
Chapter 1

HUBwatch for Windows Installation

Overview

Introduction

This chapter provides information for installing the HUBwatch for Windows application.

In This Chapter

This chapter includes the following topics:

- Preinstallation considerations
- Installing HUBwatch for Windows
- Installing the HUBwatch online tutorial
- Post-installation tasks

HUBwatch Software References

In this book, the term *HUBwatch* refers to the HUBwatch for Windows, HUBwatch for OpenVMS, and HUBwatch for Digital UNIX software.

Valid Configurations

You can install the HUBwatch for Windows software in the following configurations:

- To run as a standalone application
- To run under Digital ManageWORKS Workgroup Administrator software
- To run under HP® OpenView™ software
- To run under Novell NetWare® Management System (NMS) software

Preinstallation Considerations

Introduction

Before starting the installation procedure, you need:

- The correct PC hardware
- The latest firmware
- The correct software
- Network parameters (if the network is not already installed)
- A complete HUBwatch installation kit

The sections that follow describe these requirements.

Hardware Requirements

The HUBwatch software should be able to accommodate any configuration that meets the hardware requirements in this section. For details about specific devices and software packages recommended for Microsoft Windows, refer to the Windows Version 3.1, or higher, *Application Reference List* and *Hardware Compatibility List*.

- A 386 processor running at a minimum of 33 MHz.
or a 486 processor running at a minimum of 25 MHz.
- A minimum of 8 megabytes of random-access memory (RAM).
Additional memory improves performance and is highly recommended for hubs with high port counts.
- A minimum of 8 megabytes of available disk space.
- A mouse that is compatible with Windows Version 3.1 or higher. A mouse is required for use with HUBwatch. If you do not use a mouse, you will not have point-and-click control over network elements.
- A color VGA or SVGA monitor.

Optional Hardware

If you plan to use in-band communications, you need a network interface card (NIC) with an NDIS driver. You can use the Serial Line Internet Protocol (SLIP) for out-of-band communications, in which case you do not need a network card.

Firmware Requirements

Each of your hubs and modules needs the most recently released version of the firmware. See the HUBwatch release notes for the minimum revision software that HUBwatch supports.

Because Digital is continuously improving the quality of the DEChub product family, periodic releases of firmware become available. For information about the latest firmware releases:

- Contact your local Digital reseller or your local Digital sales office.
- Read the README file, at ftp.digital.com in the /pub/DEC/hub900 directory.

Firmware updates are customer installable. To register for automatic notification of new firmware releases, return the business reply card supplied with this product, or send your name, title, and mailing address to dechub_notice@lkg.dec.com.

Software Requirements

You need the following software to install HUBwatch for Windows:

- MS-DOS® Version 6.0 or higher
- Microsoft Windows Version 3.1 or higher
- An NDIS driver for the network interface card (if you plan to use in-band communications)
- A working WINSOCK Version 1.1 compatible TCP/IP network stack (for example, PATHWORKS 5.x).

Network Parameters

When you are installing on the network for the first time, you need to obtain information about the following network parameters:

Network Parameters

The name of your PC _____

The IP address of your PC _____

The IP address of the default gateway (a router or a brouter) _____

Your Local IP Domain Name _____

The IP address of the network name server _____

The network subnet mask _____

Your user name _____

Network Interface Card (NIC) type (see Note) _____

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Note: If your NIC is not an EtherWorks 3, DEPCA, DEFEA, SMC MAC, 3c503, 3c503B, 3c509, I82593, or Exp16, you also need to know the drive and path of the NIC driver. Refer to the list of network adapters in Step 7: Specifying Network Configuration Parameters, later in this chapter.

Is the Distribution Kit Complete?

The HUBwatch installation kit should contain the following items:

- HUBwatch management station software on three 3.5-inch 1.44-megabyte diskettes.
- HUBwatch online tutorial software on two 3.5-inch 1.44-megabyte diskettes:
 - a. Tutorial for HUBwatch for DEChubs
 - b. Tutorial for GIGAswitch/FDDI
- A READ_ME.TXT and a READ_ME.PS file on disk 1. This file provides information about product features and may contain last-minute installation information. Please read these files before installing HUBwatch.
- *HUBwatch Installation and Configuration* manual (this manual).
- *HUBwatch for Windows Use* manual.

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About This Procedure

The tasks described in this procedure assume you are installing HUBwatch, HUBloader, and NETrider Loader only, or HUBwatch, HUBloader, NETrider Loader, and the network (the first and second options on the Main menu). The steps for installing just the network are a subset of these steps.

For PATHWORKS users: Users of PATHWORKS Version 4.x with a DECnet only network will need to install HUBwatch, HUBloader, NETrider Loader, and the network. Choose NDIS network and SLIP when asked for the type of network to install. Appendix C has additional instructions about using HUBwatch with PATHWORKS.

