
Chapter 5

Network Module Configuration

Overview

Introduction

When you know which modules you want the HUBwatch application to manage and have determined the SNMP agent that the module requires, you are ready to configure the module. To configure the network modules for use with HUBwatch, you must install and start the HUBwatch application.

In This Chapter

This chapter covers the following topics:

- Configuration considerations
- Configuring SNMP agents
- Adding agent information
- Adding module information
- Configuring 900-series modules
- Configuring a DECagent 90
- Configuring 90-series DECbridges
- Configuring 90-series DECbrouters
- Configuring 90-series DECrepeaters
- Configuring 90-series DECservers

Configuration Considerations

Modules Not Directly Manageable In This HUBwatch Version

The following modules are not directly manageable through HUBwatch views. However, if you install them in a hub, they appear on the Hub Front Panel window.

- DECpacketprobe 90. If you double click on the module, HUBwatch attempts to bring up Probewatch, if installed.
- DECpacketprobe 900RR. If you double click on the module, HUBwatch attempts to bring up Probewatch, if installed.
- RouteAbout Access EW. If you double click on the module, you start a telnet session.

When You Configure a Network Module

After you install a network module, you need to configure it so that HUBwatch can manage it. Make sure that:

- You have the latest firmware.
- The required SNMP agent for the module is configured.
- The agent information is added to HUBwatch.

To configure the module for HUBwatch management, you:

- Complete the module-specific procedures described in this chapter.
- Add module-specific information by using the Add Module window, if required.
- Read the *HUBwatch Use* book for information about using the interface.

References

See the following for more information about SNMP agents and related procedures.

| If You Need to Know About... | Then See This Section... |
|---------------------------------------|--|
| Selecting the correct SNMP agent | SNMP Agents in Chapter 4 |
| Adding agent information to HUBwatch | “Adding Agent Information” in this chapter |
| Adding module information to HUBwatch | “Steps: Adding Module Information” in this chapter |

Configuring SNMP Agents

Introduction

This section describes the SNMP agent configuration procedures for:

- The DEChub 900MS Hub Manager
- 900-Series Modules
- The DECagent 90
- DECbrouters 90T1, 90T2 and 90T2A
- DECrepeaters 90FS and 90TS
- DECservers 90TL, 90M, and 900TM

DEChub 900MS Hub Manager Requirements

If you have a DEChub 900MS, you can manage the modules in the hub through the DEChub 900MS Hub Manager. The Hub Manager permits both in-band and out-of-band management.

In-Band Management Requirements: For in-band management, you need to install an IP services module in the hub that provides the IP interface for the Hub Manager. The IP services module must be reachable from the HUBwatch management station. Currently, the following modules are capable of providing IP services:

- DECbridge 900MX.
- DECconcentrator 900MX and 900TH, 900FH.
- DECrepeater 90FS and 90TS.
- DECrepeaters 900GM, 900FP, and 900TM.
- DECswitches 900EE and 900EF.
- PEs switch 900TX
- DECserver 900GM
- DECrepeater 900TL, 900FL, and 900SL
- DECmau 900TL
- DECmau 900TH
- PORTswitch 900TP, 900CP, and 900FP

Out-of-Band Management Requirements: Out-of-band management uses the OBM port on the DEChub 900MS (the DEChub 900MS hardware documentation describes the OBM port).

Configuring SNMP Agents

The OBM port supports the SLIP protocol only.

To enable management of the hub through the DEChub 900MS Hub Manager, you must create a minimum default configuration for the Hub Manager. When you configure the Hub Manager for both in-band and out-of-band management, you must supply different IP addresses for the in-band and out-of-band paths.

Procedure: DEChub 900MS Hub Manager Configuration

Complete the following steps to configure the Hub Manager.

| Step | Action | | | | | | | | |
|------------------|---|-----------|---------|----------------|-----------|------------------|-------------------|-----------|---|
| 1 | Connect a terminal to the DEChub 900MS setup port. The setup port is an RJ45 connector located on the hub. | | | | | | | | |
| 2 | Set the terminal parameters as follows. <table border="1"><thead><tr><th>Parameter</th><th>Setting</th></tr></thead><tbody><tr><td>Transmit speed</td><td>9600 baud</td></tr><tr><td>Character format</td><td>8 bits, no parity</td></tr><tr><td>Stop bits</td><td>1</td></tr></tbody></table> <p>Note: There is no flow control. Some terminal parameter settings, such as smooth scroll, may cause problems.</p> | Parameter | Setting | Transmit speed | 9600 baud | Character format | 8 bits, no parity | Stop bits | 1 |
| Parameter | Setting | | | | | | | | |
| Transmit speed | 9600 baud | | | | | | | | |
| Character format | 8 bits, no parity | | | | | | | | |
| Stop bits | 1 | | | | | | | | |
| 3 | If you have not yet installed an IP services module in the hub, do so now. Multiple IP Services Modules: If you have more than one module that can provide IP services in the hub, put the one used as the IP interface into a slot with a larger number to ensure that it gets higher priority for power. | | | | | | | | |
| 4 | At the terminal prompt, press Return or Ctrl/C. Result: The DEChub 900MS Main menu appears. Reference: See the DEChub 900MS hardware documentation for information about using the DEChub 900MS Main menu. | | | | | | | | |

Configuring SNMP Agents

| Step | Action |
|------|---|
| 5 | <p>Are you using in-band management?</p> <ul style="list-style-type: none">• If no, go to step 6.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the option for setting the in-band management IP address.b. Enter the IP address for in-band management in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255.c. Enter the slot number of the module that will supply the IP services for the Hub Manager. <p>Moving the IP Services Module: If you later move the IP services module to a different slot, you must reconfigure the hub to utilize the new slot by performing the steps in this procedure again.</p> |
| 6 | <p>Are you using out-of-band management?</p> <ul style="list-style-type: none">• If no, go to step 7.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the option for setting the out-of-band management IP address.b. Enter the IP address for out-of-band management in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. Note: The IP addresses for in-band and out-of-band management must differ.c. If you are using HUBwatch for Windows for out-of-band management, refer to Appendix B for instructions on how to configure HUBwatch for Windows to run over a SLIP connection. |
| 7 | <p>Do you want a read-write community name other than “public”?</p> <ul style="list-style-type: none">• If no, go to step 8.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the option for setting the SNMP community name.b. Enter the read-write community name. The community name consists of 4 to 32 printable characters and functions as a password giving a sending SNMP entity read-write access to the Hub Manager. |

