTM SCHEDULE, 320
Options
XTRDEL, 320
Options
Delete Routines, 320
Options
XTRGRPE, 320
Options
Group Routine Edit, 320
Options
XTRMONITOR, 321
Options
Monitor Routines for Changes, 321
Options
XT-ROUTINE COMPARE, 321
Options
Compare two routines, 321
Options
XT-RTN CS EDT, 321
Options
Old Checksum Edit, 321
Options
XT-RTN CS UPDATE, 322
Options
Old Checksum Update from Build, 322
Options
XTSUMBLD, 322
Options
Build an ‘NTEG’ routine for a package, 322
Options

XTSUMBLD-CHECK, 322
Options
Calculate and Show Checksum Values, 322
Options
XTV EDIT VERIF PACKAGE, 322
Options
Edit Verification Package File, 322
Options
XTV MENU, 322
Options
Verifier Tools Menu, 322
Options
XT-VARIABLE CHANGER, 323
Options
Variable changer, 323
Options
XT-VERSION NUMBER, 323
Options
Version Number Update, 323
Options
XTVG COMPARE, 323
Options
Global Compare for selected package, 323
Options
XTVG UPDATE, 324
Options
Accumulate Globals for Package, 324
Options
XTVR COMPARE, 324
Options
Routine Compare - Current with Previous, 324
Options
XTVR MENU, 324
Options
Verifier Tools Menu, 324
Options
XTVR MOST RECENT CHANGE DATE, 324
Options
Last Routine Change Date Recorded, 324
Options
XTVR RESTORE PREV ROUTINE, 325
Options
UNDO Edits (Restore to Older Version of Routine), 325
Options
XTVR UPDATE, 325
Options
Update with current routines, 325
Options
Routine Compare - Current with Previous, 326
Options
XTVR COMPARE, 326
Options
Audited Options Purge, 327
Options
Automatic Deactivation of Users, 327
Options
Clean Error Log over Range of Dates, 327
Options
Clean Old Job Nodes in ^XUTL, 327
Options
Clean Task File, 327
Options
Clear All Users at Startup, 327
Options
Clean Error Trap, 328
Options
Deactivate a User, 328
Options
Delete Error Log, 328
Options
Delete Old (>14 d) Alerts, 328
Options
Failed Access Attempts Log Purge, 328
Options
Programmer Mode Entry Log Purge, 328
Options
Purge Error Log of Type of Error, 328
Options
Purge Inactive Users' Attributes, 328
Options
Purge Log of Old Access and Verify Codes, 328
Options
Purge of ^%ZUA Global, 328
Options
Purge Old Spool Documents, 328

Options
Purge Sign-on Log, 329
Options
Queuable Task Log Cleanup, 329
Options
DBA, 366
Options
DBA Option, 366
Options
Integration Agreements Menu, 366
Options
DBA IA ISC, 366
Options
Custodial Package Menu, 366
Options
DBA IA CUSTODIAL MENU, 366
Options
ACTIVE by Custodial Package, 366
Options
DBA IA CUSTODIAL, 366
Options
DBA, 366
Options
DBA Option, 366
Options
Integration Agreements Menu, 366
Options
DBA IA ISC, 366
Options
Inquire, 366
Options
DBA IA INQUIRY, 366
Options
DBA, 366
Options
DBA Option, 366
Options
Integration Agreements Menu, 366
Options
DBA IA ISC, 366
Options
Subscriber Package Menu, 366
Options
DBA IA SUBSCRIBER MENU, 366
Options
Print ACTIVE by Subscribing Package, 367
Options
DBA IA SUBSCRIBER Option, 367
Options
Independence, 368
Options
Locked, 368
Options
Audit Menu, 368
Options
Filegrams, 368
Options
KIDS Installation Menu, 368
Options
KIDS Main Menu, 368
Options
Programmer Options, 368
Options
ScreenMan, 368
Options
VA FileMan Management, 368
Options
User's Toolbox, 389
Options
XUSERTOOLS, 389
Options
User's Toolbox, 389
Options
XUSERTOOLS, 389
Options
Electronic Signature Code Edit, 389
Options
XUSESIG, 389
Options
Electronic Signature Block Edit, 389
Options
XUSESIG BLOCK, 389
Options
Electronic Signature Code Edit, 389
Options
XUSESIG, 389
Options
Electronic Signature Block Edit, 389
Options
XUSESIG BLOCK, 389

Options
Electronic Signature Block Edit, 389
Options
XUSESIG BLOCK, 389
Options
Electronic Signature Block Edit, 390
Options
XUSESIG BLOCK, 390
Options
EDUCATION (Degree) File Edit, 390
Options
User Management, 390
Options
XUSER, 390
Options
EDUCATION (Degree) File Edit, 390
Options
Inquire to File Entries, 390
Options
DIINQUIRE, 390
Options
Electronic Signature code Edit, 392
Options
XUSESIG, 392
Options
Electronic Signature Block Edit, 392
Options
XUSESIG BLOCK, 392
Options in the Option File that are Out-Of-Order Option, 210
ORES Security Key, 198
ORGANIZATION (#200.2) Field, 8
ORGANIZATION ID (#200.3) Field, 9
Orientation, xxiii
Out of Service Set/Clear Option, 267
Out-Of-Order Set Management Menu, 210
OUT-OF-SERVICE DATE (#6) Field, 5
Output routines Option, 274

P

PACKAGE (#9.4) File, 23, 32, 38, 67, 80, 183, 322, 324
PARAMETER (#8989.5) File, 389
PARAMETER DEFINITION (#8989.51), 178
PARAMETER DEFINITION (#8989.51) File, 4, 11, 15, 177, 178, 389
Parameters
AGENCY CODE (#9) Field, 5
ASK DEVICE TYPE AT SIGN-ON (#205) Field, 5
AUTO-GENERATE ACCESS CODES (#11) Field, 5
BYPASS DEVICE LOCK-OUT (#211) Field, 5, 6
DEFAULT # OF ATTEMPTS (#202) Field, 5
DEFAULT AUTO-MENU (#206) Field, 5
DEFAULT INSTITUTION (#217) Field, 5
DEFAULT LANGUAGE (#207) Field, 6
DEFAULT LOCK-OUT TIME (#203) Field, 6
DEFAULT MULTIPLE SIGN-ON (#204) Field, 6
DEFAULT TIMED-READ (SECONDS) (#210) Field, 6
DEFAULT TYPE-AHEAD (#209) Field, 6
DEVICE TO AUDIT (#212.1) Multiple Field, 6, 16
FAILED ACCESS ATTEMPT AUDIT (#212.5) Field, 6, 16
INITIATE AUDIT (#19.4), 6
INITIATE AUDIT (#19.4) Field, 6, 8, 10, 16, 17
INITIATE AUDIT (#19.5) Field, 6, 16
INTERACTIVE USER'S PRIORITY (#216) Field, 7
IP SECURITY ON (#405.1) Field, 7
Kernel, 10
Site Parameters File Changes, 4
Kernel Site Parameters, 4
LAST SIGN-ON, 5
LIFETIME OF VERIFY CODE (#214) Field, 7
LOG RESOURCE USAGE? (#300) Field, 7
LOG SYSTEM RT? (#41, 6) Field, 7, 10
MAX SIGNON ALLOWED (#41, 2) Field, 7, 10

MAX SPOOL DOCUMENT LIFE-SPAN (#31.3) Field, 7, 18
MAX SPOOL DOCUMENTS PER USER (#31,2) Field, 7
MAX SPOOL DOCUMENTS PER USER (#31.2) Field, 18
MAX SPOOL LINES PER USER (#31.1) Field, 8, 18
NAMESPACE TO AUDIT (#19.2) Field, 8
NAMESPACE TO AUDIT (#19.2) Multiple, 8
NAMESPACE TO AUDIT (#19.2) Multiple Field, 16, 17
NEW PERSON IDENTIFIERS (#21) Field, 8
OPTION AUDIT (#19 Field, 16
OPTION AUDIT (#19) Field, 6, 8, 10, 16, 17
OPTION TO AUDIT (#19.1) Multiple, 8
OPTION TO AUDIT (#19.1) Multiple Field, 8, 17
ORGANIZATION (#200.2) Field, 8
ORGANIZATION ID (#200.3) Field, 9
OUT-OF-SERVICE DATE (#6) Field, 5
PERFORM DEVICE CHECKING (#59.91) Field, 5
PROHIBITED TIMES FOR SIGN-ON (#2009) Field, 5
ROUTINE MONITORING (#9.8) Field, 9
ROUTINE N-SPACE TO MONITOR (#9.81) Multiple Field, 9
SECURITY (#15) Field, 5
SECURITY TOKEN SERVICE (#200.1) Field, 9
SIGN-ON LOG RETENTION (#221) Field, 10
Spooler, 17
System, 4, 11
TERMINATE AUDIT (#19.5) Field, 8, 10, 17
USER TO AUDIT (#19.3) Multiple, 8, 10
USER TO AUDIT (#19.3) Multiple Field, 17
USER TO AUDIT (Multiple), 17
VOLUME SET (#41) Multiple Field, 7, 10
XPAR ALL ENTITIES, 11
XPAR MY NEW PARAM, 11
XPAR TEST DATE/TIME, 11
XPAR TEST FREE TEXT, 11
XPAR TEST M CODE, 11
XPAR TEST ME, 11
XPAR TEST MULT FREE TEXT, 11
XPAR TEST MULTIPLE, 12
XPAR TEST MULTIPTR, 12
XPAR TEST NUMERIC, 12
XPAR TEST POINTER, 12
XPAR TEST PWP, 12
XPAR TEST SET OF CODES, 12
XPAR TEST WP, 12
XPAR TEST YES/NO, 12
XPD PATCH HFS SERVER, 12
XQ MENUMANAGER PROMPT, 13
XQAL BACKUP REVIEWER, 13
XU SIG BLOCK DISABLE, 13, 389, 390
XU522, 14
XU594, 14
XU645, 14
XUEDIT CHARACTERISTICS, 10
XUEPCS REPORT DEVICE, 14, 223, 226
XUEXISTING USER, 10
XUNEW USER, 11
XUREACT USER, 11
XUS CCOW VAULT PARAM, 14
XUSC1 DEBUG, 15
XUSER COMPUTER ACCOUNT, 11
XUSNPI QUALIFIED IDENTIFIER, 15
XUS-XUP SET ERROR TRAP, 15
XUS-XUP VPE, 15
PARAMETERS (#8989.5) File, 199
Parent of Queuable Options Menu, 107, 150
Parent of Queuable Options Menu], 107
PATCH APPLICATION HISTORY (Multiple) Field, 80
Patch XU*8*335 clean 4.1 and 4 Option, 265
Patches
History, xvi
PATIENT (#2) File, 83, 172, 174, 352

Patient Alert List for specified date Option, 198
PERFORM DEVICE CHECKING (#59.91) Field, 5
PERSON CLASS (#8932.1) File, 89, 103, 106
Person Class Edit Option, 267
PKI CRL Upload Option, 294
PKI CRL URLS (#8980.22) File, 90
PKI Digital Signatures (#8980.2) File, 90
Place Taskman in a WAIT State Option, 308
Policies
  Official, 396
Post sign-in Text Edit Option, 286
POSTAL CODE (#5.12) File, 78, 176
Postal Code Update Server Option, 176
Preliminary Scan of File for errors Option, 171
Primary Menu, 398, 401
Print 1 occurence of each error for T-1 (QUEUE) Option, 251
Print 2 occurrences of errors on T-1 (QUEUED) Option, 252
Print A Spool Document Option, 292
Print ACTIVE by Subscribing Package Option, 367
Print All Delegates and their Options Option, 213
Print Alpha/Beta Errors (Date/Site/Num/Rou/Err) Option, 191
Print Audits for Prescriber Editing Option, 161, 164, 224
Print DEA Expiration Date Expires 30 days Option, 161, 162, 228
Print DEA Expiration Date Null Option, 161, 162, 222
Print DISUSER DEA Expiration Date Expires 30 days Option, 161, 163, 221
Print DISUSER DEA Expiration Date Null Option, 161, 162, 220
Print DISUSER Prescribers with Privileges Option, 161, 163, 220
Print List of File Duplicates Option, 171
Print Local NPI Reports Option, 276
Print Option File Option, 269
Print Options Recommended for Queueing Option, 297
Print Options that are Scheduled to run Option, 297
Print Prescribers with Privilege Option, 161
Print Prescribers with Privileges Option, 163, 224
Print PSDRPH Key Holders Option, 161, 163, 225
Print Setting Parameters Privileges Option, 161, 164, 227
Print Sign-on Log Option, 278
Print Transport Global Option, 183
Print Users Files Option, 255
Print Utility Option, 317
Problem Device Clear Option, 303
Problem Device report Option, 303
Production Account
  Routines, 28
PROGRAM OF STUD (#8932.2) File, 90
Programmer Mode Entry Log Purge Option, 268, 328
PROGRAMMER MODE LOG (#3.07) File, 69, 71
Programmer mode Option, 270
Programmer Options, 368
Programmer Options Menu, 107, 124, 269
Programmer tools Menu, 319
PROHIBITED TIMES FOR SIGN-ON (#2009) Field, 5
Protection
  Globals, 374
PROTOCOL (#101) File, 88, 210, 211
Protocols
  Lock Manager Utility, 156
  XU USER SIGN-ON, 156
  XU USER START-UP, 156
  XU USER TERMINATE, 156
  XULM DISPLAY SYSTEM LOCKS, 156
  XULM GO TO, 157
  XULM LOCK MANAGER, 156
  XULM REFRESH LOCKS, 156
  XULM SELECT LOCK, 157
  XULM SELECT NODE, 157
  XULM SINGLE LOCK MENU, 157

XULM SORT/SCREEN LOCKS, 157
XULM TERMINATE PROCESS, 157
Protocols Marked Out-Of-Order in Protocol File Option, 211
PROVIDER CLASS (#7) File, 70, 79, 102
PROVIDER NPI SELF ENTRY Option, 276
PROVIDER Security Key, 282
Proxy User List Option, 278
PS Anonymous Directories, xxviii
PSDMGR Security Key, 386
PSDRPH Security Key, 94, 163, 164, 225, 227
Purge Alerts for a User Option, 202
Purge Build or Install Files Option, 184
Purge Duplicate Record File Option, 171
Purge Error Log of Type of Error Option, 328
Purge Error Log Of Type Of Error Option, 300
Purge Error Trap Summary Option, 249
Purge Inactive Users' Attributes Option, 328
Purge Inactive Users' Attributes Option, 286
Purge Lock Manager Log Option, 260
Purge Log of Old Access and Verify Codes Option, 283, 328
Purge Merge Process File Option, 84, 172
Purge of ^%ZUA Global Option, 328
Purge of the %ZUA global Option, 278
Purge old spool documents, 18
Purge old spool documents Option, 7, 292, 293
Purge Old Spool Documents Option, 328
Purge Sign-on Log Option, 329
Purge Sign-On log Option, 278
Purging, 327

Q

QuadraMed Home Page Web Address, 388
Question Mark Help, xxvii
Queuable Problem Device report Option, 304
Queuable Synchronize County Multiple With 5.13 Option, 175
Queuable Task Log Cleanup Option, 82, 304, 329
Queueable ISO Terminated User Report Option, 279

