Software
Product
Description

DIGITAL CLASSIFIED SOFTWARE

PRODUCT NAME: P/OS Hard Disk, Version 2.0   **40.01.05**
Professional 300 Operating System

DESCRIPTION

P/OS Hard Disk is a disk-based, multiprogramming, priority-structured, event-driven operating sytem for hard disk based Professional 300 personal computers.

P/OS Hard Disk includes:
- P/OS Hard Disk User Interface
- P/OS Hard Disk Record Management System
- CORE Graphics Library
- PROSE Editor
- DECnet Support
- EDT
- Subset of DCL
- Professional System Overview

Both the Professional 300 and P/OS support the Digital Multinational Character set. By using eight rather than seven bits to represent a character, the character may be used to define both the (ASCII) characters and other characters including most special Western European Characters. The compose key allows typing of composite characters not represented on the keyboard legend.

Print Services

The print utility allows a file or a list of files to be submitted for printing. Other system utilities and/or application programs may be used while the print utility is operating.

The Print Screen function prints a copy of the screen display image on an LA50-RA/RB or LA100-PC printer. The image can be text, graphics, or a combination of both.
- Abandon Printing
- Continue Printing – Starts printing after the printing was suspended
- Pause printing
- Print File(s)

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- Restart Printing – Restarts interrupted print job at the beginning of the file that was printing when the job stopped
- Supports LA50, LA100, LVP16, LQP02 and non-DIGITAL printers
- Set Printer Characteristics
- Support of a shared printer connected via the "Mini Exchange"
- Virtual Device Meta-File or VDM Support
- DECnet remote files printing

File Utilities

- Backup Disk File(s) – Copies a file or group of files on the hard disk directory to diskette
- Change Protection – Prevents file(s) from being accidentally deleted
- Copy File(s) – Duplicates a file or group of files on a different volume and/or directory and/or node
- Delete File(s)
- Display File(s) Locally or on another node
- Clean Up File(s) – Delete all but most recent version of file
- Rename File(s)
- Restore Disk File(s) – Copies a backup diskette onto the disk
- Show Current Directory
- Show Specified Directory – Locally or on another node
- Show List of Directories

Disk Utilities

- Copy Diskette
- Create Directory
- Delete Directory
- Initialize Diskette – Erases and names a diskette
- Install Application – Places a new application onto the disk and into the menu system
- Remove Application – Deletes an application from the disk
- Show Current Directory
- Show Specified Directory – Locally or on another node
- Show List of Directories
- Specify New Current Directory – Select a different directory in place of the current directory
- Unlock a Locked File – Makes a file available that was locked during an application abort

P/OS Hard Disk User Interface

The P/OS Hard Disk User Interface is a hierarchy of menus and forms through which the user interacts with the P/OS Hard Disk Operating System, utilities, and applications. A menu may be a list of applications, a list of files or directories, or a list of other menus.

Application developers are able to incorporate their applications into the system and the User Interface. To add an application to the system, the menus for that application become part of the hierarchy of menus and forms so that the User Interface for all utilities and applications is consistent.

The HELP function provided by the User Interface may be invoked at any time to view a brief explanation about the point in the menu hierarchy. HELP may be requested while an application or utility is running. The response to HELP is determined by the current program.

P/OS Hard Disk Record Management System

P/OS Hard Disk Record Management System (RMS) is comprised of a set of run time service routines that enable information to be stored, retrieved, updated, and deleted in a consistent and efficient manner on the disk. RMS, the standard record management facility on PDP-11 (RMS-11) and VAX (VAX-11 RMS) systems, provides a high level of file transportability between Professional 300 systems and DIGITAL's PDP-11 and VAX systems

P/OS Hard Disk RMS supports sequential, relative, and multikey indexed sequential (ISAM) file organizations.

Applications use the run time service routines through extended program syntax statements or subroutine calls. The form of the statement is dependent upon the application language interface.

The functional facilities of the run time service routines are:
- Open – Establishes the file access mode and opens it for processing
- Close – Clears processing and releases the access rights
- Read/Get – Moves a logical record into the user program access space
- Write/Put – Inserts a new record into a file
- Rewrite/Update – Moves contents of an altered record into the file
- Delete – Removes an existing record from a file
- Erase – Deletes a file
- Rename – Renames a file

CORE Graphics Library

The CORE Graphics Library is a package of run time routines for drawing objects on the Professional display. The Professional Graphic Subsystem implements portions of the CORE standard. These run time routines are callable by high level application languages.

Professional Graphics Subsystem capabilities include:
- Erase a specific portion or an entire screen
- Write characters with variable attributes – size, spacing, angle, italic, justification, and user definable fonts
- Draw a line from one point to another, draw an arc or a complete circle, and draw a curve through a set of data points.
- Define windows and viewports
- Display up to eight colors simultaneously from a palette of 256 colors
- Print the contents of the screen on a printer (LA50-RA/RB or LA100-PC)

PROSE Editor

PROSE is the editor for the Professional 300 systems and can be used to create and update printable text. When using PROSE the text is displayed on the screen as it will be printed, including page breaks and endings.

