COMPAQ

Software Product Description

PRODUCT NAME: TeMIP Access Module for Lucent DACS   **SPD 80.27.00**

DESCRIPTION

The TeMIP Lucent DACS Access Module (AM) provides an interface to the Lucent Digital Access Cross-Connect System (DACS). The Lucent DACS Access Module supports fault management capabilities with a basic Information Model (flat model), receiving and processing unsolicited messages (Basic Fault Management).

TeMIP 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 V3.2 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 Network (TMN) M.3010 and M.3100 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.
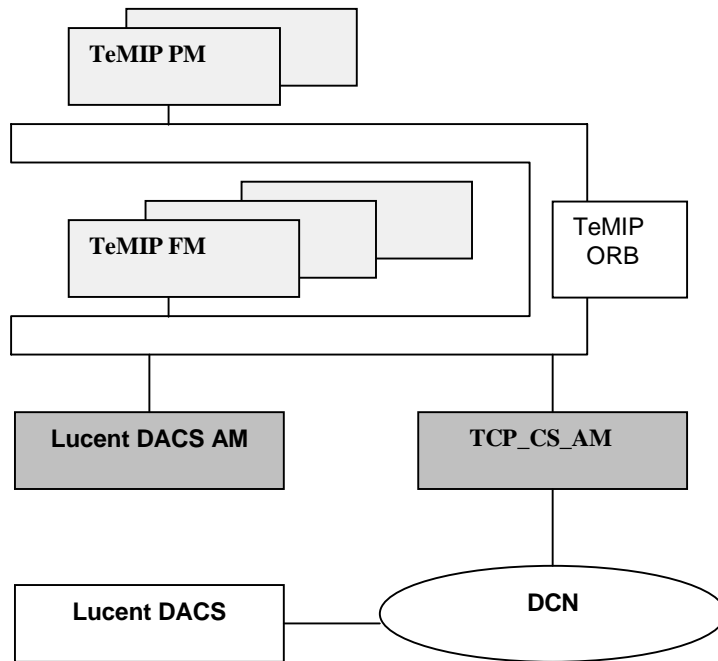
SOLUTION COMPONENTS

The Lucent DACS equipment 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) or RS232 Communications Servers could also be envisioned),

- The Lucent DACS AM, responsible for the Information Model representing the management capabilities of the equipment as well as all associated semantic translations between its ASCII-based messaging interface and TeMIP data models.

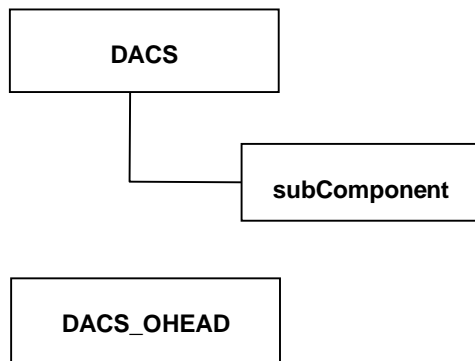The solution components are shown in Figure 1.

Figure 1: Solution Components

INFORMATION MODEL OUTLINE

The DACS 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: Lucent DACS Hierarchy Description

Global Class	Child class	Description	Cardinality
DACS		Represents a Lucent DACS II equipment	N
	subComponent	This child class represents either a physical equipment component of the Lucent DACS (e.g. power supply, cross-connect matrix) or a network processing circuit, switched by the Cross-Connect	N
DACS_OHEAD		Entities for this class are responsible for signalling received messages that are not assigned to a class representing a NE, MD or contact closure because: • the message format is corrupt or unrecognized (NOMATCH messages); • the message relates to the mechanics of establishing and maintaining Alarm surveillance (HOUSEKEEPING messages).	N

MANAGEMENT CAPABILITIES SUMMARY

Unsolicited Messages Support

The DACS AM shall handle the following unsolicited messages:

- REPT ALM EQPT: Report Alarms associated with equipment failures,

- REPT ALMDET EQPT: Supplement the information about the trouble generated by the REPT ALM,

- REPT AUD EQPT: Report Audit of equipment,

- REPT CPY MEM: Report copy of data from one memory to another, such as Disk to Tape or RAM,

- REPT DGNDET EQPT: Equipment diagnostic report,

- REPT EVT RQPT: Report Events which do not require alarm notification but indicate the maintenance condition of the system,

- REPT RMV EQPT: Report Equipment Removed from service,

- REPT SW: Report the autonomous switch of an entity to protection or working.

Commands Support

The following commands shall be supported by DACS AM:

- RTRV-ALM-EQPT: Retrieve Equipment Alarm,

- RTRV-STATE-EQPT: Retrieve State Equipment,

- RTRV-HDR: KeepAlive.

Alarm Clearance

Alarm clearing for default entities is performed based on Notification Identifier argument of the OSI alarm, based on the following rule:

- the Managed Object is the same of a previous alarm; and the Notification Identifier field is the same as the Notification Identifier of the previous alarm,

For non-default entities, to clear a previous alarm the TeMIP Alarm Handling performs the clear correlation whenever required, based on the following rule:

- the Managed Object, Event Type, Probable Cause and Specific Problem fields are the same as a previous alarm.

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: 20,000 Kbytes
> Installation: /usr 66,000 Kbytes

> 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 V4.0D or V4.0F

TeMIP Framework V3.2

A TeMIP Graphical ASCII Toolkit run time license per Access Module is also required

OPTIONAL SOFTWARE

TeMIP Graphical ASCII Toolkit V2.0

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

"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 V3.2 are applicable, as this product was verified as being Year 2000 Ready.

The testing used to confirm the Year 2000 readiness of this product included code assessment and system tests to verify transition dates.

DISTRIBUTION MEDIA

This software is available by electronic means, distributed directly by the Compaq TeMIP Engineering Team, who 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

TeMIP Access Module for Lucent DACS Basic Fault Management

Software License:

- QM-6GHAA-AA

Software Product Services:

- QT-6GH**-T* or QR-SP6GH-A9

Notes:

1. * 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 V2.0 (Run-Time) must also be purchased (QM-5SMAA-AA).

SOFTWARE LICENSING

This software is furnished under the licensing provisions of Compaq Computer Corporation's Shrinkwrap Terms and Conditions.

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SOFTWARE WARRANTY

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

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

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