Configuring SNMP Agents

| Step | Action |
|------|---|
| 8 | <p>Is there a router between the HUBwatch management station and the module that provides the IP interface?</p> <ul style="list-style-type: none">• If no, you finished the procedure.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the option for redirect mode.b. Enter the slot number of the IP services module. The module's Main menu appears (see the module's hardware documentation).c. Select the option for setting the in-band gateway address.d. Enter the IP address for the default gateway address in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. |
| 9 | <p>Start HUBwatch and add an entry for the Hub Manager by using the Add Agent window.</p> <p>Adding Agent Information: See “This is the Add Agent window that you use to add agent information to the agent file. Depending on the operating system you use, this window might appear slightly different on your screen.” in this chapter.</p> |

Procedure: 900-Series Module Configuration

Perform the following procedure on each 900-series module manageable by HUBwatch (see Appendix E for modules that HUBwatch manages) to configure it as an SNMP agent.

| Step | Action | | | | | | | | |
|------------------|--|-----------|---------|----------------|-----------|------------------|-------------------|-----------|---|
| 1 | Install the module in a DEChub ONE, DEChub ONE MX, or a DEChub 900MS. | | | | | | | | |
| 2 | <p>Connect a terminal to the setup port on the DEChub ONE or the DEChub 900MS.</p> <p>References: See the DEChub ONE hardware documentation or the DEChub 900 MultiSwitch hardware documentation for information about using the setup port.</p> | | | | | | | | |
| 3 | <p>Set the terminal parameters as follows.</p> <table><thead><tr><th>Parameter</th><th>Setting</th></tr></thead><tbody><tr><td>Transmit speed</td><td>9600 baud</td></tr><tr><td>Character format</td><td>8 bits, no parity</td></tr><tr><td>Stop bits</td><td>1</td></tr></tbody></table> | Parameter | Setting | Transmit speed | 9600 baud | Character format | 8 bits, no parity | Stop bits | 1 |
| Parameter | Setting | | | | | | | | |
| Transmit speed | 9600 baud | | | | | | | | |
| Character format | 8 bits, no parity | | | | | | | | |
| Stop bits | 1 | | | | | | | | |

Configuring SNMP Agents

| Step | Action |
|------|--|
| 4 | <p>Access the module's Installation menu. How you access the menu depends on whether the module is in a DEChub 900MS or a DEChub ONE. If the module is in a DEChub ONE, press Return at the terminal. If the module is in a DEChub 900MS, complete the following steps.</p> <ol style="list-style-type: none">Select the option for redirect mode on the DEChub 900MS Installation menu.Enter the slot number of the module. The module's Installation menu appears. <p>References: See the DEChub 900MS hardware documentation for information about redirect mode. See the module's hardware documentation for information about the module's Installation menu.</p> |
| 5 | <p>Are you using in-band management?</p> <ul style="list-style-type: none">If no, go to step 6.If yes, complete the following steps.<ol style="list-style-type: none">Select the menu option for setting the in-band IP address.Enter the in-band IP address in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255.Return to the Hub Manager Installation menu. |
| 6 | <p>Are you using out-of-band management?</p> <ul style="list-style-type: none">If no, go to step 7.If yes, complete the following steps.<ol style="list-style-type: none">Select the menu option for setting the out-of-band IP address.Enter the out-of-band IP address in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. <p>Note: The IP addresses for in-band and out-of-band management must differ.</p> |

Configuring SNMP Agents

| Step | Action |
|------|--|
| 7 | <p>Do you want a read-write community name other than “public”?</p> <ul style="list-style-type: none">• If no, you have finished this procedure; exit the Installation menu.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the menu option for setting the community name.b. Enter the read-write community name.c. The community name consists of 4 to 32 printable characters and functions as a password giving a sending SNMP entity read-write access to the module.d. If there is a router between the HUBwatch management workstation and the module, select the menu option for setting the in-band gateway address.e. Enter the IP address for the default gateway in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. |

Procedure: DECagent 90 Agent Configuration

The DECagent 90 permits both in-band and out-of-band management. If you have a DEChub 900MS, Digital recommends that you manage it and its installed modules with the Hub Manager.

complete the following steps to configure the DECagent 90 as an SNMP agent.

| Step | Action |
|------|---|
| 1 | <p>Are you installing the DECagent 90 in a DEChub 90?</p> <ul style="list-style-type: none">• If yes, install it in slot 7 or 8 for a single backplane hub configuration, and slot 7, 8, 15, or 16 for an extended hub.• If no, go to Step 2. |
| 2 | <p>Are you installing the DECagent 90 in a Digital MultiStack System?</p> <ul style="list-style-type: none">• If yes, install it in the Agent slot (set Digital MultiStack System back cover slot selector switch to agent).• If no, there are no slot restrictions. |

Configuring SNMP Agents

| Step | Action |
|------|--|
| 3 | Turn the power on and connect a terminal to the DECagent 90 setup port. Reference: See the DECagent 90 hardware documentation for information about the setup port. |
| 4 | At the terminal, press Return a few times. |
| 5 | Enter the module console password, if prompted to do so. The Main menu appears. Reference: See the DECagent 90 hardware documentation for information about using the Main menu. |

In-band Management: For in-band management, create a minimum default configuration for your DECagent 90 module. complete the following steps.

| Step | Action |
|------|---|
| 1 | Select the menu option for setting the IP address. |
| 2 | Enter the IP address in the form <i>nnn.nnn.nnn.nnn</i> , where the maximum value of <i>nnn</i> is 255. A prompt allowing you to enter an optional default gateway appears after you enter the IP address. Considerations: <ul style="list-style-type: none">• If your network has a BOOTP server that is set up to recognize the DECagent 90s MAC address, the DECagent 90s startup procedure will find the IP address and display it in the IP Address fields. In that case, you do not need to enter an IP address. Press Return to accept the address shown.• If the BOOTP server was set up to recognize the MAC address after you started the DECagent 90, the DECagent 90 will issue a BOOTP request for its IP address if you enter zero (0.0.0.0) at the IP address prompt. You will then be asked to restart the DECagent 90 module so that the BOOTP request can be issued.• If you attempt to set the DECagent 90 IP address to an address that is in a community trap address table, a warning message appears. If you want to use this address for the agent, you must remove it from the community trap address table. See the DECagent 90 hardware documentation. |
| 3 | Enter the IP address of the default gateway you want, or press Return if you do not want to specify a default gateway. |

