

# System Support Addendum

PRODUCT NAME: PATHWORKS for DOS, Version 4.1

SSA 55.07.11-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 Table*.
- A minimum of 640KB system memory.
- One network connection, either asynchronous or via an Ethernet or Token Ring controller. 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 Table* are supported.

### Block 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 18MB of free disk space (or 35,000 blocks on a VMS or ULTRIX 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
LA70	LA324

### Digital Keyboards, Mice

The following keyboards and mice from Digital may be added to the IBM PC, XT, AT, and DECstation PC family systems described in the *Supported Base Systems Table*:

- 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)

*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 and Token Ring Controllers*

PATHWORKS for DOS supports Digital's family of EtherWORKS controllers via Digital's propriety datalinks (DLLs) or NDIS drivers. (These drivers are included in this software package.) The family of EtherWORKS controllers include: EtherWORKS LC, EtherWORKS LC/TP, EtherWORKS MC, EtherWORKS MC TP/BNC, EtherWORKS Turbo, EtherWORKS Turbo/TP, and EtherWORKS Turbo TP/BNC.

**Note:** The Digital Ethernet NDIS drivers can also be used with previous versions of the Digital Ethernet controller family, DEPCAs.

Because the PATHWORKS for DOS software is written to the NDIS interface, users can use third-party Ethernet or Token Ring controllers if accompanied by an NDIS, Version 2.0.1 driver. Every effort has been made to ensure that the software adheres to the NDIS, Version 2.0.1 specification. However, individual vendors' interpretation of the specification may vary and therefore may not function in Digital's PATHWORKS for DOS network environment.

*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 Table* can be configured asynchronously unless otherwise noted.

**Microsoft® Windows™ Support**

*Mice, Keyboards*

- A Digital VSXXX-AA Mouse driver is provided (for use with a DEC EtherWORKS Ethernet controller that is equipped with a mouse port) which supports both Digital's proprietary datalink and NDIS drivers.
- A Digital LK250 keyboard driver is provided with Dynamic Link Libraries for the following languages:

English (US)	German
English (UK)	Italian
Canadian-English	Norwegian
Canadian-French	Spanish
Finnish	Swedish
French	Swiss-French
Danish	Swiss-German

- Digital printer support, as defined below, is provided:

Windows, Version 3.0 printer drivers are supplied in the PATHWORKS for DOS product to support the following Digital printers in both Digital and industry-standard mode.

- DEClaser 2200 (LN06)
- DEClaser 2100 (LN05)
- LA70 Personal Printer
- LA324 MultiPrinter
- LJ250, LJ252 Companion Color Printer

For other Digital printers in industry-standard mode, use the appropriate industry-standard printer driver from the Microsoft Windows, Version 3.0 retail kit.

**PC DECwindows Motif™ Support***Hardware Requirements*

An Intel 80286-, 80386-, or 80486-based personal computer listed in the *Supported Base Systems Table*.

*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 all extended memory managers (XMS) and 80386 expanded memory managers that are Virtual Control Program Interface (VCPI) compliant.

A minimum of 1MB 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.

Between 1 - 4 MB 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.

*Video Adapters*

The PC DECwindows Motif supports the following video adapters:

- Number Nine Computer Corp. #9GX Graphics Xcellerator card, 16 or 256 color, 640 x 480 or 1024 x 768 or 1280 x 1024 (with a Texas Instruments Graphics Architecture (TIGA), Version 2.0 driver; the driver is not included in this kit.)
- Renaissance Rendition II video graphics board, 16 or 256 color, 640 x 480 or 1024 x 768 (with a Texas Instruments Graphics Architecture (TIGA), Version 2.0 driver; the driver is not included in this kit.)
- DECpc Intelligent Graphics Controller, 16 or 256 color, 640 x 480 or 1280 x 1024 (with a Texas Instruments Graphics Architecture (TIGA), Version 2.0 driver; the driver is not included in this kit.)
- DECpc 433 Workstation, 16 or 256 color, 640 x 480 or 1280 x 1024 (with a Texas Instruments Graphics Architecture (TIGA), Version 2.0 driver; the driver is not included in this kit.)

