

HUBwatch for Windows

DECrepeater 90 Management

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Preface

Introduction

This manual is for system managers who are going to use the HUBwatch for Windows application to manage DECrepeater 90 modules.

This manual contains information on selecting a repeater module, managing the configuration, performance and faults for the repeater, accessing the MIB and printing repeater reports.

Conventions

The following table lists the conventions used in this manual.

Convention	Meaning
Note	Contains important information.
<i>Italic type</i>	Emphasizes important information, indicates variables, and indicates complete titles of documents.
Click on	To press and release a mouse button when the pointer is positioned on an active object.
Drag	To press and hold a mouse button, move the mouse, and then release the button.
MB	Indicates a mouse button.
Mouse Button	Position
MB1	Left mouse button
MB2	Right mouse button (middle button on 3-button mouse)

Convention	Meaning
<u>Underline</u>	Indicates the underlined letter on the screen menu item, option, or button. These are designed for use if you do not have a mouse or do not want to use your mouse for accessing menu items. To access items without using a mouse, do the following:
To . . .	Press . . .
Access menu items	[Alt] and the underlined letter
Access options	[Shift] and the underlined letter
Activate buttons	[Alt] and the underlined letter

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Managing DECRepeater 90 Modules

Introduction

HUBwatch for Windows, Version 1.0, supports the DECRepeater 90C and DECRepeater 90T. The DECRepeater 90 is a repeater designed for Institute of Electrical and Electronics Engineers (IEEE) 802.3 CSMA/CD networks. You can use HUBwatch to manage the configuration, performance, and faults related to a selected DECRepeater, but the DECRepeater must be in a hub with a DECbridge 90.

Note

Prior to reading this manual, you should be familiar with the *DECRepeater 90 Owner's Manual*, EK-DECMR-OM. For ordering information, refer to Appendix A.

Selecting the DECRepeater Module

To manage a specific DECRepeater, you must define that repeater by selecting it:

1. Set the display to the hub view, to select a DECRepeater.

or

Set the display to the network or site view to select a standalone DECRepeater.

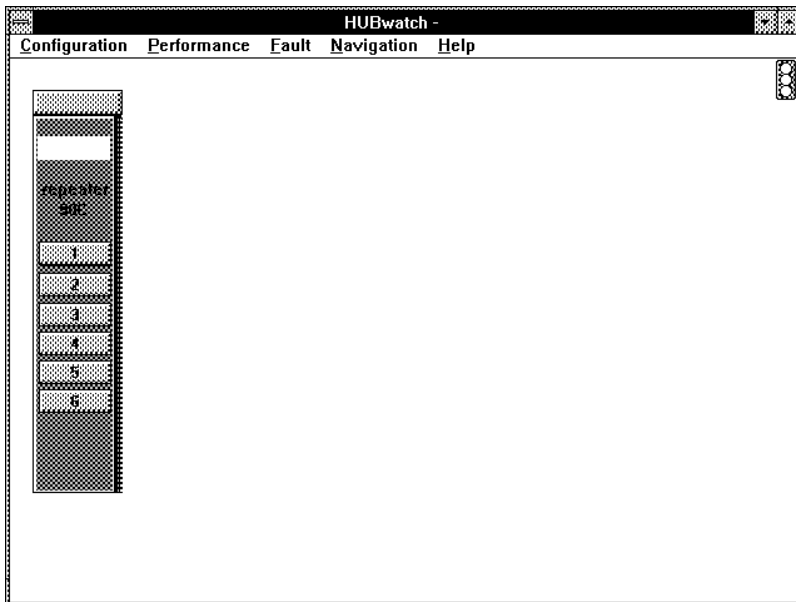
2. Choose the Navigation pull-down menu.
3. Choose the Zoom In option.
The cursor becomes a magnifying glass.
4. Position the magnifying glass on the DECRepeater and click MB1.

HUBwatch displays the module view with the selected DECrepeater module on the left side of your window (Figure 1-1).

Note

You can also access the DECrepeater module by double clicking MB1 on the module itself.

Figure 1-1 Selecting a DECrepeater Module



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Accessing DECrepeater Information

You can access repeater information through the following pull-down menus:

- Configuration
- Performance
- Fault

Managing the DECrepeater Configuration

You can manage the configuration for a DECrepeater at the module view only. A standalone DECrepeater is not manageable. The following table lists the options that appear when you select the Configuration menu from the module view. It also lists the tasks you can perform using these options.

