COMPAQ

Software Product Description

PRODUCT NAME: Compaq OSAP/H1 Version 3.1 (Compaq OMNI Services for SINEC Automation Protocols /SINEC H1 Services) **SPD 47.95.06**

DESCRIPTION

Compaq OSAP is a network communication product. It provides a solution to connect Compaq applications with shop floor devices based on Siemens® SINEC® H1 communication protocol. SINEC H1 services are also identified as PG communication services in Siemens literature.

Siemens SINEC H1 has been recommended for connecting PLCs and host computers on large configurations. It has been specified on top of the ISO/OSI Transport Layer and it is based on Ethernet to improve effectiveness (through higher performance) and efficiency (through lower costs per connection).

Compaq OSAP/H1 fully supports the SINEC H1 communication protocol.

Features

As the SINEC H1 communication protocol is defined on top of the ISO OSI Transport Layer, Compaq OSAP relies upon Compaq DECnet/OSI to complete the communication stack. For more information, refer to the DECnet/OSI *Software Product Description* (SPD 41.92.xx).

Because of the functional compatibility between Siemens SINEC AP and MMS (Manufacturing Messaging Services), ISO International Standard 9506, Parts 1 and 2, Compaq OSAP is integrated with the software architecture of the Compaq OMNI API product to supply the Application Programming Interface (API). For more information, refer to the Compaq OMNI API *Software Product Description* (SPD 47.88.xx).

Compaq OSAP also provides Device Access Software (DAS) for connecting Siemens SINEC H1 devices for BASEstar Open Server systems. For further information, refer to the Compaq OMNI API *Software Product Description* (SPD 47.82.xx).

Components

- Compaq OSAP/H1 Services

This component adds support for SINEC H1 functionality via the Compaq OMNI API. Supported services are listed at the end of this *Software Product Description* and are divided into the following categories:

  — Environmental Management

  — Messages

  — Device Management

  — Variable Access

- Configuration and Management Facilities

Compaq OSAP/H1 uses the Compaq OMNI API facility ODSCL.

On OpenVMS platforms, the following Compaq OMNI API facilities are supported:

  — ODF (OMNI Definition Facility)

  — OMNIView

- Support for the Device Access Services of BASEstar Open
- Installation Verification Procedure (IVP)

The Compaq OSAP IVP performs a series of tests to verify proper installation.

Documentation

Compaq OSAP includes the following documentation:

- A platform-specific Network Manager's and Programmer's Guide provides an overview of SINEC H1 and SINEC AP (see the Compaq OSAP/AP *Software Product Description*—SPD 47.96.07) concepts and terminology. It includes a description of the services that are available through Compaq OMNI API and features of Compaq OSAP. It also describes how to use the Compaq OMNI API utility ODSCL.
- A platform-specific Installation Guide that explains how to prepare for installation, how to install the product, and what to do after Compaq OSAP is installed.

INSTALLATION

Before attempting to install the software, the customer must have all pre-requisite hardware and software. Compaq Computer Corporation recommends that a customer's first purchase include Compaq Installation Services.

Connectivity to all other nodes within the network is the responsibility of the customer.

SUPPORTED VERSIONS

This SPD covers the following versions of the Compaq OSAP product:

- Compaq OSAP/H1 for OpenVMS VAX
- Compaq OSAP/H1 for OpenVMS Alpha
- Compaq OSAP/H1 for Tru64 Unix

ORDERING INFORMATION

Compaq OSAP/H1 for OpenVMS VAX:

Software Licenses (unlimited use): QL-5BQ**-**
Software Documentation: QA-5BP**-**
Software Product Services: QT-5BR**-**

Compaq OSAP/H1 for OpenVMS Alpha:

Software Licenses (unlimited use): QL-2XWA*-**
Software Documentation: QA-2XVAA-GZ
Software Product Services: QT-2XWA*-**

Compaq OSAP/H1 for Tru64 Unix:

The Compaq OSAP/AP product kit is included in the BASEstar Open Server for Tru64 Unix Consolidated Software Distribution:

Software Media: QA-5SRAA-H8

Software Licenses (unlimited use): QL-0Z7A*-**

Software Documentation: QA-0Z7A*-GZ

Software Product Services: QT-0Z7A*-**

* 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 Compaq Computer Corporation's Standard Terms and Conditions. For more information about Compaq licensing terms and policies, contact your local Compaq office.

License Management Facility Support:

This layered product supports the Compaq License Management Facility.

Two types of license are available:

- "Unlimited system use" license–available for a processor
- "Concurrent use" license–available for a device connection.

SOFTWARE PRODUCT SERVICES

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

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.

