COMPAQ

Software Product Description

PRODUCT: Compaq TeMIP Access Module for Fujitsu Environment Manager SPD 80.51.00

DESCRIPTION

The Compaq TeMIP FJEM Access Module (AM) provides an interface to the Fujitsu Environment Manager. This Access Module is a bi-directional module addressing fault management. It receives and processes unsolicited messages, as well as sends management commands and receives associated responses (Fault Management).

TeMIP for Tru64 UNIX® is a family of software products for the management of telecommunications and corporate networks, including fixed wire and mobile/cellular voice and data, multi-vendor, multi-technology networks. TeMIP V4.0 provides comprehensive off-the-shelf fault and trouble management functions such as Alarm Handling, Event Logging and Trouble Ticketing for telecommunications network management.

TeMIP supports the International Standards Organization (ISO) management standards ISO 10164-x and ISO 10165-x, the OMNIpoint 1 standards as defined by NMF and T1M1. TeMIP and its features are applicable in the context of the International Telecommunication Union-Telecom Standard Sector (ITU-T) X.73x and Telecommunications Management M.3010 and M.3100 Network (TMN)

Recommendations. TeMIP gives network operators a global view of their networks, and enables them to activate management functions and operations from single or multiple workstations.

TeMIP is built on top of the TeMIP Framework and fully benefits from the object oriented and truly distributed software architecture.

SOLUTION COMPONENTS

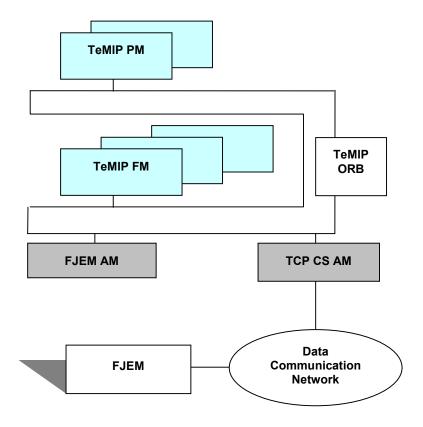
The FJEM is directly interfaced to TeMIP by means of a combination of Management Modules:

The TCP Communications Server Access Module, responsible for establishing and maintaining the physical connection to the equipment. (As an alternative to the TCP Communications Server, either the X.25 (SVC), RS232 or Telnet Communications Servers could also be envisioned),

The FJEM, Fujitsu Environment Manager, AM, responsible for the Information Model that represents the management capabilities of the equipment as well as all associated semantic translations between its ASCII-based messaging interface and TeMIP data models.

The solution components are shown in Figure 1.

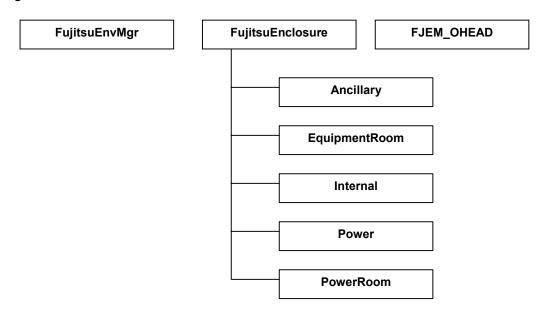
Figure 1: Solution Components



INFORMATION MODEL OUTLINE

The FJEM is represented by the information Model shown in Figure 2.

Figure 2: Information Model



The meaning of each class is described in Table 1.

Table 1: FJEM AM Hierarchy Description

Class	Child Class	Description	Cardinality
FujitsuEnvMgr		Environment Manager	N
FujitsuEnclosure		Enclosure housing telecommunications equipment.	N
	Ancillary		N
	EquipmentRoom		N
	Internal		N
	Power		N
	PowerRoom		N
FJEM_OHEAD		This global entity is responsible for signaling received messages that are not assigned to an entity of the model. The messages are not assigned due to one of the following causes: The message format is corrupted or unrecognized (NOMATCH messages) The message is valid but the ASCIIName lookup fails (because of failure to provision, provisioning error, or corruption of the data used to construct the ASCIIName (NOSITE messages))	1

MANAGEMENT CAPABILITIES SUMMARY

Unsolicited Messages Support

The FJEM AM can handle the following unsolicited messages:

- REPT ALM ENV: Report Alarm Environment,
- REPT PM ENV: Performance Report Condition.

