ULTRIX

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Reader's Guide and Master Index

ULTRIX

Reader's Guide and Master Index

Order Number: AA-ME82B-TE

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Product Version: ULTRIX Version 4.0 or higher

This manual describes the documentation kits and documents that are available for your ULTRIX system. The master index helps you find topics in the documentation set.

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1 Reader's Guide

About This Manual

This manual describes the documentation kits and documents that are available for your ULTRIX system. The master index helps you find topics in the ULTRIX documentation set.

Audience

You should read this manual if you use ULTRIX documentation. This manual helps you decide which manuals in the documentation are most useful to you and how you should use those manuals. The master index helps you find a specific topic in the documentation set by pointing you to the pages in the appropriate manual where the topic is discussed. The master index also helps you determine which manual is the best reference for a particular topic.

Organization

This manual contains the following chapters:

Chapter 1	Reader's Guide
	Describes the audience and purpose of each documentation kit. Also describes the manuals that compose each kit and how to order ULTRIX documentation.
Chapter 2	About the Master Index
	Describes the special typographical conventions used in the master index.
Chapter 3	Index
	Provides a master index for books in the ULTRIX documentation set.

Conventions

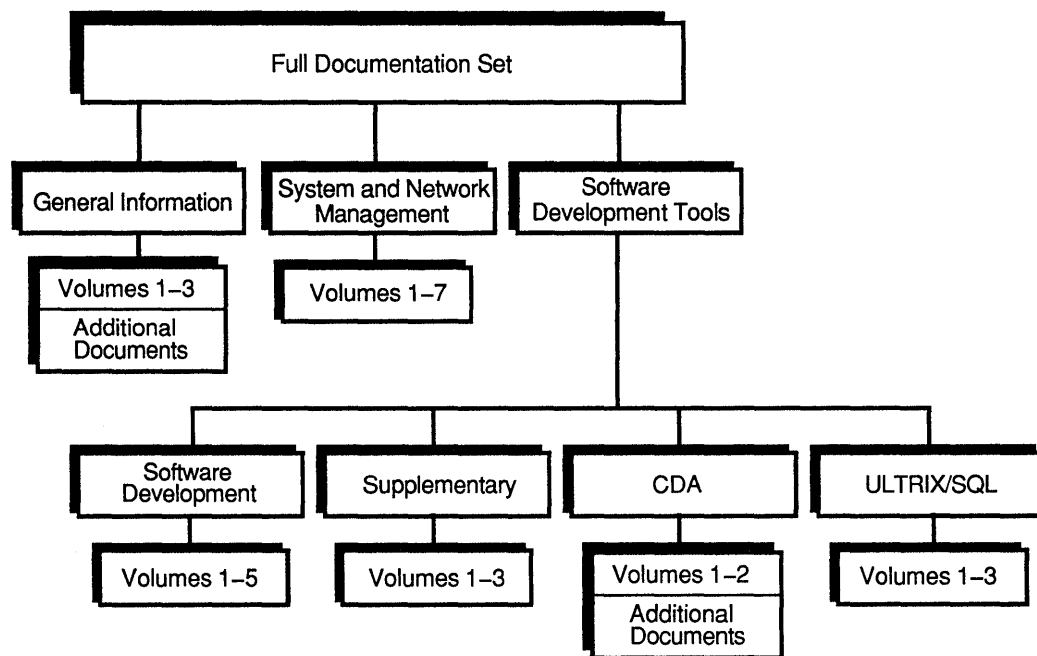The following list details the conventions used in this document. See Chapter 2 for information about conventions used in the master index.

%	The default user prompt is your system name followed by a right angle bracket. In this manual, a percent sign (%) is used to represent this prompt.
user input	This bold typeface is used in interactive examples to indicate typed user input.

The ULTRIX Full Documentation Kit contains all the manuals in the ULTRIX documentation set, with the exception of some installation documents and informational letters. The installation documents and letters are packaged with your ULTRIX software distribution media. Use those documents when you install your ULTRIX system.

