

# System Support Addendum

**PRODUCT NAME: PATHWORKS for DOS, Version 4.0**  
(Formerly DECnet PCSA Client for DOS)

**SSA 55.07.10-A**

## HARDWARE REQUIREMENTS

Systems, components, and peripherals specified below are supported except as noted for specific software components:

- An Intel® 8086-, 8088-, 80286-, 80386-, 80486-based personal computer from the *Supported Base Systems Chart*.
- A minimum of 640KB system memory.
- One network connection, either asynchronous or via an Ethernet controller. Refer to the *Supported Base Systems Chart* at the end of this document for a list of supported Ethernet controllers in the various supported systems. More than one communications device may be installed in a system subject to system limitations. If use of another device is required, the system may need to be rebooted. A device cannot typically be shared with other communications products.
- In a PC local area network, at least one base system must have one diskette drive capable of reading 5.25 inch (360KB) diskettes or 3.50 inch (720KB) diskettes to load the distribution media. (To create a floppy key disk, a disk greater than or equal to 720KB is required for booting purposes.)
- In an asynchronous network environment, every base system must have at least one diskette drive capable of reading 5.25 inch (360KB) diskettes or 3.50 inch (720KB) diskettes (to load the distribution media) and 12MB of free hard disk space.
- A system power supply that provides at least 130 watts (for IBM® XTs with a DEPCA).

Standard keyboards that come with the base systems listed in the *Supported Base Systems Chart* are supported.

### Disk Space Requirements

PATHWORKS for DOS software may be stored either on the personal computer's local storage device or on the server system.

Maximum disk space required for the installation of all PATHWORKS for DOS software is 12MB of free disk space (or 23,000 blocks on a VMS server).

Other configurations, using selected components, may require less disk space.

## OPTIONAL HARDWARE

### Expanded Memory Specification Version 4.0 Support

PATHWORKS for DOS software supports the use of Expanded Memory Specification (EMS) applications that are EMS, Version 4.0 compliant. The PATHWORKS for DOS networking software that can be loaded into EMS requires 144KB of memory.

### Digital Printers

PATHWORKS for DOS software supports the following Digital printers which can be connected to the PC:

LA75	LA75P
LA50	LA210
LJ250	LJ252
LN03	LN03 PLUS

The following hardware options from Digital may be added to the IBM PC, XT, AT, and DECstation PC family systems described in the *Supported Base Systems Chart*.

- Digital LK250-xx Keyboard

**Note:** The IBM PC Model 5150 system unit must have a system ROM BIOS dated 10-27-82 or later.

- Keyboard cables required to connect the LK250 keyboard to:
  - IBM AT, DECstation 210, 316, 320 - BCC37-06
  - IBM PC and XT - BCC41-06
  - DECstation 200, 350 - BCC39-06
  - DECstation 220, 300, 316, 320, 325, 425 - BCC40-06

- Digital VSXXX-AA 3-button mouse (for use with a DEC EtherWORKS Ethernet controller that is equipped with a mouse port)
- Digital DECstation Mouse PC6XS-\*\* (DECstation models 200, 220, 300, 316, 320, 325, 425 only)

The following hardware options from Digital, IBM, COMPAQ®, Olivetti®, Tandy®, Toshiba®, or Zenith may be added to the configurations described in the *Supported Base Systems Chart* subject to the compatibility of the hardware options with the base system: Enhanced Keyboard, Diskette Drives and Adapters, Fixed Disks and Adapters, Memory Expansion Options, Memory Module Kits, Color Display, Color/Graphics Monitor Adapter, and Printer Adapter.

