# Software Product Description

**PRODUCT NAME: DECnet/SNA VMS Distributed Host Command Facility (DHCF), Version 1.2** **SPD 26.71.03**

## DESCRIPTION

DECnet/SNA VMS Distributed Host Command Facility (DHCF) is a VMS layered software product which is used in conjunction with the DECnet/SNA gateway products. It allows suitably configured VMS systems within a DECnet network to be accessed from IBM® host-controlled 327x display stations in a Systems Network Architecture (SNA) networking environment. Users of the IBM system gain access to VAX systems via any of the DECnet/SNA gateway products.

In an actual IBM distributed processing environment, 3270 terminal operators can access, monitor, and control remote IBM 8100 Information System computers, suitably configured Series/1 small business computers and AS/400 systems using an IBM mainframe-based Program Product called Host Command Facility (HCF). HCF permits a terminal on a System/370, 43xx or 30xx mainframe to function as if it were directly attached to the remote distributed processor. HCF interacts with cooperative IBM-supplied software that runs on the remote distributed processor to provide such support.

The 3270 terminal operator using HCF can log into the remote processor to invoke system services and user programs. In addition, HCF allows the terminal operator at a centralized Network Control Center to access the maintenance, service, and control functions of the remote system for problem determination, problem isolation, and remote system control.

DECnet/SNA VMS DHCF is another VMS-based access routine in the DECnet/SNA product set. It is a VMS layered application that provides the software for VMS systems to communicate with the IBM HCF program product. When DECnet/SNA VMS DHCF is installed on a VMS system, IBM 3270 terminal operators can access the VMS system, via a DECnet/SNA gateway, using the IBM HCF program product as described in the above paragraphs. Although it may be possible to access non-VMS systems once the 3270 user has logged on to a VMS processor (e.g., CTERM access to ULTRIX-based systems or PSI access to systems via X.29), this will not be considered as a supported configuration. DHCF is intended for use with VMS-based systems only.

DECnet/SNA VMS DHCF provides "line mode" or "glass TTY" access for the IBM 3270 user to the VMS system. Such access is appropriate for entering system and network management DCL commands in the VMS environment. DHCF is not intended as a general purpose full screen access mechanism to the VMS environment. Full screen access to VMS-based applications is possible only if the application uses DIGITAL's Forms Management System (FMS). Certain FMS restrictions apply; refer to VAX FMS (SPD 26.10.xx) and DECnet/SNA Gateway documentation set for full details.

DHCF was not designed to transform ASCII escape sequences and general ANSI data streams into 3270 data streams. For this reason, full screen oriented DIGITAL base applications such as WPS-PLUS and most applications running under ALL-IN-1 are inappropriate for access through DHCF.

### *Features*

- The DHCF user may run any VMS application that can run in VMS line mode (i.e. applications that are appropriate for use on a DEC LAxx-type hardcopy terminal).
- The DHCF user may have full-screen access to VMS applications which are specifically designed to run with 327x terminals, using DIGITAL's VAX Forms Management System (FMS). (Refer to the Optional Software section of the System Support Addendum for this product).
- In IBM's terminology, DHCF allows full screen mode sessions from IBM's NetView/Terminal Access Facility; OPCTL (operator control) mode sessions from NetView/TAF are not supported.
- Access to HCF in either an IBM MVS or VSE/SP Operating System environment is supported.

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- The VMS system manager may perform the following tasks:
  - Modify the EBCDIC-to-DMCS (ASCII) translation tables
  - Modify Attention Identification (AID) key mappings
- A DECnet/SNA gateway manager may perform the following tasks:
  - Create the configuration file required for DHCF
  - Modify the initial connect screen
- DHCF provides support for 8-bit codes, extending ASCII into the Digital Multinational Character Set (DMCS)
- The documentation specifies the IBM parameter values which are required to initialize the IBM application software in order for communication with DHCF to occur. Refer to the appropriate guide:
  - DECnet/SNA Gateway-CT Guide to IBM Parameters
  - DECnet/SNA Gateway-ST Guide to IBM Parameters
  - DECnet/SNA Guide to IBM Parameters
- Error messages are reported to the DHCF user in easily understandable language.