The Full Documentation Kit is divided into three smaller kits. Figure 1-1 illustrates how the documentation kit is divided.

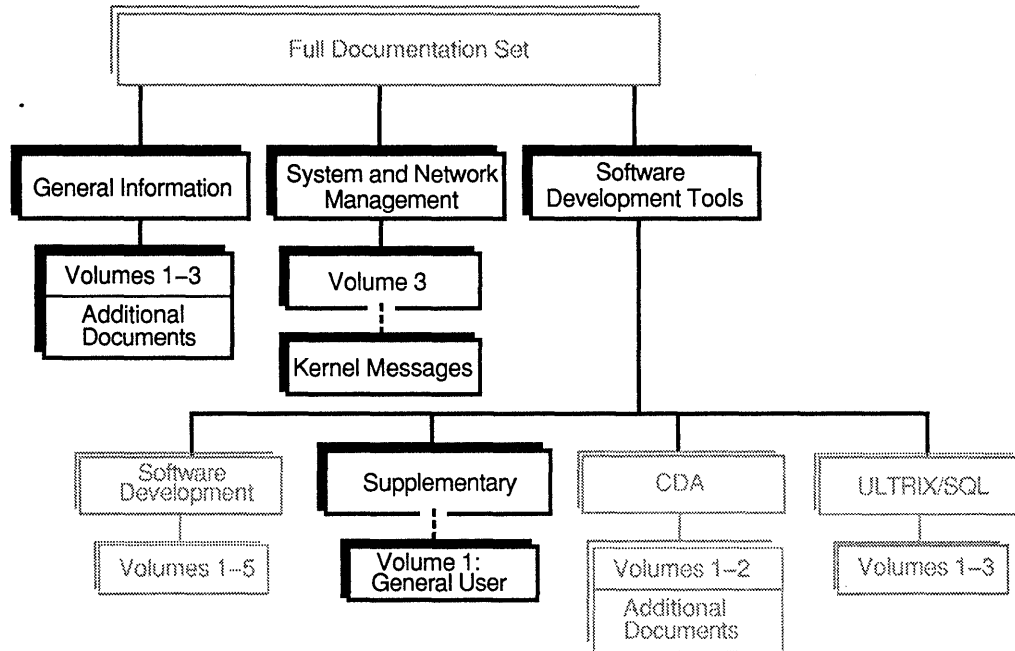**Figure 1-1: Organization of the Full Documentation Kit**

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The three-kit division of the Full Documentation Kit addresses the needs of three audiences:

- General users

  People who are general users (which includes anyone who uses an ULTRIX system) should read and refer to the manuals in the General Information Documentation Kit.

Figure 1-2: Documents of Interest to General Users

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As the figure shows, general users might need to refer the *Kernel Messages Reference Manual* and the *Supplementary Documents, Volume 1: General User* in addition to the manuals in the General Information Documentation Kit. For a description of the *Kernel Messages Reference Manual*, see Section 1.3.3. For a description of the *Supplementary Documents, Volume 1*, see Section 1.4.4.

The following documents are part of the General Information Documentation Kit, but are not part of any volume in that kit:

- *Application Sources Mailer*

  You can return this reply card to receive the *ULTRIX Software Source Book*. The *ULTRIX Software Source Book* contains a list of products that are developed by vendors other than Digital and that run on the ULTRIX system.

- *vi Beginner's Reference Card*

  The card lists `vi` editor commands and their functions and is useful as a quick reference for new users of the `vi` text editor.

- *Release Notes*

  This manual provides information about how the ULTRIX software has changed for this release. The *Release Notes* also describe errors in this version of the software and documentation changes. You should read the *Release Notes* because they contain information that is important to each type of ULTRIX system user and to each release of the ULTRIX software.

The rest of this section describes the volumes in the General Information Documentation Kit.

- *Security Guide for Users*

  This guide describes the security features available in the ULTRIX system. The manual explains how you can protect your account, files, and workstation. You should read this manual if you use an ULTRIX system and are concerned about security issues.

