COMPAQ

Software Product Description

PRODUCT NAME: Compaq SNA 3270 Application Services, Version 1.3 **SPD 38.70.07**

DESCRIPTION

The *Compaq SNA 3270 Application Services* layered software product is a member of the Compaq SNA Programming Access Routines family of products. This family of layered software products consists of a variety of programming access routines that enable communications between IBM® and Compaq applications.

The *Compaq SNA 3270 Application Services* software provides a library of callable routines and other components for building OpenVMS and Tru64 UNX applications that support processing of IBM 3270 data streams. When used with the *Compaq SNA Domain Gateway* or *Compaq SNA Peer Server*, these 3270 data stream applications can be accessed by SNA networked 3270 block mode terminal and PC users. Refer to the *Compaq SNA Domain Gateway* Software Product Description (SPD 38.69.xx) or the *Compaq SNA Peer Server* SPD (51.08.xx) for more information.

The *Compaq SNA 3270 Application Services* software provides the following components:

- An application programming interface (API) for developing 3270 data stream applications
- An OpenVMS print symbiont for printing ASCII files on SNA-attached LU Type 1 or Type 3 printers and non-SNA-attached LU Type 0 printers (OpenVMS only)
- DECforms™ (Version 1.4) support for building forms-oriented applications for 3270 terminals (OpenVMS only)
- A mechanism for testing applications without an SNA network

Application Programming Interface

The 3270 Application Services API provides a library of routines for developing 3270 data stream applications. These applications can be SNA LU Type 1, 2, or 3 applications or non-SNA LU Type 0 applications. They can serve as the primary logical unit (PLU) and activate a session with the remote 3270 device as the secondary logical unit (SLU) in the SNA network.

The API is callable from any OpenVMS language conforming to the OpenVMS calling standard on OpenVMS systems, and from the C language on Tru64 UNIX systems.

The application that calls the *Compaq SNA 3270 Application Services* API is responsible for generating and interpreting all 3270 data streams. The API provides the following features:

- Receives incoming LU Type 0, 1, 2, and 3 connections
- Initiates outgoing LU Type 0, 1, 2, and 3 connections
- Establishes and terminates sessions
- Transmits and receives data
- Implements the protocols for chaining, bracketing, responses, and session and data flow control
- On Tru64 UNIX systems, the API is Pthreads safe
- Supports TCP/IP and DECnet™ networks on Tru64 UNIX and OpenVMS systems

The API provides integrated block mode access and VT™ emulation. In this way, applications written to use the API can also be run interactively by 3270 users while running MEP VT from INTEC. For more information, see

the Optional Products section of this Software Product Description.

Print Symbiont (OpenVMS Only)

The 3270 Application Services software provides a 3270 OpenVMS print symbiont for printing local ASCII files on an SNA-attached LU Type 1 or Type 3 printer or a non-SNA-attached LU Type 0 printer from an OpenVMS print queue.

The 3270 OpenVMS print symbiont allows system managers to initiate and start OpenVMS print queues. Users can print files on SNA-attached printers. The following features are available for OpenVMS users:

- Burst, flag, and trailer pages
- Print form specification
- Automatic session establishment, retry on error
- LU Type 1 printer console commands
- DCL queue management commands

Other features of the print symbiont include:

- Prints all types of sequential RMS files, including FORTRAN and Print file types, except for non-PRN VFC files.
- Data can be sent to the printer untranslated and unformatted. This is useful if the printer is an ASCII printer attached to the SNA network. This is supported only for LU Type 1 printers.
- The symbiont can either pass through escape sequences or strip them out.
- Translation can be controlled on a queue-by-queue basis. In this way, sites that need to use multiple translation tables are accommodated.
- Certain IBM applications keep the printers bound unless they get a NOTIFY indication in the C(D)INIT. Connections are now queued until the application unbinds.
- The symbiont uses the FORM qualifier to set the size of the margins. Text that goes beyond those margins is truncated.

