# Software Product Description

PRODUCT NAME: HUBwatch for ULTRIX, Version 1.1 SPD 40.64.02

#### **DESCRIPTION**

HUBwatch for ULTRIX is a layered product that is designed to manage Digital's DEChub family of products. It can be installed in one of two ways:

- As an add-on application to POLYCENTER products for ULTRIX
- As a standalone application with ULTRIX, Bookreader, and Motif®

In this release, HUBwatch implements a Motif graphical user interface and a front panel view of the hub as well as information screens tailored for the DEChub 90 family of products, including the DECbridge 90 and DECbridge 90FL bridges, the DECserver 90L, 90L+, and 90 TL terminal servers, the DECrepeater 90C, 90T, 90FA, and 90FL Ethernet repeaters. HUBwatch for ULTRIX uses the Simple Network Management Protocol (SNMP). The DECagent 90 SNMP agent is required to provide an SNMP interface between HUBwatch and these modules. However, a DECserver 90TL used outside the hub does not require DECagent 90 support.

When the HUBwatch application is invoked, either by selecting a hub icon on a POLYCENTER network map or as a standalone application, a Motif window will be opened, and the front panel view of that hub will be shown. The near real-time information will include the hub configuration and module and port status for each module. HUBwatch is able to provide this information by polling the DECagent 90 module using the Simple Network Management Protocol. The HUBwatch program automatically determines the configuration of a hub when the DECagent 90 has been preloaded with hub and slot information. Color-coded LEDs on each module graphic show the status of modules and ports at a glance.

HUBwatch for ULTRIX incorporates both a physical and logical hub front panel view. The physical view depicts an exact representation of the hub's front panel, which can be useful in circumstances where a close correlation to the hub is needed, such as the clear communication requirements of a remote troubleshooting environment.

The logical hub view provides the same data with abstracted information displays that makes management of the hub almost intuitive.

Both the graphical physical and logical hub views have "hot-spots," such as the port connectors and LEDs, where the user can click to get more detailed information about a specific point of interest. Another window will be opened containing information and controls that are specific to that module or port. Both views allow the user to "find" Ethernet addresses and duplicate Ethernet addresses in the hub configuration.

For the DECbridge 90 bridge, the additional information is divided into several screens. The default screen contains general bridge module information such as operating status, MAC address, and controls to reset the bridge. Second level screens are accessed with a button click and allow the user to control the bridge's filtering operations, forwarding entries, and Spanning Tree Protocol parameters, and view traffic information.

For the DECserver 90L, 90L+, and 90TL terminal servers, the default screen shows general module information, collective port status, and control status with services information and individual port setup. The user can view the status and setup information for all eight ports on a single screen by clicking on the module. From this screen, the user can also select Module and Counter options for non-port-specific control and monitoring. By clicking on an individual port, the user can bring up all management information for that one port.

For the DECrepeater 90C, 90T, 90FA, and 90FL Ethernet repeaters, the default screens allow the user to collectively control and monitor all ports at once, or one port at a time. Screens display additional information about the device(s) attached to a port, such as MAC address, DECnet address and Node name, and location. The DECnet Node name must have been already defined in the DECnet database on the ULTRIX workstation. The user can also enable and disable ports, and set administrative information for the repeater. To manage the DECrepeater 90C, 90T, 90FA, and 90FL, the repeater must be installed in a hub and a DECbridge 90 or 90FL must be installed in the same hub.



The user can also directly manage the DECagent 90 module from the HUBwatch program. Screens allow viewing of general module information and viewing and administrative management of the DECagent's community tables. In addition, the user can enable or disable polling, set administrative information, and perform management functions (reset, add module, etc.) on the DECagent 90.

From the HUBwatch program, the user can configure new communities in a DECagent 90 module and add selected module types to a new hub. A new community can be either a standalone DECbridge 90 Ethernet bridge, a DECserver 90L or 90L+ terminal server, or a DEChub 90 backplane configured as either 8 or 16 slots (two hubs daisy-chained). The community must be assigned a unique community name in the DECagent 90.

#### HARDWARE REQUIREMENTS

Processor and/or hardware configurations as specified in the System Support Addendum (SSA 40.64.02-x).

### **SOFTWARE REQUIREMENTS**

- ULTRIX Operating System
- OSF/Motif®
- Bookreader

Refer to the System Support Addendum (SSA 40.64.02-x) for availability and required versions of prerequisite /optional software.

#### ORDERING INFORMATION

Software License: QL-MMAA8-AA

Software Media: QA-MMAAA-H5

Software Documentation: QA-MMAAA-GZ

Software Product Services:

Layered Product Service: QT-MMAA8-L9

Documentation Service: QT-MMAAA-K7

Media and Documentation Service (MDDS): QT-

MMAAA-E5

Installation: QT-MMAAA-I9

#### **SOFTWARE LICENSING**

This software is furnished under the licensing provisions of Digital Equipment Corporation's Standard Terms and Conditions. For more information about Digital's licensing terms and policies, contact your local Digital office.

License Management Facility Support:

This layered product supports the ULTRIX License Management Facility.

License units for this product are allocated on an Unlimited Use basis.