Configuring SNMP Agents

| This Agent... | Requires... |
|----------------------|---|
| 4 | Do you want a read-write community name other than “public”? <ul style="list-style-type: none">• If no, you have finished this procedure.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the menu option for setting the community name.b. Enter the read-write community name. The community name consists of 4 to 32 printable characters and functions as a password giving a sending SNMP entity read-write access to the DECagent 90. |

Out-of-Band Management: For out-of-band management, complete the following steps.

| Step | Action |
|-------------|--|
| 1 | Select the menu option for switching to SLIP mode. |
| 2 | Disconnect the cable from the terminal to the DECagent 90. |
| 3 | Connect the DECagent 90 serial port directly or through a modem to a station that supports SLIP. |

Procedure: DECbrouter 90T1, 90T2, or 90T2A Configuration

If you have not already executed the DECbrouter first-time startup configuration, you will be asked a series of System Configuration Dialog questions. Refer to the DECbrouter documentation for more information about the System Configuration Dialog.

Complete the following steps on each DECbrouter 90T1, 90T2, or 90T2A module to configure its built-in SNMP agent.

| Step | Action |
|------|---|
| 1 | Connect a terminal to the setup port of the DECbrouter. |
| 2 | <p>See if the brouter is running the IP protocol on the Ethernet port and to check its IP address and network mask, issue the following privileged mode commands to the brouter console.</p> <pre>Router# ENABLE <Return></pre> <pre>Password <Return></pre> <pre>Router# SHOW IP INTERFACE ETHERNET 0 <Return></pre> <p>Result: The brouter will either respond with Internet protocol processing disabled or display detailed information about Internet processing on the Ethernet port.</p> |
| 3 | <p>If needed, enable IP or change the address or network mask. complete the following steps:</p> <p>a. Issue the following privileged command to the brouter console.</p> <pre>Router# CONFIG <Return></pre> <p>Result: The following message appears.</p> <pre>Configuring from terminal, memory, or network [terminal]?</pre> <p>b. Press Return to select terminal.</p> <p>Result: The following messages appears:</p> <pre>Enter configuration commands, one per line.</pre> <pre>Edit with DELETE, CTRL/W, and CTRL/U; end with CTRL/Z.</pre> <p>c. Enter the following commands.</p> <pre>Router# INTERFACE ETHERNET 0 <Return></pre> <pre>Router# IP ADDRESS nnn.nnn.nnn.nnn mmm.mmm.mmm.mmm</pre> <pre><Return></pre> <pre><Ctrl/Z></pre> <ul style="list-style-type: none"> • The <i>nnn.nnn.nnn.nnn</i> variable is the Ethernet port's IP address. • The <i>mmm.mmm.mmm.mmm</i> variable is the port's network mask. |

Configuring SNMP Agents

| Step | Action |
|------|---|
| 4 | <p>If needed, enable the SNMP server and define an SNMP community string for the brouter. Complete the following steps:</p> <ol style="list-style-type: none">Issue the following privileged command to the brouter console: <pre>Router# CONFIG <Return></pre><p>Result: The following message appears: Configuring from terminal, memory, or network [terminal]?</p>Press Return to select terminal. <p>Result: The following message appears: Enter configuration commands, one per line. Edit with DELETE, CTRL/W, and CTRL/U; end with CTRL/Z.</p>Enter the following command: <pre>Router# SNMP-SERVER COMMUNITY <i>comm-string</i> RW <Return> Ctrl/Z></pre><p>The <i>comm-string</i> variable is the community string for the brouter's SNMP server.</p> |
| 5 | <p>Save this configuration in nonvolatile memory. Issue the following privileged command to the brouter console. <pre>Router# WRITE MEMORY <Return></pre></p> |
| 6 | <p>Verify the Internet and SNMP configuration of the brouter. Use the following command. <pre>Router# SHOW CONFIG <Return></pre><p>Result: At the end of each page of configuration information displayed, the brouter issues a “-More-” prompt. Press the space bar to get the next page of information. Press any other key to discontinue the display.</p></p> |

Procedure: DECreepeater 90FS and DECreepeater 90TS Configuration

Complete the following steps to configure a DECreepeater 90FS or 90TS as an SNMP agent.

| Step | Action | | | | | | | | |
|------------------|--|-----------|---------|----------------|-----------|------------------|-------------------|-----------|---|
| 1 | Install the repeater in a DEChub ONE, a DEChub 90, a Digital MultiStack System, or a DEChub 900MS. | | | | | | | | |
| 2 | Connect a terminal to the repeater's setup port (see the repeater's hardware documentation) if the repeater is in a DEChub ONE, DEChub 90, or a Digital MultiStack System. Or connect a terminal to the DEChub 900MS setup port (see the DEChub 900 MultiSwitch hardware documentation) if the repeater is in a DEChub 900MS. | | | | | | | | |
| 3 | Set the terminal parameters as follows. <table border="1" data-bbox="386 1037 760 1213"> <thead> <tr> <th>Parameter</th> <th>Setting</th> </tr> </thead> <tbody> <tr> <td>Transmit speed</td> <td>9600 baud</td> </tr> <tr> <td>Character format</td> <td>8 bits, no parity</td> </tr> <tr> <td>Stop bits</td> <td>1</td> </tr> </tbody> </table> | Parameter | Setting | Transmit speed | 9600 baud | Character format | 8 bits, no parity | Stop bits | 1 |
| Parameter | Setting | | | | | | | | |
| Transmit speed | 9600 baud | | | | | | | | |
| Character format | 8 bits, no parity | | | | | | | | |
| Stop bits | 1 | | | | | | | | |
| 4 | <p>Access the repeater's Main menu. How you access the menu depends on whether the repeater is in a DEChub ONE, a DEChub 90, a Digital MultiStack System, or a DEChub 900MS.</p> <ul style="list-style-type: none"> • If the repeater is in a DEChub ONE, a DEChub 90, or a Digital MultiStack System, press Return at the terminal. • If the repeater is in a DEChub 900MS, complete the following steps. <ol style="list-style-type: none"> a. Select the Redirect Mode option on the DEChub 900MS Main menu (see the DEChub 900MS hardware documentation). b. Enter the slot number of the repeater. c. The repeater's Main menu appears (see the repeater's hardware documentation). | | | | | | | | |