*User Interface*

The IBM 3270 terminal user logs on to HCF running on the IBM mainframe and enters the conventional HCF ACQUIRE command to connect to the DECnet/SNA gateway. Once the connection between the mainframe and the DIGITAL environment is established, DHCF sends an initial connect screen to the IBM 3270 terminal user which is similar to comparable panels displayed by VTAM. The DHCF user then enters the name of the DECnet node he or she wishes to access. When the DHCF user's request has been routed to the desired node, the user must log in to the VMS system in the usual manner.

The DHCF software running on the VAX processor can support up to 128 DHCF sessions, depending upon the processor size and available memory. The DECnet/SNA gateway products provide IBM mainframe connectivity for up to 16 concurrent DHCF sessions. These sessions can, of course, be accessed from any node in the DECnet network running DHCF software.

## INSTALLATION

### Customer Responsibilities

Before DIGITAL installation of the software the customer must:

- Have previously installed all requisite hardware including terminals and DECnet/SNA gateway products.
- Have generated, to DIGITAL's satisfaction, any necessary IBM host software that will be communicating with the DECnet/SNA gateway and DHCF.
- Make available for a reasonable period of time, as mutually agreed by DIGITAL and the customer, all hardware, communications facilities, and terminals that are to be used during installation.

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

Successful use of this product requires that:

- The customer must be prepared to work with both DIGITAL and IBM systems personnel to coordinate the pre-installation activities.
- The customer should be capable of modifying IBM component generation parameters to support either the DECnet/SNA gateway or DHCF.

Only experienced customers should attempt installation of this product. DIGITAL recommends that all other customers purchase DIGITAL's Installation Services. These services provide for installation of the software product by an experienced DIGITAL Software Specialist.

## WARRANTY LIMITATIONS

### IBM Supported Configurations

This software has been tested and is warranted against IBM System/370 (includes 30xx and 43xx series) class processor systems configured with the following IBM software. While this software may function correctly with other IBM software and equipment, and with software other than that supported by IBM, DIGITAL cannot offer its standard warranty for this software unless it has been tested with such equipment and software configurations.

The following list shows the configurations with which the software has been tested and is warranted:

| Software Product | Version | Release |
|---|---|---|
| **IBM MVS Environment** | | |
| MVS/SP | 1 | 3.6 |
| | 2 | 1.3 |
| | | 1.5 |
| | | 1.7 |
| | | 2.0 |
| HCF | 2 | 1.0 |
| **IBM DOS/VSE Environment** | | |
| VSE/SP | 2 | 1.6 |
| HCF | 2 | 0.0 |

Since the introduction of this software, other configurations may have been tested. Please contact your local DIGITAL office for up-to-date information regarding listed configurations.

**PREREQUISITE SUPPORT**

A Network Profile and a DECnet (where appropriate) Customer Support Plan covering all VMS nodes that will serve as hosts to IBM terminals prepared jointly by DIGITAL and the customer.

For DECnet/SNA VMS DHCF to be DIGITAL supported, the customer must have a DIGITAL supported DECnet/SNA gateway configuration.

To have a DIGITAL supported DECnet/SNA gateway configuration, purchase of the Gateway Orientation/Installation Service (QSF0x-SZ) is REQUIRED in conjunction with the customer's first purchase of the DECnet/SNA Gateway.

**HARDWARE REQUIREMENTS**

VAX, MicroVAX or VAXstation configuration as specified in the System Support Addendum (SSA 26.71.03-x).

Any properly configured DECnet/SNA Gateway system as specified in the System Support Addendum.

**SOFTWARE REQUIREMENTS ***

VMS Operating System

DECnet-VAX end node or full function node license

In a DEC MicroServer (DEMSA) or a DEC ChannelServer (DESNA) environment, the gateway load host must have DECnet/SNA VMS Gateway Management software as specified in the System Support Addendum (SSA 26.71.03-x).

In a DECnet/SNA Gateway (DECSA) environment, all VMS systems to which the DHCF software provides access must have DECnet/SNA Gateway Management software as specified in the System Support Addendum (SSA 26.71.03-x).

* Refer the the System Support Addendum for the availablity and required versions of prerequisite software (SSA 26.71.03-x).

**ORDERING INFORMATION**

Software Licenses: QL-043A*-**
Software Media: QA-043A*-**
Software Documentation: QA-043AA-GZ
Software Product Services: QT-043A*-**

* 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's 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 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 from DIGITAL. For more information 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.