COMPAQ

Software Product Description

PRODUCT NAME: BASEstar Open Client Version 3.2 **SPD 62.54.07**

DESCRIPTION

BASEstar Open is an industrial automation integration framework that facilitates the integration of manufacturing applications and plant equipment. Accelerated development of integrated manufacturing systems is assured through an architecture that also encourages consistency of application development.

BASEstar Open takes advantage of the client/server computing architecture. BASEstar Open Servers provide the robust, high-availability environment required by mission-critical applications. BASEstar Open Clients, on the other hand, provide access to all BASEstar Open services and BASEstar Open-managed information from any network Node on which BASEstar Open Client is installed. Client and server communications within BASEstar Open are provided through TCP/IP network communications.

For a description of the BASEstar Open Server product, refer to SPD 47.87.xx.

The BASEstar Open Client allows applications to have transparent access to BASEstar Open objects regardless of their physical location in the distributed BASEstar Open environment. BASEstar Open Client provides an Application Programming Interface that allows applications to:

- Define, reference, and access Data_Point objects
- Define, reference, notify, subscribe, and receive event objects
- Define, reference, and exchange Packet data objects.

Features

The following features are those that a BASEstar Open Client can request from a BASEstar Open Server via BASEstar Open's API:

Application Integration

- Data Management

BASEstar Open Data Services provide a standard mechanism for defining, organizing, and accessing data in a distributed manufacturing environment from a variety of sources including plant devices and area, plant, and work cell applications.

BASEstar Open defines discrete elements (Data_Points) to contain manufacturing information. Data_Point definitions can be of various types, ranging from scalar data elements to user-defined data structures. This provides the high flexibility of data definition and acquisition required to define the many different types of data typically present in industrial plants.

Since each Data_Point is referenced by name, applications become independent of their data sources and consequently do not require alteration as data sources change. In addition, simple Data_Points can have a predefined value specified at startup time. The value of a Data_Point may also be derived from the value of another Data_Point. The derived value can be obtained directly or modified by an arithmetic/logical expression. Data Services allow applications to define and manage Data_Points.

You can associate each Data_Point with one or more Triggers. A Trigger defines a relationship between a Data_Point, a Filter, and an Event. Each time the value of a triggered Data_Point changes, associated Filter expressions are evaluated. Whenever the Boolean result

of an evaluated Filter expression is TRUE, BASEstar Open declares the associated Event.

Likewise, the Timer object allows you to apply a time-based condition to the execution of an action. You can define the time condition as an absolute date, a time interval, or a combination of the two. When the Timer expires, BASEstar Open sends a message to the associated objects. You can associate Timers with Trigger objects.

It is possible to store one or more versions of a Data_Point value. In addition to the value, each Data_Point version includes the time when the Data_Point value changed and its status at that time.

BASEstar Open generates a new version each time the value of a Data_Point changes. You can therefore request the current version, containing the current value, or alternatively, the value associated with any cached version.

- Event Services

BASEstar Open Event Services allow you to subscribe to one or more Events. Events are occurrences that are of interest to an application program—like threshold exceeding, alarms, job completion, and so on. You can define the occurrence of such Events and specify the context information that you wish to pass. This context information can also include data and their types.

On declaration of an Event, Event Services create and deliver the notifications that the subscribers receive.

- Packet Services

BASEstar Open Packet Services allow you to exchange Packets of information directly with other users. Two users can establish direct communication through a Port; one user connects to send a Packet, and the other user connects to receive it.

A Packet contains a description of information to be exchanged. Each Packet input and output parameter is described by a datatype.

BASEstar Open delivers a Packet to a Port in a protocol-independent manner and also independent of the location of the users and Ports involved.

- Graphic Configuration Utility (GCU)

BASEstar Open offers a PC-based Graphic Configuration with a Windows "look and feel". It allows users to:

  - Manage BASEstar Open objects using create, delete and modify commands
  - Load existing configurations from CLI scripts and snapshots
  - Save configurations in CLI scripts and snapshots
  - Browse through BASEstar Open configurations.

The Graphic Configuration is bundled with BASEstar Open Server kits on Windows NT systems. It is included with the BASEstar Open Client on Windows NT and Windows 95/98 systems.

BASEstar Open users on Tru64 UNIX or OpenVMS platforms can take advantage of the Graphic Configuration via the PC-based BASEstar Open Client and GCU product. The PC-based Graphic Configuration replaces the Motif-based GCU previously available with BASEstar Open Version 2.0.

- DDE Connectivity DDE (Dynamic Data Exchange) is a protocol that allows PC-based applications to exchange data. It ensures compatibility between the PC-based data representation (used on Windows NT and Windows 95/98 platforms) and the native BASEstar Open data representation. This capability augments significantly the scope of BASEstar Open, allowing you to integrate DDE-compliant software packages such as Microsoft Excel, InTouch from Wonderware, and DDE drivers.