R

RACE (#10) File, 70, 81, 102
RAI MDS MONITOR (#46.11) File, 87
Reactivate a User Option, 11, 106, 286
Receive KERMIT file Option, 313
RECORD HAS PACKAGE DATA (#9.402,4) Field, 23
Recover deleted option set Option, 210
Reference Materials, xxvii
Reindex the users key's, 281
Relations
External, 364
Kernel, 364
Internal, 368
Release IP lock Option, 7, 229
Release user Option, 287
RELIGION (#13) File, 70, 82, 103
REMOTE APPLICATION (#8994.5) File, 100
REMOTE PROCEDURE (#8994) File, 99, 352
Remote Systems, 388
Remove a person class entry Option, 267
Remove a TYPE of error Option, 252
Remove All Access from a Single User Option, 256
Remove delegated keys Option, 208
Remove Error Screens Option, 302
Remove Options Previously Delegated Option, 215
Remove Out-Of-Order Messages from a Set of Options Option, 210
Remove Taskman from WAIT State Option, 305
Rename a menu template Option, 218
REPLACEMENT (#4) Field, 10, 11
REPLACEMENT Field, 4
Replicate or Replace a Delegate Option, 216
Repoint waiting tasks to a new port/device Option, 304
Report Menu for Alerts Menu, 199
Reprint Access agreement letter Option, 287
Requeue Tasks Option, 304

Required Software, 365
RESOURCE (#3.54) File, 69, 75
Resource Device Edit Option, 247
Restart a merge process Option, 172
Restart Install of Package(s) Option, 184
Restart Session Option, 273
Restart Task Manager Option, 305
Restrict Availability of Options Option, 212
Restrictions
  Electronic Signature, 389
Revision History, ii
  Documentation, ii
  Patches, xvi
Rollup Patches into a Build Option, 184
ROUTIN (#9.8)E File, 184
ROUTINE (#9.8) File, 38, 67, 81, 184, 185, 218, 219, 321
Routine Compare - Current with Previous Option, 93, 324, 326
Routine Edit Option, 268
Routine Management Menu, 274
ROUTINE MONITORING (#9.8) Field, 9
ROUTINE N-SPACE TO MONITOR (#9.81) Multiple Field, 9
Routine Summary List Option, 312
Routine Tools Menu, 270
Routines, 25
  %XUCI, 364
  %ZIS, 25, 346
  %ZIS1, 25
  %ZIS2, 25
  %ZIS3, 25
  %ZIS4, 364
  %ZIS5, 25
  %ZIS6, 25
  %ZIS7, 25
  %ZISC, 25, 346
  %ZISH, 346
  %ZISP, 25, 347
  %ZISS, 25, 347
  %ZISS1, 25
  %ZISS2, 25
  %ZISTCP, 347
  %ZISUTL, 25, 347
  %ZOSF, 347
  %ZOSV, 347, 364
  %ZTER, 25, 348
  %ZTER1, 25
  %ZTLOAD, 25, 348
  %ZTLOAD1, 25
  %ZTLOAD2, 25
  %ZTLOAD3, 25
  %ZTLOAD4, 25
  %ZTLOAD5, 26
  %ZTLOAD6, 26
  %ZTLOAD7, 26
  %ZTM, 26, 364
  %ZTM0, 26
  %ZTM1, 26
  %ZTM2, 26
  %ZTM3, 26
  %ZTM4, 26
  %ZTM5, 26
  %ZTM6, 26
  %ZTMOVE, 26
  %ZTMS, 26
  %ZTMS0, 26
  %ZTMS1, 26
  %ZTMS2, 26
  %ZTMS3, 26
  %ZTMS4, 26
  %ZTMS7, 26
  %ZTMSH, 26
  Additional Routines Installed by Virgin Install, 65
  Manager Account, 25
  Mapping, 65
  MXMLDOM, 330
  MXMLPRSE, 331
  MXMLUTL, 331
  Operating System, 364
  Production Account, 28
  XDR2NULL, 28
  XDRDADD, 28
  XDRDADDS, 28
  XDRDADJ, 28
  XDRDCNT, 28
  XDRDCOMP, 28
  XDRDDATA, 28
  XDRDEDT, 29
  XDRDEFLG, 29
  XDRDFPD, 29

XDRDLIST, 29
XDRDMAIN, 29
XDRDOC, 29
XDRDOC1, 29
XDRDOC2, 29
XDRDPDTI, 29
XDRDPICK, 29
XDRDPRE1, 29
XDRDPREL, 29
XDRDPRG2, 29
XDRDPRGE, 29
XDRDQUE, 30
XDRDSCOR, 30
XDRDSHOW, 30
XDRDSTAT, 30
XDRDUP, 30
XDREMSG, 31
XDRHLP, 31
XDRLRFIX, 31
XDRMADD, 31
XDRMAIN, 32
XDRMAINI, 32
XDRMERG, 32
XDRMERG0, 32
XDRMERG1, 32
XDRMERG2, 32
XDRMERGA, 32
XDRMERGB, 32
XDRMERGC, 32
XDRMPACK, 32
XDRMRG, 32
XDRMRG1, 32
XDRMSG, 32
XDRMVFY, 33
XDRPREI, 33
XDRPREL1, 33
XDRPTCAN, 33
XDRPTCLN, 33
XDRPTDOB, 33
XDRPTDOD, 33
XDRPTLSD, 33
XDRPTMMN, 33
XDRPTN, 33
XDRPTSSN, 33
XDRPTSX, 33
XDRRMRG0, 33
XDRRMRG1, 33
XDRRMRG2, 33
XDRU, 33
XDRUTL, 33
XDRVAL, 30
XDRVAL1, 30
XDRVAL2, 30
XDRVCHEK, 33
XGF, 33, 331
XGFDEMO, 33
XGFDEMO1, 33
XGKB, 33
XGKB1, 33
XGS, 33
XGSA, 33
XGSBOX, 33
XGSETUP, 34
XGSW, 34
XINDX, 34
XINDX1, 34
XINDX10, 34
XINDX11, 34
XINDX2, 34
XINDX3, 34
XINDX4, 34
XINDX5, 34
XINDX51, 34
XINDX52, 34
XINDX53, 34
XINDX6, 34
XINDX7, 34
XINDX8, 34
XINDX9, 34
XIPENV, 34
XIPMAIL, 34
XIPMAILA, 34
XIPMAILB, 34
XIPPOST, 34
XIPSRVR, 34
XIPSYNC, 34
XIPUTIL, 34, 331
XIPUTIL1, 34
XIPXREF, 34
XLFCRC, 34, 331
XLFDT, 34, 331
XLFDT1, 34

XLFDT2, 34
XLFDT3, 35
XLFDT4, 35
XLFHYPER, 35, 332
XLFIPV, 35, 332
XLFLTR, 35
XLFLTR1, 35
XLFMSMT, 35, 333
XLFMSMT2, 35
XLFMTH, 35, 333
XLFMTH1, 35
XLFNAME, 35, 334
XLFNAME1, 35
XLFNAME2, 35, 334
XLFNAME3, 35
XLFNAME4, 35
XLFNAME5, 35
XLFNAME6, 35
XLFNAME7, 35
XLFNAME8, 35
XLFNENV, 35
XLFNP152, 35
XLFNP176, 35
XLFNSLK, 35, 334
XLFSHAN, 35, 335
XLFSTR, 35, 335
XLFUTL, 35, 335
XPAR, 35, 335
XPAR1, 35
XPAR2, 35
XPAR3, 35
XPARDD, 35
XPARDD1, 36
XPARDD2, 36
XPARDDAC, 36
XPAREDIT, 15, 36, 336
XPAREDT1, 36
XPAREDT2, 36
XPAREDT3, 36
XPARLIST, 36
XPARTPV, 36
XPARTPV1, 36
XPARY26, 36
XPARZUTL, 36
XPDANLYZ1, 36
XPDANLYZ2, 36
XPDANLYZ3, 36
XPDANLYZ4, 36
XPDANLYZ5, 36
XPDANLYZ6, 36
XPDB1, 36
XPDCOM, 36
XPDCOMF, 36
XPDCOMG, 36
XPDCOML, 36
XPDCPU, 36
XPDDCS, 36
XPDDI, 36
XPDDP, 36
XPDDP1, 36
XPDDPCK, 37
XPDE, 37
XPDER, 37
XPDET, 37
XPDGCDEL, 37
XPDH, 37
XPDI, 37
XPDI1, 37
XPDIA, 37
XPDIA0, 37
XPDIA1, 37
XPDIA2, 37
XPDIA3, 37
XPDIB, 37
XPDID, 37, 336
XPDIGP, 37
XPDIJ, 37, 336
XPDIJ1, 37
XPDIK, 37
XPDIL, 37
XPDIL1, 37
XPDIN001, 37
XPDIN002, 37
XPDIN003, 37
XPDIN004, 37
XPDIN005, 37
XPDIN006, 37
XPDIN007, 37
XPDIN008, 37
XPDIN009, 37
XPDIN00A, 37
XPDIN00B, 38

XPDIN00C, 38
XPDIN00D, 38
XPDIN00E, 38
XPDIN00F, 38
XPDIN00G, 38
XPDIN00H, 38
XPDIN00I, 38
XPDIN00J, 38
XPDIN00K, 38
XPDIN00L, 38
XPDIN00M, 38
XPDIN00N, 38
XPDIN00O, 38
XPDIN00P, 38
XPDIN00Q, 38
XPDIN00R, 38
XPDIN00S, 38
XPDIN00T, 38
XPDINIT, 38
XPDINIT1, 38
XPDINIT2, 38
XPDINIT3, 38
XPDINIT4, 38
XPDINIT5, 38
XPDIP, 38, 336
XPDIPM, 38
XPDIQ, 38
XPDIR, 38
XPDIST, 38
XPDIU, 38
XPDKEY, 39, 336
XPDKRN, 39
XPDMENU, 39, 337
XPDNTEG, 39
XPDPINIT, 39
XPDPROT, 39, 337
XPDR, 39
XPDRSUM, 39
XPDT, 39
XPDTA, 39
XPDTA1, 39
XPDTA2, 39
XPDTC, 39
XPDTP, 39
XPDUTL, 39, 337
XPDUTL1, 39
XPDV, 39
XQ, 39
XQ1, 39
XQ11, 39
XQ12, 39, 156, 235
XQ2, 39
XQ21, 39
XQ3, 39
XQ31, 39
XQ32, 39
XQ33, 39
XQ4, 39
XQ41, 39
XQ5, 39
XQ55, 39
XQ55SPEC, 40
XQ6, 40
XQ61, 40
XQ62, 40
XQ6A, 40
XQ6B, 40
XQ7, 40
XQ71, 40
XQ72, 40
XQ72A, 40
XQ73, 40
XQ74, 40
XQ75, 40
XQ8, 40
XQ81, 40
XQ82, 40
XQ83, 40
XQ83A, 40
XQ83D, 40
XQ83R, 40
XQ88, 40
XQ8A, 40
XQ9, 40
XQ91, 40
XQ92, 40, 338
XQ93, 40
XQA366PO, 40
XQABELOG, 40
XQABERR, 40
XQABLIST, 40
XQABLOAD, 41

XQABTMP, 41
XQAL173P, 41
XQAL285P, 41
XQALBUTL, 41, 338
XQALDATA, 41
XQALDEL, 41
XQALDOIT, 41
XQALERT, 41, 338
XQALERT1, 41
XQALFWD, 41, 338
XQALGUI, 41
XQALMAKE, 41
XQALSET, 41
XQALSET1, 41
XQALSUR1, 41
XQALSUR2, 41
XQALSURO, 41, 338
XQARPRT1, 41
XQARPRT2, 41
XQCHK, 41, 338
XQCHK1, 41
XQCHK2, 41
XQCHK3, 41
XQCS, 41
XQDATE, 41, 339
XQH, 339
XQH, 41
XQH0, 41
XQH1, 41
XQH2, 41
XQH3, 41
XQH4, 339
XQH4, 42
XQH5, 42
XQHLP, 42
XQKEY, 42
XQLOCK, 42
XQLOCK1, 42
XQOO, 42
XQOO1, 42
XQOO2, 42
XQOO3, 42
XQOPED, 42
XQOR, 42, 339
XQOR1, 42
XQOR2, 42
XQOR3, 42
XQOR4, 42
XQORD, 42
XQORD1, 42
XQORD101, 42
XQORDD1, 42
XQORM, 42, 339
XQORM1, 42, 339
XQORM2, 42
XQORM3, 42
XQORM4, 42
XQORM5, 42
XQORMX, 42
XQORO, 42
XQOROP, 42
XQP46INI, 42
XQP50, 42
XQSET, 43
XQSMD, 43
XQSMD1, 43
XQSMD2, 43
XQSMD21, 43
XQSMD3, 43
XQSMD31, 43
XQSMD4, 43
XQSMD5, 43
XQSMD6, 43
XQSMDCPY, 43
XQSMDFM, 43
XQSMDP, 43
XQSRV, 43
XQSRV1, 43
XQSRV2, 43
XQSRV3, 43
XQSRV4, 43
XQSRV5, 43
XQSTCK, 43
XQSUITE, 43
XQSUITE1, 43
XQT, 43
XQT1, 43
XQT2, 43
XQT3, 43
XQT4, 43
XQT5, 43
XQTOC, 43

XQUIT, 43
XQUSR, 43
XQUTL, 44
XT73P113, 44
XT73P129, 44
XT73P132, 44
XT73P133, 44
XT73P136, 44
XT73P33, 44
XT73P34, 44
XT73P44, 44
XT73P94, 44
XT73P98, 44
XT95POST, 44
XTDEBUG, 44
XTDEBUG1, 44
XTDEBUG2, 44
XTDEBUG3, 44
XTDEBUG4, 44
XTDEBUG5, 44
XTDEBUG6, 44
XTDEBUG7, 44
XTDEBUG8, 44
XTECGLO, 44
XTECLIPS, 44
XTECROU, 44
XTEDTVXD, 44
XTER, 44
XTER1, 44
XTER1A, 44
XTER1A1, 44
XTER1B, 44
XTER2, 44
XTERPUR, 45
XTERSUM, 45
XTERSUM1, 45
XTERSUM3, 45
XTERSUM4, 45
XTFC1, 45
XTFCE, 45
XTFCE1, 45
XTHC, 45
XTHC10, 45, 339
XTHC10A, 45
XTHCDEM, 45
XTHCURL, 45, 339
XTHCUTL, 45, 339
XTID, 45, 339
XTID1, 45
XTIDCTX, 45
XTIDSET, 45
XTIDTBL, 45
XTIDTERM, 45
XTIDTRM, 45, 340
XTKERM1, 45
XTKERM2, 45
XTKERM4, 340
XTKERMIT, 340
XTLATSET, 45
XTLKKWL, 340
XTLKMGR, 340
XTMLOG, 45
XTMLOG1, 45
XTMLOPAR, 45
XTMLOSKT, 45
XTMRPAR1, 45
XTMRPAR2, 45
XTMRPRNT, 45
XTMUNIT, 46
XTPMKPCF, 46
XTPMKPP, 46
XTPMKPTC, 46
XTPMNEX7, 46
XTPMSTA2, 46
XTPOST, 46
XTRCMP, 46
XTRMON, 46
XTRUTL, 46
XTRUTL1, 46
XTRUTL2, 46
XTSUMBLD, 46
XTSUMCK, 46
XTSUMCK1, 46
XTVNUM, 46
XTVRC1, 46
XTVRC1A, 46
XU8343P, 46
XU8343Q, 46
XU8343R, 46
XU8343S, 46
XU8375P, 46
XU8P125, 46