Commands Support

The following commands are supported:

- ACT-USER
- CANC-USER
- INH-MSG-ALL
- ALW-MSG-ALL
- RTRV-HDR
- RTRV-ALM-ALL
- INH-PMREPT-ALL
- ALW-PMREPT-ALL.

Alarm Clearance

Some alarm messages have a corresponding alarm clear message. The FJEM AM provides a specific alarm identifier to allow the correlation of the alarm with its clear message. So, alarm clearing is performed based on some fields in the message, according to ITU-T standards:

The alarm has severity <u>clear</u>; and the <u>Managed</u> <u>Object</u>, <u>Event Type</u>, <u>Probable Cause</u> and <u>Specific</u> <u>Problem</u> fields are the same as a previous alarm.

MISCELLANEOUS MANAGEMENT CAPABILITIES

The FJEM AM implements the features listed below:

- Automatic detection and reporting of communication failure.
- Processing error handling and reporting

HARDWARE REQUIREMENTS

Supported Alpha AXP Processors:

DIGITAL Personal Workstation au series DIGITAL Ultimate Workstation AlphaStation 600 AlphaServer 800, 1000A, 1200 Compaq AlphaServer DS10, DS20

AlphaServer 2000, 2100, 4000, 4100 Compaq AlphaServer ES40

AlphaServer 8200, 8400 Compaq AlphaServer GS60, GS140

Disk Space Requirements:

Disk space required for installation:

Subset copy: 11 Mbytes Installation: /usr 32 Mbytes

Disk Space Required for Use (Permanent): No specific requirement

Memory Requirements:

The minimum memory supported, due to a TeMIP Framework prerequisite, is 128 Mbytes.

However, the use of this software in conjunction with increased memory capability improves performance.

SOFTWARE REQUIREMENTS

Compaq Tru64 UNIX® Operating System V4.0F TeMIP Framework V4.0

OPTIONAL SOFTWARE

TeMIP Graphical ASCII Toolkit V4.0

GROWTH CONSIDERATIONS

The minimum hardware/software requirements for any future version of this product may be different from the current version 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 Compaq product documentation and provided that all hardware, firmware and software used in combination with such Compaq products properly exchange accurate date data with the Compaq products.

For additional information visit Compaq's Year 2000 Product Readiness web site located at http://www.compaq.com/year2000

To ensure that this product is Year 2000 Ready, code assessment and system tests to verify the transition between December 31st 1999 and January 1st 2000 were utilized.

To ensure that this product interoperates properly with other hardware and software, the system tests involving Compaq's TeMIP V4.0 are applicable, as this product was verified as being Year 2000 Ready.

DISTRIBUTION MEDIA

This software is available by electronic means, distributed directly by Compaq TeMIP Engineering Team in Sophia Antipolis, France. The team can be contacted through your local Compaq office, which sends an internal e-mail to vbetemipsupp@compaq.com (containing customer identification and proof of license purchase).

ORDERING INFORMATION

Compaq TeMIP Access Module for Fujitsu Environment Manager (Fault Management)

Software License:

QM-6KGAA-AA

Software Product Services:

QT-6KG**-** or QR-SP6KG-A9

Notes:

- * denotes variable fields. For additional information on available services, or hardware platform tiers, refer to the appropriate price book.
- 2. The QM number corresponding to the TeMIP Graphical ASCII Toolkit V4.0 (Run-Time) must also be purchased (QM-5SMAA-AA).

SOFTWARE LICENSING

This software is furnished under the licensing provisions of Compaq Computer Corporation's Shrink-wrap Terms and Conditions. The license is a Corporate wide license, i.e. can be copied as many times as necessary on systems using the same TeMIP Namespace.

However, one Graphical ASCII Toolkit runtime license per copy of the Access Module is required.

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