#### *Video Adapters*

PATHWORKS for DOS software supports the following video adapters (subject to vendor support of the adapters in base systems):

- MDA - IBM Monochrome Display Adapter
- CGA - IBM Color Graphics Adapter
- EGA - IBM Enhanced Graphics Adapter
- MCGA - IBM PS/2® Model 30 video hardware
- VGA - IBM Video Graphics Adapter
- Hercules® Monochrome - Hercules Graphic Card
- COMPAQ Video Graphics Controller Board
- COMPAQ Enhanced Color Graphics Board
- COMPAQ Video Display Controller Board
- COMPAQ PLASMA Internal Display Controller
- COMPAQ LCD Internal Display Controller
- OGC - Olivetti Graphics Controller
- OVC - Olivetti VGA-Compatible Controller
- OEC - Olivetti EGA-Compatible Controller
- EVC - Olivetti Eisa Video Controller for VGA+
- PVGA - Paradise Video Graphics Array, mono and color
- PGC - Positive Graphic Controller
- Zenith Enhanced EGA Card
- DECstation 8-bit Video Adapter
- DECstation 16-bit SVGA Adapter

#### **Ethernet Controller Support**

##### *Hardware*

For purposes of this System Support Addendum, the terms DEC, DEC1, DEC2, DECLC, DECT, DECMC, 3Com2®, 3Com3 refer to the definitions below:

- DEPCA - Digital's DEPCA-xx multi-buffered Ethernet controller for personal computers. The use of the DEPCA-AU transceiver adapter is also supported. The terms DEC, DEC1, and DEC2 refer to revisions of the same Ethernet controller.
- DEC - Revision D, E, F or H FCC Class B compliant.
- DEC1 - Revision E, F or H FCC Class B compliant.
- DEC2 - Revision F03, H03. This Ethernet controller is FCC/VDE Class B compliant.

(For IBM PC/AT compatible configurations with EGA or VGA graphics adapter, the DEPCA Revision E or later is required to utilize EMS.)

- DECLC - EtherWORKS LC. This is an 8-bit Ethernet controller that is FCC/VDE Class B compliant. (Part number DE100-AA.)
- DECT - EtherWORKS Turbo and Turbo/TP. These are 16-bit Ethernet controllers (ISA/EISA Specifications for I/O Bus Speed either equal to or below 8.33 MHz) that are FCC Class B compliant. The EtherWORKS Turbo/TP is a 10baseT Ethernet controller. (Part numbers DE200-AA, DE201-AA respectively.)
- DECMC - EtherWORKS MC. This multi-buffered Ethernet controller is for IBM PS/2 Micro Channel Architecture personal computers. It is FCC/VDE Class B compliant. (Part number DE210-AA.)
- 3COM2 - 3COM EtherLink/MC (3C523) Ethernet multi-buffered Controller for IBM PS/2 Micro Channel Architecture personal computers.
- 3Com3 - 3Com EtherLink® II (3C503) Ethernet Network Interface.

Refer the *Supported Base Systems Chart* at the end of this document for a list of tested Ethernet controllers.

##### *Ethernet Controller Drivers*

The PATHWORKS for DOS software contains both Network Device Interface Specification (NDIS), Version 1.0 compliant device drivers for DEC EtherWORKS LC, DEC EtherWORKS MC, DEC EtherWORKS Turbo, DEC EtherWORKS Turbo/TP, 3Com EtherLink II, and 3Com EtherLink/MC Ethernet controllers. The NDIS drivers can also be used with previous versions of the Digital Ethernet controller family, DEPCAs.

**Note:** The NDIS drivers for the 3Com EtherLink II and 3Com EtherLink/MC Ethernet controllers will not be supplied with the next release of this product.

The PATHWORKS for DOS software also includes Digital proprietary datalinks (DLLs) for DEC EtherWORKS LC, DEC EtherWORKS MC, DEC EtherWORKS Turbo, DEC EtherWORKS Turbo/TP Ethernet controllers.

#### *Asynchronous Communications Support*

Asynchronous DDCMP network connections are supported utilizing the system's asynchronous serial port. Maximum line speed can be determined by consulting the PC vendor's documentation. Recoverable data errors may occur at the higher line speeds. All models listed in the *Supported Base Systems Chart* can be configured asynchronously unless otherwise noted.