XU8P132, 46
XU8P1321, 46
XU8P1322, 46
XU8P135, 46
XU8P137, 46
XU8P204, 46
XU8P246, 47
XU8P260, 47
XU8P264, 47
XU8P264A, 47
XU8P292, 47
XU8P295, 47
XU8P297, 47
XU8P307, 47
XU8P314, 47
XU8P317, 47
XU8P324, 47
XU8P327, 47
XU8P328, 47
XU8P328A, 47
XU8P328B, 47
XU8P328C, 47
XU8P328D, 47
XU8P330X, 47
XU8P332, 47
XU8P334, 47
XU8P344, 47
XU8P352, 47
XU8P354, 47
XU8P356, 47
XU8P360, 47
XU8P365, 47
XU8P369, 47
XU8P370, 47
XU8P373, 47
XU8P377, 47
XU8P377D, 48
XU8P378, 48
XU8P378A, 48
XU8P378B, 48
XU8P378C, 48
XU8P378E, 48
XU8P381, 48
XU8P386, 48
XU8P387, 48
XU8P387X, 48
XU8P410, 48
XU8P413, 48
XU8P42, 48
XU8P420, 48
XU8P426, 48
XU8P432, 48
XU8P436, 48
XU8P43P, 48
XU8P440, 48
XU8P444, 48
XU8P446, 48
XU8P452, 48
XU8P453, 48
XU8P455, 48
XU8P459, 48
XU8P463, 48
XU8P466, 49
XU8P467, 49
XU8P467A, 49
XU8P469, 49
XU8P480, 49
XU8P481, 49
XU8P483, 49
XU8P487, 49
XU8P497, 49
XU8P497A, 49
XU8P499, 49
XU8P504, 49
XU8P509, 49
XU8P509A, 49
XU8P509B, 49
XU8P509C, 49
XU8P509D, 49
XU8P511, 49
XU8P514, 49
XU8P518, 49
XU8P524, 49
XU8P531, 49
XU8P531A, 49
XU8P531B, 49
XU8P536, 49
XU8P540, 49
XU8P541, 49
XU8P541A, 49
XU8P544, 49
XU8P545, 49

XU8P545A, 49
XU8P546, 50
XU8P560, 50
XU8P571, 50
XU8P572, 50
XU8P580, 50
XU8P581, 50
XU8P582, 50
XU8P584, 50
XU8P585, 50
XU8P586, 50
XU8P591, 50
XU8P598, 50
XU8P599, 50
XU8P601, 50
XU8P601A, 50
XU8P601B, 50
XU8P604, 50
XU8P608, 50
XU8P608B, 50
XU8P616, 50
XU8P629, 50
XU8P638, 50
XU8P672E, 50
XU8P689, 50
XU8PATCH661POST, 50
XU8PE689, 50
XUA4A7, 50
XUA4A71, 50, 340
XUA4A72, 51, 341
XUA4A73, 51
XUAF4, 51, 341
XUAPURGE, 51
XUBA, 51
XUCERT, 51
XUCERT1, 51
XUCIDTM, 26, 51
XUCIGTM, 51
XUCIMSM, 26, 51
XUCIMSQ, 26, 51
XUCIVXD, 26, 51
XUCMNIT, 51
XUCMNIT1, 51
XUCMNIT2, 51
XUCMNIT4, 51
XUCMNT3A, 51
XUCMPA, 51
XUCMPR17, 51
XUCMVPI, 51
XUCMVPM, 51
XUCMVPM1, 51
XUCMXDR, 51
XUCMXUTL, 51
XUCS1E, 51
XUCS1R, 51
XUCS1RB, 52
XUCS2E, 52
XUCS2R, 52
XUCS2RB, 52
XUCS4E, 52
XUCS4R, 52
XUCS4RB, 52
XUCS6R, 52
XUCS8E, 52
XUCS8R, 52
XUCS8RB, 52
XUCS8RG, 52
XUCSCDE, 52
XUCSCDG, 52
XUCSCDR, 52
XUCSCDRB, 52
XUCSPRG, 52
XUCSRV, 52
XUCSTM, 52
XUCSTME, 52
XUCSUTL3, 52
XUCSXCD, 52
XUCSXDR, 52
XUCSXGR, 52
XUCSXRT, 52
XUCSXST, 52
XUDHGUI, 52, 341
XUDHRES, 52
XUDHSET, 52, 342
XUDHUTL, 52
XUEPCSED, 52
XUEPCSRT, 53
XUEPCSU1, 53
XUEPCSUT, 53
XUEPCSVR, 53
XUESSO1, 53
XUESSO2, 53

XUESSO3, 53
XUESSO4, 53
XUFILE, 53
XUFILE0, 53
XUFILE1, 53
XUFILE3, 53
XUGET, 53
XUGOT, 53
XUGOT1, 53
XUHUI, 53, 342
XUHUI236, 53
XUHUIHL7, 53
XUHUIMSG, 53
XUIAMPRU, 53
XUIAMXML, 53
XUINCON, 53
XUINEACH, 53
XUINEND, 53
XUINENV, 53
XUINOK, 54
XUINP275, 54
XUINP313, 54
XUINP337, 54
XUINP348, 54
XUINPCH, 54
XUINPCH2, 54
XUINPCH3, 54
XUINPCH4, 54
XUINPRE, 54
XUINPRE1, 54
XUINTSK, 54
XUINTSK1, 54
XUINTSK2, 54
XULM, 54
XULM1, 54
XULMLD, 54
XULMLOG, 54
XULMOUT, 54
XULMP, 54
XULMRPC, 54
XULMU, 54, 342
XULMUI, 54
XULMUI1, 54
XUMF, 54, 342
XUMF0, 54
XUMF04, 54
XUMF04H, 54
XUMF04P, 54
XUMF04Q, 54
XUMF1H, 54
XUMF218, 55
XUMF218A, 55
XUMF218Z, 55
XUMF261P, 55
XUMF299, 55
XUMF333, 55
XUMF382, 55
XUMF390, 55
XUMF397, 55
XUMF4, 55
XUMF416, 55
XUMF479P, 55
XUMF4A, 55
XUMF4H, 55
XUMF4L0, 55
XUMF4L1, 55
XUMF4L2, 55
XUMF502, 55
XUMF502P, 55
XUMF512F, 55
XUMF555P, 55
XUMF5AT, 55
XUMF5AU, 55
XUMF5BYT, 55
XUMF5I, 55
XUMF5II, 55
XUMF654, 55
XUMF654P, 55
XUMFEIMF, 55
XUMFENV, 55
XUMFH, 55
XUMFH4, 56
XUMFHM, 56
XUMFHPQ, 56
XUMFHPR, 56
XUMFI, 56, 342
XUMFI0, 56
XUMFMD5, 56
XUMFMFE, 56
XUMFMFI, 56
XUMFP, 56, 342
XUMFP4, 56

XUMFP4C, 56
XUMFP4Z, 56
XUMFP512, 56
XUMFP513, 56
XUMFPFT, 56
XUMFPMFS, 56
XUMFPOST, 56
XUMFPZL7, 56
XUMFQR, 56
XUMFR, 56
XUMFX, 56
XUMFXACK, 56
XUMFXH, 56
XUMFXHL7, 56
XUMFXI, 56
XUMFXP, 56
XUMFXP1, 56
XUMFXP2, 56
XUMFXR, 56
XUMPI, 56
XUMVIENU, 57
XUMVINPA, 57
XUMVINPU, 57
XUOAAHL7, 57
XUOAAUTL, 57
XUP, 57, 342
XUP468, 57
XUP522, 57
XUP569, 57
XUPARAM, 57, 342
XUPCF, 57
XUPCH117, 57
XUPCSRVR, 57
XUPOS259, 57
XUPRE247, 57
XUPROD, 57, 342
XUPS, 57, 342
XUPS309P, 57
XUPSB01, 57
XUPSCLR, 57
XUPSGS, 57
XUPSHL7B, 57
XUPSNAME, 57
XUPSNM1, 57
XUPSORG, 57
XUPSPAID, 57
XUPSPD1, 57
XUPSPRA, 57
XUPSQRY, 57, 342
XUPSSTF, 58
XUPSUTL1, 58
XUPSUTQ, 58
XURTL, 58
XURTL1, 58
XURTL2, 58
XURTL3, 58
XURTLC, 58
XURTLK, 58
XUS, 58, 342
XUS1, 58
XUS11, 58
XUS1A, 58, 156, 342
XUS1B, 58
XUS2, 58, 342
XUS3, 58
XUS3A, 58
XUS4, 58
XUS5, 58
XUS6, 58
XUS9, 58
XUS91, 58
XUSAML, 58
XUSAP, 58, 342
XUSAP1, 58
XUSBSE1, 58, 65
XUSBSE2, 58, 65
XUSBSEUT, 65
XUSC1, 58
XUSC1C, 58
XUSC1S, 58
XUSC1S1, 58
XUSCLEAN, 59, 343
XUSCNT, 59
XUSECAD, 59
XUSECBUL, 59
XUSER, 59, 343
XUSER1, 59
XUSER2, 59
XUSER3, 59
XUSERBLK, 59
XUSEREDT, 59
XUSERNEW, 59, 344

XUSERP, 59, 156
XUSESIG, 59, 344
XUSESIG1, 59, 344
XUSESIG2, 59
XUSESIG3, 59
XUSFACHK, 59
XUSG, 59
XUSG1, 59
XUSHSH, 59, 344
XUSHSHP, 59, 344
XUSKAAJ, 59
XUSKAAJ1, 59
XUSMGR, 59
XUSNPI, 60, 344
XUSNPI1, 60
XUSNPIDA, 60
XUSNPIE1, 60
XUSNPIE2, 60
XUSNPIE3, 60
XUSNPIED, 60
XUSNPIUT, 60
XUSNPIX1, 60
XUSNPIX2, 60
XUSNPIX3, 60
XUSNPIX4, 60
XUSNPIX5, 60
XUSNPIXI, 60
XUSNPIXU, 60
XUSP557, 60
XUSPURGE, 60
XUSRA, 60
XUSRB, 60, 65, 345
XUSRB1, 60, 345
XUSRB2, 60, 345
XUSRB4, 60, 345
XUSRB5, 60
XUSSPKI, 60
XUST, 60
XUST01, 60
XUST02, 60
XUST04, 60
XUST05, 61
XUST06, 61
XUST08, 61
XUST09, 61
XUST12, 61
XUST13, 61
XUST15, 61
XUST17, 61
XUST18, 61
XUST19, 61
XUST20, 61
XUST21, 61
XUST22, 61
XUST24, 61
XUST25, 61
XUST26, 61
XUST27, 61
XUST28, 61
XUST29, 61
XUST35, 61
XUSTAT, 61
XUSTAT1, 61
XUSTAT2, 61
XUSTAX, 61, 345
XUSTERM, 61, 156
XUSTERM1, 61
XUSTERM2, 61
XUSTZ, 61
XUSTZIP, 61
XUTMD, 61
XUTMD1, 61
XUTMDEVQ, 62, 345
XUTMDQ, 62
XUTMDQ1, 62
XUTMG145, 62
XUTMG146, 62
XUTMG14P, 62
XUTMG19, 62
XUTMG43, 62
XUTMHR, 62
XUTMK, 62
XUTMKA, 62
XUTMKE, 62
XUTMKE1, 62
XUTMKE2, 62
XUTMONH, 62
XUTMONH1, 62
XUTMONH2, 62
XUTMOPT, 62, 346
XUTMPCH, 62
XUTMQ, 62

XUTMQ0, 62
XUTMQ1, 62
XUTMQ2, 62
XUTMQ3, 62
XUTMQH, 62
XUTMR, 62
XUTMR1, 62
XUTMRJD, 62
XUTMRJD1, 62
XUTMRP, 63
XUTMRP1, 63
XUTMSYNC, 63
XUTMT, 63
XUTMTA, 63
XUTMTAL, 63
XUTMTD, 63
XUTMTDL, 63
XUTMTED, 63
XUTMTEIO, 63
XUTMTEP, 63
XUTMTES, 63
XUTMTL, 63
XUTMTLD, 63
XUTMTLU, 63
XUTMTP, 63, 346
XUTMTP0, 63
XUTMTP1, 63
XUTMTPD, 63
XUTMTPU, 63
XUTMTR1, 63
XUTMTR2, 63
XUTMTR3, 63
XUTMTR4, 63
XUTMTS, 63
XUTMTU, 63
XUTMTUL, 63
XUTMTZ, 63
XUTMTZ1, 63
XUTMTZ2, 63
XUTMTZ3, 63
XUTMUSE, 64
XUTMUSE1, 64
XUTMUSE2, 64
XUTMUSE3, 64
XUTMUTL, 64
XUVERIFY, 64, 346
XUWORKDY, 64, 346
XUXCTY, 64
XUXPRT, 64
XUYDEV, 64
XVIRENV, 65
XVIRPOST, 65
ZIS4VXDM, 26
ZISEDIT, 64
ZISETDTM, 26
ZISETMSM, 26
ZISETVXD, 26
ZISFMSM, 26
ZISFVXD, 27
ZISHMSM, 27
ZISHVXD, 27
ZISPL, 64, 347
ZISPL1, 64
ZISPL2, 64
ZISX, 27, 64
ZOSFMSM, 27
ZOSFVXD, 27
ZOSV2VXD, 27
ZOSVMSM, 27
ZOSVVXD, 27
ZTBKCDTM, 27
ZTBKCMSM, 27
ZTBKCVXD, 27
ZTMB, 27, 64
ZTMCHK, 27, 64
ZTMCHK1, 27, 64
ZTMDCL, 27
ZTMGRSET, 27
ZTMKU, 27, 64
ZTMON, 27, 64
ZTMON1, 27, 64
ZU, 364
ZUA, 27, 64
ZUMSM, 64
ZUVXD, 64
ROUTINES
XUCIONT, 51
Routines by Patch Number Option, 269
RPCs
XDR ADD POTENTIAL PATIENT DUP, 352
XDR UPD SUPPR EMAIL, 353

XQAL GUI ALERTS, 353
XU EPC EDIT, 353
XUPS PERSONQUERY, 354
XUS ALLKEYS, 355
XUS AV CODE, 355
XUS AV HELP, 355
XUS CCOW VAULT PARAM, 355
XUS CVC, 355
XUS DIVISION GET, 355
XUS DIVISION SET, 356
XUS GET CCOW TOKEN, 356
XUS GET TOKEN, 356
XUS GET USER INFO, 356
XUS GET VARIABLE VALUE, 362
XUS GET VISITOR, 356
XUS INTRO MSG, 356
XUS KEY CHECK, 357
XUS PKI GET UPN, 361
XUS PKI SET UPN, 361
XUS SEND KEYS, 361
XUS SET VISITOR, 362
XUS SIGNON SETUP, 362
RTHIST Data, 24