Configuring SNMP Agents

| Step | Action |
|------|---|
| 5 | <p>Are you using in-band management?</p> <ul style="list-style-type: none">• If no, go to step 7.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the menu option for setting the in-band IP address.b. Enter the in-band IP address in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. |
| 6 | <p>Do you want a read-write community name other than “public”?</p> <ul style="list-style-type: none">• If no, go to step 8.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the menu option for setting the community name.b. Enter the read-write community name. The community name consists of 4 to 32 printable characters and functions as a password giving a sending SNMP entity read-write access to the repeater. |
| 7 | <p>Is there is a router between the HUBwatch management workstation and the repeater?</p> <ul style="list-style-type: none">• If no, go to step 8.• If yes, complete the following steps.<ol style="list-style-type: none">a. Select the menu option for setting the in-band gateway address.b. Enter the IP address for the default gateway in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. |

Configuring SNMP Agents

| Step | Action |
|------|--|
| 8 | <p>Are you using out-of-band management?</p> <ul style="list-style-type: none">• If no, you have finished the procedure.• If yes, do one of the following:<ol style="list-style-type: none">a. If the repeater is in a DEChub 900MS, the Hub Manager is the agent for out-of-band management. Configure the Hub Manager according to the instructions in the <i>Configuration</i> section in this chapter.b. If the repeater is in a DEChub ONE, a Digital MultiStack System, or a DEChub 90, complete the following steps to configure the module for out-of-band management:<ol style="list-style-type: none">i. Select the menu option for setting the out-of-band IP address.ii. Enter the out-of-band IP address in the form <i>nnn.nnn.nnn.nnn</i>, where the maximum value of <i>nnn</i> is 255. |

Configuring SNMP Agents

Procedure: DECserver 90TL, 90M, 900TM, or 900GM Configuration

Complete the following steps procedure for each DECserver 90TL, 90M, 900TM, or 900GM module to configure it as an SNMP agent.

| Step | Action |
|------|---|
| 1 | Set privileges on a DECserver 90TL, 90M, 900TM, or 900GM port by connecting a terminal to port 1 and pressing Return until the following message appears. Enter username: |
| 2 | Enter a user name (can be any name) and press Return. Result: The following access server prompt appears: Local> |
| 3 | Enter the SET PRIVILEGES command and the password. Example: Local> SET PRIV <Return> Password> SYSTEM <Return> (Not echoed; SYSTEM is the factory-default password.) |
| 4 | Determine the access server's Internet address and subnet mask. Example: Local> SHOW INTERNET <Return> Internet Address: 11.21.215.13 Subnet Mask: 255.255.0.0 |
| 5 | Have your network administrator verify that these are the correct values. If the values are incorrect, reset them on the access server module by using either the DEFINE, SET, or CHANGE commands. Example: Local> DEFINE INTERNET SUBNET MASK 255.255.255.0 <Return> Local> DEFINE INTERNET ADDRESS 12.23.34.45 <Return> |
| 6 | Enter the SHOW command to display SNMP information. The displayed values should show the SNMP state is ENABLED, Address is set to either ANY or the address of the management workstation, and that the GET, GETNEXT, and SET are ENABLED for the given community. Example: Local> SHOW SNMP <Return> SNMP State: ENABLED Authentication Failure: ENABLED Community Name Address GET GETNEXT SET TRAP Any ENA ENA ENA DIS |

Configuring SNMP Agents

| Step | Action |
|------|--|
| 7 | <p>Are SNMP values set correctly?</p> <ul style="list-style-type: none">• If yes, go to step 8.• If no, use these commands to set the values as required: <pre>Local> CHANGE SNMP STATE ENABLED Local> CHANGE SNMP COMMUNITY public GET ENABLE Local> CHANGE SNMP COMMUNITY public GETNEXT ENABLE Local> CHANGE SNMP COMMUNITY public SET ENABLE Local> CHANGE SNMP COMMUNITY public ADDRESS ANY</pre><p>or</p><pre>Local> CHANGE SNMP COMMUNITY public ADDRESS n.n.n.n</pre> <ul style="list-style-type: none">• <i>n.n.n.n</i> is the Internet address of the network management workstation running the HUBwatch software (for example, 11.22.33.44).• “public” is the default SNMP community. <p>Considerations: When entering this information, consider the following:</p> <ul style="list-style-type: none">• If you enter the address of a particular station, only that station will be able to use SNMP to communicate with the access server.• You may define a community string other than “public”, but make sure that the community that you use for the access server matches the community string that appears for the access server in the HUBwatch Agent List box (see in this chapter and you specify in the HUBwatch Add Module window (see “Steps: Adding Module Information” in this chapter). |
| 8 | <p>Did you change either the Internet address or subnet mask (step 5)?</p> <ul style="list-style-type: none">• If no, you have finished the procedure.• If yes, reset the access server. Enter this command: <pre>Local> INIT DELAY nn</pre> <p>The delay time period (<i>nn</i>) can be from 0 to 1440 minutes.</p> <p>Result: The following message appears: <pre>Local> -199- WARNING - Communications server shutdown in nn minutes</pre></p> |

After You Configure SNMP Agents

After you configure the SNMP agents, complete the following steps.

- Start the HUBwatch application and use the Add Agent window from the Community Table window to add agent information for the modules you configured as SNMP agents.
- Read the chapter that describes managing communities and agents in the *HUBwatch Use* book. You manage communities somewhat differently depending on whether the agent HUBwatch uses is a DECagent 90, a DEChub 900MS Hub Manager, or a module's built-in SNMP agent.