PROSE has the following capabilities:

- Duplicate, move, or delete blocks of text within a document
- Text format controls including left and right margin control and automatic word wrap
- Insertion and deletion of page breaks into a document
- Insertion and deletion of characters in a document
- Search for characters or string of characters

DECnet Support

If the optional PRO/DECnet hardware is included in the system configuration, P/OS support includes:

- Menu-driven services for DECnet remote file copy, display, and delete
- A DECnet password
- A node name and node number in the View Message Status board

EDT

EDT is a text editor available on many of DIGITAL's operating systems. Among the most important EDT features are:

- An on-line help facility
- File protection with journaling
- The capability to work with several files or parts of files at a time
- Multiple commands per line

Subset of DCL

The following commands are directly supported on P/OS

APPEND	EXIT
COPY	PURGE
CREATE	RENAME
DELETE	SET
DIRECTORY	SHOW
EDIT	TYPE
UNLOCK	

Professional System Overview

The Professional System Overview is a self-paced instruction course for new users of Professional 300 systems.

MINIMUM HARDWARE REQUIRED

Any valid Professional 300 system configuration with:

- 512Kb Memory
- RCD50 or RCD51 Hard Disk
- KEF11-CA Floating Point Adapter

OPTIONAL HARDWARE

LA100-PC Dot Matrix Printer

LQP02-AA/AB Letter Quality Printer

LA50-RA/RB Dot Matrix Printer

VC241-A Extended Bit Map Option

VR241-A Color Monitor

MSC11-CK Memory Option

PREREQUISITE SOFTWARE

None

OPTIONAL SOFTWARE

PRO/Application Starter Kit for Hard Disk

PRO/BASIC

PRO/COMMUNICATIONS

PRO/DATATRIEVE

PRO/Tool Kit

TRAINING CREDITS

None

SOFTWARE INSTALLATION

CUSTOMER INSTALLED

P/OS Hard Disk is a software product engineered to be installed by the customer.

SUPPORT CATEGORY

DIGITAL SUPPORTED

Please refer to the Limited Warranty below.

ORDERING INFORMATION

P/OS Hard Disk is available only RX50 Floppy Diskette distribution media.

QBA02-H3 Binaries, documentation. Prerequisite is QB050-DZ (included in PC325 and PC350 systems)

ADDITIONAL SERVICES

During the Personal Computer Warranty
You may receive at no additional cost, Applications Advisory Service concurrent with your ninety (90) day Personal Computer system warranty period. This service enables you to call the DIGITAL Customer Support Center for assistance in answering questions regarding the use of this software product during this period.

In addition concurrent with your Personal Computer warranty period, you may receive software product and documentation updates on this software product, as released by DIGITAL.

For more information regarding this service refer to the DCS Program description section of this document.

Optional Service

The following service is available on this software product upon expiration of your Personal Computer warranty.

SYSTEM SUPPORT AGREEMENT

This service enables you to call the DIGITAL Customer Support Center for assistance in answering questions regarding the use of this software product. In addition this service provides software product and documentation updates on this software product, as released by DIGITAL.

GLOSSARY

Operating System: An operating system is an integrated collection of service routines for supervising the sequencing and processing of programs by a computer.

Multi-Programming: Multi-programming means that the operating system can schedule and control the execution of several programs running at the same time.

Event-Driven: Event-driven means that the operating system can start programs that are waiting for an event to occur, e.g. information is received from the keyboard so the program can continue executing.

Priority-Structured: Priority-structured means that each program has a priority associated with it. In multi-programming environments, the operating system uses the priority of each program to determine the order in which each program will run. Programs of lower priority execute only when programs of higher priority are inactive or are waiting for an event to occur such as waiting for input from the keyboard or waiting for information to be supplied from the disk.

ASCII: American Standard Code for Information Interchange

Record Management System: RMS is the standard record management facility on PDP-11 (RMS-11) and VAX (VAX-11 RMS) systems.

CORE: The American National Standards Institute (ANSI) is using a proposal by the Association for Computing Machinery Special Interest Group (ACM-SIGGRAPH) as the basis for a standard for graphics subsystems. This proposal is known as the CORE system.

Menu: A menu is a list from which the user selects one or more options by moving the pointer to the desired option(s) or by typing the name of the option. A menu may be a list of applications, a list of files or directories, or a list of other menus that the user views.

Relative Access: The records in a relative file are accessed by record number. The application's programmer can determine which records are to be added, read, updated, and deleted by specifying its record number in the file.

Sequential Access: sequential access method means that the records of a file start at the beginning of the file and are in the order in which the records are added to the file. The first record that was added to the file is at the beginning of the file and the last record that was added is at the end of the file.

Multi-Key Indexed Sequential Access: Each record of a multi-key ISAM file has associated with it one or more key fields, e.g. customer account number, that is used to store, retrieve, update, and delete records. Records can be accessed in one of two ways – directly by inserting a specific value in the key field or sequentially in the order associated with the key field.

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