Option	View	Task
Report	Module	View DECrepeater configuration reports.
Note†	Module and Device	Enables you to make an annotation about the selected device.

†This option is not module specific. For further information, refer to the *HUBwatch for Windows User Information* manual.

DECrepeater Configuration Reports

Through the Configuration menu, at the module view, you can access reports on the configuration of the selected repeater. The configuration reports for the repeater include the following:

- Repeater Ports
- Repeater Port Information

Note

This section reviews the configuration information for management of the DECrepeater module only. The configuration information at other views varies. For general information about the Configuration menu, refer to the *HUBwatch for Windows User Information* manual.

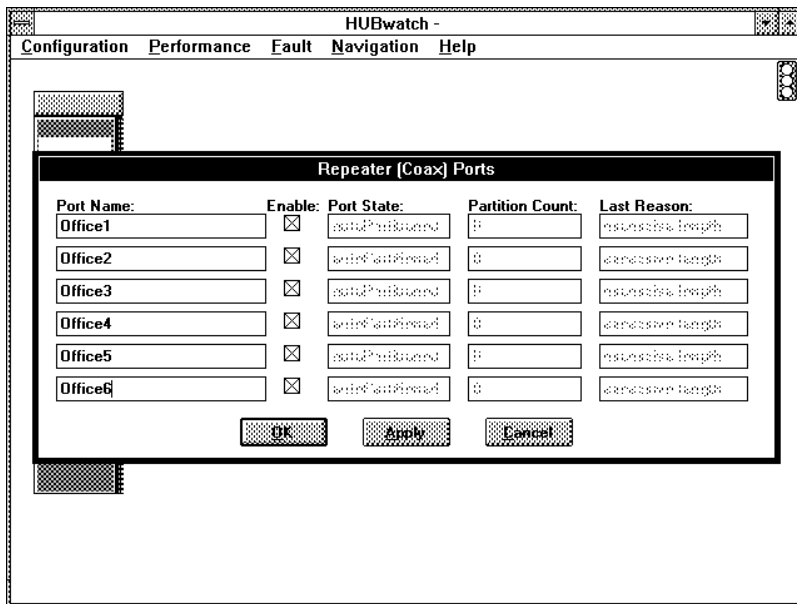
Repeater Ports Report

The Repeater Ports report (Figure 1–2) is accessed from the Repeater Ports option. It displays the following configuration information for the selected repeater.

Field Name MIB Object	Description
Port Name drpt90PortName	The user-defined name for this port. It can be up to 16 alphanumeric characters per port.
Enable drpt90PortAdminStatus	Allows you to enable or disable the port. If disabled (no check) the port is partitioned when you choose the <u>A</u> pply button.
Port State drpt90PortState	The current state of the port. The possible states are as follows: <ul style="list-style-type: none">• active — The port is operating normally.• autoPartitioned — The repeater has detected a fault on the port and partitioned it from the rest of the network.• mgmtPartitioned — The port was partitioned from the management station.
Partition Count drpt90PortPartitionCount	The number of times since the count was last read and that the port partitioned due to a fault.
Last reason drpt90PortAutoPartitionReason	The last reason the port was partitioned. This can be one of the following: <ul style="list-style-type: none">• Excessive length• Excessive collisions• Jabber• No carrier loopback for the DECRepeater 90C or no link pulse for the DECRepeater 90T• Transmit carrier dropout for the DECRepeater 90C

When you are finished viewing the information and making the necessary changes, choose the Apply button to accept the changes or choose the OK button to accept the changes and remove the window.

Figure 1–2 Repeater Ports Report



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Repeater Port Information Report

The Repeater Port Information report (Figure 1–3) is accessed through the Configuration menu.

Field Name	Description
MIB Object	
Port Name drpt90PortName	A user-assigned name for the selected port. This can be up to 16 alphanumeric characters for each port.