S

SACC Exemptions, 371
Scan Possible Duplicates Option, 172
Schedule Process to Merge Verified Duplicates Option, 170
Schedule/Unschedule Options Option, 24, 107, 230, 304, 305, 320
SCHEDULING RECOMMENDED (#209) Field, 240, 241
Screen-based Option Editor Option, 211
ScreenMan Menu, 368
Secure Hash Algorithm (SHA), 35
Secure Menu Delegation Menu, 215, 216
Security, 377
File Access, 393
Files, 393
Keys, 390
Management, 377
SECURITY (#15) Field, 5
Security Key
XUMGR, 292
SECURITY KEY (#19.1) File, 67, 86, 252
Security Keys
XDR, 391
Security Keys
ADP, 208, 210, 211, 212
ALLOWABLE MENU PREFIX, 214
ORES, 198
PROVIDER, 282
PSDMGR, 386
PSDRPH, 94, 163, 164, 225, 227
XDR, 167, 168
XDRMGR, 169
XQAL-DELETE, 202
XQSMDFM, 214
XTLKZMGR, 316, 317, 318
XUADD, 284
XUAUDITING, 368
XUAUTHOR, 206
XUEPCSEDIT, 164, 221, 227
XUEXKEY, 252
XUFILEGRAM, 368
XUMF INSTITUTION, 262, 263, 264, 265
XUMGR, 165, 231, 274, 284, 315, 368
XUPROG, 368
XUPROGMODE, 204, 251, 318, 319, 320, 321, 323, 368
XUPROGMODE, 269
XUPROGMODE, 270
XUSCREENMAN, 368
XUSIG, 13, 59, 389, 390
XUSNPIMTL, 276
XUSPY, 259
ZTMQ, 298, 305
Security Keys
XDRMGR, 391
Security Keys
XQAL-DELETE, 391
Security Keys
XQSMDFM, 391
Security Keys
XTLKZMGR, 391
Security Keys
XTLKZUSER, 391
Security Keys
XUARCHIVE, 391
Security Keys

XUAUDITING, 391
Security Keys
XUAUTHOR, 391
Security Keys
XUEPCSEDIT, 391
Security Keys
XUORES, 391
Security Keys
XUEXKEY, 391
Security Keys
XUFILEGRAM, 391
Security Keys
XULM LOCKS, 391
Security Keys
XULM SYSTEM LOCKS, 391
Security Keys
XUMF INSTITUTION, 392
Security Keys
XUMGR, 392
Security Keys
XUORES, 392
Security Keys
XUPROG, 392
Security Keys
XUPROGMODE, 392
Security Keys
XUSCREENMAN, 392
Security Keys
XUSHOWSSN, 392
Security Keys
XUSIG, 392
Security Keys
XUSNPIMTL, 392
Security Keys
XUSPF200, 393
Security Keys
ZTMQ, 393
SECURITY TOKEN SERVICE (#200.1) Field, 9
See if a User Has Access to a Particular Option Option, 211
Select Options to be Delegated Option, 213
Send Alpha/Beta Usage to Developers Option, 191
Send HL7 PMU message Option, 265
Send KERMIT file Option, 313
Send Test Pattern to Terminal Option, 308
Server audit display Option, 287
Server Options, 157
Server-type Option Test Server Option, 212
SERVICE/SECTION (#49) File, 67, 88
Set Backup Reviewer for Alerts Option, 199
SHA
Secure Hash Algorithm, 35
Shortcuts Option, 317
Show a Delegate's Options Option, 216
Show all options in a Menu Template Option, 217
Show Error Log Option, 302
Show system settings for IPv6 Option, 177
Show the keys of a particular user Option, 209
Show Users with a Selected primary Menu Option, 310
SIGNATURE BLOCK PRINTED NAME (#20.2) Field, 389
SIGNATURE BLOCK TITLE (#20.3) Field, 389, 390
Signatures, Electronic, 389
SIGN-ON LOG (#3.081) File, 68, 72, 229
SIGN-ON LOG RETENTION (#221) Field, 10
Single file add/delete for a user Option, 256
Single User Menu Tree Rebuild Option, 205
Site parameters
TaskMan, 18
Site Parameters
Changeable, 10
Kernel, 4
Site Parameters Edit Option, 297
Software
Product Security, 377
Required, 365
Software Disclaimer, xxiii
Software-Wide Variables, 369
Special Active User Excel output Option, 279
Special Active User Excel Output Option, 279
SPECIALITY (#7.1) File, 70, 79, 102
Specify Allowable New Menu Prefix Option, 216

SPOOL DATA (#3.519) File, 75
Spool Device Edit Option, 248
SPOOL DOCUMENT (#3.51) File, 75, 313
Spool Management Menu, 107, 134, 292
Spooler Menu, 291
Spooler Site Parameters, 17
Spooler Site Parameters Edit Option, 17
STANDARD TERMINOLOGY VERSION F (#4.009) File, 77
Start/Halt Duplicate Search Option, 172
Startup PROD check Option, 232
STATE (#5) File, 70, 78, 102, 175
STATUS (#15.01101,.02) Field, 23
STOP an active merge process Option, 173
Stop Task Manager Option, 306
Structured Routine listing Option, 257
SUBJECT ORGANIZATION (#205.2) Field, 8
SUBJECT ORGANIZATION ID (#205.3) Field, 9
Subscriber Package Menu Option, 366
SUBTYPE Field, 74
Summary Most Recent Errors Option, 249
Surrogate for which Users? Option, 200
Switch Identities Option, 295
Switch UCI Option, 232
Symbols
  Found in the Documentation, xxiv
SYNC flag file control Option, 306
Synonyms Option, 317
System Audit Menu, 237
System Audit Reports Menu, 238
SYSTEM COMMAND OPTIONS Menu, 107, 151, 243
System Parameters, 4, 11
System Security Menu, 107, 135
System Status Option, 295
Systems Manager Menu, 107, 108, 111
System-wide Variables, 365

T

Table of Contents, xvii
Take away All access to a File Option, 255
Tally STATUS and MERGE STATUS fields Option, 173
Task Allocation Audit of PSDRPH Key Report Option, 161, 164, 225
Task Changes to DEA Prescribing Privileges Report Option, 161, 164, 223
TASK SYNC FLAG (#14.8) File, 69, 83
TaskMan, 75, 82, 83, 92, 107, 365, 371, 376
Taskman Error Log Menu, 299
Taskman Management Menu, 107, 142, 302
Taskman Management Utilities Menu, 307
TASKMAN MONITOR (#14.71) File, 69
TaskMan site parameters, 18
TASKMAN SITE PARAMETERS (#14.7) File, 18, 69, 83, 297
TASKMAN SNAPSHOT (#14.72) File, 69, 83, 306
Taskman snapshot Option, 306
TaskMan User Option, 306
TASKS (#14.4) File, 69, 82
TCP/IP type PING server Option, 267
TCP/IP Type Ping Server Option, 217
Terminal Type, 5
TERMINAL TYPE (#3.2) File, 68, 73, 74, 295, 369, 370
Terminal Type Edit Option, 295
TERMINATE AUDIT (#19.5) Field, 6, 8, 10, 16, 17
Test an option not in your menu Option, 320
Time Option, 295
TIMED READ (# OF SECONDS) (#51.1) Field, 6
TITLE (#3.1) File, 67, 73
Toggle options/protocols on and off Option, 211
Token, 362
Toolkit
  APIs, 330
  Archiving, 327
  Callable Entry Points, 330
  Direct Mode Utilities, 349
  Files, 66
  Globals, 67
  Internal Relations, 368
  Menu Tree Diagrams, 107
  Menu Tree Roots, 107
  Namespace, 3
  Purging, 327

Routines, 25
SACC Exemptions, 371
Software-Wide Variables, 369
Toolkit Queuable Options Menu, 320
Top Errors Option, 250
Total Count of Registered Trainees Option, 241
Trainee Registration Inquiry Option, 241
Trainee Reports Menu, 242
Trainee Transmission Report by Date Option, 242
Trainee Transmission Report by Range Option, 242
Trainee Transmission Report Selectable Items Option, 242
Trainee Transmission Reports to OAA Menu, 243
Translation
Globals, 374
Transport a Distribution Option, 185
TRM or VTRM Device Edit Option, 248
TYPE-AHEAD (#51.9) Field, 6

U

U Variable, 369
UCI ASSOCIATION (#14.6) File, 18, 62, 69, 83, 306
UCI Association Table Edit Option, 306
Unassign Editors Option, 206
UNDO Edits (Restore to Older Version of Routine) Option, 325
Unload a Distribution Option, 185
Up Arrow Delimited Termination Report Option, 279
Update Error Trap Summary Option, 250
Update Routine File Option, 184
Update with current routines Option, 93, 325
Update/refresh Institution file with IMF data Option, 264
URLs
Acronyms Intranet Website, 402
Adobe Website, xxviii
Glossary Intranet Website, 402
Kernel Website, xxvii
NUCC Home Page Web Address, 103
QuadraMed Home Page Web Address, 388
VHA Software Document Library (VDL) Website, xxviii
Use this Manual, How to, xxiii
User Alerts Count Report Option, 200
User Audit Display Option, 309
User Change Event Option, 233
USER CLASS (#201) File, 89
User Failed Access Attempts Option, 253
User Help Option, 309
User Inquiry Option, 285
User Management Menu, 107, 145, 266, 267, 280, 310, 390
User PC build Edit Option, 282
User PC build Print Option, 281
User Security Menu, 282
User sign-on event Option, 156, 233
User start-up event Option, 219, 234
User Status Report Option, 309
User terminate event Option, 235
USER TO AUDIT (#19.3) Multiple Field, 8, 10, 17
USER TO AUDIT (Multiple) Field, 17
User’s Toolbox Menu, 287
Users
Attributes, 286
User's Toolbox Menu, 389
Utilities
%INDEX, 81
Direct Mode, 349
Utilities for MTLU Menu, 317
Utilities Menu, 173, 185

V

VA FileMan
File Protection, 393
Globals Exempt From Compatibility, 371
VA FileMan File Protection, 393
VA FileMan Management Menu, 368
Validate IPv4 and IPv6 address Option, 177
Variable changer Option, 323
Variables
DILOCKTM, 369
DR, 8
DT, 369

DTIME, 369
DUZ, 369, 373
DUZ("AG"), 369
DUZ("AUTO"), 370
DUZ("LANG"), 6, 370
DUZ(0), 369, 373
DUZ(2), 5, 369
IO, 369
IO(0), 370
IOBS, 370
IOF, 369
IOM, 369
ION, 369
IOS, 370
IOSL, 369
IOST, 369
IOST(0), 370
IOT, 369
IOXY, 370
Software-Wide, 369
System-wide, 365
U, 369
XQABTST, 370
VAX DSM Device Set-up Option, 314
VAX/Alpha Performance Monitor (VPM)
Configuring, 23
Verifier Tools Menu, 322, 324
Verify a Build Option, 187
Verify Checksums in Transport Global
Option, 183
Verify Code, 7, 156, 235
Verify Package Integrity Option, 187
Verify Potential Duplicates Option, 174
Verify Selected Potential Duplicate Pair
Option, 174
VERSION (Multiple) Field, 80
Version Number Update Option, 323
VHA Directive 2012-003, Person Class
Taxonomy, 396
VHA Software Document Library (VDL)
Website, xxviii
View Alerts Option, 202
View Duplicate Record Entries Option, 175
View Lock Manager Log Option, 261
Virgin Installation, 102
VOLUME SET (#14.5) File, 18, 62, 69, 82
VOLUME SET (#41) Multiple Field, 7, 10
Volume Set Edit Option, 308

W

Web Pages
Adobe Website, xxviii
NUCC Home Page Web Address, 103
QuadraMed Home Page Web Address,
388
VHA Software Document Library (VDL)
Website, xxviii
Websites
Acronyms Intranet Website, 402
Glossary Intranet Website, 402
Kernel Website, xxvii
Where am I? Option, 288

X

XDR ADD POTENTIAL PATIENT DUP
RPC, 352
XDR ADD VERIFIED DUPS Option, 165
XDR ANCILLARY REVIEW Option, 166
XDR APPROVE FOR MERGE Option, 166
XDR AUTO MERGE Option, 166
XDR CHECK MERGE PROCESS
STATUS Option, 166
XDR CHECK PAIR Option, 167
XDR DISPLAY SEARCH STATUS
Option, 167
XDR EDIT DUP RECORD STATUS
Option, 167
XDR EDIT DUP RESOLUTION FILE
Option, 168
XDR ERROR Bulletin, 378
XDR Files
MERGE PROCESS (#15.2), 172
XDR FIND POTENTIAL DUPLICATES
Option, 168
XDR MAIN MENU Menu, 168
XDR MANAGER UTILITIES Menu, 169
XDR MERGE PROCESS (#15.2) File, 172
XDR MERGE READY DUPLICATES
Option, 170
XDR MERGE SELECTED PAIR Option,
170

XDR MERGED Bulletin, 378
XDR OPERATIONS MENU, 170
XDR PRELIMINARY SCAN LIST Option, 171
XDR PRELIMINARY SCAN Option, 171
XDR PRINT LIST Option, 171
XDR PURGE Option, 171
XDR PURGE2 Option, 84, 172
XDR RESTART MERGE PROCESS Option, 172
XDR SCAN POSSIBLE DUPLICATES Option, 172
XDR SEARCH ALL Option, 172
XDR Security Key, 167, 168, 391
XDR STOP MERGE PROCESS Option, 173
XDR TALLY STATUS FIELDS Option, 173
XDR UPD SUPPR EMAIL RPC, 353
XDR UTILITIES MENU, 173
XDR VALID CHECK Option, 174
XDR VERIFIED Bulletin, 379
XDR VERIFY ALL Option, 174
XDR VERIFY SELECTED PAIR Option, 174
XDR VIEW DUPLICATE RECORD Option, 175
XDR2NULL Routine, 28
XDRDADA Routine, 28
XDRDADDS Routine, 28
XDRDADJ Routine, 28
XDRDCNT Routine, 28
XDRDCOMP Routine, 28
XDRDDATA Routine, 28
XDRDEDT Routine, 29
XDRDEFLG Routine, 29
XDRDFPD Routine, 29
XDRDLIST Routine, 29
XDRDMAIN Routine, 29
XDRDOC Routine, 29
XDRDOC1 Routine, 29
XDRDOC2 Routine, 29
XDRDPDTI Routine, 29
XDRDPICK Routine, 29
XDRDPRE1 Routine, 29
XDRDPREL Routine, 29
XDRDPRG2 Routine, 29
XDRDPRGE Routine, 29
XDRDQUE Routine, 30
XDRDSCOR Routine, 30
XDRDSHOW Routine, 30
XDRDSTAT Routine, 30
XDRDUP Routine, 30
XDREMSG Routine, 31
XDRHLP Routine, 31
XDRLRFIX Routine, 31
XDRMADD Routine, 31
XDRMAIN Routine, 32
XDRMAINI Routine, 32
XDRMERG Routine, 32
XDRMERG0 Routine, 32
XDRMERG1 Routine, 32
XDRMERG2 Routine, 32
XDRMERGA Routine, 32
XDRMERGB Routine, 32
XDRMERGC Routine, 32
XDRMGR Security Key, 169, 391
XDRMPACK Routine, 32
XDRMRG Routine, 32
XDRMRG1 Routine, 32
XDRMSG Routine, 32
XDRMVFY Routine, 33
XDRPREI Routine, 33
XDRPREL1 Routine, 33
XDRPTCAN Routine, 33
XDRPTCLN Routine, 33
XDRPTDOB Routine, 33
XDRPTDOD Routine, 33
XDRPTLSD Routine, 33
XDRPTMMN Routine, 33
XDRPTN Routine, 33
XDRPTSSN Routine, 33
XDRPTSX Routine, 33
XDRRMRG0 Routine, 33
XDRRMRG1 Routine, 33
XDRRMRG2 Routine, 33
XDRU Routine, 33
XDRUTL Routine, 33
XDRVAL Routine, 30
XDRVAL1 Routine, 30
XDRVAL2 Routine, 30
XDRVCHEK Routine, 33