Task 1: Starting the Procedure

Complete the following steps to start the installation procedure.

Step	Action
1	Turn on your personal computer (PC) and run Windows.
2	Put the HUBwatch diskette 1 in drive A (or drive B, as appropriate).
3	Choose the Run option from the Program Manager's File menu.
4	Enter A:INSTALL in the Command Line field of the Run text box.
5	Click the OK button. Result: The HUBwatch installation Main menu appears. Follow the instructions on the screen to select an installation option. Stopping the procedure: To stop the procedure at any time, press the escape key (Esc). You return to the procedure's Main menu.

Task 2: Selecting the Installation Option

Select one of the following installation options when the Main menu appears.

Note: If you have a TCP/IP network configured on your PC, choose install HUBwatch, HUBloader, and Network Loader only as your install option. You should use any existing TCP/IP stack before using a HUBwatch stack..

Option	Result
1. Install HUBwatch, HUBloader, and NETrider Loader only	Installs HUBwatch, HUBloader, and NETrider Loader and, if you want, automatically updates AUTOEXEC.BAT and installs the HUBwatch, HUBloader, and NETrider Loader icons. Sets up HP Open View and NMS, if present. If your PC does not have an IP network, you can install HUBwatch, HUBloader, and NETrider Loader, but you cannot run them. Use this option if you are upgrading your HUBwatch, HUBloader, and NETrider Loader software or if you already have a TCP/IP network configured. See Task 9: Digital ManageWORKS Workgroup Administrator in this chapter for more information.
2. Install HUBwatch, HUBloader, NETrider Loader, and network	Installs HUBwatch, HUBloader, and NETrider Loader and installs and configures the network. Sets up HP Open View and NMS, if present. If you want, this option will automatically update AUTOEXEC.BAT and install the HUBwatch, HUBloader, and NETrider Loader icons. Use this option if you do not have a TCP/IP network configured. See Task 7: Specifying Network Configuration Parameters and Task 9: Digital ManageWORKS Workgroup Administrator in this chapter for information.
3. Install and configure the network	Installs and configures an IP network on your PC. Use this option if you want to use the TCP/IP network stack that the HUBwatch distribution kit contains. See Task 7: Specifying Network Configuration Parameters in this chapter for information about network parameters.
4. Install HUBwatch, HUBloader, and NETrider Loader icons	Creates icons for starting HUBwatch, HUBloader, and NETrider Loader and allows you to place them in an existing Windows icon group or in their own group. The alternative to starting HUBwatch, HUBloader, or NETrider Loader with an icon is to run HUBWATCH.EXE, HUBload.exe or loader.exe from the File Manager or Program Manager.

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Option	Result
5. Set up for User Data file	<p>Modifies the AUTOEXEC.BAT file's SET HUBWATCH_LIBRARY command, which points to the directory for the file HW_AGENT.DAT containing agent information needed by HUBwatch (see Task 5: Do You Want to Modify System Files? in this chapter). The installation places this file in the \USERDATA subdirectory of the directory you select for HUBwatch.</p> <p>This menu choice allows different users to have their own versions of this file. HUBwatch edits the file, invisibly to the user, when you enter agent information into the HUBwatch Community Table window.</p>
6. Set up for Digital ManageWORKS Workgroup Administrator	<p>Installs the required files so you can launch HUBwatch from the Digital ManageWORKS Workgroup Administrator application. See Task 9: Digital ManageWORKS Workgroup Administrator for more information.</p>
7. Set up for HP OpenView	<p>Installs the required files so you can launch HUBwatch from the HP OpenView application.</p>
8. Set up for Novell NMS	<p>Installs the required files so you can launch HUBwatch from Novell NMS.</p>
9. Set network configuration parameters	<p>Allows you to modify your network configuration parameters. See Task 7: Specifying Network Configuration Parameters in this chapter for information about network parameters.</p>
Exit	<p>Exits from the installation.</p>

Task 3: Specifying the Location of the Installation Files

If you selected either option 1 or option 2 from the list of options in Task 2, take the following steps to specify the drive and directory in which you want the installation files to reside.

Step	Action
1	<p>A window prompts you to select an installation drive to receive the software and displays the available space on each fixed drive. Choose the drive in which you want the files to reside.</p> <p>Result: A window prompts you to choose an installation directory and displays the default directory C:\HUBWATCH. If you choose a nonexistent directory, the installation procedure creates it for you. The procedure also creates subdirectories under the main installation directory.</p> <p>For More Information: See “Are the Files Where They Belong?” in this chapter.</p>
2	<p>Choose the directory in which you want to install HUBwatch, if different from the default.</p> <p>Result: The installation procedure copies the files to the directory.</p> <p>If you previously installed the HUBwatch IP network, several windows inform you that files already exist and ask you if you want to replace them. Do not replace them at this time. You will have the opportunity to change them later in the installation procedure.</p>
3	<p>Choose the directory in which you want to install HUBloader, if different from the default.</p>

Task 4: Selecting an Icon

If you selected Options 1, 2, or 4 from the Main menu, choose one of the following choices when the Install Icon menu appears.