Adding Agent Information

When to Use

Add agent information to HUBwatch when:

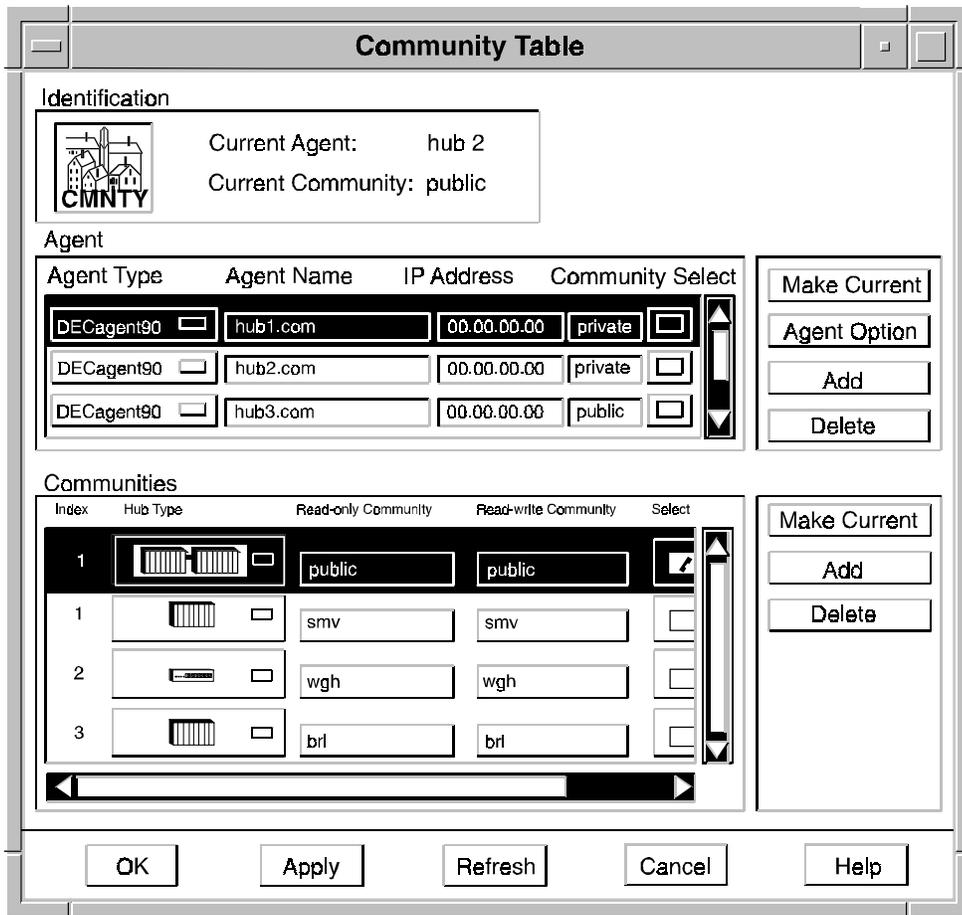
- Configuring a DECagent 90 as an SNMP agent for in-band or out-of-band management.
- Configuring the DEChub 900MS Hub Manager for in-band or out-of-band management.
- Configuring a network module's built-in agent.

Which Windows to Use

When adding agent information to HUBwatch, you use the Community Table window and the Add Agent window.

Community Table Window

This is the Community Table window. The Agent List box shows which agents are configured for the hub (the entries in the agent file). Depending on the operating system you use, this window might appear slightly different on your screen.



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Add Agent Window

This is the Add Agent window that you use to add agent information to the agent file. Depending on the operating system you use, this window might appear slightly different on your screen.

The screenshot shows a dialog box titled "Add Agent". It contains the following fields and values:

- IP Address: 00.00.00.00
- Agent Name: hub2.com
- Community: Private
- Timeout: 3
- Retries: 1
- MAC Address: (empty)
- Comments: HUB on second floor
- AgentType: DECagent90

At the bottom of the dialog are two buttons: "OK" and "Cancel".

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Adding Agent Information

Steps: Adding Agent Information

Complete the following steps to add agent information to HUBwatch.

| Step | Action |
|------|--|
| 1 | From the Hub Front Panel, click on Community in the menu bar. Result: The Community menu appears. |
| 2 | Click on the Manage Table option. Result: The Community Table window appears. If you have not yet used the Community Table window to supply agent information, the fields in the window will be blank. |
| 3 | Click on Add located next to the Agent List box. Result: The Add Agent window appears. |

Adding Agent Information

| Step | Action |
|------|--|
| 4 | <p>Supply the following information and click on OK to execute the change (unless indicated information is optional):</p> <ul style="list-style-type: none">• IP address (required field).• Agent name.• Community name to use in HUBwatch SNMP requests; the default is “public”.• A timeout value; the length of time that the network management station (NMS) waits for a response after sending a request to the agent. The default is 5 seconds.• The number of retries; the number of times that the NMS resends the request to the agent after a timeout. The default is 1.• MAC address, required if using the following:<ul style="list-style-type: none">– DECagent 90 if installed in a DEChub 900MS.– DECbridges 90 and 90FL if installed in a DEChub 900MS.– DECbrothers 90T1, 90T2, and 90T2A if not managed as standalone modules.– DECservers 90L and 90L+ if installed in a DEChub 900MS.– DECservers 90TL and 90M, if not managed as standalone modules.– DECserver 900TM, if not managed as a standalone module (recommended, not required).<p>Look for the MAC address on the module's front or rear bezel (see the module's owner's manual for exact location). The MAC address is a unique 48-bit binary number (usually represented as a 12-digit hexadecimal number) encoded in a device's circuitry to identify it on a local area network.</p>• Comments on the agent (for example, its physical location).• Agent type (for example, a DECagent 90). <p>Result: The Add Agent window closes, HUBwatch adds the information to the agents file, and the Hub Front Panel remains displayed.</p> |

More Information

See the online help and the *HUBwatch Use* book for additional information about using the Community Table window and the Add Agent window.

Adding Module Information

When to Use

Add module information when configuring:

- DECbridges 90 and 90FL (not required if you install them in a DEChub 900MS with a Hub Manager configured).
- A DECserver 90L.
- Some DECservers 90L+ available prior to the release of HUBwatch Version 2.0. (If an installed DECserver 90L+ does not appear on the Hub Front Panel windows, you must supply the information manually. For a DECserver 90L+ that is autodiscovered, HUBwatch windows use the label 90L+2.)
- DECservers 90TL or 90M that are not running the DECserver Network Access Software.
- DECwanrouter 90 (to display it on the Hub Front Panel only; HUBwatch does not manage it).

