
Chapter 2

HUBwatch for OpenVMS Installation

Overview

Introduction

This chapter describes how to install the HUBwatch for OpenVMS software by using the VMSINSTAL procedure.

In This Chapter

The chapter includes the following topics:

- Preinstallation requirements
- Preinstallation tasks
- VMSINSTAL overview
- Installing HUBwatch for OpenVMS
- Installation error messages
- Post-installation tasks
- Starting HUBwatch for OpenVMS as a standalone application

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 software in the following configurations.

- To run as a standalone application.
- To run HUBwatch as an application under POLYCENTER™ or DECmcc™ Version 1.2 network management software. (Unless otherwise noted, further references to POLYCENTER also apply to DECmcc Version 1.2.)

Preinstallation Requirements

Installation Time

On OpenVMS VAX™ systems, the HUBwatch software installation procedure takes approximately 10 minutes. If you are running the DEC™ TCP/IP Services for OpenVMS VAX, you may need more time

DEC TCP/IP Services for OpenVMS Information: See “Set Up DEC TCP/IP Services for OpenVMS VAX” in this chapter for information about using it with HUBwatch.

Hardware Requirements

For a list of VAXstations that are compatible with HUBwatch, refer to the HUBwatch for OpenVMS VAX Software Product Description (SPD 45.74.10-XX).

Software Requirements

The system must have the following software installed and operating:

- OpenVMS VAX operating system Version 6.0 or later
- DECwindows™ Motif® Version 1.2 or later
- OpenVMS DECwindows Motif Bookreader™ Version 4.0 or later
- DEC TCP/IP Services for OpenVMS VAX Version 2.0 or later, or TGV MultiNet™ Version 3.2 or later

To verify that you have the DEC TCP/IP Services for OpenVMS software, type UCX at the system prompt. The UCX prompt appears (UCX>). Press Ctrl/Z to return to the system prompt.

Preinstallation Requirements

Verifying Product Version Numbers: Complete the following steps to verify your product version numbers.

For This Product...	Enter This Command...
OpenVMS VAX software	<code>\$SHOW SYSTEM</code> Result: The version appears in the first line of output.
DECwindows Motif	From the Session Manager window, click on the Help menu and choose On Version.
OpenVMS DECwindows Motif Bookreader™	From the Help menu, select Product Information.
DEC TCP/IP Services for OpenVMS	<code>\$UCX</code> <code>UCX> SHOW VERSION</code>
TGV MultiNet	<code>\$MULTINET SHOW/VERSION</code>

Optional Software

To use HUBwatch with the POLYCENTER network management platform, you must have one of the following products installed:

- POLYCENTER Framework Version 1.3 or later
- POLYCENTER Network Manager 200 Version 1.3
- POLYCENTER Network Manager 400 Version 2.3
- DECMCC Director Version 1.2
- DECMCC Basic Management System Version 1.2
- DECMCC Enterprise Management Station Version 2.2

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 firmware that HUBwatch supports.

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

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

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.

Memory Requirements

See the HUBwatch Software Product Description (SPD) for the recommended minimum memory requirements for HUBwatch. See the HUBwatch release notes for virtual memory requirements.

Complete the following steps to check available memory, global sections, and global pages.

To Check...	Enter This Command...
System memory	\$ SHOW MEM
Global sections	\$ WRITE SYS\$OUTPUT F\$GETSYI ("FREE_GBLSECTS")
Global pages	\$ WRITE SYS\$OUTPUT F\$GETSYI ("FREE_GBLPAGES")

Disk Space Requirements

See the HUBwatch release notes for the recommended minimum disk space for HUBwatch. Make sure that you have enough free blocks on the system disk. If you do not have enough free blocks, the installation fails.

Finding Free Block Amount: To find out how many free blocks exist on the system disk, enter:

```
$ SHOW DEVICE SYS$SYSDEVICE:
```

If the number of required blocks exceeds the number of free blocks, clear space on the system disk.

Preinstallation Requirements

Account Privileges and Quotas

See the HUBwatch release notes for the recommended process quotas and SYSGEN parameter values. You need system privileges for the account from which you plan to install HUBwatch to change system parameters.

Complete the following commands to view and change these values.