Choice	Result
Install icons in HUBwatch Windows Group	Creates the icons for HUBwatch, HUBloader, NETrider Loader, and the HUBwatch application group. Places the icons in the group. When you open Windows, the HUBwatch group will be the top group.
Install icons in an existing group	Displays a list of the existing Windows application groups. When you select a group, the procedure creates the HUBwatch, HUBloader, and NETrider Loader icons and places them in the selected group.
Do not install icons	Choose this option only if an icon already exists. If an icon for HUBwatch does not exist, you must start it by running HUBWATCH.EXE from the File Manager or Program Manager.

Task 5: Modifying System Files

After you select your icon option, a window prompts you that changes may be necessary in your AUTOEXEC.BAT, CONFIG.SYS, and WIN.INI files. You should set the environment variable HUBWATCH_LIBRARY to the path of your user data file. Choose one of the following file-modification methods.

Choice	Result
Go ahead and modify	The procedure creates a backup copy of the file with the extension 0x, where x is an integer. Then the procedure asks you for the information it needs and edits the file.
Create example files	The procedure allows you to modify the file, but assists you by first creating sample files named AUTOEXEC.EXM, WIN.EXM, and CONFIG.EXM. If you select this option, you must remember to make the modifications yourself when you exit from the installation procedure.
Bypass these changes	The procedure does not modify or create any files. Select this option <i>only</i> if you have previously installed HUBwatch, and you chose the same drive and directory this time.

Task 6: Selecting the Drive and System File Path

A window prompts you to indicate the drive in which the system files are located. This is the drive whose root directory contains the AUTOEXEC.BAT and CONFIG.SYS files. Complete the following steps.

Step	Action	Result
1	Enter the boot drive and click on OK.	The screen displays the drives where the AUTOEXEC.BAT and CONFIG.SYS (or AUTOEXEC.EXM and CONFIG.EXM) files are located. The screen displays the drive where the WIN.INI (or WIN.EXM) file is located.
2	Indicate the correct paths and click on OK.	The Set Network Configuration Parameters dialog box appears (only if you selected options 2, 3, and 9).

Task 7: (Optional) Specifying Network Configuration Parameters

If you selected options 2, 3, or 9 in Task 2, complete the following steps to provide the network parameters.

Step	Action
1	<p>Before you start this procedure, get the network parameters from your system or network administrator. Supply the following information:</p> <ul style="list-style-type: none">• The name of your PC• The IP address of your PC• The IP address of the default gateway (a router or brouter)• Your local IP domain name• The IP address of the network name server• The network subnet mask• Your username <p>Result: A window prompts you to specify the type of network with which you will be using HUBwatch.</p>
2	<p>Select one of the following options and click on OK:</p> <ul style="list-style-type: none">• NDIS network and SLIP - Sets up NDIS and SLIP services• SLIP network only - Sets up SLIP services only <p>Result: If you selected an NDIS network, a window prompts you to specify the type of network card you will be using. Go to step 3 in this table. If you did not select an NDIS network, go to Task 8 of the installation procedure.</p>

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Step	Action
3	<p>Choose one of the following network cards:</p> <p>EtherWORKS 3 - Places the driver EWRK3.DOS and the protocol file EWRK3.PRO in the \IPSTACK subdirectory of your HUBwatch directory. For ODI support, EWRK3.COM and EWRK3.NC (net.cfg) are placed in the \IPSTACK directory.</p> <p>Ethernet (DEPCA) - Places the driver DEPCA.DOS and the protocol file DEPCA.PRO in the \IPSTACK subdirectory of your HUBwatch directory. For ODI support, DEPCA.COM and DEPCA.NC (net.cfg) are placed in the \IPSTACK directory.</p> <p>DEC FDDIcontroller/EISA (DEFEA) - Places the driver DEFEA.DOS and the protocol file DEFEA.PRO in the \IPSTACK subdirectory of your HUBwatch directory.</p> <p>SMC EtherCard PLUS Elite16 (SMCMAC) - Places the driver SMCMAC.DOS and the protocol file SMCMAC.PRO in the \IPSTACK subdirectory of your HUBwatch directory.</p> <p>3COM EtherLink II Adapter (3c503) - Places the driver ELNKII.DOS and the protocol file ELNKII.PRO in the \IPSTACK subdirectory of your HUBwatch directory. For ODI support, ELNKII.COM and ELNKII.NC (net.cfg) are placed in the \IPSTACK directory.</p> <p>3COM EtherLink Plus Adapter (3c505-B) - Places the driver ELNKPL.DOS and the protocol file ELNKPL.PRO in the \IPSTACK subdirectory of your HUBwatch directory. For ODI support, ELNKPL.COM and ELNKPL.NC (net.cfg) are placed in the \IPSTACK directory.</p> <p>3COM EtherLink III Adapter (3c509) - Places the driver ELNK3.DOS and the protocol file ELNK3.PRO in the \IPSTACK subdirectory of your HUBwatch directory.</p> <p>Intel 82593 Demo Card (I82593) - Places the driver I82593.DOS and the protocol file I82593.PRO in the \IPSTACK subdirectory of your HUBwatch directory.</p> <p>Intel Ether Express 16 Adapter (Exp16) d - Places the driver Exp16.DOS and the protocol file Exp16.PRO in the \IPSTACK subdirectory of your HUBwatch directory.</p>