#### **PC DECwindows/Motif® Support**

##### *Hardware Requirements*

- An Intel 80286-, 80386-, or 80486-based personal computer listed in the *Supported Base Systems Chart*.
- A minimum of 640KB of system memory must be free and accessible to start PC DECwindows/Motif after configuring the system. This memory may be made up of free conventional and extended memory.

At least a total of 1 - 4 megabytes of system memory must be free and accessible to run X Window System applications. The specific amount of memory required will depend upon the memory requirements of the application chosen by the user.

Depending on the number of X Window System applications being displayed and the memory requirements of each application, the user should test these types of configurations with PC DECwindows/Motif prior to production use.

- The PC DECwindows/Motif X server is not supported in an asynchronous network environment.

##### *Disk Space Requirements*

PC DECwindows/Motif requires an additional 1 - 2MB of secondary hard disk space (per PC DECwindows user) for the creation of temporary files.

##### *Memory Requirements*

PC DECwindows/Motif supports 80386 expanded memory managers that are Virtual Control Program Interface (VCPI) compliant.

##### *Video Adapters*

The PC DECwindows/Motif supports the following video adapters:

- Ahead VGA Video Adapter, mono and color, 800 x 600 or 640 x 480
- EGA - IBM Enhanced Graphics Adapter, mono and color, 640 x 350
- MCGA - IBM PS/2 Model 30 video hardware, mono, 640 x 480
- VGA - IBM Video Graphics Adapter, mono and color, 640 x 480
- COMPAQ Video Graphics Controller Board, mono and color, 640 x 480
- COMPAQ Enhanced Color Graphics Board, mono and color, 640 x 350
- COMPAQ LCD Internal Display Controller, mono and color, 640 x 480
- DECstation 8-bit Video Adapter, mono and color, 640 x 480 or 800 x 600
- DECstation 16-bit SVGA Adapter, mono and color, 640 x 480 or 800 x 600
- EVC - Olivetti Eisa Video Controller for VGA+, mono and color, 640 x 480
- Everex Viewpoint VGA Video Adapter, mono and color, 800 x 600 or 640 x 480
- IBM 8514/A 16/256-color Video Adapter, color, 640 x 480 or 1024 x 768
- OVC - Olivetti VGA-Compatible Controller, mono and color, 640 x 480
- OEC - Olivetti EGA-Compatible Controller, mono and color, 640 x 350
- Paradise 8514/A Plus 16/256-color card, color, 1024 x 768
- PVGA - Paradise Video Graphics Array, mono and color, 640 x 480 or 800 x 600
- Video 7 Enhanced VGA Video Adapter, mono and color, 640 x 480 or 800 x 600
- DECstation 8514/A-Compatible Graphics Adapter, color, 1024 x 768

### *Mice*

PC DECwindows/Motif is designed for operation with a mouse for the user's convenience and ease-of-use although keyboard emulation for a mouse is provided. If PC DECwindows/Motif is configured for use with a mouse, the user must acquire a Microsoft® compatible mouse driver (Version 6.0 or later) and install it on the system prior to the installation of PC DECwindows/Motif. PATHWORKS for DOS software does not include such a mouse driver; it does include a driver for the VSXXX-AA mouse (for use with a DEC EtherWORKS Ethernet controller equipped with a mouse port).

### *Keyboards*

PC DECwindows/Motif supports the following keyboards in both PC-style or LK201-like mappings:

- Digital's LK250
- IBM 84 key (or compatible)
- IBM 101 enhanced key (or compatible)
- IBM 102 enhanced key (or compatible)

## **SOFTWARE REQUIREMENTS**

### *Operating System Support*

- COMPAQ DOS V3.31, V4.0, V4.01
- DECstation DOS V3.3, V4.0
- IBM DOS V3.3, V4.0
- Olivetti DOS V3.3, V4.0, V4.01
- Tandy DOS V3.30, V4.01
- Toshiba DOS V3.3 (R3C90US), V4.01 (R4A15US)
- Zenith DOS V3.3+, V4.0, V4.01

The base systems listed in the *Supported Base Systems Chart* at the end of this document are supported only when using operating system software supplied by the same vendor as the system unit itself.

