



# Software Product Description

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**PRODUCT: Compaq TeMIP Access Module for NORTEL IN**

**SPD 80.24.01**

## DESCRIPTION

The Compaq TeMIP NORTEL IN Access Module (AM) provides an interface to the NORTEL IN Platform. This Access Module supports fault management capabilities with a basic Information Model (flat model), receiving and processing unsolicited messages (Basic 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 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 NORTEL IN Platform is directly interfaced to TeMIP by means of a combination of Management Modules and Applications:

- The inetd\_piper application
- The TCP Communications Server Access Module

This module is responsible for establishing and maintaining the physical connection to the Front-End.

Either of the X.25 (SVC), RS232 or Telnet Communications Servers are a possible alternative to the TCP Communications Server. Modifications can also be made to the inetd\_piper application.

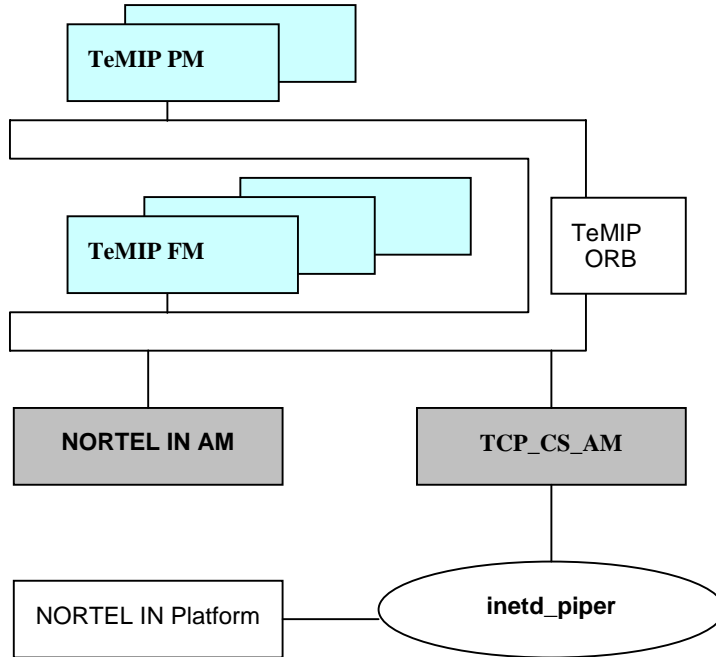
- The NORTEL IN AM

This AM is responsible for the Information Model that represents the management capabilities of the equipment.

This AM is also responsible for 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 NORTEL IN Platform 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: NORTEL IN AM Hierarchy Description

Class	Description	Cardinality
NORTEL_SMS	Service Management System	N
NORTEL_SCP	Service Control Point	N
NORN_OHEAD	Represents all the unknown NEs	N

## MANAGEMENT CAPABILITIES SUMMARY

### Unsolicited Messages Support

Each network element on the IN Platform has particular subsystems that generate events. These events are of interest to the network managers. The events are communicated to the Network Management system as ASCII formatted messages. Each message is associated with a subsystem through a log subsystem code. The format of these codes is as follows:

```
<Log subsystem code>: =<Log subsystem
identifier><serial number>
```

Example log subsystem codes are as follows:

- CCS210
- FSRV490

The log subsystem identifier is a three or four character ASCII code that associates the alarm with a particular sub-process in the system.

This log subsystem classification provides a basic partitioning of events into equivalence classes associated with a functional area of the NE.

This subsystem identification is the primary classification of the messages from the network element.

### Alarm Clearance

If the Alarm Operation field of an alarm is set to Off, the alarm generates OSI Alarms of severity Clear, as follows:

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

This module works this way even if no such alarm clearance is ever emitted by the NORTEL IN Network Elements.

## 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: 9 Mbytes  
 Installation: /usr 26 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 31<sup>st</sup> 1999 and January 1<sup>st</sup> 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](mailto:vbetemipsupp@compaq.com) (containing customer identification and proof of license purchase).

**ORDERING INFORMATION**

*Compaq TeMIP Access Module for NORTEL IN (Basic Fault Management)*

Software License:

- QM-6GEAA-AA

Software Product Services:

- QT-6GE\*\*-\*\* or QR-SP6GE-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 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. However, one Graphical ASCII Toolkit runtime license per copy of the Access Module is required.

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This product uses the FLEXIm Software License Key system.

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