Step	Action
3 (cont.)	<p>Other - Choose this option if you plan to use a network card that is not in this list. This option asks you to supply the path to and the file name of the driver for your network interface card. Enter the information and click on OK. You need a properly defined PROTOCOL.INI file in the same directory as the network driver. You also need to know the network interface card type. See Appendix D for further instructions about using another network card and editing the PROTOCOL.INI file.</p> <p>Result: A window prompts you to run the STRTNDIS.BAT file (if you installed an NDIS network) or the STRTSLIP.BAT file (if you installed a SLIP network) to start your network. The window asks whether you want the command to run the file added to AUTOEXEC.BAT.</p> <p>Important: If you do not put the network startup command in AUTOEXEC.BAT, you must remember to execute the command before starting Windows.</p>

Special File Editing Considerations: Depending on the options you choose, you may need to do some special editing.

- If you earlier chose to update the AUTOEXEC.BAT file yourself rather than have the procedure do it automatically, the installation modifications will be added to the file AUTOEXEC.EXM, and not to AUTOEXEC.BAT.
- If you chose to install an NDIS network, you are allowed to run a SLIP network. However, the installation does not automatically add the STRTSLIP startup command to AUTOEXEC.BAT (or AUTOEXEC.EXM) unless you chose to install a SLIP network only.

Task 8: (Optional) Specifying the Network Startup Command Location

If you chose Task 7, you must specify where you want to place the network startup command. Complete the following steps.

Step	Action
1	Choose whether to put the network startup command in AUTOEXEC.BAT (or AUTOEXEC.EXM). Result: A list of the files modified by the installation procedure appears, including files that the procedure creates.
2	Click on OK to dismiss the list of files. Result: The Digital ManageWORKS Workgroup Administrator Integration window is displayed. See Task 9.
3	If you want to have an HW_AGENT.DAT file different from other users, choose Set Path to User Data File from the HUBwatch Installation Main menu. Result: A window asks for the path to the user data file.
4	Enter the path you want and click on OK. Result: The choices shown in step 5 of this installation procedure appear. Do steps 5 and 6. The Main menu appears.

Task 9: (Optional) Digital ManageWORKS Workgroup Administrator

Important:

- Installation integration requires HUBwatch for Windows 4.1 and Digital ManageWORKS Workgroup Administrator 2.0.
- If you are using a TCP/IP stack from Digital, the HUBwatch IP stack version 4.1 or PATHWORKS 5.1 TCP/IP stack is required.

Complete the following tasks to install Digital ManageWORKS Workgroup Administrator.

1. Preinstallation requirements

You must install Digital ManageWORKS Workgroup Administrator 2.0 prior to integrating HUBwatch for Windows 4.1.

Digital ManageWORKS Workgroup Administrator requires that you install SNMP Management to work with HUBwatch. To install Digital ManageWORKS Workgroup Administrator SNMP Management, complete the following steps:

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- A. Select the Management Module Setup icon.
- B. Select Install SNMP Management.

Refer to your Digital ManageWORKS Workgroup Administrator documentation for further information.

If you **do not have an IP Stack installed** prior to installing Digital ManageWORKS Workgroup Administrator and plan to **use the HUBwatch V4.1 IP Stack**, you **MUST** perform the following steps. These steps would occur during the Digital ManageWORKS Workgroup Administrator installation of the Management Module Setup SNMP Management option in the TCP/IP Stack Selection Window.

- A. Select Digital PATHWORKS TCP/IP V5.1 (enabled by default).
- B. Deselect the Perform Compatibility Test On TCP/IP Stack check box by clicking with the mouse on the X in the box. The X in the box is removed.

Continue with the Digital ManageWORKS Workgroup Administrator installation.