Field Name MIB Object	Description
Port State drpt90PortState	<p>The current state of the port. The possible states are as follows:</p> <ul style="list-style-type: none"> • active — The port is operating normally. • autoPartitioned — The repeater has detected a fault on the port and partitioned it from the rest of the network. • mgmtPartitioned — The port was partitioned from the management station.
<p>Label No MIB Object</p>	<p>If selected, the first 8 characters of the information in the adjacent field will be written in the port box on the hub view.</p>
<p>Enable/Disable drpt90PortAdminStatus</p>	<p>If Enable is selected, the port is enabled. If Disable is selected, the port is partitioned when the <u>A</u>pply button or the <u>O</u>K button is chosen.</p>
<p>Port No MIB Object</p>	<p>Enables you to define the number of the port you need to change.</p>
<p>Partition Count drpt90PortPartitionCount</p>	<p>The number of times, since the last count was read and that the port partitioned due to a fault on the port.</p>
<p>Last Reason drpt90PortAutoPartitionReason</p>	<p>The last occurrence that caused the port to enter an autopartitioned state. This can be for any of the following reasons:</p> <ul style="list-style-type: none"> • Excessive length • Excessive collisions • Jabber • No carrier loopback • Transmit carrier dropout for the DECrepeater 90C

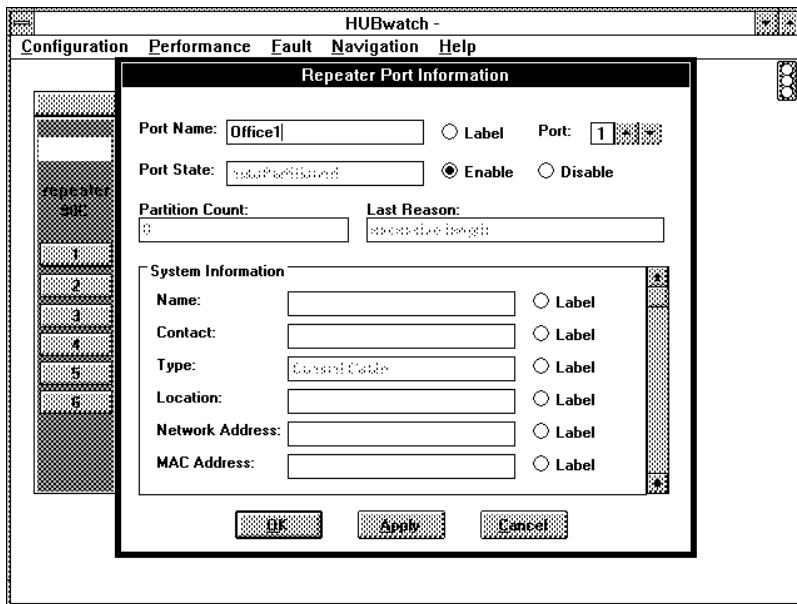
Field Name MIB Object	Description
System Information	
Name No MIB Object	A user-defined name for the device which has the MAC address that has been displayed at the bottom of the System Information box.
Contact No MIB Object	A user-assigned name of the person to contact for questions about the system or device.
Type No MIB Object	A brief user-description of the selected device such as PC, workstation, terminal server, etc.
Location No MIB Object	A user-defined description of the location where the device can be found. This is often coded in terms of building, floor or pole number.
Network Address No MIB Object	A user-defined address of the selected device at the Network level. Examples may include IP address, DECnet address, IPX address. This is often referred to as the node address.
MAC Address drpt90PortPhyAddr	The Medium Access Control (MAC) address that was found on the port. All the other fields in the System Information table relate to the device that is found to have this address.
Label No MIB Object	If selected, the first 8 characters of the information in the adjacent field will be written in the port box on the hub view.

Note

You must choose the Apply button as you change the labels for each port.

When you are finished viewing the information and making the necessary changes, choose the Apply button to accept the changes or choose the OK button to accept the changes and remove the window.

Figure 1-3 Repeater Port Information Report



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Managing DECRepeater Performance

There are no specific performance management options for a DECRepeater. The options that are listed under the Performance menu are generic. For further information, refer to the *HUBwatch for Windows User Information* manual.

Managing DECRepeater Faults

You can manage the faults for a DECRepeater at the module view. The following table lists the options that appear at the module view when you select the Fault menu. It also lists the tasks you can perform using these options:

Option	View	Task
Error Statistics	Module	Look at the DECRepeater Error Reports.
Set Thresholds	Module	Set threshold counters for the selected module.
Audible Alarms†	Module and Device	Set alarms so they are audible or inaudible.
Alarms†	Module and Device	Access the Current Alarms Network report.
Report†	Module and Device	Access the Alarm Log.