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

*Mice*

PC DECwindows Motif is designed for operation with a mouse for the user's convenience and ease-of-use. However, keyboard emulation for a mouse is also 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 with either Digital LK201 or IBM style mappings:

- IBM compatible enhanced keyboard (102-key)
 

Belgium	Norway
Canada	Portugal
Denmark	Spain
Germany	Sweden
Finland	Switzerland (French)
France	Switzerland (German)
Italy	United Kingdom
Latin America	United States (101-key)
Netherlands	
- IBM compatible 84-key keyboard
 

Belgium	Norway
Canada	Portugal
Denmark	Spain
Germany	Sweden
Finland	Switzerland (French)
France	Switzerland (German)
Italy	United Kingdom
Latin America	United States
- Digital LK250 keyboard
 

Canada	Spain
Denmark	Sweden
Finland	Switzerland (French)
France	Switzerland (German)
Germany	United Kingdom
Italy	United States
Norway	

**SOFTWARE REQUIREMENTS**

*Operating System Support*

- COMPAQ DOS V3.31, V4.0, V4.01, V5.0
- DECstation DOS V3.3, V4.0, V5.0
- IBM DOS V3.3, V4.0, V5.0
- Olivetti DOS V3.3, V4.0, V4.01, V5.0
- Tandy® DOS V3.30, V4.01, V5.0
- Toshiba® DOS V3.3 (R3C90US), V4.01 (R4A15US)
- Zenith DOS V3.3+, V4.0, V4.01, V5.0

The base systems listed in the *Supported Base Systems Table* at the end of this document are supported when using operating system software supplied by the same vendor as the system unit itself or with Microsoft DOS, Version 5.0. Digital recommends using the operating system software supplied by the PC vendor to ensure complete interoperability.

**Note:** If using DOS, Version 4.0, Digital recommends upgrading to DOS, Version 4.01 where available; enhancements associated with these releases ensure interoperability with PATHWORKS for DOS.

*Server Support*

The following versions of the PATHWORKS server software products are supported in conjunction with PATHWORKS for DOS, Version 4.1 client software when used in a server/client environment:

- PATHWORKS for VMS V4.1 (SPD 30.50.xx)
- PATHWORKS for ULTRIX V1.0, V1.1 (SPD 32.44.xx)
- PATHWORKS for OS/2® V1.1, V2.0 Server Software (SPD 55.24.xx)

**OPTIONAL SOFTWARE**

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

PATHWORKS for DOS (Netware® Coexistence) is required software if the user requires PATHWORKS for DOS and Novell's Netware client software to run concurrently.

Microsoft Windows, Version 3.0/3.00A

**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, RX24 Hard-shell Diskette

TK50 Tape Cartridge, 9-track 1600 BPI Magtape

**ORDERING INFORMATION**

Software Licenses: QL-0TL\*\*-\*

Software Media and Documentation: QA-0TL\*\*-\*

- QA-0TL\*\*-H5 (TK50 cartridge) or -HM (magtape) for use with a VAX/VMS server.
- QA-0TL\*E-H5 (TK50 cartridge) or -HM (magtape) for use with a VAX/RISC ULTRIX server.
- QA-0TL\*A-H7 (high-density 5 1/4 inch floppies) or -HB (low-density 3 1/2 inch floppies):
  - To use with a PATHWORKS for OS/2 server
  - 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
  - QA-0TL\*B-H7 (high-density 5 1/4 inch floppies) or -HB (low-density 3 1/2 inch floppies) to install additional languages

*Documentation*

Complete Documentation (for VMS Servers):  
QA-0TL\*B-GZ

Complete Documentation (for ULTRIX Servers):  
QA-0TL\*E-GZ

Complete Documentation (for floppy-only use):  
QA-0TL\*C-GZ

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

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

*PATHWORKS for DOS User Handbook*: AA-PAF7C-TK

*DECnet Programmer's Documentation*: AA-PAFJC-TK

\* 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 Table* 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 4.1 has been tested on the base systems listed in the *Supported Base Systems Table* at the end of this document. 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 is written to the NDIS Version 2.0.1 interface. Every effort has been made to ensure that the software adheres to the NDIS, Version 2.0.1 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 and Token Ring 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.