To See Current...	Enter These Commands...	And Change Values with These Commands...
System privileges	<code>\$ SHOW PROCESS /PRIVILEGES</code>	<code>\$ SET PROCESS/PRIV=ALL</code>
Process quotas	<code>\$ SET DEFAULT SYSS\$SYSTEM</code> <code>\$ RUN SYSS\$SYSTEM:AUTHORIZE</code> <code>UAF> SHOW</code>	If you do not have the required quotas, enter: <code>UAF> MODIFY user-name -</code> <code>_UAF> /quota-name=value</code> Press Ctrl/Z to return to the system prompt. You must log out and log in again for the new values to take effect.
SYSGEN parameters	<code>\$ SET DEFAULT SYSS\$SYSTEM</code> <code>\$ RUN SYSS\$SYSTEM:SYSGEN</code> <code>SYSGEN> SHOW /ALL</code>	<code>SYSGEN> SET param-name -</code> <code>_SYSGEN> value</code> <code>SYSGEN> WRITE CURRENT</code> Press Ctrl/Z to return to the system prompt. You must reboot the system for the new values to take effect.

Preinstallation Tasks

Introduction

This section describes the tasks you perform before you start the installation procedure.

Read the Release Notes

A number of installation requirements might not be known exactly until after this book is printed. The HUBwatch release notes list those requirements. Do not install HUBwatch unless your system satisfies those requirements. “Read the Release Notes” in “Installing HUBwatch for OpenVMS” explains how to install and print the release notes. Be sure to read them before completing the HUBwatch installation.

Requirements in Release Notes: The installation requirements listed in the release notes include minimum values for the following:

- Disk space
- Process quotas
- SYSGEN parameters
- Virtual memory

For POLYCENTER Users: If you plan to run HUBwatch as an add-on application to POLYCENTER, you must use the minimum values required for POLYCENTER if they are higher than those listed in the HUBwatch Release Notes. Refer to the POLYCENTER documentation. (Unless otherwise noted, further references to POLYCENTER also apply to DECmcc.)

Is the Distribution Kit Complete?

The HUBwatch installation kit should contain the following items:

- One TK50 tape cartridge labeled HUBWAT
- *HUBwatch Installation and Configuration* book (this book)
- *HUBwatch Use* book

If any item is missing, contact your local Digital representative.

Preinstallation Tasks

Back Up the System Disk

Before starting the installation procedure, back up the disk onto which you will install the HUBwatch software. Use the following command to back up the disk.

```
$ BACKUP/IMAGE/VERIFY/LOG SYS$SYSDEVICE:[*...]*.*;* -  
_ $ backup-device:SYSTEM.SAV /SAVE
```

Command Variable: The *backup-device* variable is the device to which you are copying the HUBwatch files.

Install the HUBwatch License

You cannot use HUBwatch software unless the HUBwatch license is installed. To check for the HUBwatch license, type:

```
$ SHOW LIC HUBWATCH
```

Installing the License: If the license is installed, see Installing HUBwatch in this chapter. Complete the following steps if the license is not installed.

Step	Action
1	Obtain the HUBwatch Product Authorization Key (PAK) delivered with the software distribution kit.
2	Log in to the system account.
3	Enter the following command to start the OpenVMS VAX license command procedure: \$ @SYS\$UPDATE:VMSLICENSE.COM
4	In response to the prompts, enter the information from the PAK.

Set Up DEC TCP/IP Services for OpenVMS VAX

If you are running DEC TCP/IP Services for OpenVMS VAX, enter the following OpenVMS commands before installing HUBwatch.

```
$ create sys$sysdevice:[ucx$snmp]ucx$snmp.log  
<Ctrl/Z>  
$ set file /version_limit=5 sys$sysdevice:[ucx$snmp]ucx$snmp.log  
$ purge sys$sysdevice:[ucx$snmp]*.log
```

Purge Time: If you have a large number of log files, the purge command might take up to an hour to execute.

VMSINSTAL Overview

Introduction

VMSINSTAL is an interactive procedure that displays a series of questions. You use the VMSINSTAL command procedure to install the HUBwatch software on an OpenVMS VAX system. This procedure copies files from the distribution media to the installation disk.

Additional Information: See the OpenVMS/VAX documentation for a complete description of VMSINSTAL. See to the HUBwatch release notes for a list of files and logical names that the HUBwatch installation procedure adds or modifies.

VMSINSTAL Guidelines

Basic guidelines for using VMSINSTAL are as follows:

- After each question, the default response, if there is one, appears in brackets ([]). At the end of each question, either a colon (:) or a question mark (?) appears. Respond in one of the following ways.
 - To get help after a question, type a question mark (?). After the help display, the same question reappears.
 - To select the default response, press Return.
 - To enter information, type it immediately after the colon or question mark, and press Return.

You can type Y for Yes and N for No.

- To abort the installation procedure at any time, press Ctrl/Y.

The installation procedure deletes all files that it has created up to that point and returns to the Digital Command Language (DCL) level. Invoke VMSINSTAL again to restart the installation procedure.

Installing HUBwatch for OpenVMS

Installing HUBwatch for OpenVMS involves nine tasks.