### *Server Support*

The following versions of the PATHWORKS server software products are supported for use in conjunction with PATHWORKS for DOS V4.0 client software when used in a server/client environment:

- PATHWORKS for VMS V4.0 (SPD 30.50.xx)
- PATHWORKS for ULTRIX V1.0 (SPD 32.44.xx)
- PATHWORKS for OS/2® V1.1 server software (SPD 55.24.xx)
- VAXmate Services for MS-DOS® V2.2 (SPD 55.09.xx)

## **OPTIONAL SOFTWARE**

Microsoft Windows/286 Version 2.1 and Microsoft Windows Version 3.0 are supported.

PATHWORKS for DOS (TCP/IP) is required software for PATHWORKS for DOS client if the user requires TCP/IP network transport support (SPD 33.45.xx).

## **GROWTH CONSIDERATIONS**

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

## **DISTRIBUTION MEDIA**

RX33 Floppy Diskette, RX31 Floppy Diskette, RX24 Hard-shell Diskette

TK50 Tape Cartridge, 9-track 1600 BPI Magtape

## **ORDERING INFORMATION**

Software Licenses: QL-OTL\*\*-\*\*

Software Media and Documentation: QA-OTL\*\*-\*\* TK50 or Magtape kits are required for most customers.

- Order QA-OTL\*\*-H5 or -HM for use with a VAX/VMS server.
- Order QA-OTL\*E-H5 or -HM for use with a VAX/RISC ULTRIX server.
- Order QA-OTL\*-HI, -H7, or -HB (all floppy kits):
  - To use with a PATHWORKS for OS/2 server
  - To use with VAXmate Services for MS-DOS
  - To use PATHWORKS for DOS locally (installed to a hard disk)
  - Recommended use of DECnet-DOS only
  - Recommended use of PATHWORKS for DOS or DECnet-DOS for asynchronous network connections
  - To use any component of the PATHWORKS for DOS product which does not require a file server, such as PC DECwindows/Motif or the 3270 emulator capabilities

### *Documentation*

QA-OTL\*B-GZ - System Administration Documentation (for VMS Servers)

QA-OTL\*E-GZ - System Administration Documentation (for ULTRIX Servers)

QA-0TL\*C-GZ - System Administration Documentation  
(for floppy-only use)

QA-0TL\*A-GZ - User Documentation

QA-0TL\*D-GZ - DECnet-DOS Documentation

AA-PAF7B-TK - PATHWORKS for DOS User Handbook

AA-PAFJA-TK - DECnet-DOS Programmer's Documentation

*Software Product Services:*

QT-0TL\*\*-\*\* (Media/Doc updates and right-to-copy licenses)

QVA05-\*\* (for DECnet-DOS phone support)

\* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

A variety of service options are available from Digital. For more information, please contact your local Digital office.

**SUPPORTED CONFIGURATIONS**

The PATHWORKS for DOS software has been tested on the base systems listed in the *Supported Base Systems Chart* at the end of this document. Support of a particular model as a client is subject to the requirements stated in the *HARDWARE REQUIREMENTS* and *SOFTWARE REQUIREMENTS* sections of this document.

Each system is supported in a native hardware configuration only, and with its native operating system; that is, supported configurations are those in which the hardware components and operating system software are supplied by the base system vendor. The supported operating system versions are listed in the *SOFTWARE REQUIREMENTS* section of this document.

PATHWORKS for DOS software, Version 4.0 has been tested on the following supported configurations. If a customer problem with PATHWORKS for DOS software can be reproduced by the customer on one of these supported configurations, Digital will work the problem to resolution on these supported configurations. If the customer problem can not be reproduced by the customer on one of these supported configurations, it will be the responsibility of the customer to resolve the issue.

PATHWORKS for DOS software supports the use of Expanded Memory Specification (EMS) applications that are Version 4.0 compliant. Every effort has been made to ensure that the software adheres to the EMS, Version 4.0 specification. However, individual applications may have interpreted the specification differently and, therefore, may not function in Digital's PATHWORKS for DOS network environment.

