Software Product Description

PRODUCT NAME: DECnet/SNA Gateway for Channel Transport, Version 2.1 **SPD 29.76.02**

DESCRIPTION

DECnet/SNA Gateway for Channel Transport (DECnet /SNA Gateway-CT) is a member of the DECnet/SNA Transport product family. This family consists of hardware and software products that allow users to exchange information and share resources between suitably configured Digital systems in a DECnet environment and IBM® systems in a Systems Network Architecture (SNA) environment. Users on one or more Digital systems can simultaneously perform functions such as accessing IBM application programs or other system resources, act as a 3270 display station, perform data transfer between Digital and IBM file systems, exchange electronic documents and mail messages, submit jobs to IBM batch subsystems acting as a Remote Job Entry workstation, and implement distributed, task-to-task application programs that run between Digital and IBM systems.

The DECnet/SNA Transport product set provides a means of connecting DECnet and SNA networks which can be used by a wide variety of Digital-supplied access routines running under VMS, MS–DOS®, and ULTRIX operating environments. The DECnet/SNA Gateway-CT is managed and configured using the DECnet/SNA management software that is part of the DECnet/SNA Gateway-CT product. For additional information on the various access routines and their capabilities, please consult the *OPTIONAL SOFTWARE* section of the System Support Addendum (SSA 29.76.02-x).

DECnet/SNA Gateway-CT is part of both the DECnet and the SNA networks. Architecturally, it is a DECnet Phase IV end node to DECnet and a Physical Unit Type 2.0 node to SNA. It provides bi-directional access between DECnet and SNA networks.

The DECnet/SNA Gateway-CT software is supported on two hardware platforms — the DEC ChannelServer (DESNA-Ax) and DEC ChannelServer II (DESNB-Ax). Both systems connect directly to an Ethernet Local Area Network and an IBM S/370 Byte Multiplexor, Block Multiplexor, or Selector channel. When used with DECnet /SNA Gateway-CT, they provide SNA connectivity to any Phase IV [or Phase IV+] DECnet system in the DECnet network. This product can be used in networks currently using other DECnet/SNA Gateway systems and can share access routines, Ethernet LANs, and load host resources with those systems.

DECnet/SNA Gateway-CT software is down-line loaded into the DEC ChannelServer or DEC ChannelServer II system and must be ordered in addition to the DEC ChannelServer hardware. Other DECnet systems wishing access to the SNA environment through the DEC ChannelServer or DEC ChannelServer II, should be configured with the appropriate DECnet/SNA access routine(s).

DECnet/SNA Gateway-CT and the DEC ChannelServer /DEC ChannelServer II support a single set of Bus and Tag connectors to an IBM S/370 Byte Multiplexor, Block Multiplexor, or Selector channel. Channel type and address may be configured according to specifications listed in both the hardware and the software user documentation.

Loading DECnet/SNA Gateway-CT Software

The DEC ChannelServer/DEC ChannelServer II requires software to be loaded into memory prior to DECnet/SNA Gateway operation. DECnet/SNA Gateway-CT software is down-line loaded into the hardware over the Ethernet Local Area Network from a VMS or ULTRIX system acting as DECnet load host system.

Most VAX, MicroVAX, VAXstation, DECsystem, and DECstation systems running VMS or ULTRIX are supported as Ethernet load hosts for DECnet/SNA Gateway-CT. Supported VMS and ULTRIX configurations are described in the System Support Addendum (SSA 29.76.02-x).

DECnet/SNA Gateway Management

DECnet/SNA gateway management software, which is part of the DECnet/SNA Gateway-CT, provides configuration and management functions for use with DECnet /SNA Gateway for Channel Transport V2.1. This management software allows the Gateway administrator to configure the software executing in the DECnet/SNA Gateway-CT system. The administrator can set up parameters relating to lines, circuits, physical units, logical

units, and other key variables necessary for network-to-network communications between the DECnet and SNA networks. Additionally, the gateway management software allows the administrator to manage and diagnose problems related to the DECnet/SNA Gateway-CT.

DECnet/SNA gateway management software is required on the Digital load host node for DECnet/SNA Gateway-CT. It must also be present on any other VMS or ULTRIX node where users want to manage a DEC ChannelServer/DEC ChannelServer II (DECnet /SNA Gateway-CT) based Gateway. It is strongly recommended that the software also be installed on VMS or ULTRIX systems in order to facilitate debugging functions where IBM Interconnect application programs are developed using any of the DECnet/SNA Programming Interface products.