XGF Routine, 33, 331
XGFDEMO Routine, 33
XGFDEMO1 Routine, 33
XGKB Routine, 33
XGKB1 Routine, 33
XGS Routine, 33
XGSA Routine, 33
XGSBOX Routine, 33
XGSETUP Routine, 34
XGSW Routine, 34
XINDX Routine, 34
XINDX1 Routine, 34
XINDX10 Routine, 34
XINDX11 Routine, 34
XINDX2 Routine, 34
XINDX3 Routine, 34
XINDX4 Routine, 34
XINDX5 Routine, 34
XINDX51 Routine, 34
XINDX52 Routine, 34
XINDX53 Routine, 34
XINDX6 Routine, 34
XINDX7 Routine, 34
XINDX8 Routine, 34
XINDX9 Routine, 34
XIP SYNCHRONIZE COUNTY Option, 175
XIP ZIP CODE LIST Option, 175
XIPENV Routine, 34
XIPMAIL Routine, 34
XIPMAILA Routine, 34
XIPMAILB Routine, 34
XIPMAILSERVER Option, 175
XIPPOST Routine, 34
XIPSRVR Option, 176
XIPSRVR Routine, 34
XIPSYNC Routine, 34
XIPUTIL Routine, 34, 331
XIPUTIL1 Routine, 34
XIPXREF Routine, 34
XLFCRC Routine, 34, 331
XLFDT Routine, 34, 331
XLFDT1 Routine, 34
XLFDT2 Routine, 34
XLFDT3 Routine, 35
XLFDT4 Routine, 35
XLFHYPER Routine, 35, 332
XLFIPV CONVERT Option, 176
XLFIPV FORCEIP4 Option, 177
XLFIPV FORCEIP6 Option, 177
XLFIPV IPV4 IPV6 MENU, 177
XLFIPV Routine, 35, 332
XLFIPV VALIDATE Option, 177
XLFIPV VERSION Option, 177
XLFLTR Routine, 35
XLFLTR1 Routine, 35
XLFMSMT Routine, 35, 333
XLFMSMT2 Routine, 35
XLFMTH Routine, 35, 333
XLFMTH1 Routine, 35
XLFNAME Routine, 35, 334
XLFNAME1 Routine, 35
XLFNAME2 Routine, 35, 334
XLFNAME3 Routine, 35
XLFNAME4 Routine, 35
XLFNAME5 Routine, 35
XLFNAME6 Routine, 35
XLFNAME7 Routine, 35
XLFNAME8 Routine, 35
XLFNENV Routine, 35
XLFNP152 Routine, 35
XLFNP176 Routine, 35
XLFNSLK Routine, 35, 334
XLFSHAN Routine, 35, 335
XLFSTR Routine, 35, 335
XLFUTL Routine, 35, 335
XPAR ALL ENTITIES Parameter, 11
XPAR EDIT BY TEMPLATE Option, 177
XPAR EDIT KEYWORD Option, 177
XPAR EDIT PARAMETER Option, 178
XPAR LIST BY ENTITY Option, 178
XPAR LIST BY PACKAGE Option, 178
XPAR LIST BY PARAM Option, 178
XPAR LIST BY TEMPLATE Option, 178
XPAR MENU TOOLS Menu, 179
XPAR MY NEW PARAM Parameter, 11
XPAR Routine, 35, 335
XPAR TEST DATE/TIME Parameter, 11
XPAR TEST FREE TEXT Parameter, 11
XPAR TEST M CODE Parameter, 11
XPAR TEST ME Parameter, 11

XPAR TEST MULT FREE TEXT Parameter, 11
XPAR TEST MULTIPLE Parameter, 12
XPAR TEST MULTIPTR Parameter, 12
XPAR TEST NUMERIC Parameter, 12
XPAR TEST POINTER Parameter, 12
XPAR TEST PWP Parameter, 12
XPAR TEST SET OF CODES Parameter, 12
XPAR TEST WP Parameter, 12
XPAR TEST YES/NO Parameter, 12
XPAR1 Routine, 35
XPAR2 Routine, 35
XPAR3 Routine, 35
XPARDD Routine, 35
XPARDD1 Routine, 36
XPARDD2 Routine, 36
XPARDDAC Routine, 36
XPAREDIT Routine, 15, 36, 336
XPAREDT1 Routine, 36
XPAREDT2 Routine, 36
XPAREDT3 Routine, 36
XPARLIST Routine, 36
XPARTPV Routine, 36
XPARTPV1 Routine, 36
XPARY26 Routine, 36
XPARZUTL Routine, 36
XPD BACKUP Option, 179
XPD BUILD NAMESPACE Option, 180
XPD COMPARE TO SYSTEM Option, 180
XPD CONVERT PACKAGE Option, 180
XPD COPY BUILD Option, 181
XPD DISTRIBUTION MENU, 181
XPD EDIT BUILD Option, 181
XPD EDIT INSTALL Option, 181
XPD INSTALL BUILD Option, 181
XPD INSTALLATION MENU, 182
XPD LOAD DISTRIBUTION Option, 182
XPD MAIN Menu, 182
XPD PATCH HFS SERVER Parameter, 12
XPD PRINT BUILD Option, 183
XPD PRINT CHECKSUM Option, 183
XPD PRINT INSTALL FILE Option, 183
XPD PRINT INSTALL Option, 183
XPD PRINT PACKAGE PATCHES Option, 183
XPD PURGE FILE Option, 184
XPD RESTART INSTALL Option, 184
XPD ROLLUP PATCHES Option, 184
XPD ROUTINE UPDATE Option, 184
XPD TRANSPORT PACKAGE Option, 185
XPD UNLOAD DISTRIBUTION Option, 185
XPD UTILITY Menu, 185
XPD VERIFY BUILD Option, 187
XPD VERIFY INTEGRITY Option, 187
XPDANLYZ MAIN MENU, 187
XPDANLYZ Option, 187
XPDANLYZ_DEL Option, 188
XPDANLYZ_SQA Option, 188
XPDANLYZ1 Routine, 36
XPDANLYZ2 Routine, 36
XPDANLYZ3 Routine, 36
XPDANLYZ4 Routine, 36
XPDANLYZ5 Routine, 36
XPDANLYZ6 Routine, 36
XPDB1 Routine, 36
XPDCOM Routine, 36
XPDCOMF Routine, 36
XPDCOMG Routine, 36
XPDCOML Routine, 36
XPDCPU Routine, 36
XPDDCS Routine, 36
XPDDI Routine, 36
XPDDP Routine, 36
XPDDP1 Routine, 36
XPDDPCK Routine, 37
XPDE Routine, 37
XPDER Routine, 37
XPDET Routine, 37
XPDGCDEL Routine, 37
XPDH Routine, 37
XPDI Routine, 37
XPDI1 Routine, 37
XPDIA Routine, 37
XPDIA0 Routine, 37
XPDIA1 Routine, 37
XPDIA2 Routine, 37
XPDIA3 Routine, 37
XPDIB Routine, 37
XPDID Routine, 37, 336

XPDIGP Routine, 37
XPDIJ Routine, 37, 336
XPDIJ1 Routine, 37
XPDIK Routine, 37
XPDIL Routine, 37
XPDIL1 Routine, 37
XPDIN001 Routine, 37
XPDIN002 Routine, 37
XPDIN003 Routine, 37
XPDIN004 Routine, 37
XPDIN005 Routine, 37
XPDIN006 Routine, 37
XPDIN007 Routine, 37
XPDIN008 Routine, 37
XPDIN009 Routine, 37
XPDIN00A Routine, 37
XPDIN00B Routine, 38
XPDIN00C Routine, 38
XPDIN00D Routine, 38
XPDIN00E Routine, 38
XPDIN00F Routine, 38
XPDIN00G Routine, 38
XPDIN00H Routine, 38
XPDIN00I Routine, 38
XPDIN00J Routine, 38
XPDIN00K Routine, 38
XPDIN00L Routine, 38
XPDIN00M Routine, 38
XPDIN00N Routine, 38
XPDIN00O Routine, 38
XPDIN00P Routine, 38
XPDIN00Q Routine, 38
XPDIN00R Routine, 38
XPDIN00S Routine, 38
XPDIN00T Routine, 38
XPDINIT Routine, 38
XPDINIT1 Routine, 38
XPDINIT2 Routine, 38
XPDINIT3 Routine, 38
XPDINIT4 Routine, 38
XPDINIT5 Routine, 38
XPDIP Routine, 38, 336
XPDIPM Routine, 38
XPDIQ Routine, 38
XPDIR Routine, 38
XPDIST Routine, 38
XPDIU Routine, 38
XPDKEY Routine, 39, 336
XPDKRN Routine, 39
XPDMENU Routine, 39, 337
XPDNTEG Routine, 39
XPDPINIT Routine, 39
XPDPROT Routine, 39, 337
XPDR Routine, 39
XPDRSUM Routine, 39
XPDT Routine, 39
XPDTA Routine, 39
XPDTA1 Routine, 39
XPDTA2 Routine, 39
XPDTC Routine, 39
XPDTP Routine, 39
XPDUTL Routine, 39, 337
XPDUTL1 Routine, 39
XPDV Routine, 39
XQ LIST UNREFERENCED OPTIONS Option, 188
XQ MENUMANAGER PROMPT Parameter, 13
XQ Routine, 39
XQ UNREF'D OPTIONS Option, 189
XQ XUTL $J NODES Option, 189
XQ1 Routine, 39
XQ11 Routine, 39
XQ12 Routine, 39, 156, 235
XQ2 Routine, 39
XQ21 Routine, 39
XQ3 Routine, 39
XQ31 Routine, 39
XQ32 Routine, 39
XQ33 Routine, 39
XQ4 Routine, 39
XQ41 Routine, 39
XQ5 Routine, 39
XQ55 Routine, 39
XQ55SPEC Routine, 40
XQ6 Routine, 40
XQ61 Routine, 40
XQ62 Routine, 40
XQ6A Routine, 40
XQ6B Routine, 40
XQ7 Routine, 40
XQ71 Routine, 40

XQ72 Routine, 40
XQ72A Routine, 40
XQ73 Routine, 40
XQ74 Routine, 40
XQ75 Routine, 40
XQ8 Routine, 40
XQ81 Routine, 40
XQ82 Routine, 40
XQ83 Routine, 40
XQ83A Routine, 40
XQ83D Routine, 40
XQ83R Routine, 40
XQ88 Routine, 40
XQ8A Routine, 40
XQ9 Routine, 40
XQ91 Routine, 40
XQ92 Routine, 40, 338
XQ93 Routine, 40
XQA366PO Routine, 40
XQAB ACTUAL OPTION USAGE Option, 191
XQAB AUTO SEND Option, 191
XQAB ERR DATE/SITE/NUM/ROU/ERR Option, 191
XQAB ERROR LOG SERVER Option, 157, 192
XQAB ERROR LOG XMIT Option, 157, 193
XQAB ERRORS LOGGED (#8991.5) File, 68, 94, 157
XQAB LIST LOW USAGE OPTS Option, 194
XQAB MENU Menu, 194
XQABELOG Routine, 40
XQABERR Routine, 40
XQABLIST Routine, 40
XQABLOAD Routine, 41
XQABTMP Routine, 41
XQABTST Variable, 370
XQAL ALERT LIST FROM DATE Option, 195
XQAL BACKUP REVIEWER Parameter, 13
XQAL CRITICAL ALERT COUNT Option, 195
XQAL GUI ALERTS Option, 197
XQAL GUI ALERTS RPC, 353
XQAL NO BACKUP REVIEWER Option, 198
XQAL PATIENT ALERT LIST Option, 198
XQAL REPORTS MENU, 199
XQAL SET BACKUP REVIEWER Option, 199
XQAL SURROGATE FOR WHICH USERS Option, 200
XQAL USER ALERTS COUNT Option, 200
XQAL VIEW ALERT TRACKING ENTRY Option, 201
XQAL173P Routine, 41
XQAL285P Routine, 41
XQALBUTL Routine, 41, 338
XQALDATA Routine, 41
XQALDEL Routine, 41
XQAL-DELETE Security Key, 202, 391
XQALDOIT Routine, 41
XQALERT BY USER DELETE Option, 202
XQALERT DELETE OLD Option, 202
XQALERT MAKE Option, 203
XQALERT MGR Menu, 203
XQALERT Option, 202
XQALERT Routine, 41, 338
XQALERT SURROGATE SET/REMOVE Option, 203
XQALERT1 Routine, 41
XQALFWD Routine, 41, 338
XQALGUI Routine, 41
XQALMAKE Routine, 41
XQALSET Routine, 41
XQALSET1 Routine, 41
XQALSUR1 Routine, 41
XQALSUR2 Routine, 41
XQALSURO Routine, 41, 338
XQARPRT1 Routine, 41
XQARPRT2 Routine, 41
XQBUILDMAIN Menu, 204
XQBUILDTREE Option, 204
XQBUILDTREEQUE Option, 205
XQBUILDUSER Option, 205
XQCHK Routine, 41, 338