What to Use

Use the Add Module window to add module information to HUBwatch.

Add Module Window

The illustration that follows is the Add Module window that you use to add module information to HUBwatch. Depending on the operating system you use, this window may appear slightly different on your screen.

Adding Module Information

Add Module:00.00.00.00

Identification

 Slot:
Type:

Slot 2 Name:

Enable status polling

Interface Information

MAC Address:

Password Information

Current Password:
New Password:

Management Information

New Password:
Community:
Location:
Contact:
SNMP Retries:
SNMP Timeout:

LKG-7424-92

Special Conditions

When adding module information, check for the following conditions:

- DECagent 90 is used as an SNMP agent.
When you use a DECagent 90 as the SNMP agent, the Hub Front Panel window displays slots containing modules that are not autodiscovered as empty slots. Click on the empty slot where the non-autodiscovered module resides.
- DEChub 900MS Hub Manager is used as an SNMP Agent.
If you are using a Hub Manager as an agent for a DEChub 900MS, do not click on an empty slot. In this case, the Hub Front Panel window displays slots containing modules that are not autodiscovered with an icon labeled “Unknown.” Click on the slot containing the “Unknown” icon that corresponds to the module whose information you want to add.
- DECserver 90TL is not running the Digital Network Access Services software.
Disable polling before adding a DECserver 90TL module that is not running the Digital Network Access Software (see “Configuring 90-Series Access Servers” in this chapter).

Steps: Adding Module Information

Complete the following steps to add module management information to HUBwatch.

| Step | Action |
|------|--|
| 1 | From the Hub Front Panel window, click on the empty chassis slot where you want to add the module. Result: The module is highlighted. |
| 2 | From the Configuration menu, click on Add. Result: The Add Module window appears. The number of the selected slot appears on the window. |
| 3 | Click on Type. Result: A menu with a list of the available devices appears. |

Adding Module Information

| Step | Action |
|------|--|
| 4 | <p>Click on the desired device type.</p> <p>Result: The window displays an icon and highlights the additional fields required to add the module to your hub configuration. Fields not required for a particular module are grayed out. The fields are:</p> <ul style="list-style-type: none">• <i>MAC Address</i> - The module's Ethernet address.• <i>Enable Status Polling</i> - Turns status polling on or off. If using a DECagent 90 as the module's agent, click on Check to enable polling.• <i>Current Password</i> - The password required to use out-of-band management to manage the module.• <i>IP Address</i> - The module's or the module's management agent's Internet Protocol address.• <i>Community</i> - The community name to which the module or the module's agent belongs.• <i>Location</i> - The module's physical location (for example Taylor Street LAN).• <i>Contact</i> - The name of the person responsible for maintaining the module.• <i>SNMP Retries</i> - The number of times that the network management station (NMS) resends the requests to the agent after a timeout. The default is 2.• <i>SNMP Timeout</i> - The length of time that the NMS waits for a response after sending a request to the agent. The default is 5 seconds. |
| 5 | <p>Fill in the required fields (the fields not grayed out).</p> <p>Result: The Apply and OK buttons are highlighted.</p> |
| 6 | <p>Click on Apply or OK.</p> <p>Result: The Add Module window closes, and the module appears on the Hub Front Panel.</p> |

More Information

See the online help and the *HUBwatch Use* book for more information about using the Add Module window.

Configuring 900-Series Modules

Introduction

This section describes how to configure 900-series modules so that HUBwatch can manage them.

The DECserver 90TL, 90M, 900TM, or 900GM: These access servers require a different procedure. See Steps: DECserver 900TM Configuration in this section.

References

See the following for procedures related to configuring 900-series module.

| For This Information... | See This Section in Chapter 5... |
|---|---|
| Configuring a Hub Manager | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Installing a module in the IP Interface Slot | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Configuring a DECserver's built-in SNMP agent | “Procedure: DECserver 90TL, 90M, 900TM, or 900GM Configuration” |

Steps: 900-Series Module Configuration

Complete the following steps to configure 900-series modules for HUBwatch management.

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Will the module be the IP interface?<ul style="list-style-type: none">• If yes, install it in the IP Interface slot.• If no, you have finished the procedure. |
| Standalone module | <ol style="list-style-type: none">1. Install the module in a DEChub ONE.2. Configure the built-in agent.3. Add an entry for the built-in agent by using the Add Agent window. |

Steps: DECserver 900TM Configuration

Complete the following steps to configure a DECserver 900TM for HUBwatch management.

| When the Module Is Installed in a... | Then Do This... |
|---|--|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Configure the module's built-in agent.4. Add an entry for the module's built-in agent by using the Add Agent window. |
| Standalone module | <ol style="list-style-type: none">1. Configure the module's built-in agent.2. Add an entry for the built-in agent by using the Add Agent window. |

Configuring a DECagent 90

Introduction

This section explains how to configure a DECagent 90 so that HUBwatch can manage it.

References

See the following for procedures related to configuring the DECagent 90.

| For This Information... | See This Section in Chapter 5... |
|----------------------------------|---|
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Using the Add Module window | “Steps: Adding Module Information” |

Additional Reference: See the *HUBwatch Use* book for information about bridge management.