1. Starting the procedure.
2. Confirming system disk backup.
3. Reading the release notes.
4. Do you want to run the IVP?
5. Purging files
6. Answering HUBwatch-specific questions.
7. Reading installation messages.
8. Proving SNMP information
9. Running the IVP.

Task 1: Starting the Procedure

Complete the following steps to start the HUBwatch installation procedure.

Step	Action
1	Log in to the system account. Result: The system prompt appears.
2	Mount the HUBwatch distribution tape on the tape drive. For instructions about mounting and removing a TK50 tape cartridge, see the system documentation.

Installing HUBwatch for OpenVMS

Step	Action
3	<p>Start VMSINSTAL with the following command.</p> <pre>\$ @SYS\$UPDATE:VMSINSTAL HUBWATCH <i>device-name</i>: OPTIONS N</pre> <p>Command Variables: The VMSINSTAL command variables are as follows.</p> <ul style="list-style-type: none">• HUBWATCH names the save set on the distribution media.• <i>device-name</i>: names the device where the distribution media is mounted (for example, MKB300:).• OPTIONS N provides the option of printing the on-line HUBwatch release notes. If you are reinstalling the same version of HUBwatch software and you have already read the release notes, you can omit OPTIONS N. <p>Result: The procedure displays the following.</p> <pre>VAX/VMS Software Product Installation Procedure Version n.n. It is dd-mmm-yyyy at hh:mm. Enter a question mark (?) at any time for help. The procedure displays a message like the following to tell you what processes are active on your system. %VMSINSTAL-W-ACTIVE, The following processes are still active: DAVID DECW\$TE_0118 DINANT DECW\$BANNER DECW\$MWM NML_8299 * Do you want to continue anyway [NO]?</pre>
4	<p>Type yes and press Return.</p> <p>Result: The procedure continues; go to Task 2: Confirming System Disk Backup.</p>

Task 2: Confirming System Disk Backup

The procedure displays the following message:

```
* Are you satisfied with the backup of your system disk [YES]?
```

Do one of the following:

- If you are not satisfied with the backup, type N and press Return to terminate the installation procedure. Back up your system disk and reenter the VMSINSTAL command:

```
$ @SYS$UPDATE:VMSINSTAL HUBWATCH device-name: OPTIONS
```

If you stop the procedure to back up the system disk and then restart the procedure, the procedure displays the introductory prompts.

- If your system disk is fully backed up, press Return to answer Yes. The procedure continues; go to Task 3: Reading the Release Notes.

Task 3: Reading the Release Notes

After you confirm the system backup status, the procedure displays the following messages:

The following products will be processed:

```
HUBWATCH Version 4.1
```

```
Beginning installation of HUBWATCH Version 4.1 at 09:15
```

```
%VMSINSTAL-I-RESTORE, Restoring product saveset A. . .
```

If you include OPTIONS N in the VMSINSTAL command, the procedure shows these options.

```
Release notes included with this kit are always copied to SYS$HELP.  
Additional Release Notes Options:
```

1. Display release notes
2. Print release notes
3. Both 1 and 2
4. None of the above

```
* Select option [2]:*
```

```
Queue name [SYS$PRINT]:
```

Complete the following steps to select a release note option

Installing HUBwatch for OpenVMS

Step	Action
1	Select the release note option you want. Result: The procedure displays the following message: * Do you want to continue the installation [NO]?
2	Type Yes and press Return. Result: The following messages appear: %VMSINSTAL I - RELMOVED, The product 's release notes have been moved to SYS\$HELP ----- HUBwatch for OpenVMS for VAX - Version 4.1 VMSINSTAL installation procedure Copyright „ 1995 by DIGITAL EQUIPMENT CORPORATION, Littleton Mass, USA All rights reserved ----- - Product: HUBWATCH Producer: DEC Version 4.1 Release Date: * Does this product have an authorization key registered and loaded?
3	Type Yes and press Return. Result: The procedure continues; go to Task 4: Do You Want to Run the IVP?.

Task 4: Do You Want To Run the IVP?

The installation verification procedure (IVP) verifies that all files from the distribution kit are in the proper directories, that the release notes are in the SYS\$HELP directory, and that the HUBwatch software can be started.

After you select the release notes option, the procedure displays the following prompt:

```
* Do you want to run the IVP after the installation [YES]
```

Type **yes** and press Return if you want the IVP to run automatically. The installation procedure will start the IVP after all other tasks are complete (see Task 8: Provide SNMP Information). If you prefer to start the IVP manually, see Post-Installation Tasks in this chapter.

Task 5: Purging Files

When the procedure continues, it displays the following prompt:

```
* Do you want to purge files replaced by this installation [YES]?
```

Press Return to answer Yes. The procedure continues with HUBwatch-specific questions; go to Task 6: Answering HUBwatch-Specific Questions.