XQCHK1 Routine, 41
XQCHK2 Routine, 41
XQCHK3 Routine, 41
XQCOPYOP Option, 205
XQCS Routine, 41
XQDATE Routine, 41, 339
XQDIAGMENU Menu, 206
XQDISPLAY OPTIONS Menu, 206
XQDISPLAY OPTIONS Option, 108
XQH Routine, 41, 339
XQH0 Routine, 41
XQH1 Routine, 41
XQH2 Routine, 41
XQH3 Routine, 41
XQH4 Routine, 42, 339
XQH5 Routine, 42
XQHELP-ASSIGN Option, 206
XQHELP-DEASSIGN Option, 206
XQHELP-DISPLAY Option, 206
XQHELPFIX Option, 207
XQHELP-LIST Option, 207
XQHELP-MENU, 207
XQHELP-UPDATE Option, 207
XQHELP-XREF Option, 208
XQHLP Routine, 42
XQKEY Routine, 42
XQKEYALTODEL Option, 208
XQKEYDEL Option, 208
XQKEYRDEL Option, 208
XQKICKMICRO Option, 208
XQLISTKEY Option, 209
XQLOCK Routine, 42
XQLOCK1 Option, 209
XQLOCK1 Routine, 42
XQLOCK2 Option, 209
XQOO Routine, 42
XQOO1 Routine, 42
XQOO2 Routine, 42
XQOO3 Routine, 42
XQOOFF Option, 209
XQOOMAIN M Menu, 210
XQOOMAKE Option, 210
XQOON Option, 210
XQOOREDO Option, 210
XQOOSHOFIL Option, 210
XQOOSHOPRO Option, 211
XQOOSHOW Option, 211
XQOOTOG Option, 211
XQOPACCESS Option, 211
XQOPED Option, 211
XQOPED Routine, 42
XQOPTFIX Option, 211
XQOR Routine, 42, 339
XQOR1 Routine, 42
XQOR2 Routine, 42
XQOR3 Routine, 42
XQOR4 Routine, 42
XQORD Routine, 42
XQORD1 Routine, 42
XQORD101 Routine, 42
XQORDD1 Routine, 42
XQORM Routine, 42, 339
XQORM1 Routine, 42, 339
XQORM2 Routine, 42
XQORM3 Routine, 42
XQORM4 Routine, 42
XQORM5 Routine, 42
XQORMX Routine, 42
XQORO Routine, 42
XQOROP Routine, 42
XQORPHANOPTIONS Menu, 212
XQP46INI Routine, 42
XQP50 Routine, 42
XQRESTRICT Option, 212
XQRIGHTNOW Option, 212
XQSCHK Option, 157, 212
XQSERVER Bulletin, 379
XQSET Routine, 43
XQSHOKEY Option, 213
XQSMD ADD Option, 213
XQSMD BUILD MENU Option, 213
XQSMD BY OPTION Option, 213
XQSMD BY USER Option, 213
XQSMD COPY USER Option, 213
XQSMD EDIT OPTIONS Option, 214
XQSMD LIMITED FM OPTIONS Option, 214
XQSMD MGR Menu, 215
XQSMD REMOVE Option, 215
XQSMD REPLICATE Option, 216
XQSMD Routine, 43
XQSMD SEC OFCR Menu, 216

XQSMD SET PREFIX Option, 216
XQSMD SHOW Option, 216
XQSMD USER MENU, 217
XQSMD1 Routine, 43
XQSMD2 Routine, 43
XQSMD21 Routine, 43
XQSMD3 Routine, 43
XQSMD31 Routine, 43
XQSMD4 Routine, 43
XQSMD5 Routine, 43
XQSMD6 Routine, 43
XQSMDCPY Routine, 43
XQSMDFM Routine, 43
XQSMDFM Security Key, 214, 391
XQSMDP Routine, 43
XQSPING Option, 158, 217
XQSRV Routine, 43
XQSRV1 Routine, 43
XQSRV2 Routine, 43
XQSRV3 Routine, 43
XQSRV4 Routine, 43
XQSRV5 Routine, 43
XQSTCK Routine, 43
XQSUITE Routine, 43
XQSUITE1 Routine, 43
XQT Routine, 43
XQT1 Routine, 43
XQT2 Routine, 43
XQT3 Routine, 43
XQT4 Routine, 43
XQT5 Routine, 43
XQTKILL Option, 217
XQTLIST Option, 217
XQTNEW Option, 217
XQTOC Routine, 43
XQTRNAM Option, 218
XQTSHO Option, 218
XQTUSER Menu, 218
XQUIT Routine, 43
XQUSR Routine, 43
XQUTL Routine, 44
XT73P113 Routine, 44
XT73P129 Routine, 44
XT73P132 Routine, 44
XT73P133 Routine, 44
XT73P136 Routine, 44
XT73P33 Routine, 44
XT73P34 Routine, 44
XT73P44 Routine, 44
XT73P94 Routine, 44
XT73P98 Routine, 44
XT95POST Routine, 44
XT-BLD RTN LIST Option, 312
XTCM MAIN Menu, 312
XTDEBUG Routine, 44
XTDEBUG1 Routine, 44
XTDEBUG2 Routine, 44
XTDEBUG3 Routine, 44
XTDEBUG4 Routine, 44
XTDEBUG5 Routine, 44
XTDEBUG6 Routine, 44
XTDEBUG7 Routine, 44
XTDEBUG8 Routine, 44
XTECGLO Routine, 44
XTECLIPS Routine, 44
XTECROU Routine, 44
XTEDTVXD Routine, 44
XTER Routine, 44
XTER1 Routine, 44
XTER1A Routine, 44
XTER1A1 Routine, 44
XTER1B Routine, 44
XTER2 Routine, 44
XTERPUR Routine, 45
XTERSUM Routine, 45
XTERSUM1 Routine, 45
XTERSUM3 Routine, 45
XTERSUM4 Routine, 45
XTFC1 Routine, 45
XTFCE Option, 312
XTFCE Routine, 45
XTFCE1 Routine, 45
XTFCR Option, 313
XTHC Routine, 45
XTHC10 Routine, 45, 339
XTHC10A Routine, 45
XTHCDEM Routine, 45
XTHCURL Routine, 45, 339
XTHCUTL Routine, 45, 339
XTID Routine, 45, 339
XTID1 Routine, 45
XTIDCTX Routine, 45

XTIDSET Routine, 45
XTIDTBL Routine, 45
XTIDTERM Routine, 45
XTIDTRM Routine, 45, 340
XTKERM1 Routine, 45
XTKERM2 Routine, 45
XTKERM4 Routine, 340
XT-KERMIT EDIT Option, 313
XT-KERMIT MENU, 158, 313
XT-KERMIT RECEIVE Option, 313
XTKERMIT Routine, 340
XT-KERMIT SEND Option, 313
XT-KERMIT SPOOL DL Option, 158, 313
XTLATSET Option, 314
XTLATSET Routine, 45
XTLKKWL Routine, 340
XTLKLKUP Option, 316
XTLKMGR Routine, 340
XTLKMODKY Option, 316
XTLKMODPARK Option, 316
XTLKMODPARS Option, 19, 317
XTLKMODSH Option, 317
XTLKMODSY Option, 317
XTLKMODUTL Menu, 317
XTLKPRTUTL Option, 317
XTLKUSER2 Menu, 317
XTLKUTILITIES Menu, 317
XTLKZMGR Security Key, 316, 317, 318, 391
XTLKZUSER Security Key, 391
XTMENU Menu, 318
XTMLOG Routine, 45
XTMLOG1 Routine, 45
XTMLOPAR Routine, 45
XTMLOSKT Routine, 45
XTMOVE Option, 318
XTMOVE-IN Option, 318
XTMP Global, 180
XTMRPAR1 Routine, 45
XTMRPAR2 Routine, 45
XTMRPRNT Routine, 45
XTMUNIT Routine, 46
XT-NUMBER BASE CHANGER Option, 319
XTOOLS Menu, 319
XT-OPTION TEST Option, 320
XTPMKPCF Routine, 46
XTPMKPP Routine, 46
XTPMKPTC Routine, 46
XTPMNEX7 Routine, 46
XTPMSTA2 Routine, 46
XTPOST Routine, 46
XT-PURGE ERRORS Option, 320
XTQUEUABLE OPTIONS Menu, 320
XTRCMP Routine, 46
XTRDEL Option, 320
XTRGRPE Option, 320
XTRMON Bulletin, 380
XTRMON Routine, 46
XTRMONITOR Option, 321
XT-ROUTINE COMPARE Option, 321
XT-RTN CS EDT Option, 321
XT-RTN CS UPDATE Option, 322
XTRUTL Routine, 46
XTRUTL1 Routine, 46
XTRUTL2 Routine, 46
XTSUMBLD Option, 322
XTSUMBLD Routine, 46
XTSUMBLD-CHECK Option, 322
XTSUMCK Routine, 46
XTSUMCK1 Routine, 46
XTV EDIT VERIF PACKAGE Option, 322
XTV GLOBAL CHANGES (#8991.2) File, 68, 93
XTV MENU, 322
XTV ROUTINE CHANGES (#8991) File, 68, 93
XTV VERIFICATION PACKAGE (#8991.19) File, 68, 93
XT-VARIABLE CHANGER Option, 323
XT-VERSION NUMBER Option, 323
XTVG COMPARE Option, 323
XTVG UPDATE Option, 324
XTVNUM Routine, 46
XTVR COMPARE Option, 93, 324, 326
XTVR MENU, 324
XTVR MOST RECENT CHANGE DATE Option, 324
XTVR RESTORE PREV ROUTINE Option, 325
XTVR UPDATE Option, 93, 325
XTVRC1 Routine, 46

XTVRC1A Routine, 46
XU BLOCK COUNT Option, 218
XU CHECKSUM LOAD Option, 218
XU CHECKSUM REPORT Option, 218
XU DA EDIT Option, 219
XU EPC EDIT RPC, 353
XU EPCS DISUSER EXP DATE Option, 161, 162, 220
XU EPCS DISUSER PRIVS Option, 161, 163, 220
XU EPCS DISUSER XDATE EXPIRES Option, 161, 163, 221
XU EPCS EDIT DATA Option, 221
XU EPCS EDIT DEA# AND XDATE Option, 162, 222
XU EPCS EXP DATE Option, 161, 162, 222
XU EPCS LOGICAL ACCESS Option, 161, 164, 223
XU EPCS Option, 219
XU EPCS PRINT EDIT AUDIT Option, 161, 164, 224
XU EPCS PRIVS Option, 161, 163, 224
XU EPCS PSDRPH AUDIT Option, 161, 164, 225
XU EPCS PSDRPH KEY Option, 162, 164, 227
XU EPCS PSDRPH Option, 161, 163, 225
XU EPCS SET PARMS Option, 161, 164, 227
XU EPCS UTILITY FUNCTIONS Menu, 161, 227
XU EPCS XDATE EXPIRES Option, 161, 162, 228
XU FINDUSER Option, 229
XU FIRST LINE PRINT Option, 229
XU IP RELEASE Option, 7, 229
XU NOP MENU, 229
XU OPTION QUEUE Option, 230
XU OPTION START Option, 230
XU PROC CNT CLUP Option, 230
XU SEC OFCR Menu, 231
XU SID ASK Option, 231
XU SID EDIT Option, 231
XU SID STARTUP Option, 232
XU SIG BLOCK DISABLE Parameter, 13, 389, 390
XU SITE LOCKOUT Option, 7, 232
XU SWITCH UCI Option, 232
XU USER ADD Option, 232
XU USER CHANGE Option, 233
XU USER SIGN-ON Option, 156, 233
XU USER START-UP Option, 156, 234
XU USER TERMINATE Option, 156, 235
XU-486 MENU COPY Option, 236
XU522 Parameter, 14
XU594 Parameter, 14
XU645 Parameter, 14
XU8343P Routine, 46
XU8343Q Routine, 46
XU8343R Routine, 46
XU8343S Routine, 46
XU8375P Routine, 46
XU8P125 Routine, 46
XU8P132 Routine, 46
XU8P1321 Routine, 46
XU8P1322 Routine, 46
XU8P135 Routine, 46
XU8P137 Routine, 46
XU8P204 Routine, 46
XU8P246 Routine, 47
XU8P260 Routine, 47
XU8P264 Routine, 47
XU8P264A Routine, 47
XU8P292 Routine, 47
XU8P295 Routine, 47
XU8P297 Routine, 47
XU8P307 Routine, 47
XU8P314 Routine, 47
XU8P317 Routine, 47
XU8P324 Routine, 47
XU8P327 Routine, 47
XU8P328 Routine, 47
XU8P328A Routine, 47
XU8P328B Routine, 47
XU8P328C Routine, 47
XU8P328D Routine, 47
XU8P330X Routine, 47
XU8P332 Routine, 47
XU8P334 Routine, 47
XU8P344 Routine, 47

XU8P352 Routine, 47
XU8P354 Routine, 47
XU8P356 Routine, 47
XU8P360 Routine, 47
XU8P365 Routine, 47
XU8P369 Routine, 47
XU8P370 Routine, 47
XU8P373 Routine, 47
XU8P377 Routine, 47
XU8P377D Routine, 48
XU8P378 Routine, 48
XU8P378A Routine, 48
XU8P378B Routine, 48
XU8P378C Routine, 48
XU8P378E Routine, 48
XU8P381 Routine, 48
XU8P386 Routine, 48
XU8P387 Routine, 48
XU8P387X Routine, 48
XU8P410 Routine, 48
XU8P413 Routine, 48
XU8P420 Routine, 48
XU8P426 Routine, 48
XU8P428 Routine, 48
XU8P432 Routine, 48
XU8P436 Routine, 48
XU8P43P Routine, 48
XU8P440 Routine, 48
XU8P444 Routine, 48
XU8P446 Routine, 48
XU8P452 Routine, 48
XU8P453 Routine, 48
XU8P455 Routine, 48
XU8P459 Routine, 48
XU8P463 Routine, 48
XU8P466 Routine, 49
XU8P467 Routine, 49
XU8P467A Routine, 49
XU8P469 Routine, 49
XU8P480 Routine, 49
XU8P481 Routine, 49
XU8P483 Routine, 49
XU8P487 Routine, 49
XU8P497 Routine, 49
XU8P497A Routine, 49
XU8P499 Routine, 49
XU8P504 Routine, 49
XU8P509 Routine, 49
XU8P509A Routine, 49
XU8P509B Routine, 49
XU8P509C Routine, 49
XU8P509D Routine, 49
XU8P511 Routine, 49
XU8P514 Routine, 49
XU8P518 Routine, 49
XU8P524 Routine, 49
XU8P531 Routine, 49
XU8P531A Routine, 49
XU8P531B Routine, 49
XU8P536 Routine, 49
XU8P540 Routine, 49
XU8P541 Routine, 49
XU8P541A Routine, 49
XU8P543 Routine, 49
XU8P545 Routine, 49
XU8P545A Routine, 49
XU8P546 Routine, 50
XU8P560 Routine, 50
XU8P571 Routine, 50
XU8P572 Routine, 50
XU8P580 Routine, 50
XU8P581 Routine, 50
XU8P582 Routine, 50
XU8P584 Routine, 50
XU8P585 Routine, 50
XU8P586 Routine, 50
XU8P591 Routine, 50
XU8P598 Routine, 50
XU8P599 Routine, 50
XU8P601 Routine, 50
XU8P601A Routine, 50
XU8P601B Routine, 50
XU8P604 Routine, 50
XU8P608 Routine, 50
XU8P608B Routine, 50
XU8P616 Routine, 50
XU8P629 Routine, 50
XU8P638 Routine, 50
XU8P672E Routine, 50
XU8P689 Routine, 50
XU8PATCH661POST Routine, 50
XU8PE689 Routine, 50