DECagent 90 Configuration

Complete the following steps to configure the DECagent 90 so HUBwatch can manage it.

| When the Module Is Installed in a... | Then Do This... |
|--|---|
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Install the module in slot 7 or 8 of an 8-slot DEChub 90 or slot 7, 8, 15, or 16 of a double DEChub 90. Install the module in the agent slot of a Digital MultiStack System.2. Configure the DECagent 90.3. Add an entry for the DECagent 90 by using the Add Agent window.4. Will the DECagent 90 manage a repeater in a remote hub?<ul style="list-style-type: none">• If no, you have finished the procedure.• If yes, complete the following steps.<ol style="list-style-type: none">a. Install a DECbridge 90 or 90FL in the repeater's hub in slot 7 or 8 of DEChub 90, slot 7, 8, 15, or 16 in a double DEChub90, or the Bridge slot in a Digital MultiStack System.b. Add module information for the bridge by using the Add Module window.c. Set bridge hub management to ON, if necessary, by using the Bridge Summary window. |
| Standalone module | <ol style="list-style-type: none">1. Configure the DECagent 90.2. Add an entry for the DECagent 90 by using the Add Agent window.3. Will the DECagent 90 manage a repeater in a remote hub?<ul style="list-style-type: none">• If no, you have finished the procedure.• If yes, complete the following steps.<ol style="list-style-type: none">a. Install a DECbridge 90 or 90FL in the repeater's hub in slot 7 or 8 of DEChub 90, slot 7, 8, 15, or 16 in a double DEChub90, or the Bridge slot in a Digital MultiStack System.b. Add module information for the bridge by using the Add Module window.c. Set bridge hub management to ON, if necessary, by using the Bridge Summary window. |

Configuring 90-Series DECbridges

Introduction

This section explains how to configure 90-series DECbridges so that HUBwatch can manage them.

Remote Repeaters Require a DECbridge

If you use a DECagent 90 to manage remote repeaters, install a DECbridge 90 or 90FL in the remote hub with the repeater.

References

See the following procedures related to configuring 90-series DECbridges.

| For This Information... | See This Section in Chapter 5... |
|----------------------------------|---|
| Configuring a Hub Manager | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Configuring a DECagent 90 | “Procedure: DECagent 90 Agent Configuration” |
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Using the Add Module window | “Steps: Adding Module Information” |

Additional Reference: See the *HUBwatch Use* book for information about bridge management.

Steps: DECbridge 90 and 90FL Configuration

Complete the following steps to configure a DECbridge 90 or 90FL so HUBwatch can manage it.

Configuring 90-Series DECbridges

| When the Module Is Installed in a... | Then Do This... |
|---|--|
| DEChub 900MS that uses a Hub Manager. | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 4.• If no, configure the DECagent 90.4. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 5.• If no, add an entry for the agent by using the Add Agent window.5. Is the DECagent 90 installed in the same hub as the bridge module?<ul style="list-style-type: none">• If yes go to step 6.• If no, complete the following steps.<ol style="list-style-type: none">a. Create a DECagent 90 standalone community for the bridge by using the Community Table window.b. Use the Add Module window to add the bridge to the DECagent 90 standalone community.6. Associate the bridge with the DECagent 90. Complete the following steps:<ol style="list-style-type: none">a. Add an entry for the bridge's community by using the Add Agent window. Enter the module's MAC address along with the DECagent 90's IP address.b. Set bridge hub management to ON, if necessary, by using the Bridge Summary window. |

Configuring 90-Series DECbridges

| When the Module Is Installed in a... | Then Do This... |
|--|--|
| DEChub 900MS that does not use a Hub Manager | Follow the procedure for the DEChub 90 or a Digital MultiStack System. |
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the DECagent 90 by using the Add Agent window.3. Add the module information by using the Add Module window.4. Set bridge hub management to on, if necessary, by using the Bridge Summary window. |

Configuring 90-Series DECbridges

| When the Module Is Installed in a... | Then Do This... |
|---|--|
| Standalone module | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the DECagent 90 by using the Add Agent window.3. Create a DECagent 90 standalone community for the bridge.4. Add the bridge to the DECagent 90 standalone community by using the Add Module window.5. Associate the bridge with the DECagent 90. Complete the following steps:<ol style="list-style-type: none">a. Add an entry for the bridge's community by using the Add Agent window. Enter the module's MAC address along with the DECagent 90's IP address.b. Set bridge hub management to ON, if necessary, by using the Bridge Summary window. |

Configuring 90-Series DECbrouters

Introduction

This section explains how to configure 90-series DECbrouters so that HUBwatch can manage them.

References

See the following for procedures related to configuring 90-series DECbridges.

| For This Information... | See This Section in Chapter 5... |
|--|---|
| Configuring a Hub Manager | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Configuring a DECagent 90 | “DECagent 90 Configuration” |
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Adding module information to HUBwatch | “Steps: Adding Module Information” |
| Configuring DECbridge built-in agents as SNMP agents | Procedure: DECbridge 90T1, 90T2, or 90T2A Configuration |

Steps: DECbridge 90T1, 90T2, and 90T2A Configuration

Complete the following steps to configure a DECbridge 90T1, 90T2, or 90T2A so that HUBwatch can manage it.

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Configure the module's built-in agent.4. Add an entry for the built-in agent by using the Add Agent window. |

Configuring 90-Series DECbridges

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add the agent by using the Add Agent window.3. Configure the module's built-in agent.4. Add an entry for the built-in agent by using the Add Agent window. |
| Standalone module | <ol style="list-style-type: none">1. Configure the module's built-in agent.2. Add an entry for the built-in agent by using the Add Agent window. |

Configuring 90-Series DECrepeaters

Introduction

This section explains how to configure 90-series DECrepeaters so that HUBwatch can manage them.

Note: If you install the DECrepeater 90C, 90FA, 90FL, 90T, 90T-16, or 90T+ in a DEChub 900MS and do not use a Hub Manager, you can manage the module with a DECagent 90, DECrepeater 90FS, or DECrepeater 90TS.

References

See the following for procedures related to configuring 90-series DECrepeaters.

| For This Information... | See This Section in Chapter 5... |
|--|--|
| Configuring a Hub Manager | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Configuring a DECagent 90 | “Procedure: DECagent 90 Agent Configuration” |
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Adding module information to HUBwatch | “Adding Module Information” |
| Configuring DECrepeater built-in agents as SNMP agents | “Procedure: DECrepeater 90FS and DECrepeater 90TS Configuration” |

Steps: DECRepeaters 90C, 90FA, 90FL, 90T, 90T-16, 90T+ Configuration

Complete the following steps to configure a DECrepeater 90C, 90FA, 90FL, 90T, 90T-16, or 90T+ so that HUBwatch can manage it.