- *Reference Pages Section 7: Macro Packages and Conventions*

  This reference page section contains miscellaneous information. Refer to this section for descriptions of the following:

  - ASCII character codes
  - Mail addressing formats
  - The root file system
  - The `time` command
  - The `man`, `ms`, and `me` macro packages for formatting text

1.2.3 Volume 3: Command Reference

Volume 3A of the General Information Documentation Kit contains the *Reference Pages Section 1: Commands A – L.* Volume 3B contains the *Reference Pages Section 1: Commands M – Z.* Refer to these reference pages for descriptions of ULTRIX commands that are available to all users. (System and network management commands are documented in the *Reference Pages Section 8: Maintenance*.)

1.3 System and Network Management Documentation Kit

System administrators need the System and Network Management Documentation Kit. This documentation kit contains manuals that describe how to configure systems, maintain disks, and set up and use system administration tools. Figure 1-3 illustrates the documents that are useful to system administrators.

- *Guide to System and Network Setup*

  This guide identifies a series of tasks that you must perform to set up your system and establish it on a network. The guide provides step-by-step information on how to complete each task. Although the guide is primarily focused on setting up your system and network, you can use it to modify an existing system or network configuration. You should read this manual if you are a novice system or network administrator.

- *Guide to the Location Broker*

  This guide describes the administration of the Location Broker, a component of DECrpc Version 1.0 that is based on Apollo's Network Computing System (NCS). Location Broker software provides run-time name service support for distributed application programs that use remote procedure calls. You should read this manual if you are a system administrator who sets up the Location Broker or administers systems that run distributed applications.

- *Security Guide for Administrators*

  This guide describes the tasks and considerations associated with managing system security in an ULTRIX environment. You should read this guide if you are responsible for establishing and implementing system security policies on any machine that runs the ULTRIX operating system.

- *Guide to PrintServer Clients*

  This guide explains how to use the PrintServer software to print files on Digital's family of network laser printers. The guide explains the commands you use to print files and manage printer queues. The manual also describes how to customize your print jobs and handle some special types of media. You should read this manual if you use the PrintServer to print files or if you set up and maintain the PrintServer environment.

1.3.2 Volume 2: Local System Management

Volume 2 of the System and Network Management Documentation Kit describes how to manage a standalone, or local, ULTRIX system. This volume contains the following manuals:

- *Guide to Configuration File Maintenance*

  This guide contains information on how to maintain the system configuration file and how to build a new kernel, either automatically or manually. The configuration file provides you with the ability to configure your system to meet your needs. You should read this manual if you are responsible for maintaining an ULTRIX system.

- *Guide to Shutdown and Startup*

  This guide gives information on boot commands and on shutting down and starting up your system. The manual gives the boot command for each processor ULTRIX supports. The guide also explains various ways to shut down your system and the three system startup modes: single-user, multiuser, and conversational. You should read this manual if you are responsible for managing an ULTRIX system.

1.3.4 Volume 4: Network Management

Volume 4 of the System and Network Management Documentation Kit describes managing networks and distributed system services. This volume contains the following manuals:

- *Introduction to Networking and Distributed System Services*

  This guide provides an overview of basic networking concepts and the ULTRIX software's distributed system services. The distributed system services include the BIND/Hesiod and Yellow Pages (YP) naming services, the Network Time Protocol (NTP) and the Timed Synchronization Protocol (TSP) time services, and the Kerberos authentication service. The guide also provides an overview of the Simple Network Management Protocol (SNMP) and the ULTRIX implementation of the SNMP Agent. You should read this guide if you are responsible for maintaining TCP/IP networks.

- *Guide to Ethernet Communications Servers*

  This guide provides information about the tasks and procedures you use to interface the ULTRIX operating system and the communications servers in an Ethernet LAN. The guide also provides information about maintaining these interfaces. You should read this manual if you are responsible for maintaining local area networks on an ULTRIX system.