XUA4A7 Routine, 50
XUA4A71 Routine, 50, 340
XUA4A72 Routine, 51, 341
XUA4A73 Routine, 51
XUADD Security Key, 284
XUADISP Menu, 237
XUAF4 Routine, 51, 341
XUAPURGE Routine, 51
XUARCHIVE Security Key, 391
XUAUDIT MAINT Menu, 237
XUAUDIT MENU, 238
XUAUDIT Option, 16, 237
XUAUDIT RPT Menu, 238
XUAUDITING Security Key, 368, 391
XUAUTHOR Security Key, 206, 391
XUAUTODEACTIVATE Option, 238
XUBA Routine, 51
XUCERT Routine, 51
XUCERT1 Routine, 51
XUCHANGE Option, 239
XUCIDTM Routine, 26, 51
XUCIGTM Routine, 51
XUCIMSM Routine, 26, 51
XUCIMSQ Routine, 26, 51
XUCIONT Routine, 51
XUCIVXD Routine, 26, 51
XU-CLINICAL ACTIVE TRAINEE Option, 240
XU-CLINICAL INACTIVE TRAINEE Option, 240
XU-CLINICAL LOCAL REPORTS Menu, 240
XU-CLINICAL TRAINEE COUNT Option, 241
XU-CLINICAL TRAINEE DB COUNT Option, 241
XU-CLINICAL TRAINEE EDIT DB COUNT Option, 241
XU-CLINICAL TRAINEE INQUIRY Option, 241
XU-CLINICAL TRAINEE LIST Option, 241
XU-CLINICAL TRAINEE MENU, 242
XU-CLINICAL TRAINEE REPORTS Menu, 242
XU-CLINICAL TRAINEE TRANSA Option, 242
XU-CLINICAL TRAINEE TRANSB Option, 242
XU-CLINICAL TRAINEE TRANSC Option, 242
XU-CLINICAL TRANS REPORTS Menu, 243
XUCM TASK NIT Option, 24
XUCM TASK VPM, 24
XUCMNIT Routine, 51
XUCMNIT1 Routine, 51
XUCMNIT2 Routine, 51
XUCMNIT4 Routine, 51
XUCMNT3A Routine, 51
XUCMPA Routine, 51
XUCMPR17 Routine, 51
XUCMVPI Routine, 51
XUCMVPM Routine, 51
XUCMVPM1 Routine, 51
XUCMXDR Routine, 51
XUCMXUTL Routine, 51
XUCOMMAND Menu, 107, 151, 243
XUCONTINUE Option, 244
XUCORE Menu, 107, 111, 244
XUCS1E Routine, 51
XUCS1R Routine, 51
XUCS1RB Routine, 52
XUCS2E Routine, 52
XUCS2R Routine, 52
XUCS2RB Routine, 52
XUCS4E Routine, 52
XUCS4R Routine, 52
XUCS4RB Routine, 52
XUCS6R Routine, 52
XUCS8E Routine, 52
XUCS8R Routine, 52
XUCS8RB Routine, 52
XUCS8RG Routine, 52
XUCSCDE Routine, 52
XUCSCDG Routine, 52
XUCSCDR Routine, 52
XUCSCDRB Routine, 52
XUCSPRG Routine, 52
XUCSRV Routine, 52
XUCSTM Routine, 52

XUCSTME Routine, 52
XUCSUTL3 Routine, 52
XUCSXCD Routine, 52
XUCSXDR Routine, 52
XUCSXGR Routine, 52
XUCSXRT Routine, 52
XUCSXST Routine, 52
XUDEV LINEPORT ADDR CURRENT Option, 246
XUDEV LINEPORT ADDR EDIT Option, 246
XUDEV LINEPORT ADDR RPT Option, 246
XUDEV Option, 246
XUDEV RES-CLEAR Option, 246
XUDEV RES-ONE Option, 246
XUDEVEDIT Menu, 247
XUDEVEDITALL Option, 247
XUDEVEDITCHAN Option, 247
XUDEVEDITHFS Option, 247
XUDEVEDITLPD Option, 247
XUDEVEDITMT Option, 247
XUDEVEDITRES Option, 247
XUDEVEDITSPL Option, 248
XUDEVEDITSYNC Option, 248
XUDEVEDITTRM Option, 248
XUDHGUI Routine, 52, 341
XUDHRES Routine, 52
XUDHSET Routine, 52, 342
XUDHUTL Routine, 52
XUDIACCESS FOR ISO Menu, 248
XUDISPLAY Option, 248
XUEDIT CHARACTERISTICS Parameter, 10
XUEDITOPT Option, 39, 85, 248
XUEPCS DATA (#8991.6) File, 94, 164, 223
XUEPCS DATA FILE (#8991.6) File, 68
XUEPCS PSDRPH AUDIT (#8991.7) File, 94, 164, 225
XUEPCS PSDRPH AUDIT FILE (#8991.7) File, 68
XUEPCS REPORT DEVICE parameter, 223, 226
XUEPCS REPORT DEVICE Parameter, 14
XUEPCSED Routine, 52
XUEPCSEDIT Security Key, 164, 221, 227, 391
XUEPCSRT Routine, 53
XUEPCSU1 Routine, 53
XUEPCSUT Routine, 53
XUEPCSVR Routine, 53
XUER EDIT PARAMS Option, 249
XUER NOTE Option, 249
XUER PURGE ERROR SUMMARY Option, 249
XUER SUMMARY INQUIRE Option, 249
XUER SUMMARY Menu, 249
XUER SUMMARY MOST RECENT Option, 249
XUER SUMMARY TOP Option, 250
XUER UPDATE DEMAND/BATCH Option, 250
XUERRS Menu, 250
XUERTRAP Option, 44, 251
XUERTRP AUTO CLEAN Option, 251
XUERTRP CLEAN Option, 251
XUERTRP PRINT ERRS Option, 251
XUERTRP PRINT T-1 1 ERR Option, 251
XUERTRP PRINT T-1 2 ERR Option, 252
XUERTRP TYPE Option, 252
XUESSO1 Routine, 53
XUESSO2 Routine, 53
XUESSO3 Routine, 53
XUESSO4 Routine, 53
XUEXISTING USER Parameter, 10
XUEXKEY Option, 252
XUEXKEY Security Key, 252, 391
XUFAIL Option, 252
XUFDEV Option, 253
XUFDISP Option, 253
XUFILE Routine, 53
XUFILE0 Routine, 53
XUFILE1 Routine, 53
XUFILE3 Routine, 53
XUFILEACCESS Option, 253
XUFILEACCESS SEC OFCR Menu, 254
XUFILECOPY Option, 254
XUFILEDELETE Option, 255
XUFILEGRAM Security Key, 368, 391
XUFILEGRANT Option, 255
XUFILEINQUIRY Option, 255

XUFILELIST Option, 255
XUFILEPRINT Option, 255
XUFILERANGEASSIGN Option, 255
XUFILEREMOVEALL Option, 256
XUFILESETDELETE Option, 256
XUFILESINGLEADD Option, 256
XUFPURGE Option, 256
XUGET Routine, 53
XUGOT Routine, 53
XUGOT1 Routine, 53
XUHALT Option, 256
XUHUI Routine, 53, 342
XUHUI236 Routine, 53
XUHUIHL7 Routine, 53
XUHUIMSG Routine, 53
XUIAMPRU Routine, 53
XUIAMXML Routine, 53
XU-INACTIVE PERSON CLASS USERS Option, 256
XUINCON Routine, 53
XUINDEX Option, 257
XUINDEX2 Option, 257
XUINEACH Routine, 53
XUINEND Routine, 53
XUINENV Routine, 53
XUINOK Routine, 54
XUINP275 Routine, 54
XUINP313 Routine, 54
XUINP337 Routine, 54
XUINP348 Routine, 54
XUINPCH Routine, 54
XUINPCH2 Routine, 54
XUINPCH3 Routine, 54
XUINPCH4 Routine, 54
XUINPRE Routine, 54
XUINPRE1 Routine, 54
XUINQUIRE Option, 257
XU-INSTALL-DONE Bulletin, 380
XU-INSTITUTION-DEA Option, 257
XU-INSTITUTION-E Option, 257
XUINTSK Routine, 54
XUINTSK1 Routine, 54
XUINTSK2 Routine, 54
XUKERNEL Menu, 257
XUKEYALL Option, 258
XUKEYDEALL Option, 258
XUKEYEDIT Option, 258
XUKEYMGMT Menu, 258
XULIST Option, 259
XULM DISPLAY SYSTEM LOCKS Protocol, 156
XULM EDIT LOCK DICTIONARY Option, 259
XULM EDIT PARAMETERS Option, 259
XULM GO TO Protocol, 157
XULM LOCK DICTIONARY (#8993) File, 67
XULM LOCK MANAGER LOG (#8993.2) File, 67
XULM LOCK MANAGER MENU, 259
XULM LOCK MANAGER Option, 259
XULM LOCK MANAGER PARAMETERS (#8993.1) File, 67
XULM LOCK MANAGER Protocol, 156
XULM LOCKS Security Key, 391
XULM PURGE LOCK MANAGER LOG Option, 260
XULM REFRESH LOCKS Protocol, 156
XULM Routine, 54
XULM RPC BROKER CONTEXT Option, 260
XULM SELECT LOCK Protocol, 157
XULM SELECT NODE Protocol, 157
XULM SINGLE LOCK MENU Protocol, 157
XULM SORT/SCREEN LOCKS Protocol, 157
XULM SYSTEM LOCKS Security Key, 391
XULM TERMINATE PROCESS Protocol, 157
XULM VIEW LOCK MANAGER LOG Option, 261
XULM1 Routine, 54
XULMLD Routine, 54
XULMLOG Routine, 54
XULMOUT Routine, 54
XULMP Routine, 54
XULMRPC Routine, 54
XULMU Routine, 54, 342
XULMUI Routine, 54
XULMUI1 Routine, 54

XUMAINT Menu, 85, 107, 108, 114, 261
XUMF DMIS ID LOAD Option, 262
XUMF ERROR Bulletin, 381
XUMF IMF ADD EDIT Option, 262
XUMF IMF EDIT STATUS Option, 263
XUMF INSTITUTION Bulletin, 381
XUMF INSTITUTION Option, 263
XUMF INSTITUTION Security Key, 262, 263, 264, 265, 392
XUMF LOAD INSTITUTION Option, 264
XUMF LOAD NPI Option, 265
XUMF Routine, 54, 342
XUMF0 Routine, 54
XUMF04 Routine, 54
XUMF04H Routine, 54
XUMF04P Routine, 54
XUMF04Q Routine, 54
XUMF1H Routine, 54
XUMF218 Routine, 55
XUMF218A Routine, 55
XUMF218Z Routine, 55
XUMF261P Routine, 55
XUMF299 Routine, 55
XUMF333 Routine, 55
XUMF335 clean 4.1 and 4 Option, 265
XUMF382 Routine, 55
XUMF390 Routine, 55
XUMF397 Routine, 55
XUMF4 Routine, 55
XUMF416 Routine, 55
XUMF479P Routine, 55
XUMF4A Routine, 55
XUMF4H Routine, 55
XUMF4L0 Routine, 55
XUMF4L1 Routine, 55
XUMF4L2 Routine, 55
XUMF502 Routine, 55
XUMF502P Routine, 55
XUMF512F Routine, 55
XUMF555P Routine, 55
XUMF5AT Routine, 55
XUMF5AU Routine, 55
XUMF5BYT Routine, 55
XUMF5I Routine, 55
XUMF5II Routine, 55
XUMF654 Routine, 55
XUMF654P Routine, 55
XUMFEIMF Routine, 55
XUMFENV Routine, 55
XUMFH Routine, 55
XUMFH4 Routine, 56
XUMFHM Routine, 56
XUMFHPQ Routine, 56
XUMFHPR Routine, 56
XUMFI Routine, 56, 342
XUMFI0 Routine, 56
XUMFMD5 Routine, 56
XUMFMFE Routine, 56
XUMFMFI Routine, 56
XUMFP Routine, 56, 342
XUMFP4 Routine, 56
XUMFP4C Routine, 56
XUMFP4Z Routine, 56
XUMFP512 Routine, 56
XUMFP513 Routine, 56
XUMFPFT Routine, 56
XUMFPMFS Routine, 56
XUMFPOST Routine, 56
XUMFPZL7 Routine, 56
XUMFQR Routine, 56
XUMFR Routine, 56
XUMFX Routine, 56
XUMFXACK Routine, 56
XUMFXH Routine, 56
XUMFXHL7 Routine, 56
XUMFXI Routine, 56
XUMFXP Routine, 56
XUMFXP1 Routine, 56
XUMFXP2 Routine, 56
XUMFXR Routine, 56
XUMGR Security Key, 165, 231, 274, 284, 292, 315, 368, 392
XUMNACCESS Menu, 265
XUMPI Routine, 56
XUMVIENU Routine, 57
XUMVINPA Routine, 57
XUMVINPU Routine, 57
XUNEW USER Parameter, 11
XUOAA SEND HL7 MESSAGE Option, 265
XUOAAHL7 Routine, 57
XUOAAUTL Routine, 57

XUOPTDISP Option, 266
XUOPTLOG Option, 266
XUOPTPURGE Option, 266
XUOPTUSER Menu, 266
XUOPTWHO Option, 266
XURES Security Key, 391, 392
XUOUT Option, 267
XUP Routine, 57, 342
XUP468 Routine, 57
XUP522 Routine, 57
XUP569 Routine, 57
XUPARAM Routine, 57, 342
XUPCF Routine, 57
XUPCH117 Routine, 57
XUPCSRVR Routine, 57
XU-PERSON CLASS EDIT Option, 267
XU-PERSON CLASS REMOVE Option, 267
XU-PING-SERVER Option, 158, 267
XUPMDISP Option, 267
XUPMPURGE Option, 268
XUPOS259 Routine, 57
XUPR RTN CHKSUM Option, 268
XUPR RTN EDIT Option, 268
XUPR RTN PATCH Option, 269
XUPRE247 Routine, 57
XUPRGL Option, 269
XUPRINT Option, 269
XUPROD Routine, 57, 342
XUPROG Menu, 107, 124, 269
XUPROG Security Key, 368, 392
XUPROGMODE Bulletin, 383
XUPROGMODE Option, 270
XUPROGMODE Security Key, 204, 251, 269, 270, 318, 319, 320, 321, 323, 368, 392
XUPROTOCOL EDIT Option, 270
XUPRROU Option, 270
XUPR-ROUTINE-TOOLS Menu, 270
XUPR-RTN-TAPE-CMP Option, 271
XUPS ASSESSMENT DETAIL Option, 271
XUPS ASSESSMENT STATS Option, 272
XUPS NPF CLEANUP MAIN MENU, 272
XUPS PERSONQUERY RPC, 354
XUPS PREUPDATE NPF REPORTS Option, 273
XUPS Routine, 57, 342
XUPS UPDATE NEW PERSON FILE DATA Option, 273
XUPS UPDATE NEW PERSON FILE Option, 273
XUPS VISTALINK Option, 273
XUPS309P Routine, 57
XUPSB01 Routine, 57
XUPSCLR Routine, 57
XUPSGS Routine, 57
XUPSHL7B Routine, 57
XUPSNAME Routine, 57
XUPSNM1 Routine, 57
XUPSORG Routine, 57
XUPSPAID Routine, 57
XUPSPD1 Routine, 57
XUPSPRA Routine, 57
XUPSQRY Routine, 57, 342
XUPSSTF Routine, 58
XUPSUTL1 Routine, 58
XUPSUTQ Routine, 58
XUREACT USER Parameter, 11
XURELOG Option, 273
XURESJOB Option, 274
XUROUTINE IN Option, 274
XUROUTINE OUT Option, 274
XUROUTINES Menu, 274
XURTL Routine, 58
XURTL1 Routine, 58
XURTL2 Routine, 58
XURTL3 Routine, 58
XURTLC Routine, 58
XURTLK Routine, 58
XUS ACCESS CODE VIOLATION Bulletin, 383
XUS ALLKEYS RPC, 355
XUS AV CODE RPC, 355
XUS AV HELP RPC, 355
XUS CCOW VAULT PARAM Parameter, 14
XUS CCOW VAULT PARAM RPC, 355
XUS CVC RPC, 355
XUS DIVISION GET RPC, 355
XUS DIVISION SET RPC, 356