| When the Module Is Installed in a... | Then Do This... |
|--|---|
| DEChub 900MS that uses a Hub Manager | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window. |
| DEChub 900MS that does not use a Hub Manager | <ol style="list-style-type: none">1. Do you have a DECrepeater 90FS or DECrepeater 90TS as your agent in the DEChub 900MS?<ul style="list-style-type: none">• If yes, go to step 3.• If no, go to step 2.2. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 3.• If no, configure the DECagent 90.3. Does an entry for the agent exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 4.• If no, add the agent by using the Add Agent window.4. If your agent is a DECagent 90, is the DECagent 90 in the repeater's hub?<ul style="list-style-type: none">• If yes, you have finished this procedure.• If no, complete the following steps.<ol style="list-style-type: none">a. Install a DECbridge 90 or 90FL in the repeater's hub.b. Add DECbridge 90 or 90FL information to HUBwatch by using the Add Module window. |

Configuring 90-Series DECrepeaters

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add the agent by using the Add Agent window.3. Is the DECagent 90 in the repeater's hub?<ul style="list-style-type: none">• If yes, you have finished this procedure.• If no, complete the following steps.<ol style="list-style-type: none">a. Install a DECbridge 90 or 90FL in the repeater's hub. Use slot 7 or 8 of DEChub 90 or slot 7, 8, 15, or 16 of a double DEChub 90. In a Digital MultiStack System, install the bridge in the bridge slot.b. Add DECbridge 90 or 90FL information to HUBwatch by using the Add Module window. |
| Standalone module | Not applicable. These DECrepeaters can operate as standalone modules; however, you cannot use HUBwatch to manage them. |

Steps: DECrepeater 90FS and 90TS Configuration

Complete the following steps to configure a DECrepeater 90FS or 90TS so that HUBwatch can manage it.

| When the Module Is Installed in a... | Then Do This... |
|--|--|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Will the module be the IP interface?<ul style="list-style-type: none">• If no, you have finished this procedure.• If yes, install it in the IP interface slot. |
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Install the module in slot 7 or 8 of an 8-slot DEChub 90 or slot 7, 8, 15, or 16 of a double DEChub 90. Install the module in the agent slot of a Digital MultiStack System.2. Configure the module's built-in agent.3. Add an entry for the built-in agent by using the Add Agent window. |
| Standalone module | <ol style="list-style-type: none">1. Configure the module's built-in agent.2. Add an entry for the built-in agent by using the Add Agent window. |

Configuring 90-Series Access Servers

Introduction

This section describes how to configure 90-series access servers so that HUBwatch can manage them.

References

See the following for procedures related to configuring 90-series access servers.

| For This Information... | See This Section in Chapter 5... |
|--|---|
| Configuring a Hub Manager | “Procedure: DEChub 900MS Hub Manager Configuration” |
| Configuring a DECagent 90 | “Procedure: DECagent 90 Agent Configuration” |
| Adding agent entries to HUBwatch | “Adding Agent Information” |
| Adding module information to HUBwatch | “Adding Module Information” |
| Configuring access server built-in agents as SNMP agents | “Procedure: DECserver 90TL, 90M, 900TM, or 900GM Configuration” |

Additional Reference: For information about creating communities, see the *HUBwatch Use* book.

Steps: DECServers 90L and 90L+ Configuration

Complete the following steps to configure a DECserver 90L or 90L+ so that HUBwatch can manage it.

Configuring 90-Series Access Servers

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 4.• If no, configure the DECagent 90.4. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 5.• If no, add an entry for the DECagent 90 by using the Add Agent window.5. Is the DECagent 90 installed in the same hub as the DECserver?<ul style="list-style-type: none">• If yes, go to step 6.• If no, complete the following steps.<ol style="list-style-type: none">a. Create an 8-slot hub DECagent 90 community for the access server by using the Community Table window.b. On the Hub Front Panel window, click on the slot that the access server occupies in the DEChub 900MS.c. Use the Add Module window to add the access server to the DECagent 90 community.6. Add an entry for the access server's community by using the Add Agent window. Include the access server's MAC address and the DECagent 90's IP address.7. Add module information to HUBwatch for any access servers 90L and 90L+ that were available before the HUBwatch V2.0 release by using the Add Module window. |

Configuring 90-Series Access Servers

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add the agent by using the Add Agent window.3. Add module information to HUBwatch for any DECservers 90L and 90L+ that were available before the HUBwatch Version 2.0 release by using the Add Module window. |
| Standalone module | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add the agent by using the Add Agent window.3. Create a DECagent 90 standalone community for the module.4. Use the Add Module window to add the module to the DECagent 90 standalone community. |

Steps: DECservers 90TL and 90M Configuration

Complete the following steps to configure a DECserver 90TL or 90M so that HUBwatch can manage it.

| When the Module Is Installed in a... | Then Do This... |
|--------------------------------------|--|
| DEChub 900MS | <ol style="list-style-type: none">1. Does the hub have a configured Hub Manager?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the Hub Manager.2. Does an entry for the Hub Manager exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add an entry for the Hub Manager by using the Add Agent window.3. Configure the module's built-in agent.4. Add an entry for the module's built-in agent in the Agent List Box by using the Add Agent window.5. Add module information for any DECservers 90TL and 90M that are not running the DECserver Network Access Software by using the Add Module window.<p>Note: Disable polling before adding the DECserver 90TL information.</p> |

Configuring 90-Series Access Servers

| When the Module Is Installed in a... | Then Do This... |
|---|---|
| DEChub 90 or Digital MultiStack System | <ol style="list-style-type: none">1. Does a configured DECagent 90 exist on the same LAN segment?<ul style="list-style-type: none">• If yes, go to step 2.• If no, configure the DECagent 90.2. Does an entry for the DECagent 90 exist in the Agent List box in the Community Table window?<ul style="list-style-type: none">• If yes, go to step 3.• If no, add the agent by using the Add Agent window.3. Configure the module's built-in agent.4. Add an entry for the module's built-in agent by using the Add Agent window. Open the Add Agent window from the Community Table window.5. Add module information for any DECservers 90TL and 90M that are not running the DECserver Network Access Software by using the Add Module window. Open the Add Module window from the Configuration pull-down on the Hub Front Panel window.<ul style="list-style-type: none">Note: Disable polling before adding the DECserver 90TL information. |
| Standalone module | <ol style="list-style-type: none">1. Configure the module's built-in agent.2. Add an entry for the module's built-in agent by using the Add Agent window. |