Documentation

BASEstar Open Client is supported by the following documentation:

- An installation and management guide specific to each operating system, for installing BASEstar Open Client on the selected operating system. It provides also instructions on how to manage BASEstar Open Client components.
- BASEstar Open Client Release Notes describes new features provided with BASEstar Open Client, and details any functional and documentation errors. This document,too, is specific to each operating system.

INSTALLATION

Before attempting to install the software, the customer must have all the pre-requisite hardware and software installed. Compaq recommends that a customer's first purchase of this software 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 BASEstar Open Client product:

- BASEstar Open Client for OpenVMS VAX V3.2
- BASEstar Open Client for OpenVMS Alpha V3.2
- BASEstar Open Client for Tru64 UNIX V3.2

- BASEstar Open Client for Windows NT and Windows 95/98 V3.2

HARDWARE REQUIREMENTS

Processors Supported

BASEstar Open Client for OpenVMS VAX Version 3.2:

VAX processors supporting OpenVMS VAX V6.1 to V7.2

BASEstar Open Client for OpenVMS Alpha Version 3.2:

Alpha processors supporting OpenVMS Alpha V6.1 to V7.2

BASEstar Open Client for Tru64 UNIX Version 3.2:

Alpha processors supporting Tru64 UNIX V3.2C to V5.0

BASEstar Open Client for Windows NT and Windows 95/98 Version 3.2:

Intel processors supporting Windows NT V4.0 or Windows 95/98

DISK AND MEMORY SPACE REQUIREMENTS

BASEstar Open Client for OpenVMS VAX Version 3.2

Minimum recommended memory:

- 48 Mbytes

Disk space required:

- 10,000 blocks (for installation)
- 9,100 blocks (for subsequent use))

BASEstar Open Client for OpenVMS Alpha Version 3.2

Minimum recommended memory:

- 96 Mbytes

Disk space required:

- 10,000 blocks (for installation)
- 9,000 blocks (for subsequent use)

BASEstar Open Client for Tru64 UNIX Version 3.2

Disk space required:

- 10 Mbytes (for installation and subsequent use)

BASEstar Open Client for Windows NT and Windows 95/98 Version 3.2

Minimum recommended memory:

- 32 Mbytes (Windows NT), 12 Mbytes (Windows 95 /98)

Disk space required:

- 10 Mbytes (for installation and subsequent use)

The above values refer to the disk space required on the system disk. The sizes are approximate; actual sizes will vary depending on the user's system environment and use of BASEstar Open.

SOFTWARE REQUIREMENTS

YEAR 2000 READY

This product is Year 2000 Ready. "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 pro- vided that all hardware, firmware and software used in combination with such products properly exchange accurate date data with the products.

BASEstar Open Client for OpenVMS VAX Version 3.2

- OpenVMS VAX V6.1 to V7.2

Layered Products

- DEC TCP/IP Services for OpenVMS V3.3 to V5.0

BASEstar Open Client for OpenVMS Alpha Version 3.2

- OpenVMS Alpha V6.1 to V7.2

Layered Products

- DEC TCP/IP Services for OpenVMS V3.3 to 5.0

BASEstar Open Client for Tru64 UNIX Version 3.2

- Tru64 UNIX V3.2C to V5.0

BASEstar Open Client for Windows NT and Windows 95/98 Version 3.2

- Windows NT V4.0 or Windows 95/98

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 Tru64 UNIX, OpenVMS Alpha, OpenVMS VAX platforms. It is also available on TK50 streaming tape for OpenVMS VAX platforms.

The BASEstar Open Client for Windows NT and Windows 95/98 kit is provided on CDROM.

ORDERING INFORMATION

BASEstar Open Client for OpenVMS VAX Version 3.2:

Software Media and Documentation: QA-0Y8AA-H5
Software Product Services: QT-0Y8A*-**

BASEstar Open Client for OpenVMS Alpha Version 3.2:

Software Product Services: QT-0Y9A*-**

BASEstar Open Client for Tru64 UNIX Consolidated Software Distribution:

Software Media: QA-5SRAA-H8

BASEstar Open Client for Tru64 UNIX Version 3.2:

Software Documentation: QA-2WVAA-GZ
Software Product Services: QT-0YBA*-**

BASEstar Open Client for Windows NT and Windows 95/98 Version 3.2:

PC Package (documentation):
QB-2WVAA-S*
Software Documentation: QA-2WVAA-GZ

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

SOFTWARE LICENSING

BASEstar Open Client Version 3.2 does not require a local license on the node where it is installed.

Every BASEstar Open Client node connected a BASEstar Open Server confederation (a set of BASEstar Open Server nodes working together) consumes one BASEstar Open client-connection slot while it is working with the server nodes (this is independent on how many client applications are running in the client node and on the accessed realms). The client-connection slot is freed when no more applications from the client node are connected to the BASEstar Open confederation. A BASEstar Open confederation provides as many client-connection slots as the total number of client-connection licenses loaded there (more precisely: loaded in the node where the primary BASEstar Open LNS server was started). Client-connection licenses can be bought individually or by groups.

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.

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

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