For more information on the License Management Facility, refer to the ULTRIX Operating System Software Product Description (SPD 26.40.xx) or the *Guide to Software Licensing* in the ULTRIX Operating System documentation set.

#### SOFTWARE PRODUCT SERVICES

A variety of service options, including those listed below, are available from Digital. For more information, contact your local Digital office.

- · Network Management Operations Services
- · Network Management Planning and Design Services
- Network Management Implementation Services
- Network Management Training

## **SOFTWARE WARRANTY**

Warranty for this software product is provided by Digital with the purchase of a license for the product as defined in the Software Warranty Addendum of this SPD.

- ® Motif and OSF/Motif are registered trademarks of Open Software Foundation, Inc.
- The DIGITAL Logo, Bookreader, DECbridge, DECnet, DECserver, DECstation, DECsystem, Digital, HUBwatch, POLYCENTER, TK, ULTRIX, and VAX are trademarks of Digital Equipment Corporation.

## **System Support Addendum**

PRODUCT NAME: HUBwatch for ULTRIX, Version 1.1 SSA 40.64.02-A

#### HARDWARE REQUIREMENTS

RISC-Based Processors Supported:

DECstation: DECstation 3100, DECstation 3100s

> Personal DECstation 5000 Model 20/25 HX, Personal DECstation 5000 Model 20/25 MX, Personal DECstation 5000 Model 20/25 TX,

Personal DECstation 5000 Model 20/25 PXG+.

Personal DECstation 5000 Model 20/25 PXG

Turbo+

DECstation 5000 Model 120/125/133 CX. DECstation 5000 Model 120/125/133 HX, DECstation 5000 Model 120/125/133 MX, DECstation 5000 Model 120/125/133 PX, DECstation 5000 Model 120/125/133 TX, DECstation 5000 Model 120/125/133 PXG. DECstation 5000 Model 120/125/133 PXG+, DECstation 5000 Model 120/125/133 PXG Turbo,

DECstation 5000 Model 120/125/133 PXG

Turbo+

DECstation 5000 Model 200 CX, DECstation 5000 Model 200 HX, DECstation 5000 Model 200 MX, DECstation 5000 Model 200 PX, DECstation 5000 Model 200 TX, DECstation 5000 Model 200 PXG, DECstation 5000 Model 200 PXG+, DECstation 5000 Model 200 PXG Turbo, DECstation 5000 Model 200 PXG Turbo+

DECstation 5000 Model 240 HX, DECstation 5000 Model 240 MX, DECstation 5000 Model 240 TX, DECstation 5000 Model 240 PXG+, DECstation 5000 Model 240 PXG Turbo+

DECsystem: DECsystem 3100,

> DECsystem 5000 Model 25, DECsystem 5000 Model 200, DECsystem 5000 Model 240, DECsystem 5100, DECsystem 5400, DECsystem 5500, DECsystem 5810,

DECsystem 5820, DECsystem 5830, DECsystem 5840, DECsystem 5900

Processors Not Supported

**DECstation 2100** 

All VAX-based processors

## Other Hardware Required:

The minimum recommended memory size is 24 Mbytes. The HUBwatch program supports 8-plane color monitors in "pseudocolor" mode only.

DECagent 90 (which serves as SNMP agent for HUBwatch) to manage these devices:

- DECrepeater 90C, 90T, 90FA, 90FL
- DECserver 90L, 90L+
- DECserver 90TL, when installed in a hub
- DECbridge 90, 90FL

DECbridge 90 or 90FL with software at version 3.0 for HUBwatch to manage devices installed in a DEChub 90.

## **Disk Space Requirements:**

Disk space required for installation: 8 Mbytes

Disk space required for use (permanent): 9 Mbytes

The disk sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options.

The minimum memory supported is 24 Mbytes. However, the use of this software in conjunction with increased memory capability improves performance.



#### SOFTWARE REQUIREMENTS

- ULTRIX Operating System V4.2A or V4.3
- OSF/Motif® V1.1.3
- Bookreader V4.0

#### **OPTIONAL SOFTWARE**

- POLYCENTER Framework V1.3
- POLYCENTER Network Manager 200 V1.3
- POLYCENTER SNMP Manager 300 V1.3
- DECnet-ULTRIX V4.2 must be installed in order to use the "Find by DECnet name or address" operation

Refer to the following SPDs for specific information on the DECmcc products:

- POLYCENTER Framework (SPD 32.46.xx)
- POLYCENTER Network Manager 200 (SPD 32.48.xx)
- POLYCENTER SNMP Manager 300 (SPD 33.18.xx)

#### **GROWTH CONSIDERATIONS**

The minimum hardware/software requirements for any future version of this product may be different from the requirements for the current version.

## **DISTRIBUTION MEDIA**

TK50 Streaming Tape

This product is also available as part of the ULTRIX Consolidated Software Distribution on CD-ROM.

#### **ORDERING INFORMATION**

Software License: QL-MMAA8-AA Software Media: QA-MMAAA-H5

Software Documentation: QA-MMAAA-GZ

Software Product Services:

Layered Product Service: QT-MMAA8-L9 Documentation Service: QT-MMAAA-KZ Media Document (MDDS): QT-MMAAA-E5

Installation: QT-MMAAA-I9

The above information is valid at time of release. Contact your local Digital office for the most up-to-date information.

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