†This option is not module specific. For further information, refer to the *HUBwatch for Windows User Information* manual.

Setting Thresholds - DECRepeater

The Set Thresholds window displays the thresholds for the selected DECRepeater.

To access the Set Thresholds window for a DECRepeater, do the following:

1. Select the DECRepeater for which you need to view the threshold settings.
2. Choose the Set Threshold option from the Fault menu.
The Select Port dialog box appears.
3. Select the port for which you need to view or change the threshold counters and choose the OK button.

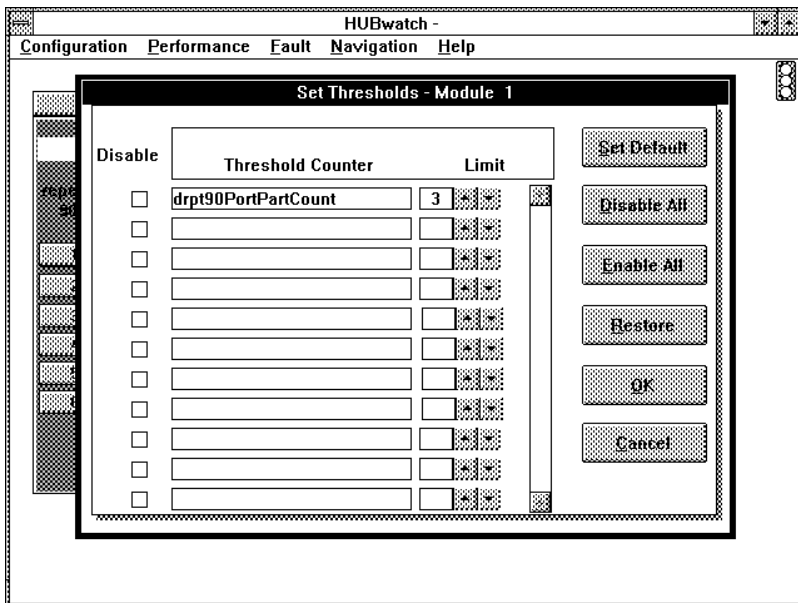
The Set Thresholds window for the selected DECRepeater port appears (Figure 1-4).

You can do any of the following to the threshold counters for the selected DECRepeater.

To perform this task . . .	Do this . . .
Set the thresholds to their default.	Choose the <u>S</u> et Default button.
Disable all the threshold counters.	Choose the <u>D</u> isable All button.
Enable all the threshold counters.	Choose the <u>E</u> nable All button.
Restore the threshold counters to their original setting.	Choose the <u>R</u> estore button.
Change specific threshold counter limits.	Position the cursor on ↑ or ↓ and click MB1 repeatedly until the setting you want to change appears.

4. Make the necessary changes to the threshold counters and choose the OK button to accept the changes and remove the window.

Figure 1-4 Set Thresholds Window



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Documentation and Ordering

Introduction

This appendix lists documentation that is related to the HUBwatch for Windows application. It also includes ordering information.

Related Documentation

You can order the following documents from Digital:

Document Title	Order Number
DEChub 90 Owner's Manual	EK-DEHUB-OM
Open DECconnect Building Wiring Components and Application Catalog	EB-K2407-42
DECconnect System Planning and Configuration Guide	EK-DECSY-CG
DECagent 90 User Information	EK-DENMA-UI
DECbridge 90 Owner's Manual	EK-DEWGB-OM
DECrepeater 90C Owner's Manual	EK-DECMR-OM
DECrepeater 90T Owner's Manual	EK-DETMR-OM
DECserver 90L Owner's Manual	EK-DSRVD-OM
DECserver 90L+ Owner's Manual	EK-DSRVG-OM
HUBwatch Installation & Use for DECMcc	AA-PW4BA-TE
HUBwatch for Windows (Kit)	EK-478AA-DK
HUBwatch for Windows User Information	EK-487AA-UI
HUBwatch for Windows DECserver 90 Management	EK-489AA-UI
HUBwatch for Windows DECbridge 90 Management	EK-488AA-UI

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Hardware documentation	DTN: 234-4325 (508) 351-4325 FAX: (508) 351-4467	Publishing & Circulation Services Digital Equipment Corporation NRO2-2/I5 444 Whitney Street Northboro, MA 01532

¹Call to request an Internal Software Order Form (EN-01740-07).

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