**Table 1**  
**Supported Base Systems**

<b>COMPAQ® Model</b>	<b>Comments</b>
COMPAQ DESKPRO® Model 2 *	
COMPAQ DESKPRO 286 Personal Computer Model 20 and Model 40 (Model 2551 on UL label) *	
COMPAQ DESKPRO 286e *	
COMPAQ DESKPRO 286N	
COMPAQ DESKPRO 386/16 *	
COMPAQ DESKPRO 386/20 *	
COMPAQ DESKPRO 386/25 *	
COMPAQ DESKPRO 386/33 *	
COMPAQ DESKPRO 386N	
COMPAQ DESKPRO 386s *	
COMPAQ DESKPRO 386s/20	
COMPAQ DESKPRO 386/20e *	
COMPAQ DESKPRO 386/25e *	
COMPAQ DESKPRO 486/25	
COMPAQ DESKPRO 486/33L	
COMPAQ PORTABLE II *	
COMPAQ PORTABLE III *	
COMPAQ PORTABLE 386 *	
COMPAQ SLT/286 *	Some restrictions apply. Contact COMPAQ for details.
COMPAQ SLT 386s/20	
COMPAQ SYSTEMPRO 386 *	
COMPAQ DESKPRO 386/33L	
COMPAQ SYSTEMPRO 486	
COMPAQ LTE	Asynchronous Support Only
COMPAQ LTE/286	Asynchronous Support Only
COMPAQ LTE 386s/20	
<b>Digital Model</b>	<b>Comments</b>
DECstation 200 *	
DECstation 210 *	EtherWORKS Turbo supported for 8MHz bus speed configuration only.
DECstation 212 *	
DECstation 212LP *	
DECstation 220 *	
DECstation 300 *	
DECstation 316 *	
DECstation 316+ *	
DECstation 316sx *	

**Table 1 (Cont.)  
Supported Base Systems**

<b>Digital Model</b>	<b>Comments</b>
DECstation 320 *	
DECstation 320+	
DECstation 320SX	
DECstation 325 *	
DECstation 325c *	
DECstation 333c *	
DECstation 350 *	
DECstation 425 *	
DECstation 425c	
DECpc 222	
DECpc 333	
DECpc 333 Portable	
DECpc 433 Workstation	
DECpc 433T	
DECpc 320sx Notebook	
<b>IBM® Model</b>	<b>Comments</b>
IBM 5150 Personal Computer *	IBM 5150-2074 Asynch. Comm. adapter used for Asynch connections
IBM 5160 Personal Computer XT *	IBM 5150-2074 Asynch. Comm. adapter used for Asynch connections
IBM 5162 Personal Computer XT Model 286 *	IBM 5170-0215 serial/parallel adapter used for Asynch connections
IBM 5170 Personal Computer AT@ *	IBM 5170-0215 serial/parallel adapter used for Asynch connections
IBM 8530-021 Personal System/2 Model 30 *	
IBM 8530-E21 Personal System/2 Model 30-286 *	
IBM 8550 Personal System/2 Model 50	
IBM 8550 Personal System/2 Model 50Z	
IBM 8555 Personal System/2 Model 55sx	
IBM 8560 Personal System/2 Model 60	
IBM 8570 Personal System/2 Model 70 386 16mhz, 20mhz, 25mhz	
IBM 8580 Personal System/2 Model 80	
IBM 8590 Personal System/2 Model 90	Supported with non-Digital NDIS drivers only
IBM 8595 Personal System/2 Model 95	Supported with non-Digital NDIS drivers only
<b>Olivetti® Model</b>	<b>Comments</b>
Olivetti M24 *	
Olivetti M28 *	
Olivetti M240 *	



**Table 1 (Cont.)  
Supported Base Systems**

<b>Olivetti® Model</b>	<b>Comments</b>
Olivetti M250 *	
Olivetti M250E *	
Olivetti M280 *	
Olivetti M290 *	
Olivetti M290s *	
Olivetti M300 *	
Olivetti M300-05	
Olivetti M300-10	
Olivetti M380-40	
Olivetti M380/XP1 *	
Olivetti M386/25 *	
Olivetti M486 *	
<b>Tandy® Model</b>	<b>Comments</b>
Tandy 3000NL *	
Tandy 4025LX *	
<b>Toshiba® Model</b>	<b>Comments</b>
Toshiba T3200	
Toshiba T3200sx *	System ROM 3.10 or later is required.
Toshiba T5200 *	System ROM 3.00 or later is required.
<b>Zenith Model</b>	<b>Comments</b>
Zenith Z-248 *	
Zenith Z-248/12 *	
Zenith Z-386/20 *	
Zenith Z-386/25 *	
Zenith Z-386/33 *	
Zenith Z-386/33E	
Zenith Z-386SX *	
Zenith SupersPort 286 *	
Zenith SupersPort SX *	

\* Denotes support for the previous versions of the Digital Ethernet controller family, DEPCAs.

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- ® NetWare is a registered trademark of Novell, Inc.
- ® Tandy is a registered trademark of Tandy Corporation.
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