If you are using PATHWORKS 5.1 TCP/IP stack, you must install the stack before integrating HUBwatch for Windows 4.1.

Note: If you are running Windows for Workgroups and PATHWORKS Version 5.1 TCP/IP stack, you must edit the C:\WINDOWS\PROTOCOL.INI files [DATALINKE] sections LG_BUFFERS=26 statement for Digital ManageWORKS Workgroup Administrator to work correctly.

If you would like to use the HUBwatch IP 4.1 stack, the installation procedure installs the HUBwatch IP stack and Digital ManageWORKS Workgroup Administrator integration simultaneously.

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2. Installation

Complete the following steps to integrate with the Digital ManageWORKS Workgroup Administrator.

Step	Action
1	Choose OK when the prompt asks if you want support for Digital ManageWORKS Workgroup Administrator integration. (The default is CANCEL. If you choose CANCEL, the installation terminates.)
2	The installation procedure searches all the devices for the location of the Digital ManageWORKS Workgroup Administrator installation directory. Result: An installation window displays the location of the HUBwatch installation directory. You must verify the location.
3	After the installation directories of Digital ManageWORKS Workgroup Administrator are located and verified, the installation procedure modifies the appropriate Digital ManageWORKS Workgroup Administrator files to support the HUBwatch integration.
4	You are asked to verify if a PATHWORKS TCP/IP stack is being utilized. Result: <ul style="list-style-type: none">• If you choose NO, the integration terminates with a message indicating HUBwatch and Digital ManageWORKS Workgroup Administrator are integrated.• If you choose YES (default), the installation continues to start verifying PATHWORKS information.
5	The installation procedure searches the PATH and all devices for the location of the PATHWORKS installation directory. The location should be the \IPSTACK subdirectory if it is installed with the HUBwatch 4.1 IP stack. Result: You are requested to verify the location.
6	After you have located and verified the installation directory of PATHWORKS, the installation modifies the appropriate PATHWORKS files and a message appears, indicating that HUBwatch and Digital ManageWORKS Workgroup Administrator are integrated.

Digital ManageWORKS Workgroup Administrator Modifications:

HUBwatch integration into Digital ManageWORKS Workgroup Administrator results in the following modifications to Digital ManageWORKS Workgroup Administrator.

The \MWORKS\DATABASE\SNMPOMM.INI file is modified in the [HUBWATCH] section with binary= statement to indicate the HUBwatch for Windows 4.1 installation directory.

PATHWORKS Modifications (including HUBwatch IP stack):

HUBwatch integration into Digital ManageWORKS Workgroup Administrator results in following modifications to PATHWORKS.

Note: Modification of these files and settings may affect other network applications. For example, modifying PATHWORKS settings to work with Digital ManageWORKS Workgroup Administrator may affect other network-view type applications, such as HP OpenView. Be aware of this possibility if you are using several applications or have problems with other applications.

- The \PW\TCPIP.INI or \HUBWATCH\IPSTACK\PWTCP.INI file is modified in the [TCPIP] section with the following statements:
 - TCPMaxSock=32
 - UDPMaxSock=10
 - UDPMaxInputBuf=10

A backup of the modified file is maintained with the *.BCK extension.

Note: The installation modifies the first occurrence of these statements. If statements are embedded in comments and the comments appear first, the comment is modified instead of the actual statement.

- The \PW\PROTOCOL.INI or \HUBWATCH\IPSTACK\PROTOCOL.INI file is modified in the [DATA LINK] section with the following statement:
LG_BUFFERS=26

A backup of the modified file is maintained with the *.BCK extension.

Note: The installation modifies the first occurrence of these statements. If statements are embedded in comments and the comments appear first, the comment is modified instead of the actual statement.

- A new version of the following files is copied to the \PW or \HUBWATCH\IPSTACK directory:
 - DNR.EXE
 - WINSOCK.DLL
- A new version of DECPW.386 is copied to the \WINDOWS\SYSTEM directory.
- A backup of each modified file is maintained with the *.BCK extension. These files are **REQUIRED** to successfully use Digital ManageWORKS Workgroup Administrator and the PATHWORKS TCP/IP stack.

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If the Name Server is not running or configured properly (that is, you are in an isolated LAN), you must add your PC IP address information to your local HOSTS file. The ManageWORKS Workgroup Administrator Event Dispatcher requires this information.

Task 10: Exiting the Installation Procedure

From the Main menu choose Exit, and click on OK.

Result: One of the following occurs.

- If you installed a network, a message prompts you to run the network startup file (STRTNDIS.BAT or STRTSLIP.BAT, depending on the type of network you chose) to connect your PC to the network. Click on OK to dismiss the message.
- If you chose to modify AUTOEXEC.BAT yourself, a message prompts you to do so before starting HUBwatch. You must reboot your computer to make the modifications take effect.