XUS GET CCOW TOKEN RPC, 356
XUS GET TOKEN RPC, 356
XUS GET USER INFO RPC, 356
XUS GET VARIABLE VALUE RPC, 362
XUS GET VISITOR RPC, 356
XUS INTRO MSG RPC, 356
XUS KAAJEE PROXY LOGON Option, 275
XUS KAAJEE WEB LOGON Option, 275
XUS KEY CHECK RPC, 357
XUS NPI CBO LIST Option, 275
XUS NPI ENTER NPI FOR PROVIDER Option, 275
XUS NPI EXEMPT PROVIDER Option, 275
XUS NPI EXTRACT REPORT Option, 276
XUS NPI LOCAL REPORTS Option, 276
XUS NPI MENU, 276
XUS NPI PROVIDER SELF ENTRY Option, 276
XUS NPI SIGNON CHECK Option, 277
XUS PKI GET UPN RPC, 361
XUS PKI SET UPN RPC, 361
XUS PROC CNT CLUP Option, 277
XUS Process count cleanup Option, 230, 277
XUS Routine, 58, 342
XUS SEND KEYS RPC, 361
XUS SET VISITOR RPC, 362
XUS SIGNON Option, 277
XUS SIGNON SETUP RPC, 362
XUS1 Routine, 58
XUS11 Routine, 58
XUS1A Routine, 58, 156, 342
XUS1B Routine, 58
XUS2 Routine, 58, 342
XUS3 Routine, 58
XUS3A Routine, 58
XUS4 Routine, 58
XUS5 Routine, 58
XUS6 Routine, 58
XUS9 Routine, 58
XUS91 Routine, 58
XUSAML Routine, 58
XUSAP PROXY LIST Option, 278
XUSAP Routine, 58, 342
XUSAP1 Routine, 58
XUSAZONK Option, 278
XUSBSE1 Routine, 58, 65
XUSBSE2 Routine, 58, 65
XUSBSEUT Routine, 65
XUSC LIST Option, 278
XUSC1 DEBUG Parameter, 15
XUSC1 Routine, 58
XUSC1C Routine, 58
XUSC1S Routine, 58
XUSC1S1 Routine, 58
XUSCLEAN Routine, 59, 343
XUSCNT Routine, 59
XUSCREENMAN Security Key, 368, 392
XUSCZONK Option, 278
XUSEC ISO ACTIVE USER EXTRACT Option, 279
XUSEC ISO Q TERMINATION REPORT Option, 279
XUSEC ISO TERMINATION REPORT Option, 279
XUSEC UP ARROW TERM REPORT Option, 279
XUSECAD Routine, 59
XUSECBUL Routine, 59
XUSECURITY Bulletin, 383
XUSER COMPUTER ACCOUNT Parameter, 11
XUSER DIV CHG Option, 281
XUSER FILE MGR Menu, 281
XUSER KEY RE-INDEX Option, 281
XUSER Menu, 107, 145, 267, 280, 390
XUSER PC BUILD EDIT Option, 282
XUSER PC BUILD Option, 281
XUSER Routine, 59, 343
XUSER SEC OFCR Menu, 282
XUSER1 Routine, 59
XUSER2 Routine, 59
XUSER3 Routine, 59
XUSERAOLD Option, 283
XUSERBLK Option, 283
XUSERBLK Routine, 59
XUSER-CLEAR-ALL Option, 284
XUSERCLR Option, 284
XUSERDEAC Bulletin, 384
XUSERDEACT Option, 284

XUSERDIS Bulletin, 384
XUSEREDIT Option, 10, 106, 285
XUSEREDITSELF Option, 10, 285
XUSEREDT Routine, 59
XUSERINQ Option, 285
XUSERINT Option, 286
XUSERLIST Option, 286
XUSERNEW Option, 11, 106, 286
XUSERNEW Routine, 59, 344
XUSERP Routine, 59, 156
XUSERPOST Option, 286
XUSERPURGEATT Option, 286
XUSERREACT Option, 11, 106, 286
XUSERREL Option, 287
XUSERREPRINT Option, 287
XUSERTERM Bulletin, 384
XUSERTOOLS Menu, 287, 389
XUSERVDISP Option, 287
XUSERWHERE Option, 288
XUSESIG BLOCK Option, 288, 389, 390, 392
XUSESIG CLEAR Option, 288
XUSESIG DEG Option, 289
XUSESIG Option, 288, 389, 392
XUSESIG Routine, 59, 344
XUSESIG1 Routine, 59, 344
XUSESIG2 Routine, 59
XUSESIG3 Routine, 59
XUSFACHK Option, 289
XUSFACHK Routine, 59
XUSG Routine, 59
XUSG1 Routine, 59
XUSHOWSSN Security Key, 392
XUSHSH Routine, 59, 344
XUSHSHP Routine, 59, 344
XUSIG Security Key, 13, 59, 389, 390, 392
XUSIGNON Bulletin, 385
XUSITEMGR Menu, 107, 119, 290
XUSITEPARM Option, 16, 17, 290
XUSKAAJ Routine, 59
XUSKAAJ1 Routine, 59
XUSLOCK Bulletin, 385
XUSMGR Routine, 59
XUSNPI QUALIFIED IDENTIFIER Parameter, 15
XUSNPI Routine, 60, 344
XUSNPI1 Routine, 60
XUSNPIDA Routine, 60
XUSNPIE1 Routine, 60
XUSNPIE2 Routine, 60
XUSNPIE3 Routine, 60
XUSNPIED Routine, 60
XUSNPIMTL Security Key, 276, 392
XUSNPIUT Routine, 60
XUSNPIX1 Routine, 60
XUSNPIX2 Routine, 60
XUSNPIX3 Routine, 60
XUSNPIX4 Routine, 60
XUSNPIX5 Routine, 60
XUSNPIXI Routine, 60
XUSNPIXU Routine, 60
XUSP557 Routine, 60
XUSPF200 Security Key, 393
XU-SPL-ALLOW Option, 291
XU-SPL-BROWSE Option, 291
XU-SPL-DELETE Option, 291
XU-SPL-LIST Option, 291
XU-SPL-MAIL Option, 291
XU-SPL-MENU, 291
XU-SPL-MGR Menu, 107, 134, 292
XU-SPL-PRINT Option, 292
XU-SPL-PURGE Option, 7, 18, 292
XU-SPL-SITE Option, 17, 293
XU-SPL-USER Option, 293
XUSPURGE Routine, 60
XUSPY Menu, 107, 135, 293
XUSPY Security Key, 259
XU-SPY-SHOW Option, 294
XUSRA Routine, 60
XUSRB Routine, 60, 65, 345
XUSRB1 Routine, 60, 345
XUSRB2 Routine, 60, 345
XUSRB4 Routine, 60, 345
XUSRB5 Routine, 60
XUSSPKI CRL SERVER Bulletin, 386
XUSSPKI CRL UPLOAD Option, 294
XUSSPKI EDIT Option, 294
XUSSPKI Routine, 60
XUSSPKI SAN Bulletin, 386
XUSSPKI UPN SET Option, 294
XUST Routine, 60
XUST01 Routine, 60

XUST02 Routine, 60
XUST04 Routine, 60
XUST05 Routine, 61
XUST06 Routine, 61
XUST08 Routine, 61
XUST09 Routine, 61
XUST12 Routine, 61
XUST13 Routine, 61
XUST15 Routine, 61
XUST17 Routine, 61
XUST18 Routine, 61
XUST19 Routine, 61
XUST20 Routine, 61
XUST21 Routine, 61
XUST22 Routine, 61
XUST24 Routine, 61
XUST25 Routine, 61
XUST26 Routine, 61
XUST27 Routine, 61
XUST28 Routine, 61
XUST29 Routine, 61
XUST35 Routine, 61
XUSTAT Option, 295
XUSTAT Routine, 61
XUSTAT1 Routine, 61
XUSTAT2 Routine, 61
XUSTATUS Option, 295
XUSTAX Routine, 61, 345
XUSTERM Routine, 61, 156
XUSTERM1 Routine, 61
XUSTERM2 Routine, 61
XUSTIME Bulletin, 387
XUSTZ Routine, 61
XUSTZIP Routine, 61
XUS-XUP SET ERROR TRAP Parameter, 15
XUS-XUP VPE Parameter, 15
XUTERM Option, 295
XUTESTUSER Option, 295
XUTIME Option, 295
XUTIO Menu, 107, 112, 295
XUTLOOPBACK Option, 296
XUTM BACKGROUND PRINT Option, 297
XUTM BACKGROUND RECOMMENDED Option, 297
XUTM BVPAIR Option, 297
XUTM CHECK ENV Option, 297
XUTM CLEAN Option, 297
XUTM DEL Option, 298
XUTM DQ Option, 298
XUTM ERROR DELETE Option, 299
XUTM ERROR LOG CLEAN RANGE Option, 299
XUTM ERROR Menu, 299
XUTM ERROR PURGE TYPE Option, 300
XUTM ERROR SCREEN ADD Option, 300
XUTM ERROR SCREEN EDIT Option, 301
XUTM ERROR SCREEN LIST Option, 301
XUTM ERROR SCREEN REMOVE Option, 302
XUTM ERROR SHOW Option, 302
XUTM INQ Option, 302
XUTM MGR Menu, 107, 142, 302
XUTM PARAMETER EDIT Menu, 303
XUTM PROBLEM CLEAR Option, 303
XUTM PROBLEM DEVICES Bulletin, 387
XUTM PROBLEM DEVICES Option, 303
XUTM QCLEAN Option, 82, 304
XUTM QPROBLEM DEVICES Option, 304
XUTM REPNT Option, 304
XUTM REQ Option, 304
XUTM RESTART Option, 305
XUTM RP Option, 305
XUTM RUN Option, 305
XUTM SCHEDULE Option, 24, 107, 230, 304, 305, 320
XUTM SNAPSHOT Option, 306
XUTM STOP Option, 306
XUTM SYNC Option, 306
XUTM TL CLEAN Option, 306
XUTM UCI Option, 306
XUTM USER Option, 306
XUTM UTIL Menu, 307
XUTM VOLUME Option, 308
XUTM WAIT Option, 308
XUTM ZTMON Option, 308
XUTMD Routine, 61

XUTMD1 Routine, 61
XUTMDEVQ Routine, 62, 345
XUTMDQ Routine, 62
XUTMDQ1 Routine, 62
XUTMG145 Routine, 62
XUTMG146 Routine, 62
XUTMG14P Routine, 62
XUTMG19 Routine, 62
XUTMG43 Routine, 62
XUTMHR Routine, 62
XUTMK Routine, 62
XUTMKA Routine, 62
XUTMKE Routine, 62
XUTMKE1 Routine, 62
XUTMKE2 Routine, 62
XUTMONH Routine, 62
XUTMONH1 Routine, 62
XUTMONH2 Routine, 62
XUTMOPT Routine, 62, 346
XUTMPCH Routine, 62
XUTMQ Routine, 62
XUTMQ0 Routine, 62
XUTMQ1 Routine, 62
XUTMQ2 Routine, 62
XUTMQ3 Routine, 62
XUTMQH Routine, 62
XUTMR Routine, 62
XUTMR1 Routine, 62
XUTMRJD Routine, 62
XUTMRJD1 Routine, 62
XUTMRP Routine, 63
XUTMRP1 Routine, 63
XUTMSYNC Routine, 63
XUTMT Routine, 63
XUTMTA Routine, 63
XUTMTAL Routine, 63
XUTMTD Routine, 63
XUTMTDL Routine, 63
XUTMTED Routine, 63
XUTMTEIO Routine, 63
XUTMTEP Routine, 63
XUTMTES Routine, 63
XUTMTL Routine, 63
XUTMTLD Routine, 63
XUTMTLU Routine, 63
XUTMTP Routine, 63, 346
XUTMTP0 Routine, 63
XUTMTP1 Routine, 63
XUTMTPD Routine, 63
XUTMTPU Routine, 63
XUTMTR1 Routine, 63
XUTMTR2 Routine, 63
XUTMTR3 Routine, 63
XUTMTR4 Routine, 63
XUTMTS Routine, 63
XUTMTU Routine, 63
XUTMTUL Routine, 63
XUTMTZ Routine, 63
XUTMTZ1 Routine, 63
XUTMTZ2 Routine, 63
XUTMTZ3 Routine, 63
XUTMUSE Routine, 64
XUTMUSE1 Routine, 64
XUTMUSE2 Routine, 64
XUTMUSE3 Routine, 64
XUTMUTL Routine, 64
XUTTEST Option, 308
XUUSERACC Option, 108, 308
XUUSERACC1 Option, 308
XUUSERACC2 Option, 309
XUUSERDISP Option, 43, 309
XUUSERHELP Option, 309
XUUSEROPT Option, 309
XUUSERSTATUS Option, 309
XUVERIFY Routine, 64, 346
XUVERSIONEW-HELP Option, 310
XUVISIT Bulletin, 387
XUWORKDY Routine, 64, 346
XUXCTY Routine, 64
XUXPRT Routine, 64
XUXREF Option, 310
XUXREF-2 Option, 310
XUYDEV Routine, 64
XUZUSER Menu, 310
XVIRENV Routine, 65
XVIRPOST Routine, 65

Z

ZIP Code List Option, 175
ZIS4VXD Routine, 26
ZISEDIT Routine, 64
ZISETDTM Routine, 26

ZISETMSM Routine, 26
ZISETVXD Routine, 26
ZISFMSM Routine, 26
ZISFVXD Routine, 27
ZISHMSM Routine, 27
ZISHVXD Routine, 27
ZISPL Routine, 64, 347
ZISPL1 Routine, 64
ZISPL2 Routine, 64
ZISX Routine, 27, 64
ZOSFMSM Routine, 27
ZOSFVXD Routine, 27
ZOSV2VXD Routine, 27
ZOSVMSM Routine, 27
ZOSVVXD Routine, 27
ZTBKCDTM Routine, 27
ZTBKCMSM Routine, 27
ZTBKCVXD Routine, 27
ZTMB Routine, 27, 64
ZTMCHK Routine, 27, 64
ZTMCHK1 Routine, 27, 64
ZTMDCL Routine, 27
ZTMGRSET Routine, 27
ZTMKU Routine, 27, 64
ZTMON Routine, 27, 64
ZTMON1 Routine, 27, 64
ZTMQ Security Key, 298, 305, 393
ZTMQUEUABLE OPTIONS Menu, 107, 150
ZU Routine, 364
ZUA Routine, 27, 64
ZUMSM Routine, 64
ZUVXD Routine, 64