

TimePictra – SNMP Agent

KEY FEATURES

- Standard Interface to North-bound Systems
- One Generic Interface for All NEs

SNMP AGENT WITH PATENTED SNMP MIB

The SNMP agent is an optional module for TimePictra™. This generic northbound MIB (interface) enables integration of the TimePictra into network-level systems, i.e. NMSs such as Network Node Manager® from HP, NetCool® from Micromuse, etc.

The SNMP MIB provides one generic SNMP interface for TimePictra and all the Network elements (NEs) managed by TimePictra.

The functionality offered by the SNMP MIB is comprehensive. The MIB delivers all the standard alarms, events, SNMP traps, and in addition offers a configuration interface. It allows users to perform GET and SET operations on particular NEs by retrieving and modifying the values in the database and the NE itself. Users can set/get multiple values for the NE in a single SNMP GET/SET command, saving time and network bandwidth. If needed, network operators may use the higher-level network systems and the SNMP

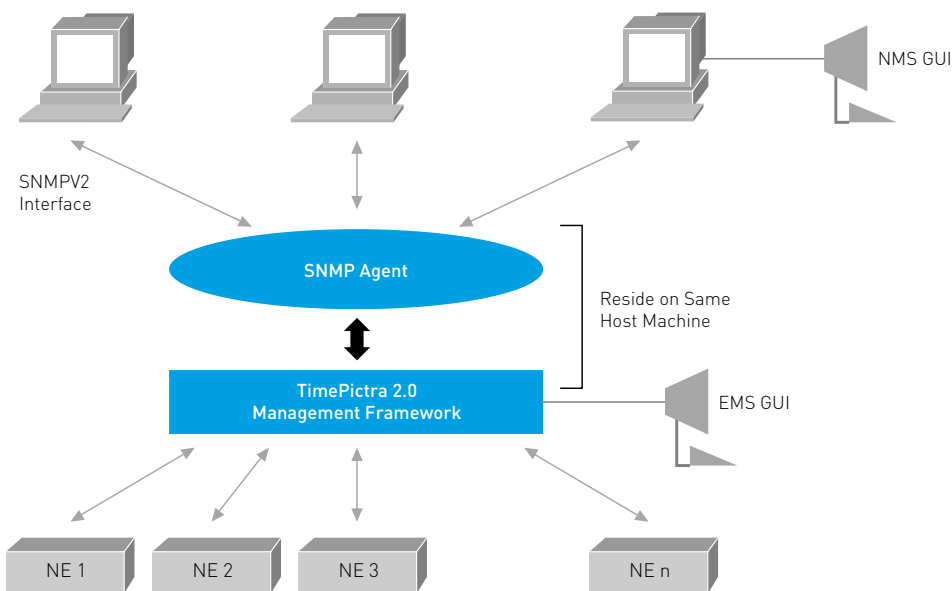


FIG.1 TimePictra SNMP Agent

option to manage their sync network, with TimePictra as an essential, but invisible intermediary.

The SNMP option provides an agent based on SNMP MIB. The following is a summary of some of the key functionality that this SNMP interface delivers:

- Retrieve all outstanding alarms – All the current alarms from the EMS will be reported as Traps
- Report outstanding alarms for a particular NE – Reports all the current alarms for a particular NE as SNMP Traps
- Force unlock NE – This operation allows managers to unlock a NE locked by a low profile user.

The Following traps are generated by the SNMP agent to help operators know the status of TimePictra and network elements managed by it:

- neAlarm – Alarms generated by the network elements
- neEvent – The non-alarmed events generated by network elements.
- systemAlarm – Alarmed events generated by TimePictra.
- systemEvent – Non-alarmed events generated by TimePictra.
- neCreation – Network Element Creation traps will be emitted for NEs.
- neDeletion – Network Element Deletion traps will be emitted for NEs.
- agentUp – This trap will be emitted by the agent once it completes its initialization.
- agentDown – This trap will be emitted by the agent before it goes down.

Customizing TRAP severity: The SNMP agent provides a set of mapping variables that enables customization of the severity of the traps being generated and the probable cause for the traps. These mapping variables help operators use their own operation guidelines or procedures and their own severity values, with the default ones used by TimePictra.

The SNMP Option Agent is based on the industry standard "SNMP Research's Emanate Architecture". It uses the services of Emanate Master agent to communicate with SNMP based managers.

Symmetricom's Global Services team offers customization or integration services that may be needed to complete integration of the SNMP agent with north-bound systems.

SNMP Requirements:

- HP-UX 11i and above
- TimePictra 3 and above
- Built on SNMP v2

(For detailed TimePictra software requirements, see the TimePictra's Administration Guide)



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