Software Product Description

PRODUCT NAME: **LAN Traffic Monitor for VMS, Version 1.2**   **SPD 27.80.02**

DESCRIPTION

The LAN Traffic Monitor for VMS (LTM) is the software portion of a fully distributed monitor that can support the capture and presentation of traffic data from an extended Ethernet. A LAN Bridge 100 or LAN Bridge 150 (Local Area Network) downline loaded with unique monitoring software is attached to the Ethernet cable, and transmits information to a VMS layered application software program located on any VAX in the extended LAN. Multiple users, from different nodes on the extended Ethernet, can access the traffic data.

LAN Traffic Monitor for VMS also works with Chipcom's™ Broadband Bridges called Ethermodem™ III Bridges.

LAN Bridge hardware can run either as a LAN Traffic Monitor or as a LAN Bridge, i.e., the primary building of the "Extended LAN" architecture. An Extended LAN is a collection of LANs that are interconnected and logically appear as one large Local Area Network.

With the LAN Bridge designed to work at full Ethernet speed, the LAN Traffic Monitor can provide real-time data on Ethernet LAN throughput and utilization, allowing a customer to actively monitor their Ethernet usage. The ability to collect data on any protocol type (i.e. LAT, 802.3, DECnet, TCP/IP, etc.) on the Ethernet is provided. All 802.3 packets are grouped as a single protocol type.

LAN Traffic Monitor for VMS contains the LTM Listener software (which counts and classifies Ethernet traffic using a LAN Bridge as a monitoring device) and the LTM User Interface (which collects and displays data received from the LTM Listener).

The LAN Traffic Monitor for VMS software license includes both the Host and Listener software licenses. Listener software is executed on any LAN Bridge to which it can be downline loaded. Note that when a bridge is used as a monitoring device, it does not function as a bridge. Users can remotely switch a bridge between monitoring and standard bridge modes using Digital Equipment Corporation's Remote Bridge Management Software (RBMS) product.

Note: DECnet-VAX is required on the downline load host.

The LTM Listener periodically reports traffic statistics to the LTM User Interface located on a VAX host. The LTM User Interface receives unsolicited Ethernet datagrams generated by the LTM Listener. Through the menu structure, the user can also ask the LTM Listener for additional data not found in the unsolicited messages.

Multiple Listeners can be distributed throughout the network, monitoring the particular Ethernet segment to which they are connected. There can also be multiple User Interfaces throughout the extended LAN, gathering the Data as it is transmitted. For potential configuration restrictions, refer to *GROWTH CONSIDERATIONS* section of the System Support Addendum (SSA 27.80.02-x).

The LTM User Interface performs the necessary data reduction and presents the statistics in logical groupings. Summary displays which are presented in tabular format include:

- Network Traffic
- Top Ten Talkers (Current, Long Term)
- Throughput and Utilization (Current, Long Term, Peak)
- List of Nodes
- List of Multicast Addresses
- List of Nodes Using Protocol
- Node Traffic by Protocol Type
- Multicast Traffic by Protocol Type
- Protocol Type Traffic

In addition, the utilization of the LAN can be displayed graphically based on the most recent traffic data received from the LTM Listener in intervals of one, four, eight, twelve, twenty-four, or forty-eight hours.

The user interacts with the application software through a menu structure, and can display both the status and operational parameters of the LTM Listener and LTM User Interface. Counters on the LTM Listener can be set to zero, and the host software can stop and start the LTM Listener when required. The menu structure also allows the VMS DCL process to be "spawned" as well as the terminal detached from the LTM application.

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HARDWARE REQUIREMENTS

VAX, MicroVAX, VAXstation, or VAXserver configuration as specified in the System Support Addendum (SSA 27.80.02-x).

LAN Bridge 100 or LAN Bridge 150

The LAN Bridge will require at least one transceiver drop cable and Ethernet connection, H4000 or DELNI, to connect to the Ethernet physical channel to be monitored.

SOFTWARE REQUIREMENTS*

VMS Operating System

DECnet-VAX

* Refer to the System Support Addendum (SSA 27.80.02-x) for availability and required versions of prerequisite/optional software.

ORDERING INFORMATION

Software Licenses: QL-VEHA*-**
Software Media: QA-VEHA*-**
Software Documentation: QA-VEHAA-GZ
Software Product Services: QT-VEHA*-**

* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

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, please contact your local Digital office.

LICENSE MANAGEMENT FACILITY SUPPORT

This layered product supports the VMS License Management Facility.

License units for this product are allocated on a CPU-capacity basis.

For more information on the License Management Facility, refer to the VMS Operating System Software Product Description (SPD 25.01.xx) or the License Management Facility manual of the VMS Operating System documentation set.