- *Guide to the Network File System*

  This guide provides information about the Network File System (NFS). NFS is a facility for sharing files in a heterogeneous environment of different processors, operating systems, and networks. The manual provides introductory, setup, and troubleshooting information and helps you develop NFS management procedures. You should read this manual if the system you administer is an NFS server or client.

- *Guide to the BIND/Hesiod Service*

  This guide provides introductory information about the BIND/Hesiod service. The BIND/Hesiod service allows client systems to obtain distributed database information, such as host names, host addresses, and user passwords, from a server. The guide explains how to install and troubleshoot this service. You should read this manual if you are responsible for maintaining utilities, such as the mail utility, on a number of ULTRIX systems.

- *Guide to the Yellow Pages Service*

  This guide gives information about the Yellow Pages (YP) service. YP is a distributed database lookup service that maintains and propagates databases around a network. You should read this manual if you are responsible for managing more than one system connected by a network.

- *Guide to Kerberos*

  This guide describes Kerberos, its setup, and the network programming connections of the kerberos daemon to a Kerberos-authenticated application. Kerberos enhances security by authenticating applications to each other across machine boundaries in a distributed network. ULTRIX Kerberos supports the authentication of commonly networked applications, such as named and auditd. You should read this manual if you are responsible for setting up a network with Kerberos authentication.

pages if you are a programmer who is writing a device driver or a system administrator who is partitioning a disk.

- *Reference Pages Section 5: File Formats*

  These reference pages describe formats of various files and how the system files are used. The files described include assembler and link editor output, system accounting, and file system formats. Refer to this reference page section if you need information about file formats.
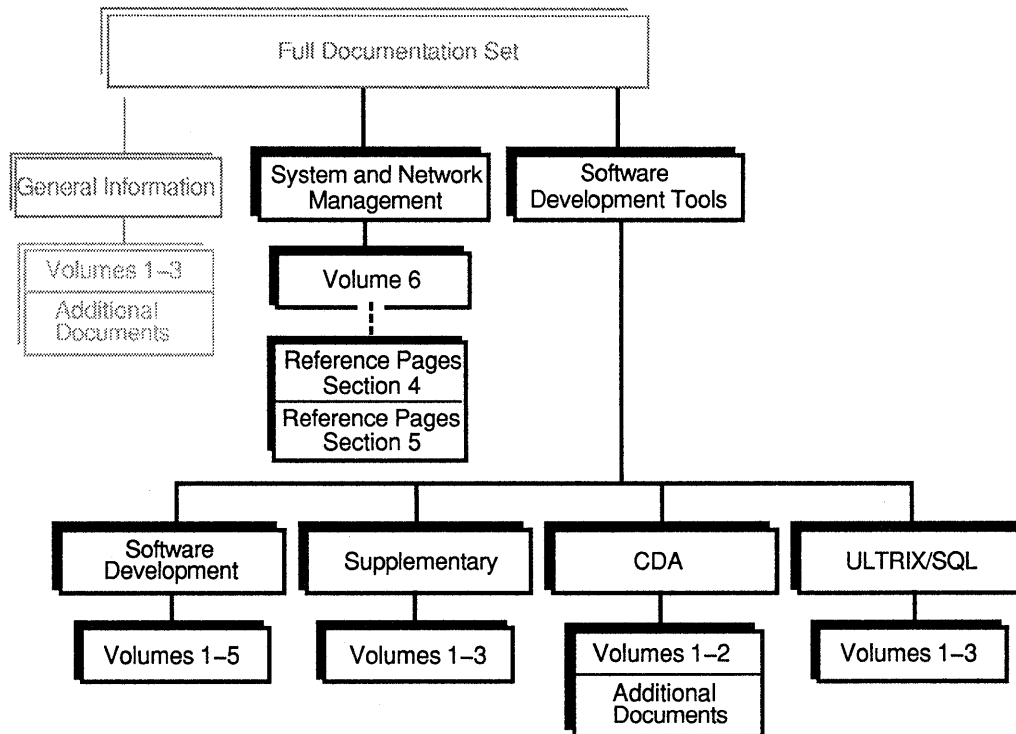
1.3.7 Volume 7: Maintenance Command Reference

Volume 7 of the System and Network Management Documentation Kit contains the *Reference Pages Section 8: Maintenance*. These reference pages describe commands used to create new file systems and to verify the integrity of file systems. Use these reference pages when you perform system administration tasks.