DECforms for 3270 Terminals (OpenVMS Only)

Compaq SNA 3270 Application Services provides support for the DECforms (Version 1.4) product to enable the development of forms-oriented applications that can be accessed by SNA networked 3270 terminal and PC users. These DECforms applications can be developed without knowledge of 3270 Data Stream, SNA, or the Compaq SNA Application Services software. DECforms is Compaq's implementation of the ANSI/ISO standard for a Form Interface Management System (FIMS). Refer to the DECforms Software Product Description (SPD 29.90.xx) for additional information.

Application Testing Tools

The *Compaq SNA Domain Gateway* is required for 3270 access; however, a 3270 Terminal Emulator provides a method for preliminary testing of incoming sessions by emulating the SLU side of a session. For example, testing can be done with the *Compaq SNA 3270 Terminal Emulator for OpenVMS (SPD 26.84.xx)* or the *Compaq DECwindows SNA 3270 Terminal Emulator for OpenVMS (SPD 31.58.xx)*.

The *Compaq SNA 3270 Application Services* SNALOG trace utility provides debugging facilities to debug applications layered on *Compaq SNA 3270 Application Services*.

Thread Safe

Under Tru64 UNIX, the interface is fully thread safe and can be used by a multithreaded program.

INSTALLATION

Installation services from Compaq are recommended for a customer's first purchase of this software product. These services provide for installation of the software product by an experienced software specialist.

HARDWARE REQUIREMENTS

Processors Supported

For a complete list of supported processors, refer to the OpenVMS Operating System for Alpha and VAX Software Product Description (SPD 25.01.xx) and the Tru64 UNIX Operating System Software Product Description (SPD 41.60.xx for Tru64 UNIX V4.x; SPD 70.70.xx for Tru64 U V5.x).

Disk Space Requirements

For OpenVMS Systems:

Disk space required for installation:	7,100 blocks (3.55 MB)
Disk space required for use (permanent):	4,600 blocks (2.30 MB)

For Tru64 UNIX Systems:

Disk space required for use (permanent):	2.00 MB

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.

SOFTWARE REQUIREMENTS

For OpenVMS Systems:

OpenVMS Operating System for Alpha and VAX Version 6.2, 7.1 (VAX), 7.1-2 (Alpha), 7.2, 7.2-1 (Alpha), or 7.3 (SPD 25.01.xx)

Using *Compaq SNA 3270 Application Services* requires a network product appropraite for the version of OpenVMS, plus one of the SNA server or gateway products listed below. Networking options include:

- DECnet-Plus (Phase V, SPD 50.45.xx for Alpha, SPD 25.03.xx for VAX)
- TCP/IP Services for OpenVMS (SPD 46.46.xx)

Choose a networking option appropriate for OpenVMS Versions 6.2, 7.1 (VAX), 7.1-2 (Alpha), 7.2, 7.2-1 (Alpha), or 7.3 from the following table:

OpenVMS	TCP/IP	DECnet IV	DECnet V
6.2	4.2	6.2	6.3
7.1	5.1	7.1	7.1
7.1-2	5.1	7.1-2	7.1
7.2	5.1	7.2	7.2
7.2-1	5.1	7.2-1	7.2-1
7.3	5.1	7.3	7.3

For Tru64 UNIX Systems:

Tru64 UNIX Operating System Version 4.0D or higher (SPD 41.60.xx for V4.x; SPD 70.70.xx for V5.x)

OPTIONAL SOFTWARE

DECnet-Plus for Tru64 UNIX

(Tru64 UNIX only)

Select a version of DECnet-Plus appropriate for the version of Tru64 UNIX, as listed in the following table:

Tru64 UNIX	DECnet-Plus
V4.0D or higher	V4.0C
V5.0 or higher	V5.0A

MEP VT for Compaq SNA 3270 Applications Services

(OpenVMS VAX only)

The MEP VT product from INTEC is an OpenVMS terminal emulation software package that allows 3270 users to access unmodified applications on OpenVMS systems. MEP VT provides full-screen access to OpenVMS applications including ALL-IN-1™, OpenVMS based customer applications, and utilities such as OpenVMS Mail.