Gateway management software includes DECnet-style network management tools for configuring, controlling, monitoring, and troubleshooting for DECnet/SNA Gateway itself. These activities are generally performed by the Digital system manager responsible for the designated load host node. Most management functions are performed from a node on the Digital network rather than at or on the Gateway itself.

Management of the DECnet/SNA Gateway should be viewed as part of the Digital environment, while the management of the lines and/or channel connecting the DECnet/SNA Gateway to the IBM system is a joint responsibility of the IBM and Digital system managers. (Refer to the *Customer Responsibilities* section of this Software Product Description.)

DECnet/SNA gateway management software allows a Digital system operator to bootstrap or restart a DECnet /SNA Gateway remotely and provide configuration and initialization facilities for the DECnet/SNA Gateway.

Problem Isolation and Determination Tools for the Gateway

In addition to event logging and error counters, a wide range of fault isolation tools are included.

Trace capabilities, snatrace for ULTRIX and SNATRACE and NETTRACE for VMS, are provided with the DECnet /SNA Gateway-CT to help debug application programs as well as assist in identifying system problems. An operator can run a trace at the Circuit, Physical Unit (PU), or Session level, and then format the data on a specified Digital system. The trace features are helpful in identifying an error for remedial action.

A snapshot monitoring utility is provided to display on a Digital host-controlled terminal the status of the Gateway's buffer availability, the number of SNA sessions currently in progress, and other information that pertains to both the DECnet and SNA network.

If an irrecoverable error should occur during operation of the DECnet/SNA Gateway system, a memory image may be dumped to a designated Ethernet attached VAX or RISC host. This memory image may then be provided to your Digital support personnel for problem diagnosis.

Features

The differences between DECnet/SNA Gateway-CT V2.1 and DECnet/SNA Gateway-CT V2.0 are:

- Inclusion of the DECnet/SNA gateway management within the DECnet/SNA Gateway-CT software kit.
- Provision of the DECnet/SNA Gateway-CT product on ULTRIX; that is, inclusion of gateway load host and gateway management and configuration capabilities for ULTRIX (both VAX and RISC).

INSTALLATION

In order for this product to be Digital warranted and supported, purchase of the Gateway Orientation/Installation Service in conjunction with the customer's first purchase of a DECnet/SNA Gateway is REQUIRED. Please refer to the *SOFTWARE PRODUCT SERVICES* section for further details.

Only customers experienced with Digital's IBM Interconnect products should attempt installation of second or subsequent DECnet/SNA Gateways. Any DECnet/SNA Gateway-CT installations performed by customers are REQUIRED to be CERTIFIED by Digital prior to customer purchase of DECnet/SNA Gateway DECsupport Service, Basic Service, or Self-Maintenance Service. CERTIFICATION is performed by Digital software specialists. For installations that conform to the Software Product Description and cannot be certified, the customer must purchase DECnet/SNA Gateway Orientation/Installation Service to be eligible for DECnet/SNA Gateway DECsupport Service, Basic Service, or Self-Maintenance Service.

Customer Responsibilities

Before installation of the software, the customer must:

- Have previously installed all requisite hardware including terminals.
- Obtain, install, and demonstrate as operational any equipment and facilities necessary to interface to Digital's communication equipment.
- Have generated, to Digital's satisfaction, any necessary IBM host software that will be communicating with DECnet/SNA Gateway-CT.
- Have completed any additional requirements as described in the Orientation and Installation Service.

- Make available for a reasonable period of time, as mutually agreed by Digital and the customer, all hardware, communication facilities, and terminals that are to be used during installation.
- Be prepared to work with the Digital and the IBM system manager in the pre-installation activities outlined in the Orientation and Installation Service.
- Be prepared to modify IBM component generation parameters to support DECnet/SNA Gateway-CT.

Delays caused by any failure to meet these responsibilities will be charged at Digital's then prevailing rate for time and materials.

HARDWARE REQUIREMENTS

In Ethernet Local Area Networks:

- VAX, MicroVAX, VAXstation, VAXserver, DECstation, or DECsystem configuration as specified in the System Support Addendum (SSA 29.76.02-x)
- DEC ChannelServer (DESNA-Ax) or DEC ChannelServer II (DESNB-Ax)
- S/370 Bus and Tag cables (with terminators if appropriate)
- VT series terminal for diagnostic use

SOFTWARE REQUIREMENTS

VMS Environment

VMS Operating System
DECnet–VAX

ULTRIX Environment

ULTRIX Operating System
DECnet–ULTRIX

Refer to the System Support Addendum (SSA 29.76.02-x) for availability and required versions of prerequisite /optional software.