Task 11: (Optional) Installing and Using the Online Tutorial

The HUBwatch distribution kit includes two online tutorials. Using realistic simulations, they present highlights of the software features.

Complete the following steps to install the online tutorial.

Step	Action
1	Put the HUBwatch tutorial diskette in drive A (or drive B, as appropriate).
2	Choose the Run option from the Program Manager's File menu.
3	Enter A:SETUP in the Command Line field of the Run text box. Result: A dialog box prompts you to enter a directory specification.
4	Press Return to accept the default directory, or enter a directory where you want to install the tutorial files. Result: The tutorial icon appears in the same program group as the HUBwatch icon. Click on the icon to start the tutorial.

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Use the following buttons to move through the tutorial.

Click on This Button...	For This Action...
(right arrow)	To move to the next window
(left arrow)	To move to the previous window
Jump	To do one of the following: <ul style="list-style-type: none">• Display a window with a list of topics. Click on the topic you want.• Set the speed of the mouse cursor.
Quit	To exit the tutorial

Moving Text Boxes: Text boxes with instructional information appear in some tutorial windows. To move the text boxes, position the mouse cursor on the text box title bar, press the left mouse button and drag the text box to a new location.

Task 12: Before Starting HUBwatch for Windows

HUBwatch and the included HUBloader applications use a number of environmental variables that are set at kit installation time. These variables are as follows:

- HUBWATCH_LIBRARY identifies the directory where the hubwatch agents file resides. HUBWATCH_LOAD is used by HUBloader to identify the directory where the DEChub Consolidated Firmware kit's firmware and `dcfiles.dat` files are located.
 - The HUBloader application requires that the DEChub Consolidated Firmware kit also is installed on your system.
- HUBWATCH_HUBLOADER is used by HUBloader to identify the directory where you want to create the `status message log` and the `load from agents list` files. You will need write access to this directory.

If you chose not to edit the AUTOEXEC.BAT file during the HUBwatch installation, complete the following steps before you start HUBwatch.

Start the network. If you installed the network using the HUBwatch installation procedure, do one of the following tasks before starting Windows:

- For NDIS networks, type: `hubwatch-drive:\hubwatch-path\IPSTACK\STRTNDIS`
Example: `c:\nets\hubwatch\ipstack\strtndis`.
- For SLIP networks, see Appendix B.
- For PATHWORKS networks, see Appendix C.

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- If managing DECbrouters 90T1, 90T2, or 90T2A on a PATHWORKS network, see Appendix C before starting the application.

To Run HUBwatch with the Specify Agent Dialog Box

Complete the following steps to start HUBwatch with the Specify Agent dialog box.

Step	Action
1	<p>Start HUBwatch in one of the following ways:</p> <ul style="list-style-type: none">• From the application group where the HUBwatch icon resides, double click on the HUBwatch icon.• From the File Manager, double click on HUBWATCH.EXE. <p>Result: The Specify Agent dialog box presents a list of agents. (This list is in the HW_AGENT.DAT file.) When you first run HUBwatch, the list is empty. In that case, get the information from your network administrator and enter it manually.</p> <p>The Specify Agent dialog box requests the following information about the agent you want:</p> <ul style="list-style-type: none">• <i>IP Address</i> - an integer in the format <i>n.n.n.n</i>. where <i>n</i> is a decimal number less than 256.• <i>Community</i>-The community name used in requests to the agent. The default is <code>public</code>.• <i>Timeout</i> - The number of seconds that the PC waits for a response after sending a request to the agent. The default is 5 seconds.• <i>Retries</i> - The number of times that the PC resends a request to the agent after a timeout. The default is 1. <p>Required Information: Only the IP address is required when starting HUBwatch. All other information is optional unless the device's community name is not public.</p>

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Step	Action
2	<p data-bbox="373 630 1175 724">Click on the name of the agent you are invoking, or fill the IP address in manually, together with any other information you want to supply. Click on OK, or double click on the entry itself.</p> <p data-bbox="373 724 1175 850">Result: The information is recorded in the Specify Agent dialog box. Next, a copyright message appears. After a short pause, the Hub front panel window opens. If you have entered incorrect information, an error message appears. Click OK to dismiss the message, and try again.</p> <p data-bbox="373 850 1175 1003">The Hub front panel window differs, depending on whether you started HUBwatch with the IP address of a DEChub 900 MultiSwitch (MS), a DECagent 90, or a standalone module. The <i>HUBwatch for Windows Use</i> book has pictures of the Hub front panel windows that appear for the DEChub 900MS and the DECagent 90.</p>

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To Run HUBwatch with Command Line Parameters

Complete the following steps to start HUBwatch by using command line parameters.