Task 6: Answering HUBwatch-Specific Questions

The procedure displays the following messages:

The logical name HUBWATCH\$LIBRARY should be defined as the directory which contains or which will contain the HUBwatch agents file and the HUBwatch events agents file.

SYS\$STARTUP:HUBWATCH\$STARTUP.COM will define the system-wide logical name HUBWATCH\$LIBRARY as SYS\$LOGIN. To assign a different system-wide translation for HUBWATCH\$LIBRARY, enter it below. You may also edit SYS\$STARTUP:HUBWATCH\$STARTUP.COM at a later time.

```
* System-wide translation for HUBWATCH$LIBRARY: [SYS$LOGIN]:
```

Complete the following steps to answer the installation questions.

Step	Action
1	<p>Do one of the following:</p> <ul style="list-style-type: none">• Press Return to accept the default translation for HUBWATCH\$LIBRARY.• Enter a different translation and press Return. <p>Result: The procedure displays the following information:</p> <p>The logical name HUBWATCH\$ALARM_FILES may be defined as the directory which will be used for HUBwatch event polling and alarm logfiles.</p> <p>SYS\$STARTUP:HUBWATCH\$STARTUP.COM will define the system-wide logical name HUBWATCH\$ALARM_FILES as SYS\$SYSTEM. To assign a different system-wide translation for HUBWATCH\$ALARM_FILES enter it below. You may also edit SYS\$STARTUP:HUBWATCH\$STARTUP.COM at a later time.</p> <pre>* System-wide translation for HUBWATCH\$ALARM_FILES: [SYS\$SYSTEM]:</pre>

Installing HUBwatch for OpenVMS

Step	Action
2	<p>Do one of the following:</p> <ul style="list-style-type: none">• Press Return to accept the default translation for HUBWATCH\$ALARM_FILES.• Enter a different translation and press Return. <p>Result: The procedure then displays the following information:</p> <p>he HUBwatch poller is a background process that queries a list of DEChubs and DEChub modules for selected MIB information. This information is then used by the HUBwatch alarms component. The poller may be started manually at any time by using the</p> <pre>WATCH /POLLER START [/FILE=<alarm_agents_file>]</pre> <p>DCL command, or it may be started automatically in the HUBwatch system startup procedure</p> <pre>SYS\$STARTUP:HUBWATCH\$STARTUP.COM.</pre> <p>* Automatically start the HUBwatch poller?(YES NO) [YES]</p>

Installing HUBwatch for OpenVMS

Step	Action
3	<p>Do one of the following:</p> <ul style="list-style-type: none">• Press Return if you want to start the poller automatically when you start HUBwatch.• Enter No and press Return if you do not want the poller started automatically. If you enter No, you can start the poller later by entering the command <pre>\$ WATCH /POLLER START [/FILE=alarm-agents-file]</pre> <p>Result: If you chose to start the poller automatically, the procedure displays the following messages.</p>

The HUBwatch poller reads agent information from a file. If the poller is interactively invoked through the WATCH/POLLER START command, and an alarmed agents file is not specified, then it will use HUBWATCH\$LIBRARY:HUBWATCH_ALARMED_AGENTS.DAT. When the poller is invoked through HUBWATCH\$STARTUP.COM, it uses the SYS\$MANAGER directory.

To use a different filename, enter it below. You may also edit SYS\$STARTUP:HUBWATCH\$STARTUP.COM at a later time.

```
* HUBwatch poller agents
file:[SYS$MANAGER:HUBWATCH_ALARMED_AGENTS.DAT
```

Installing HUBwatch for OpenVMS

Step	Action
4	<p>Do one of the following:</p> <ul style="list-style-type: none">• Press Return to accept the default file name.• Enter a different file name and press Return. <p>Result: If you are running a version of OpenVMS prior to Version 6.0, the procedure displays a message similar to the following:</p> <pre>ATTENTION SYSTEM MANAGER: After HUBwatch installation completes, you must add the following line to SYS\$MANAGER:SYSTARTUP_V5.COM \$ @SYS\$STARTUP:HUBWATCH\$STARTUP.COM</pre> <p>If you are running OpenVMS Version 6.0 or later, the procedure displays a message similar to the following:</p> <pre>ATTENTION SYSTEM MANAGER: After HUBwatch installation completes, you must add the following line to SYS\$MANAGER:SYSTARTUP_VMS.COM \$ @SYS\$STARTUP:HUBWATCH\$STARTUP.COM</pre> <p>The procedure then displays a message similar to the following and pauses:</p> <pre>ATTENTION HUBwatch USERS: If HUBwatch Version 2.0 or earlier is in use at this site, users should make a backup copy of their agents file before running HUBwatch Version 4.1. HUBwatch Version 4.1 will automatically convert agents files into a new format. However, this new format is not compatible with pre-Version 3.0 versions of HUBwatch. * Press <Return> to continue.</pre>
5	<p>Press Return.</p> <p>Result: The procedure continues; go to Task 7: Reading Installation Messages.</p>