Warranty Limitations

The SINEC H1 services supported by Compaq OSAP /H1 are listed in Appendix A of the System Warranty Addendum of this SPD.

HARDWARE REQUIREMENTS

Processors Supported:

- Alpha processors supporting either:
  - — OpenVMS Alpha Version 6.1 to 7.1, 7.2
  - — Tru64 Unix Version 3.2 or 4.0
- VAX processors supporting:
  - — OpenVMS VAX Version 6.1 to 7.1, 7.2

DISK SPACE REQUIREMENTS

OpenVMS (VAX/Alpha):

- 26 Mb (installation)
- 10 Mb (permanent use)

Tru64 Unix:

- 26 Mb (installation)
- 10 Mb (permanent use)

Note: A configuration with at least 16 Mb of memory is recommended.

These values 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

YEAR 2000 READY

YEAR 2000 READY This product is Year 2000 Ready. Year 2000 Ready is defined: "Year 2000 Ready" products are defined by Compaq as products capable of accurately processing, providing, and/or receiving date data from, into and between the twentieth and the twenty-first centuries, and the years 1999 and 2000, including leap year calculations, when used in accordance with the associated product documentation and provided that all hardware, firmware and software used in combination with such products properly exchange accurate date data with the products. *Compaq OSAP /H1 for OpenVMS Alpha:*

- OpenVMS Version 6.1 to 7.1, 7.2
- DECnet/OSI for OpenVMS Alpha Version 6.3 to 7.1, 7.2
- Either:
  - — Compaq OMNI API for OpenVMS Alpha V3.21, or
  - — BASEstar Open Server for OpenVMS Alpha V3.2
- ORACLE Rdb Version 6.0 or 6.1[1]
- OpenVMS DECwindows Motif Version 1.2[2]

Compaq OSAP/H1 for OpenVMS VAX:

- OpenVMS VAX Version 6.1 to 7.1, 7.2
- DECnet/OSI for OpenVMS VAX Version 6.3 to 7.1, 7.2
- Either:
  - — Compaq OMNI API for OpenVMS VAX V3.1, or
  - — BASEstar Open Server for OpenVMS VAX V3.2
- ORACLE Rdb Version 5.1[1]
- OpenVMS DECwindows Motif Version 1.2[2]

Compaq OSAP/H1 for Tru64 Unix:

- Tru64 Unix Version 3.2 or 4.0
- DECnet/OSI for Tru64 Unix Version 3.2 to 4.0
- Either:
  - — Compaq OMNI API for Tru64 Unix V3.1
  - — BASEstar Open Server for Tru64 Unix V3.2

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

This product is available on CD-ROM for the supported operating system, and on TK50 media for OpenVMS VAX.

[1] Only necessary if you are using Compaq OMNI API with the ODF component.

[2] Only necessary if you are using Compaq OMNI API with the OMNIView component.

APPENDIX A - SINEC H1 Functionality Cross Reference Tables

The tables that follow list the Conformance Building Block (CBB) services and parameters that are supported by Compaq OSAP/H1 Version 3.1. They are compared to the services provided within the first version. The level of support depends upon the level of functionality provided by the target Siemens communication processors.

Table 1
Siemens SINEC H1 CBB Services Cross Reference Table

	Compaq OSAP/H1 Version 3.1	CP535
Environment Management		
Initiate	B	B
Conclude	B	B
Abort	B	B
Cancel	C	N
VMD Support		
Status	C	S
Variable Access Services		
Read	B	B
Write	B	B
InformationReport	B	B
Domain Management Services		
InitiateDownload Sequence	C	S
DownloadSegment	C	S
TerminateDownload Sequence	C	S
InitiateUpload Sequence	C	S
UploadSegment	C	S
TerminateUpload Sequence	C	S
Program Invocation Services		
Start	C	S
Stop	C	S
Serial Transfer Services		
Send	B	B

Where the following symbols apply:

B = Client and Server
C = Client only
S = Server only
N = Not supported

Table 2
Siemens SINEC H1 CBB Parameters Cross Reference Table

Parameters	Compaq OSAP/H1 Version 3.1
STR1	TRUE
STR2	TRUE
NEST	10
VNAM	FALSE
VADR	TRUE
VALT	FALSE
VSCA	FALSE
TPY	FALSE
VLIS	FALSE
REAL	FALSE
AKEC	FALSE
CEI	FALSE

Supported Siemens Communication Processors (CP) are:

- CP535 for Simatic® S5 PLC family
- CP143 for Simadyn® S5 PLC family
- CP1430 for Simatic® S5 PLC family
- CSH1 for Simadyn® PLC family

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