ORDERING INFORMATION

Software Licenses: QL-VC9A9-AA
Software Media:
QA-VC9AA-** (VAX/VMS)
QA-VC9AB-** (VAX/ULTRIX)
QA-VC9AC-** (RISC/ULTRIX)
Software Documentation:
QA-VC9AA-GZ (VAX/VMS)
QA-VC9AB-GZ (VAX/ULTRIX)
QA-VC9AC-GZ (RISC/ULTRIX)
Software Product Services: QT-VC9A*-**

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

SOFTWARE LICENSING

Users need a separate license for each DEC ChannelServer or DEC ChannelServer II unit on which they will be using DECnet/SNA Gateway-CT (except as otherwise specified by Digital).

The DECnet/SNA Gateway for Channel Transport license applies to the DEC ChannelServer or DEC ChannelServer II unit on which the software executes.

DECnet/SNA gateway management software is required on the Digital load host for DECnet/SNA Gateway Channel Transport. The license to use the DECnet /SNA gateway management software on the load host is included with the DECnet/SNA Gateway for Channel Transport license.

The DECnet/SNA Gateway Management license includes the right to install and fully configure the product on a second backup load host processor, in standby mode, for downline gateway loading in case of primary load host failure.

This software is furnished under the licensing provision 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 product supports both the VMS and ULTRIX License Management Facility.

For more information on the License Management Facility refer to:

- VMS Operating System Software Product Description (SPD 25.01.xx) or the *License Management Facility* manual of the VMS Operating System documentation set.
- ULTRIX Operating System Software Product Description (SPD 26.40.xx).

SOFTWARE PRODUCT SERVICES

DECnet/SNA Gateway Orientation and Installation Service

The Gateway Orientation/Installation Service is REQUIRED in conjunction with the customer's first purchase of a DECnet/SNA Gateway if the installation is to be warranted and supported by Digital. The purpose of this service is to insure that the installation of the DECnet/SNA Gateway will be completed and to eliminate start-up problems. It includes the following activities:

- Verify IBM and Digital hardware and software prerequisites.
- Coordinate customer MIS and Digital Software Services resources.
- Review IBM system generation parameters.
- Install the DECnet/SNA Gateway and any load host resident DECnet/SNA VMS or ULTRIX Gateway access routine software that has been ordered concurrently with the DECnet/SNA Gateway for the first VAX or RISC host node.
- Verify connectivity between installed access routines and the IBM system if they have been pre-configured according to the guidelines provided by Digital for those products. The following access routines qualify for this verification:
  - — DECnet/SNA VMS 3270 Terminal Emulation
  - — DECnet/SNA VMS DISOSS Document Exchange Facility
  - — DECnet/SNA VMS Printer Emulation
  - — DECnet/SNA VMS Remote Job Entry
  - — DECnet/SNA Data Transfer Facility

Connectivity verification of the DECnet/SNA Gateway with access routine products other than those listed above will be done using the Installation Verification (IVP) Software Program supplied with each access routine.

An installation service is available for the simultaneous installation of the DECnet/SNA access routines for each additional VAX or RISC system.

Digital will provide these services upon customer notification that the system, including all prerequisite hardware and software, is ready for installation according to the guidelines listed in the *Customer Responsibilities* section of this Software Product Description. Contact your local Digital office for additional information on these services.

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.

WARRANTY LIMITATIONS

IBM Supported Configurations

This product has been designed to operate with the IBM host systems and software subsystems listed in the System Support Addendum (SSA 29.76.02-x). While this software may function correctly with other IBM hardware, software and equipment, and with hardware and software other than that supported by IBM, Digital cannot offer its standard warranty for this product unless it has been tested with such equipment and software configurations and found acceptable to Digital.

For a complete list of IBM application subsystems (e.g., CICS/VS) that the various DECnet/SNA access routines have been certified against and that are supported configurations by Digital, please consult the respective access routine Software Product Description (SPD). (Refer to *Table 2* provided in the *OPTIONAL SOFTWARE* section of the System Support Addendum.)

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