PATHWORKS for DOS software supports the use of NDIS Version 1.0. Every effort has been made to ensure that the software adheres to the NDIS, Version 1.0 specification. However, individual vendors' interpretation of the specification may vary and therefore may not function in Digital's PATHWORKS for DOS network environment.

Digital's implementation of the NDIS standard is intended to allow users a greater choice of Ethernet controllers. This implementation is not intended to support the simultaneous operation of the PATHWORKS for DOS product and other vendors' networking products.

The above information is valid at time of release. Please contact your local Digital office for the most up-to-date information.

**Note:** The availability of these software product options and services may vary by country. Customers should contact their local Digital office for information on availability.

**Supported Base Systems**

<b>COMPAQ Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
COMPAQ DESKPRO Model 2	DEC, 3COM3	
COMPAQ DESKPRO 286 Personal Computer Model 20 and 40 (Model 2551 on UL label)	DEC, 3COM3	
COMPAQ DESKPRO 286e	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 286N	DECLC	
COMPAQ DESKPRO 386/16	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386/20	DEC, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386/25	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386/33	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386N	DECT	
COMPAQ DESKPRO 386s	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386s/20	DECT	
COMPAQ DESKPRO 386/20e	DEC1, DECLC, DECT, 3COM3	
COMPAQ DESKPRO 386/25e	DEC2, 3COM3	
COMPAQ DESKPRO 486/25	DECT	
COMPAQ DESKPRO 486/33L	DECT	
COMPAQ PORTABLE II	DEC1, 3COM3	
COMPAQ PORTABLE III	DEC1, 3COM3	
COMPAQ PORTABLE 386	DEC1, 3COM3	
COMPAQ 286/SLT	DEC1, DECLC, 3COM3	Some restrictions apply. Contact COMPAQ for details.
COMPAQ SLT 386s/20	DECT	
COMPAQ SYSTEMPRO	DEC2, 3COM3	
COMPAQ LTE	Not Applicable	
COMPAQ LTE/286	Not Applicable	

<b>Digital Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
DECstation 200	DEC2, 3COM3, DECLC, DECT	
DECstation 210	DEC1, DECLC, DECT	DECT supported for 8MHz bus speed configuration only.
DECstation 212	DEC2, DECLC, DECT	
DECstation 212LP	DEC2, 3COM3	
DECstation 220	DEC2, DECLC, DECT, 3COM3	
DECstation 300	DEC2, DECLC, DECT, 3COM3	
DECstation 316	DEC1, DECLC, DECT	
DECstation 316+	DEC2, DECLC, DECT, 3COM3	
DECstation 316sx	DEC2, DECLC, DECT, 3COM3	
DECstation 320	DEC1, DECLC, DECT	
DECstation 320+	DECT	