Task 7: Reading Installation Messages

The procedure displays the following informational messages for you to read:

```
%HUBWATCH-I-NOMOREQUES, No more questions will be asked
during the installation phase.
%HUBWATCH-I-COMPTIME, HUBwatch installation will typically
complete in about 5 minutes.
```

Installing HUBwatch for OpenVMS

```
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%HUBWATCH-I-FILES, Copying image file...
%HUBWATCH-I-FILES, Copying message, option files..., and data files...
%HUBWATCH-I-FILES, Copying command procedures
%HUBWATCH-I-FILES, Copying help files and documentation
%HUBWATCH-I-FILES, Creating customized HUBwatch startup procedure...
questionnaire...
%VMSINSTAL-I-RESTORE, Restoring product save set C
%HUBWATCH-I-FILES, Copying DECwindows UID files...
    If any users on the system are using HELP right now,
    the installation will be delayed for up to 5 minutes.
... HUBwatch HELP installed.
```

If the POLYCENTER or DECMcc network management application is installed on your system, the procedure displays the following messages:

```
To launch HUBwatch from DECMcc version 1.2, all DECMcc users
need to modify their own MCC_RESOURCE.DAT file according
to the instructions in MCC_SYSTEM:MCC_HUBWATCH.COM.
```

```
DECMcc version 1.3 users will be able to launch HUBwatch
directly from DECMcc's Applications menu with no other
changes necessary.
```

The procedure then displays this message:

```
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

```
-----
HUBwatch for OpenVMS for VAX, Version 4.1
Installation verification procedure.
```

```
Copyright © 1995 by
DIGITAL EQUIPMENT CORPORATION, Littleton, Mass, USA
All rights reserved.
```

Task 8: Providing SNMP Information

The procedure then prompts you to provide SNMP information. The procedure displays the following message:

```
Enter a question mark (?) for help on any of the following questions
or type <Ctrl/Z> to exit the verification procedure at any time.
```

```
* What is the IP address of the SNMP agent?
```

Complete the following steps to supply the SNMP information.

Step	Action
1	Enter the IP address in the format <i>n.n.n.n</i> , where <i>n</i> is a decimal number less than 256. Then press Return. Result: The procedure displays the following message. * What is the r/w Community Name for the agent [public]?
2	Press Return to use the default name <code>public</code> , or enter the community name of the agent and press Return. The community name is case sensitive. Result: The procedure continues with the IVP if you specified this in task 4 of the installation procedure. If you did not so specify, the installation procedure completes.

Task 9: Running the IVP

When the procedure starts the IVP, it displays the following messages:

```
Device:   WSA1:  [exec]
Node:     0
Transport: LOCAL
Server:   0
Screen:   0
```

HUBwatch will now be run on the above display.

When the front-panel view for your hub comes up, move the pointer to the `File` menu, and press and hold mouse button 1. Slide the pointer down to `Exit` in the menu which will appear below File, and release mouse button 1.

If HUBwatch fails to come up, check that the display information shown above is correct...

* Hit the <Return> key to start HUBwatch or <Ctrl/z> to abort:

Installing HUBwatch for OpenVMS

Complete the following steps to run the IVP.

Step	Action
1	<p>Press Return.</p> <p>Result: The procedure continues by starting HUBwatch. HUBwatch begins by displaying hub management and configuration information.</p> <p>Example:</p> <pre>WATCH /AGENT 00.00.00.00 - /COMMUNITY="public" - /TIMEOUT=5 /RETRIES=2 /VIEW=PHYSICAL (I) HUBWATCH\$LIBRARY = SYS\$LOGIN</pre> <p>Result: The procedure displays the following.</p> <pre>HUBwatch for OpenVMS Revision 4.1</pre> <p>If you have not previously installed and used HUBwatch, you receive warning messages like the following (which you can ignore):</p> <pre>(W) Current agent not in the agent table (W) Unresolved agent node IP name (W) Agent type DETMM found for 00.00.00.00</pre> <p>As part of the IVP, HUBwatch software displays the Hub front panel window. 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, a GIGAswitch, or a standalone module. The <i>HUBwatch Use</i> book has pictures of the Hub front panel windows that appear for the DEChub 900MS and the DECagent 90.</p>
2	<p>Exit the Hub front panel window. Click on the File menu and then click on Exit.</p> <p>Result: The procedure displays the following.</p> <p>The HUBwatch events viewer will now be verified. When the HUBwatch viewer window appears on the display, move the pointer to the `File` menu, and press and hold mouse button 1. Slide the pointer down to `Exit` in the menu which will appear below File, and release mouse button 1.</p> <pre>* Hit the <Return> key to start the events viewer, or <ctrl/z> to abort:</pre> <pre>\$ WATCH /VIEWER</pre>
3	<p>Press Return to verify the events viewer.</p> <p>Result: The HUBwatch software displays the Events Viewer window.</p>

Installing HUBwatch for OpenVMS

Step	Action
4	<p data-bbox="373 661 1185 724">Exit the Events Viewer window. Click on the File menu and then click on Exit.</p> <p data-bbox="373 724 1185 766">Result: The procedure completes and displays the following messages.</p> <pre data-bbox="373 798 1185 957">Exiting HUBwatch HUBwatch Version 4.1 Installation verification complete. Installation of HUBWATCH V4.1 completed at 09:58 VMSINSTAL procedure done at 09:58</pre>

Installation Error Messages

Introduction

This section lists error messages specific to HUBwatch that you may receive while installing the application. Each message in this section is followed by an explanation and a recommended user action.

HUBWATCH-E-BADVMSVER

Message Text: HUBWATCH-E-BADVMSVER, This kit requires version 6.0 or later of OpenVMS VAX.

Explanation: Your version of OpenVMS VAX is too low.

User Action: Install OpenVMS VAX Version 6.0 or later before installing HUBwatch.

HUBWATCH-E-INSGBLPGS

Message Text: HUBWATCH-E-INSGBLPGS, Insufficient global pages. HUBwatch needs at least *nnn* free global pages.

HUBWATCH-I-CURGBLPGS, Only *nn* global pages are available.

Explanation: You do not have the minimum required global pages as specified in the release notes for the HUBwatch installation.

User Action: Increase the SYSGEN GBLPAGES parameter and reboot the system before installing HUBwatch. Increase the GBLPAGES by at least the current value plus the number listed in the release notes.

HUBWATCH-E-INSGBLSCT

Message Text: HUBWATCH-E-INSGBLSCT, Insufficient global sections. HUBwatch needs at least *nn* free global sections.

HUBWATCH-I-CURGBLSCT, Only *nn* global sections are available.

Explanation: You do not have sufficient available global sections to install HUBwatch.

User Action: Increase the SYSGEN GBLSECTIONS parameter to at least the number listed in the release notes, and reboot the system before you install HUBwatch.

HUBWATCH-E-INSSYSSPC

Message Text: HUBWATCH-E-INSSYSSPC, Insufficient space on system disk to install HUBwatch.

HUBWATCH-I-TOTSYSSPC, *nnn*,000 blocks are needed.

Explanation: You do not have sufficient free blocks on the system disk to install HUBwatch.

User Action: Clear enough space on the system disk before you install HUBwatch (see the release notes for disk requirements).

HUBWATCH-E-UCXNOTFOUND

Message Text: UCX\$IPC_SHR.EXE network software not found on system.

HUBWATCH-I-UCXREQ, Either DEC TCP/IP Services for OpenVMS (UCX) or TGV MultiNet is prerequisite software for HUBwatch.

Explanation: Prerequisite software, DEC TCP/IP Services for OpenVMS VAX, is not installed on the system.

User Action: Install DEC TCP/IP Services for OpenVMS VAX before you install HUBwatch (see Software Requirements in this chapter).

HUBWATCH-W-ERRMCC

Message Text: HUBWATCH-W-ERRMCC, Error copying DECmcc launch files to MCC_COMMON:

Explanation: HUBwatch detected that POLYCENTER or DECmcc was installed on the system, but it could not copy the HUBwatch launch files (MCC_HUBWATCH.COM and MCC_APPL_HUBWATCH.DEF) to the MCC_COMMON directory. Instead, HUBwatch copied those files to the SYSS\$LIBRARY: directory.

User Action: At a later time, copy those files to the MCC_COMMON directory.

HUBWATCH-W-HELPINUSE

Message Text: HUBWATCH-W-HELPINUSE, System HELP library in use. HUBwatch help not installed.

Explanation: An individual is using OpenVMS Help; therefore, the installation procedure cannot add HUBwatch Help to the OpenVMS Help library at this time.

User Action: Add help for the HUBwatch startup command, WATCH/AGENT, at a later time. Use the following command:

```
$ LIBRARY /REPLACE /HELP SYS$HELP:HELPLIB SYS$HELP:HUBWATCH.HLP
```

Post-Installation Tasks

Introduction

This section describes the four post-installation tasks:

1. Running the IVP separately.
2. Installing HUBwatch files separately.
3. Editing the system startup command procedure.
4. Modifying DECmcc Version 1.2 files

About the IVP

If you did not select to run the installation verification procedure (IVP) when installing HUBwatch, you must run it before using HUBwatch to verify that the software is ready. You can also run the IVP after a system failure to ensure that HUBwatch is still ready.

IVP Failure: If the IVP fails, run it again. If it still fails, contact your Digital representative.

Task 1: Running the IVP Separately

Complete the following steps to run the IVP separately from the installation procedure.

Step	Action
1	<p>Enter the following command:</p> <pre>\$ @SYS\$TEST:HUBWATCH\$IVP</pre> <p>Result: The following messages appear:</p> <pre>----- HUBwatch for OpenVMS for VAX, Version 4.1 Installation verification procedure. Copyright © 1995 by DIGITAL EQUIPMENT CORPORATION, Littleton, Mass, USA All rights reserved. ----- Enter a question mark (?) for help on any of the following questions, or type <CTRL/Z> to exit the verification procedure at any time. * What is the IP address of the SNMP agent?</pre>

Post-Installation Tasks

Step	Action
2	<p>Enter the IP address in the format <i>n.n.n.n</i>, where <i>n</i> is a decimal number less than 256. Then press Return.</p> <p>Result: The procedure displays the following:</p> <p>* What is the r/w Community Name for the agent?</p>
3	<p>Enter the community name for the agent, (for example, "public"). The community name is case sensitive.</p> <p>Result: The procedure displays the following:</p> <p>* Hit the <Return> key to start HUBwatch or <ctrl/z> to abort:</p>
4	<p>Press Return to start HUBwatch.</p> <p>Result: The procedure displays the following:</p> <pre>Device: WSA1: [exec] Node: 0 Transport: LOCAL Server: 0 Screen: 0</pre> <p>HUBwatch will now be run on the above display. When the front-panel view for your hub comes up, move the pointer to the `File` menu, and press and hold mouse button 1. Slide the pointer down to `Exit` in the menu which will appear below File, and release mouse button 1.</p> <p>If HUBwatch fails to come up, check that the display information shown above is correct...</p> <p>* Hit the <Return> key to start HUBwatch or <ctrl/z> to abort:</p>

Post-Installation Tasks

Step	Action
5	<p>Press Return.</p> <p>Result: The procedure then continues by starting HUBwatch. HUBwatch begins by displaying hub management and configuration information.</p> <p>Example:</p> <pre>WATCH /AGENT 00.00.00.00 - /COMMUNITY="public" - /TIMEOUT=5 /RETRIES=2 /VIEW=PHYSICAL (I) HUBWATCH\$LIBRARY = SYS\$LOGIN</pre> <p>The procedure then displays the following:</p> <pre>HUBwatch for OpenVMSRevision 3.1</pre> <p>If you have not previously installed and used HUBwatch, you will receive warning messages like the following, which you can ignore:</p> <pre>(W) Current agent not in the agent table (W) Unresolved agent node IP name (W) Agent type DETMM found for 00.00.00.00</pre> <p>As part of the IVP, HUBwatch software displays the Hub front panel window. 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 Use</i> book has pictures of the Hub front panel windows that appear for the DEChub 900MS and the DECagent 90.</p>
6	<p>Exit the Hub front panel window. Click on the File menu and then click on Exit.</p> <p>Result: The procedure displays the following:</p> <p>The HUBwatch events viewer will now be verified.</p> <p>When the HUBwatch viewer window appears on the display, move the pointer to the `File` menu, and press and hold mouse button 1. Slide the pointer down to `Exit` in the menu which will appear below `File`, and release the mouse button.</p> <p>* Hit the <Return> key to start the events viewer, or<ctrl/z> to abort:</p> <pre>\$ WATCH /VIEWER</pre>

Step	Action
7	Press return to verify the events viewer. Result: The HUBwatch software displays the Events Viewer window.
8	Exit the Events Viewer window. Click on the File menu and then click on Exit. Result: The procedure displays the following: Exiting HUBwatch HUBwatch Version 4.1 Installation verification complete.

Task 2: Installing HUBwatch Help Files Separately

If anyone on the system was using OpenVMS help while you were installing HUBwatch, the installation did not add HUBwatch help to the OpenVMS help library. To add help for the HUBwatch startup command, WATCH/AGENT, at a later time, use the following command:

```
$ LIBRARY /REPLACE /HELP SYS$HELP:HELPLIB SYS$HELP:HUBWATCH.HLP
```

Task 3: Editing the System Startup Command Procedure

To start HUBwatch after the installation is complete, you must add the following line to SYS\$MANAGER:SYSTARTUP_VMS.COM for OpenVMS Version 6.0 or later, :