In addition, the 3270 user can run 3270-ready API applications in block mode from the MEP VT. This provides the benefits of block mode access while accessing the program through a VT emulation terminal session.

MEP VT for Compaq 3270 Application Services is available from:

INTEC Connectivity, Inc.

1735 E. Bayshore Road

Redwood City, CA 94063

650-365-5861

www.intec-connectivity.com

SOFTWARE LICENSING

This software is furnished only under a license. For more information about Compaq's licensing terms and policies, contact your local Compaq office.

License Management Facility Support

This layered product supports the OpenVMS and Tru64 UNIX License Management Facilities.

License units for this product are allocated on an Unlimited System Use plus Personal Use and Concurrent Use basis.

This layered product offers a Personal Use license. Each Personal Use license allows one identified individual to use the layered product.

This layered product offers a Concurrent Use license. Each Concurrent Use license allows any one individual at a time to use the layered product.

For more information on the License Management Facility, refer to the OpenVMS Operating System for Alpha and VAX Software Product Description (SPD 25.01.xx) or the Tru64 UNIX Operating System Software Product Description (SPD 41.61.xx for Tru64 UNIX V4.x; SPD 70.70.xx for Tru64 V5.x), or the License Management Facility manual of the operating system documentation set.

OpenVMS TAILORING CLASSES (OpenVMS Only)

The following OpenVMS classes are required for full functionality of this layered product:

- OpenVMS Required Saveset
- Network Support
- Utilities
- Programming Support

For more information on OpenVMS classes and tailoring, refer to the OpenVMS Operating System for Alpha and VAX Software Product Description (SPD 25.01.xx).

GROWTH CONSIDERATIONS

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

DISTRIBUTION MEDIA

This product is available as part of the OpenVMS Alpha, OpenVMS VAX, and Tru64 UNIX Software Product Libraries on CD-ROM.

SOFTWARE WARRANTY

This software is provided by Compaq with a 90-day conformance warranty in accordance with the Compaq warranty terms applicable to the license purchase.

ORDERING INFORMATION

Software Licenses:

Development System (OpenVMS VAX Systems):

QL-MKJA*9-AA (Unlimited System Use)

QL-MKJAA-3B (Concurrent Use)

QL-MKJAA-2B (Personal Use)

Development System (OpenVMS Alpha Systems):

QL-2FKA*-AA (Traditional)

QL-2FKAA-3B (Concurrent Use)

QL-2FKAA-2B (Personal Use)

Development System (Tru64 UNIX Systems):

QL-2UAA*-AA (Traditional)

Runtime System (OpenVMS VAX Systems):

QL-MKKA*-AA (Unlimited System Use)

QL-MKKAA-3B (Concurrent Use)

Runtime System (OpenVMS Alpha Systems):

QL-2FLA*-AA (Traditional)

QL-2FLAA-3B (Concurrent Use)

Runtime System (Tru64 UNIX Systems):

QL-2UBA*-AA (Traditional)

Software Documentation:

QA-MKJAA-GZ

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

SOFTWARE PRODUCT SERVICES

Installation

Installation provides comprehensive installation and of Compaq and non-Compaq hardware, software, and networks products. These products include systems, servers, upgrades, workstations, terminals, PCs, peripherals, network equipment, operating systems, and layered products. Optional pieces of the Installation offer include site planning and preparation, orientation, and other projects which are based on the installation of computer equipment (e.g. relocation services).

License Subscription

License Subscription provides the license rights to use all new versions of those products, which are released during the contract period. Also included are the rights to use certain server-resident products whose license is included in a corresponding client license.

Telephone Software Support

Software Support provides software problem identification and resolution and operational support for system managers, technical support/helpdesk personnel who manage Compaq and popular multivendor server software in either a standalone or networked environment. This service provides access both to technical resources to assist in problem diagnosis and resolution and to Compaq's information database. This combination of support resources will address system management questions and inquiries on a wide variety of topics including information on the latest product features, known problems and available solutions, and operational advice and assistance to help the system manager, system administrator better manage its information technology environment.

Please contact your local Compaq office for additional information on specific services in your area.

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