1.4 Software Development Tools Documentation Kit

Software developers need the Software Development Tools Documentation Kit. This kit contains four subkits that provide information programmers might find useful: the Software Development Documentation Kit, the ULTRIX/SQL Documentation Kit, the CDA Documentation Kit, and the Supplementary Documents Kit. Figure 1-4 shows the documents that are useful to programmers.

Figure 1-4: Documents of Interest to Programmers

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Notice that in addition to the manuals in the Software Development Tools Kit, programmers might need the *Reference Pages Section 4: Special Files* and the

- *Guide to Preparing Software for Distribution on ULTRIX Systems*

  This guide contains information about preparing software distribution kits that are compatible with the `setld` utility. The `setld` utility installs and manages ULTRIX software kits and ULTRIX layered product kits. You should read this manual if you prepare software for installation on ULTRIX systems.

- *The Packet Filter: An Efficient Mechanism for User-Level Network Code*

  This article gives information about implementing networking protocols using the packet filter, a kernel-resident, protocol-independent packet demultiplexer. You can write user-level (as opposed to kernel-resident) protocols that use the packet filter to demultiplex received packets. When you use the packet filter, your user-level protocol performs efficiently, and you avoid the development and maintenance issues involved in writing kernel-resident protocols. You should read this article if you develop network protocols.

- *POSIX Conformance Document*

  This manual details how Version 4.0 of the ULTRIX operating system meets the "conforming implementation" requirements for an operating system as defined in the following standards:

  - IEEE 1003.1–1988 (POSIX) standard
  - POSIX Federal Information Processing Standard (FIPS 151–1)
  - ISO DIS 9944

You should read this manual if you want to evaluate the ULTRIX operating system for POSIX conformance.

1.4.1.2 **Volume 2: VAX C Programming** – The second volume of the Software Development Documentation Kit contains the *Guide to VAX C for ULTRIX*. This guide contains information on how to develop and debug VAX C programs on the ULTRIX operating system. The VAX C compiler is written specifically to compile programs that run on VAX hardware. The ULTRIX system version of the VAX C compiler is similar to the VAX C compiler that runs on the VMS system. You should read this manual if you plan to use VAX C.

1.4.1.3 **Volume 3: Network Programming** – Volume 3 of the Software Development Documentation Kit contains manuals that address writing programs that run over a network. This kit contains the following manuals:

- *Guide to Network Programming*

  This guide introduces the architectures and components of the ULTRIX network programming environment. The guide discusses how network layering schemes, the socket interface, and ULTRIX network components can help you write network applications. The manual also describes the programming interface to the Extended SNMP Agent supported by the ULTRIX operating system. You should read this manual if you write network application programs.

–   *ULTRIX/SQL NET User's Guide*

This guide explains how to access remote ULTRIX/SQL databases and use the `netu` utility.

–   *ULTRIX/SQL Database Administrator's Guide*

This guide describes how to create and maintain an ULTRIX/SQL database.

• Volume 2: *ULTRIX/SQL Reference Manual*

This manual describes the ULTRIX/SQL relational database system and query language. The manual also explains how to define terminals to the ULTRIX/SQL, forms-based utilities.

1.4.3 CDA Documentation Kit

The CDA (Compound Document Architecture) Documentation Kit contains user and reference material that describes the CDA Services used to convert, view, and transfer CDA documents and to create CDA-conforming compound document applications and converters. The CDA Services and their documentation are intended for use by system and application programmers.

The CDA Documentation Kit consists of the following manuals:

• *Introduction to the CDA Services*

This manual provides an overview of compound document processing terminology and the various components of CDA. The components of CDA include the CDA Toolkit; the Converter Architecture; the DDIF and DTIF interchange formats; and the command line interface to converting, viewing, and transferring CDA documents.