```
$ @SYS$STARTUP:HUBWATCH$STARTUP.COM
```

Task 4: Modifying DECmcc Version 1.2 Files

To launch HUBwatch from DECmcc Version 1.2, all DECmcc users need to modify their own MCC_RESOURCE.DAT files according to the instructions in MCC_SYSTEM:MCC_HUBWATCH.COM.

Users of POLYCENTER Version 1.3 or later can launch HUBwatch from the POLYCENTER Applications menu without editing any files.

For More Information

See Appendix A for details about using HUBwatch with the POLYCENTER software.

Starting HUBwatch as a Standalone Application

Introduction

This section describes how to start HUBwatch for OpenVMS as a standalone application. Appendix A describes how to start HUBwatch as an add-on application to the POLYCENTER Network Management platform.

HUBwatch Logicals

HUBwatch and the included HUBloader applications use a number of logicals that are set at kit installation time.

Note: The HUBloader application requires that the DEChub Consolidated Firmware kit also is installed on your system.

Logical	Description
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 <code>dcffiles.dat</code> files are located.
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 need write access to this directory.

Command Syntax

Use the following command to start HUBwatch:

```
$ WATCH/AGENT agent-name or ip-address/COMMUNITY=comm-string  
_ $ /RETRIES=n /TIMEOUT=n /VIEW=logical (or physical)
```

Command Use

When you start HUBwatch, you can use all or part of the full startup command. Which you use depends on whether you previously used HUBwatch to add entries for the agents you want to use to the Agent List box in the Community window.

For More Information

See SNMP Agents in Chapter 4 for information about adding agent entries.

Command Variables

These are the start command variables.

This Variable...	Specifies...
<code>agent-name</code>	The name assigned to the agent module Example: <code>agent1</code> .
<code>ip-address</code>	The Internet address in the form <i>n.n.n.n</i> , <i>n</i> being a decimal number less than 256.
<code>comm-string</code>	The name assigned to the community. When you enter the community name, use quotation marks. Example: <code>Community="public"</code> .
<code>/RETRIES=<i>n</i></code>	An integer that sets the number of retries allowed.
<code>/TIMEOUT=<i>n</i></code>	The timeout period in seconds.
<code>/VIEW=<i>n</i></code>	Whether a logical or physical view of the hub appears in the Hub front panel window. The physical view is the default.

The First Time You Start HUBwatch

The first time you invoke HUBwatch, the startup command must at least include an agent's IP address.

Example: `$ WATCH/AGENT 00.00.00.00`

HUBwatch will use default values for the remaining parameters. (The default community name is public. If the requested agent has a different community name, you must specify that name.)

Starting Subsequent HUBwatch Sessions

Once you are running HUBwatch, add entries for the agents you want to use with the Add Agent window. Then, you can invoke HUBwatch with the name of an agent from the Agent List box.

Example: `$ WATCH/AGENT HUBMAN`

Information About Adding Agents: See SNMP Agents in Chapter 4.

Starting HUBwatch as a Standalone Application

Initial Display

When you execute the startup command, 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, a GIGAswitch, or a standalone module. The *HUBwatch Use* book has pictures of the DEChub 900MS and DECagent 90 Hub front panel windows.

Steps

Complete the following steps to start HUBwatch.

Step	Action
1	Is the logical name HUBWATCH\$LIBRARY defined as the directory that contains or will contain the Agent file, HUBWATCH_AGENTS.DAT? <ul style="list-style-type: none">• If yes, go to step 2.• If no, define the logical name as the correct directory. See the <i>HUBwatch Use</i> book for details.
2	Are you currently using HUBwatch Version 2.0 or earlier? <ul style="list-style-type: none">• If no, go to step 3.• If yes, make a backup copy of your Agents file before running HUBwatch Version 4.1. The first time you add or delete an agent in your Agents file, HUBwatch Version 4.1 automatically converts the Agents file into a new format. The new format is not compatible with earlier versions of HUBwatch. The Agents file is located in HUBWATCH\$LIBRARY:HUBWATCH_AGENTS.DAT
3	Enter the HUBwatch start command.

Starting the Poller and the Events Viewer

Introduction

The HUBwatch poller is a background process that queries a list of DEChubs and DEChub modules for selected MIB information. This information is then used by the HUBwatch alarms component. The events viewer allows you to view this information.

Poller Command Syntax

Use the following command to start the poller:

```
$ WATCH/POLLER START [/FILE=alarmed-agents-file-name]
```

Command Variable: The `FILE=alarmed-agents-file-name` variable tells HUBwatch to read the specified file without starting the Alarms Setup window.

Disabling the Poller: To disable the poller, enter the following command:

```
$ WATCH/POLLER STOP
```

Events Viewer Command Syntax

Use the following command to start the events viewer:

```
$ WATCH/VIEWER
```