Step	Action
1	From the Program Manager menu or the File Manager menu, choose Run. Result: A text box prompts you to enter a command.
2	Enter the following command: <i>drive:path\HUBWATCH -x ip-address -a agent-name -c community -t n -r n</i> Command Variables: The command variables are: <ul style="list-style-type: none">• <i>drive</i> - the drive where HUBWATCH.EXE resides. If the current drive is correct, you do not need to enter the drive.• <i>path</i> - the location of HUBWATCH.EXE. If the current directory is correct, you do not need to enter the path.• <i>ip-address</i> - an integer in the format <i>d.d.d.d</i>, where <i>d</i> is a decimal number less than 256. The IP address is required the first time you start HUBwatch. After you add entries for the agents you want to use to the Agent List window (see <i>SNMP Agents</i> in Chapter 4), you can enter this command with an agent's name and no IP address.• <i>agent-name</i> - the name assigned to the agent module (for example, agent1). You need not include the agent name if you include its IP address.• <i>community</i> - the community name used in requests to the agent. The default is public.• <i>t n</i> - the number of seconds that the PC waits for a response after sending a request to the agent. The default is five seconds.• <i>r n</i> - the number of times that the PC resends a request to the agent after a timeout. The default is 1. Required Information: Only the drive, path, and IP address or agent name are required parameters. Result: The Hub front panel window appears. The Hub front panel window differs, depending on whether you started HUBwatch with the IP address of a DEChub 900 MultiSwitch (MS), a DECagent 90, or a standalone model. The HUBwatch for Windows Use book shows the Hub front panel windows that appear for the DEChub 900 MS and the DECagent 90.

Files Changed and Created During Installation

During installation HUBwatch changes some of your system files if you select that option. This section lists the commands added to the system files.

The installation procedure changes the following files.

In This Directory:	In This File...	HUBwatch Makes This Change...
<i>bootdrive:</i> \	AUTOEXEC. BAT	Sets the following environment variables. SET HUBWATCH_HUBLOADER=C:\HUBLOAD REM SET HUBWATCH_SYSTEM=C:\HUBWATCH SET HUBWATCH_LIBRARY=C:\HUBWATCH\USERDATA SET WSAVERS=1.1
<i>bootdrive:</i> \	CONFIG.SYS	Removes packet driver information if you previously used HUBwatch for Windows Version 1.1
<i>bootdrive:</i> \Windows	SYSTEM.INI	Adds network driver information if you chose to install HUBwatch and the network. Adds to the end of the network= line as follows: network= . . . ,DECpw. 386
hubwatch- install-drive: \HUBWATCH \HUBWOV	OVWIN.INI (For HP OpenView only)	HUBWOV=C:\HUBWATCH\HUBWOV\HUBWOV .EXE New File Created: The installation procedure also creates the HUBWOV.INI file in the same subdirectory. This file specifies location of the HUBwatch icon files.
<i>bootdrive:</i> \Windows	WIN.INI	Adds both of the following paths: <ul style="list-style-type: none"> • Path for the HUBWATCH.EXE file for use with HP OpenView and Novell NMS. • Path for the HUBLOAD.EXE file for use with HUBloader.

Post-Installation Tasks

Introduction

After you complete the installation, confirm that the HUBwatch files are in the correct directory, and then start the application.

The following is an example of an AUTOEXEC.BAT running Windows for Workgroup and PATHWORKS Version 5.1. The bold text reflects entries specific for HUBwatch.

```
REM ***** Start AUTOEXEC.BAT *****
REM *** HUBLOADER and HUBWATCH ENVIRONMENT VARIABLES ***
set HUBWATCH_HUBLOADER=C:\HUBLOAD
REM set HUBWATCH_SYSTEM=C:\HUBWATCH
set HUBWATCH_LIBRARY=C:\HUBWATCH\USERDATA
set WSAVERS=1.1

REM** Do not display AUTOEXEC.BAT commands as executed **
@ECHO OFF

REM ** Set DOS command line prompt to location **
PROMPT=$P$G

REM **Specify path for directories to be searched for executables REM
and order **
PATH C:\;C:\DOS;C:\WINDOWS;c:\pw;c:\mouse;

REM ** Load Disk Caching, perform double buffering (faster access to REM
hard disk) **
LH SMARTDRV /V /X 512 128

REM ** Load Mouse driver for DOS applications **
MOUSE CENHANCE

REM ** Load command line recall and default is INSERT mode **
LH DOSKEY/insert
```