• *Guide to Creating Compound Documents with the CDA Toolkit*

This guide is a tutorial that describes how to use the CDA Toolkit to create CDA-conforming compound document applications on ULTRIX and VMS systems.

• *CDA Reference Manual Volume 1 and Volume 2*

This manual provides material that supplements the CDA user guides. The reference material describes the DDIF and DTIF aggregates and syntax diagrams; CDA Toolkit and user-defined routines; converter routines; callable DECwindows and character-cell CDA viewer routines; and the ULTRIX and VMS system commands used to convert, view, and transfer CDA documents.

1.4.4 Supplementary Documents Kit

The ULTRIX Supplementary Documents Kit contains three volumes. Each volume contains articles written by computer scientists and program developers at Bell Laboratories and the University of California at Berkeley. Topics range from "getting-started" procedures to the details of the operating system. The articles in the supplementary information provide some information that is unavailable elsewhere. However, you should be aware that the information in some articles is dated.

Some information in the *Supplementary Documents* is provided by other manuals in the ULTRIX documentation set. Where other manuals duplicate information in the

Table 1-1: ULTRIX Documentation Kit Order Numbers

Documentation Kit	Order Number
Full Documentation Kit	QA-VEYAA-GZ
General Information Documentation Kit	QA-VEYAD-GZ
System and Network Management Documentation Kit	QA-VEYAE-GZ
Software Development Tools Documentation Kit	QA-VEYAB-GZ
Software Development Documentation Kit	QA-VEYAG-GZ
ULTRIX/SQL Documentation Kit	QA-YHTAA-GZ
CDA Documentation Kit	QA-VEYAH-GZ
Supplementary Documents Kit	QA-VEYAC-GZ

Each kit includes the manuals, binders to hold each volume, and spine inserts that label the binders.

You can also order individual manuals. In most cases, individual manuals come with only the manual covers and any tabbed dividers. Manuals that have an order number beginning with the letters "AI" include binders and spine inserts, even if ordered individually.

You can order binders to store individual manuals. Digital offers binders for books that are 8 1/2 × 11 inches; the binders have rings that are 1 1/2, 2, or 2 1/2 inches in diameter. Table 1-2 lists the order numbers for the binders.

Table 1-2: 8 1/2× 11-Inch Binder Order Numbers

Binder Ring Size	Order Number
1 1/2-inch ring	99-07642-01
2-inch ring	99-07643-01
2 1/2-inch ring	99-07644-01

Table 1-3 lists the order number for each manual in the Version 4.0 ULTRIX documentation set. Individual manuals listed in this table are revised periodically. If you have a version of the ULTRIX system other than Version 4.0, the manual numbers listed in this table might be not be correct for your system. The best way to be sure that you are ordering the correct manual is to telephone Technical Support before you place your order. Technical Support can help ensure that you order the manuals that apply to your version of the operating system. (The telephone number for Technical Support is listed on the "How to Order Additional Documentation" page.)

Table 1-3: (continued)

