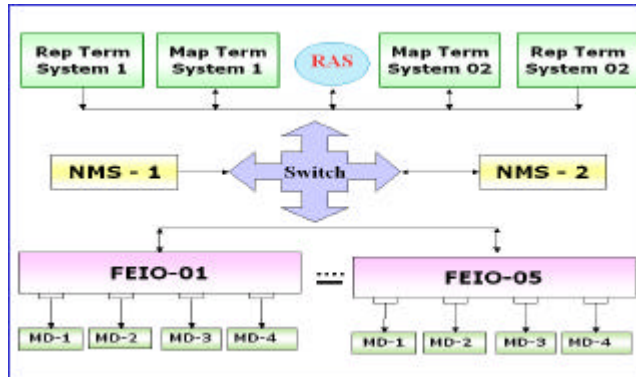


**TCMIS** is a solution for any kind of basic Telecom Service provider, which has heterogeneous telecom switches in their network. In earlier days where all the switches were of the same technology / vendor, there was no need for a solution like this. For such a scenario, the manufacturer of the switches was able to provide Network Management Solution. Day-by-day the number of technologies of the switch increased and thus the complexity for the Network Manager also increases.

## Architecture



**TCMIS** provides the Network Manager a technology independent management of the Telecom Network.

## SYSTEM ARCHITECTURE

The system contains mainly the following:

**Mediation Device (MD)** is located at each Exchange building connecting to multiple switches within the same building on RS-232 port/ Dial-up / Leased MODEM link/X.25 link.

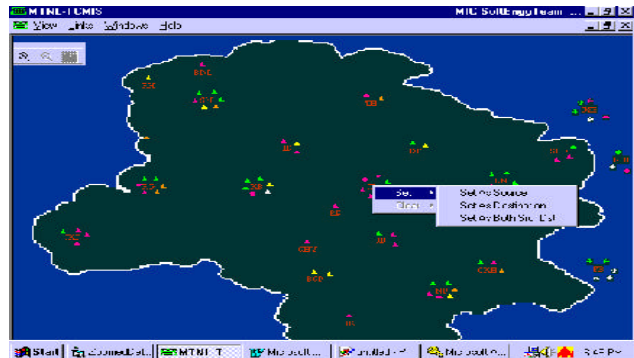
**FrontEndIO System (FEIO)** is located at central NMS site, which interacts with multiple **Mediation Devices**. It acts as a buffering system between Mediation Device and NMServer.

**NMServer (NMS)** is the heart of TCMIS and it schedules the generic commands to be issued to the switches and maintains the processed data in a standard RDBMS.

**RepTerm** is a system from which day-to-day MIS reports can be viewed. In addition to the standard reports available, the operator/user can build customized reports using **GenRep** tool.

**MAPTerm** is the system that presents the health of the total telecom network in terms of **Nodes** (Switches) and **Links** (Trunk Groups).

The telecom network performance attributes like **ASR**, **ABR**, **%Outage**, **Traffic in Erlangs** are displayed for each entity.



## SALIENT FEATURES

- ❖ Switch Access Modules for heterogeneous switches from ALCA TEL's **E10B** & **OCB-283**, AT&T's **5ESS** & Ericsson's **AXE-10**.
- ❖ *Generic Commands to Switch Technology specific command* Translation at Mediation Device
- ❖ **Switch specific data** to **generic data** conversion at Central NM Server
- ❖ Centralized *Command Scheduler*
- ❖ Data collection from switch through command interactive, periodic and spontaneous sessions.
- ❖ Daily Reports to Network Manager on the faults of telecom resources like Circuits, PCM links, Tone Registers, etc.
- ❖ MIS Reports for New Levels Addition, Network Augmentation and Routing Anomalies to planning cell.
- ❖ Quick-Look Display of Geographical MAP Terminal showing the status of '**Links**' and '**Nodes**'.
- ❖ Conforming to the guidelines specified in **TEC** specifications for **Local Network Management System** GR No: G/LNM-01/02.FEB2000, referring to **ITU-T** standards for **Telecom Management Network**.

## HARDWARE ARCHITECTURE

UNIX based Dual-Processor, RAID-5 HDD based SERVER for **NM Server**, UNIX based Desktop systems for **MD** and **FEIO** and Windows based Desktop systems for **RepTerm** and **MapTerm** systems.