For more information about Digital's licensing terms and policies, contact your local Digital office.

SOFTWARE PRODUCT SERVICES

A variety of service options are available. For more information, please contact your local Digital office.

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.

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System Support Addendum

HARDWARE REQUIREMENTS

Processors Supported

VAX: VAX 6000 Model 200 Series, VAX 6000 Model 300 Series, VAX 6000 Model 400 Series

VAX 8200, VAX 8250, VAX 8300, VAX 8350, VAX 8500, VAX 8530, VAX 8550, VAX 8600, VAX 8650, VAX 8700, VAX 8800, VAX 8810, VAX 8820, VAX 8830, VAX 8840, VAX 8842, VAX 8974, VAX 8978

VAX-11/750, VAX-11/780, VAX-11/785

MicroVAX: MicroVAX II, MicroVAX 2000, MicroVAX 3100, MicroVAX 3300, MicroVAX 3400, MicroVAX 3500, MicroVAX 3600, MicroVAX 3800, MicroVAX 3900

VAXstation: VAXstation II, VAXstation 2000, VAXstation 3100 Series, VAXstation 3200, VAXstation 3500, VAXstation 3520, VAXstation 3540, VAXstation 8000

VAXserver: VAXserver 3100, VAXserver 3300, VAXserver 3400, VAXserver 3500, VAXserver 3600, VAXserver 3602, VAXserver 3800, VAXserver 3900, VAXserver 6000-210, VAXserver 6000-310, VAXserver 6000-410, VAXserver 6000-420

Processors Not Supported

VAX: VAX-11/725, VAX-11/730, VAX-11/782

MicroVAX: MicroVAX I

VAXstation: VAXstation I, VAXstation 8000

Other Hardware Requirements

- A VT24x, VT330, or VT340 Terminal is required to display color graphics for systems with no DECwindows interface.

- To run the Listener, one of the following is required:

 A LAN Bridge 100 with ROM ECO Revision E or later

 A LAN Bridge 150

 A Chipcom™ Ethermodem™ III Bridge [Part Numbers 8318BS (18Mhz) or 8312BS (12 Mhz)

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Block Space Requirements (Block Cluster Size = 1):

Disk space required for installation:

1,100 blocks
(0.55M bytes)

Disk space required for use (permanent):

600 blocks
(0.3M bytes)

These counts refer to the disk space required on the system disk. The sizes are approximate; actual sizes may vary depending on the user's system environment, configuration, and software options.

CLUSTER ENVIRONMENT

This layered product is fully supported when installed on any valid and licensed VAXcluster* configuration without restrictions. The *HARDWARE REQUIREMENTS* sections of this product's Software Product Description and System Support Addendum detail any special hardware required by this product.

* V5.x VAXcluster configurations are fully described in the VAXcluster Software Product Description (29.78.xx) and include CI, Ethernet, and Mixed Interconnect configurations.

SOFTWARE REQUIREMENTS

- VMS Operating System V5.2 - V5.3

- DECnet-VAX V5.2 - V5.3

VMS Tailoring

For VMS V5.x systems, the following VMS classes are required for full functionality of this layered product:

- VMS Required Saveset

- Network Support

- Programming Support

- Secure User's Environment

- Utilities

For more information on VMS classes and tailoring, refer to the VMS Operating System Software Product Description (25.01.xx).

OPTIONAL SOFTWARE

• Remote Bridge Management Software (RBMS) V2.0

• NMCC/VAX ETHERnim V2.2

For more information refer to the RBMS Software Product Description (SPD 27.12.xx) and NMCC/VAX ETHERnim Software Product Description (SPD 26.96.xx).

GROWTH CONSIDERATIONS

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

Additional LAN Bridge units can be purchased and configured with LTM Listener software after LAN Traffic Monitor VMS has been installed. By creating a separate VMS process (or subprocess), a single user account on the VAX host may simultaneously be collecting data from multiple LTM Listener units. The LTM Listener can be started in either private mode (sending to a single destination Ethernet address) or shared mode (multicasting its traffic reports).

Also, while multiple hosts may simultaneously view a single LTM Listener unit (thereby requiring additional licenses of the software be purchased for each additional processor), multiple accounts on a single host may NOT simultaneously view a single LTM Listener unit.

DISTRIBUTION MEDIA

Tape: 9-track 1600 BPI Magtape, TK50 Streaming Tape

This product is also available as part of the VMS Consolidated Software Distribution on CDROM.

ORDERING INFORMATION

Software Licenses: QL-VEHA*-**
Software Media: QA-VEHA*-**
Software Documentation: QA-VEHAA-GZ
Software Product Services: QT-VEHA*-**

* Denotes variant fields. For additional information on available licenses, services, and media, refer to the appropriate price book.

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