Title	Order Number
Guide to VAX C for ULTRIX	AA-ME83B-TE
Guide to X/Open curses Screen Handling	AA-LY27B-TE
Guide to the X/Open Transport Interface	AA-PBKXA-TE
Guide to the Yellow Pages Service	AA-ME00B-TE
Introduction to the CDA Services	AA-PB0JA-TK
Introduction to Networking and Distributed System Services	AA-ME97B-TE
Kernel Messages Reference Manual	AA-PBKUA-TE
The Little Gray Book: An ULTRIX Primer	AA-MG64B-TE
The Packet Filter: An Efficient Mechanism for User-Level Network Code	AA-PBM2A-TE
POSIX Conformance Document	AA-LY25C-TE
Reader's Guide and Master Index	AA-ME82B-TE
Reference Pages Section 1: Commands	AI-PC0WA-TE
Reference Pages Section 2: System Calls	AA-LY15B-TE
Reference Pages Section 3: Library Routines	AA-LY16B-TE
Reference Pages Section 4: Special Files	AA-LY17B-TE
Reference Pages Section 5: File Formats	AA-LY18B-TE
Reference Pages Section 7: Macro Packages and Conventions	AA-LY19B-TE
Reference Pages Section 8: Maintenance	AA-LY20B-TE
Reference Pages for Unsupported Software	AA-MF05B-TE
Release Notes	AA-ME85C-TE
Security Guide for Administrators	AA-PBKTA-TE
Security Guide for Users	AA-PBKQA-TE
Supplementary Documents, Volume 1: General User	AA-MF06A-TE
Supplementary Documents, Volume 2: Programmer	AA-MF07A-TE
Supplementary Documents, Volume 3: System Manager	AA-MF08A-TE
Technical Summary	AA-MG63B-TE
ULTRIX/SQL Database Administrator's Guide	AA-PBZ8A-TE
ULTRIX/SQL Installation Guide	AA-PBZBA-TE
ULTRIX/SQL NET User's Guide	AA-PBZ7A-TE
ULTRIX/SQL Operations Guide	AA-PBZ9A-TE
ULTRIX/SQL Reference Manual	AA-PBZ6A-TE
ULTRIX/SQL Release Notes	AA-PBZAA-TE
vi Beginner's Reference Card	AV-MF10A-TE

The master index helps you locate topics in the ULTRIX documentation by directing you to manuals and page numbers.

The master index entries follow these conventions:

- Each master index page reference is preceded by an abbreviated manual title that indicates which manual discusses the topic. For example, the following master index entry points to page 3–10 in the *Guide to Backup and Restore:*

  fsck command
      checking restored file system with, *Backup* 3–10

  If the subject of the index entry is described in two or more manuals, the page references are alphabetized according to the abbreviated manual title.

  Table 2-1 lists the abbreviated title for each manual in the master index.

- Page references for some figures, tables, and notes are indicated by a letter that appears at the end of the page reference. For example, an "f" appears at the end of figure page references and a "t" appears at the end of table page references. The following example shows an index entry for a note:

  passwd file
      last entry in, *YP* 2–15n

- Each guide in the ULTRIX documentation set is focused on just a few broad topic areas. A guide that focuses on a topic area is the best one to reference for information about that topic. The master index indicates that a particular guide is the best reference for a topic as shown:

  Shutdown command, *RefPages* 8–345
    Best reference, Shutdown
    shutting down multiuser mode, *Shutdown* 1–1e

  In this example, the *Guide to Shutdown and Startup* is identified as the best reference for the topic of the shutdown command.

- Entries in the master index often refer to other entries. For example, the entry for the mknod system call contains this reference:

  mknod system call
    See also mkdir command

  In general, when an entry refers to another entry, the text of the reference is identical to the other entry. In this case, you would look for the entry "mkdir command" in the index.

  Some entries contain references to groups of master index entries or books that are not covered by the master index. In this case, the text of the reference is not identical to any other entries. These references appear in italics as shown:

  file
    See also specific file names
  VAX C
    See also the Guide to VAX C for ULTRIX

Table 2-1: (continued)

Abbreviation	Manual Title
sccs	*Guide to the Source Code Control System*
setld	*Guide to Preparing Software for Distribution on ULTRIX Systems*
Shutdown	*Guide to Shutdown and Startup*
SysEnviron	*Guide to System Environment Setup*
SysNetSetup	*Guide to System and Network Setup*
TechSumm	*Technical Summary*
TermEmul	*Guide to IBM Terminal Emulation for VAX Processors*
uucp	*Guide to the uucp Utility*
X/OpenTransport	*Guide to the X/Open Transport Interface*
YP	*Guide to the Yellow Pages Service*

Insert tabbed divider here.
Then discard this sheet.

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    See me macro package

    See ms macro package

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    initiating communication with, *TermEmul* 1–7n

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    See also 2780d daemon

    See also 2780e daemon

    See also 3780e emulator spooler

    See also BISYNC communications interface

    See also dpv data communications device

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