<b>Digital Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
DECstation 320SX	DECT	
DECstation 325	DEC2, DECLC, DECT, 3COM3	
DECstation 325c	DEC2, 3COM3	
DECstation 333c	DEC2	
DECstation 350	DEC2, DECLC, DECT, 3COM3	
DECstation 425	DEC2, DECLC, DECT, 3COM3	
DECstation 425c	DECT	
<b>IBM Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
IBM 5150 Personal Computer	DEC, 3COM3	IBM 5150-2074 Asynch. Comm. adapter used for Asynch connections
IBM 5160 Personal Computer XT	DEC, DECLC, 3COM3	IBM 5150-2074 Asynch. Comm. adapter used for Asynch connections
IBM 5162 Personal Computer XT Model 286	DEC, DECLC, 3COM3	IBM 5170-0215 serial /parallel adapter used for Asynch connections
IBM 5170 Personal Computer AT	DEC, DECLC, DECT, 3COM3	IBM 5170-0215 serial /parallel adapter used for Asynch connections
IBM 8530-021 Personal System/2 Model 30	DEC, DECLC, 3COM3	
IBM 8530-E21 Personal System/2 Model 30-286	DEC, DECLC, 3COM3	
IBM 8550 Personal System/2 Model 50	3COM2, DECMC	
IBM 8550 Personal System/2 Model 50Z	3COM2, DECMC	
IBM 8555 Personal System/2 Model 55sx	3COM2, DECMC	
IBM 8560 Personal System/2 Model 60	3COM2, DECMC	
IBM 8570 Personal System/2 Model 70 386 16mhz, 20mhz, 25mhz	3COM2, DECMC	
IBM 8580 Personal System/2 Model 80	3COM2, DECMC	
<b>Olivetti Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
Olivetti M24	DEC1, 3COM3	
Olivetti M28	DEC1, 3COM3	
Olivetti M240	DEC1, 3COM3	
Olivetti M250	DEC2, 3COM3	
Olivetti M250E	DEC2, DECLC, DECT, 3COM3	
Olivetti M280	DEC1, 3COM3	
Olivetti M290	DEC2, 3COM3	
Olivetti M290s	DEC2, DECLC, DECT, 3COM3	
Olivetti M300	DEC2, DECLC, DECT, 3COM3	
Olivetti M380/XP1	DEC2, DECLC, DECT, 3COM3	

<b>Olivetti Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
Olivetti M386/25	DEC2, DECLC, DECT, 3COM3	
Olivetti M486	DEC2, DECLC, DECT, 3COM3	

  

<b>Tandy Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
Tandy 3000NL	DECLC	
Tandy 4025LX	DEC2	

  

<b>Toshiba Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
Toshiba T3200	3COM3	
Toshiba T3200sx	DEC2,3COM3	System ROM 3.10 or later required
Toshiba T5200	DEC2, 3COM3	System ROM 3.00 or later required.

  

<b>Zenith Model</b>	<b>Ethernet Controller Support</b>	<b>Comments</b>
Zenith Z-248	DEC1, DECLC, DECT, 3COM3	
Zenith Z-248/12	DEC1, DECLC, DECT, 3COM3	
Zenith Z-386/20	DEC2, DECLC, DECT, 3COM3	
Zenith Z-386/25	DEC2, DECLC, DECT, 3COM3	
Zenith Z-386/33	DEC2, DECLC, DECT, 3COM3	
Zenith Z-386/33E	DECT	
Zenith Z-386SX	DEC2, DECLC, DECT, 3COM3	
Zenith SupersPort 286	DEC1, DECLC, 3COM3	
Zenith SupersPort SX	DEC2, 3COM3	

- ® MS-DOS, Microsoft and GW-BASIC are registered trademarks of Microsoft Corporation.
- ® IBM, OS/2, PS/2, Micro Channel and Personal Computer AT are registered trademarks of IBM Corporation.
- ® PostScript is a registered trademark of Adobe Systems Inc.
- ® 3Com and EtherLink are registered trademarks of 3Com Corporation.
- ® Intel is a trademark of Intel Corporation.
- ® COMPAQ and COMPAQ DESKPRO are registered trademarks of COMPAQ Computer Corporation.
- ® Olivetti is a registered trademark of Ing. C. Olivetti.
- ® Motif is a registered trademark of Open Software Foundation, Inc.
- ® Macintosh is a registered trademark of Apple Computer, Inc.
- ® Hercules is a registered trademark of Hercules Computer Technology.

- ® Tandy is a registered trademark of Tandy Corporation.
- ® Toshiba is a registered trademark of Kabushiki Kaisha Toshiba.
- ™ Windows is a trademark of Microsoft Corporation.
- ™ The DIGITAL Logo, ALL-IN-1, DEC, DEC EtherWORKS, DECnet, DECnet-VAX, DECnet-DOS, DECwindows, DECserver, DECrouter, DECnet, LA210, LN03, LN03 PLUS, LVP16, LA50, LJ250, LJ252, LAT, MicroVMS, PATHWORKS, PCSA, TK, VAX, VMS, VAXmate, VAXstation, VT, and ULTRIX are trademarks of Digital Equipment Corporation.