Post-Installation Tasks

```
REM ** Install file sharing and locking for disk and network drives REM
**
LH SHARE

REM ** Set TEMP to WINDOWS\TEMP directory environment variables **
SET TEMP=C:\WINDOWS\TEMP
SET TMP=C:\WINDOWS\TEMP

REM ** Load Microsoft Windows for Workgroup's network components
C:\WINDOWS\NET START

REM ** Start PATHWORKS TCP/IP stack and components **
if exist C:\PW\STARTNET.BAT call C:\PW\STARTNET.BAT

REM ** Start Windows for Workgroups **
WIN

REM ***** End AUTOEXEC.BAT *****
```

The following is an example of the modifications to the previous AUTOEXEC.BAT example if you are running Windows for Workgroup and HUBwatch Version 4.1 IP stack.

```
REM ** COMMENT OUT Microsoft Windows for Workgroup's network
REM components
REM C:\WINDOWS\NET START
REM ** Start HUBwatch V4.1 IP stack and components **
if exist C:\HUBWATCH\IPSTACK\STRNDIS.BAT call C:\HUBWATCH\IPSTACK\STRNDIS.BAT
```

The following is an example of the modifications to the previous AUTOEXEC.BAT example if you are running Windows 3.1 and PATHWORKS Version 5.0 TCP/IP stack.

```
REM ** NOTE: No reference to NET START **
REM ** Start PATHWORKS TCP/IP stack and components **
if exist C:\PW\STARTNET.BAT call C:\PW\STARTNET.BAT
```

Post-Installation Tasks

The following is an example of an CONFIG.SYS running Windows for Workgroup and PATHWORKS Version 5.1 or HUBwatch Version 4.1 IP stack:

```
REM ***** Start CONFIG.SYS *****
REM ** Specifies MS-DOS will use HIGH memory and Upper Memory Block REM
**
DOS=HIGH,UMB

REM ** Manage the use of extended memory **
DEVICE=C:\DOS\HIMEM.SYS

REM ** Simulate expanded memory and provide access to Upper Memory REM
area **
DEVICE=C:\DOS\EMM386.EXE

REM ** Memory reserved for transferring info to and from disks **
BUFFERS=30,0

REM ** Number of FILES open at one time **
FILES=40

REM ** Number of valid drive letters **
LASTDRIVE=Z

REM ** Load MS-DOS version table in memory **
DEVICE=C:\DOS\SETVER.EXE

REM ** Checks for CNTRL/C and CNTRL/BREAK key combinations **
BREAK=ON

REM ** Memory reserved for processing h/w interrupts **
STACKS=9,256

REM ** Specifies and configures Command Interpreter **
```

Post-Installation Tasks

```
SHELL=C:\COMMAND.COM C:\ /P /E:1024
REM ** Provide real-mode support for the Installable File System
REM manager which is **
REM ** responsible for passing data to the appropriate device **
DEVICE = C:\WINDOWS\IFSHLP.SYS

REM ***** End CONFIG.SYS *****
```

The following is an example of the modifications to the previous CONFIG.SYS example if you are running Windows 3.1 and PATHWORKS Version 5.0 TCP/IP stack or HUBwatch Version 4.1 IP stack.

```
REM ** NOTE: No reference to DEVICE = C:\WINDOWS\IFSHLP.SYS **
```

Post-Installation Tasks

Are the Files Where They Belong?

The HUBwatch installation procedure creates a default directory structure. Check this to confirm that the HUBwatch files are in the correct directory.

The following table lists the default directories and their contents unless you specified otherwise during the installation procedure.

This Directory...	Contains...
C:\HUBWATCH	HUBWATCH.EXE and other files used by HUBwatch, including the subdirectories \USERDATA, \IPSTACK, \HUBWMWRK, \HUBWOV, \HUBWNMS and \HUBLOAD.
C:\HUBWATCH\USERDATA	The user's Agent file, HW_AGENT.DAT, unless you have specified a different directory for this file.
C:\HUBWATCH\IPSTACK	The network service files, if you installed the HUBwatch network.
C:\HUBWATCH\HUBWMWRK	The Digital ManageWORKS Workgroup Administrator files for HUBwatch integration and PATHWORKS support.
C:\HUBWATCH\HUBWOV	The HP Openview files for HUBwatch integration.
C:\HUBWATCH\HUBWNMS	The Novell NMS files for HUBwatch integration.
C:\HUBLOAD	The HUBloader files.
C:\NETRIDER\LOAD	The NETrider Loader files.

Note: See the table in the section “Files Changed and Created During Installation” for a list of changes to the AUTOEXEC.BAT and CONFIG.SYS files during the installation process.

Network Files Provided

The installation procedure provides the following network configuration files.

This File...	Does This.,,
PWTCP.INI	Sets up the system's IP address and related information if you chose to install the HUBwatch network stack.
STRTNDIS.BAT	Starts the NDIS network.
STRTSLIP.BAT	Starts the SLIP network.
STOPNET.BAT	Stops the network.
