



siteVIEW APEX SNMP Manager

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PREFACE

The user should ascertain that this product is suitable for the intended application. TASC Systems Inc. accepts no responsibility, liability, for misuse, or damage resulting from the inappropriate use of the product described herein.



Before connecting any equipment to TASC products, the user is advised to read this document in its entirety. Application of voltages in excess of the built-in protection could seriously damage the TASC products and/or the equipment it is connected to.

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REVISION HISTORY

Revision	Date	Change
001	February 2014	Initial document

RELATED DOCUMENTS

- 050-015-0050Rxx siteVIEW 2.0 User Manual

RECOMMENDED PRODUCT VERSIONS

This document uses the following products versions:

Product	Revision	Provider
siteVIEW APEX	V3 or higher	TASC Systems
Dart powerSNMP for NET	V4.6 or higher	Dart Communications

1. SUMMARY

siteVIEW APEX will provide SNMP Manager functionality. Initially, the implementation will support handling of traps and notifications.

Future versions will support the ability to Get and Set SNMP agent values, send and receive SNMP Inform messages, and retrieve SNMP Tables.

The SNMP Manager is implemented in the following siteVIEW APEX components:

- **SNMP Manager Communication System** – is a new set of siteVIEW components which provide the communication infrastructure and configuration between siteVIEW and SNMP Agents.
- **siteVIEW SNMP Agent Device Configurator** – provides the ability to create a siteVIEW SNMP device based on a MIB library.
- **siteVIEW APEX Client** – in addition to existing siteVIEW functionality, provides the ability to define SNMP Agents as siteVIEW device. Device values are updated on the associated panel by incoming SNMP Traps.
- **siteVIEW Alarm Handler** – in addition to existing siteVIEW functionality, provides alarm notification capabilities for devices based on received SNMP values.
- **siteVIEW Logging Service** – in addition to existing siteVIEW functionality, captures SNMP activity into siteVIEW's logging infrastructure.

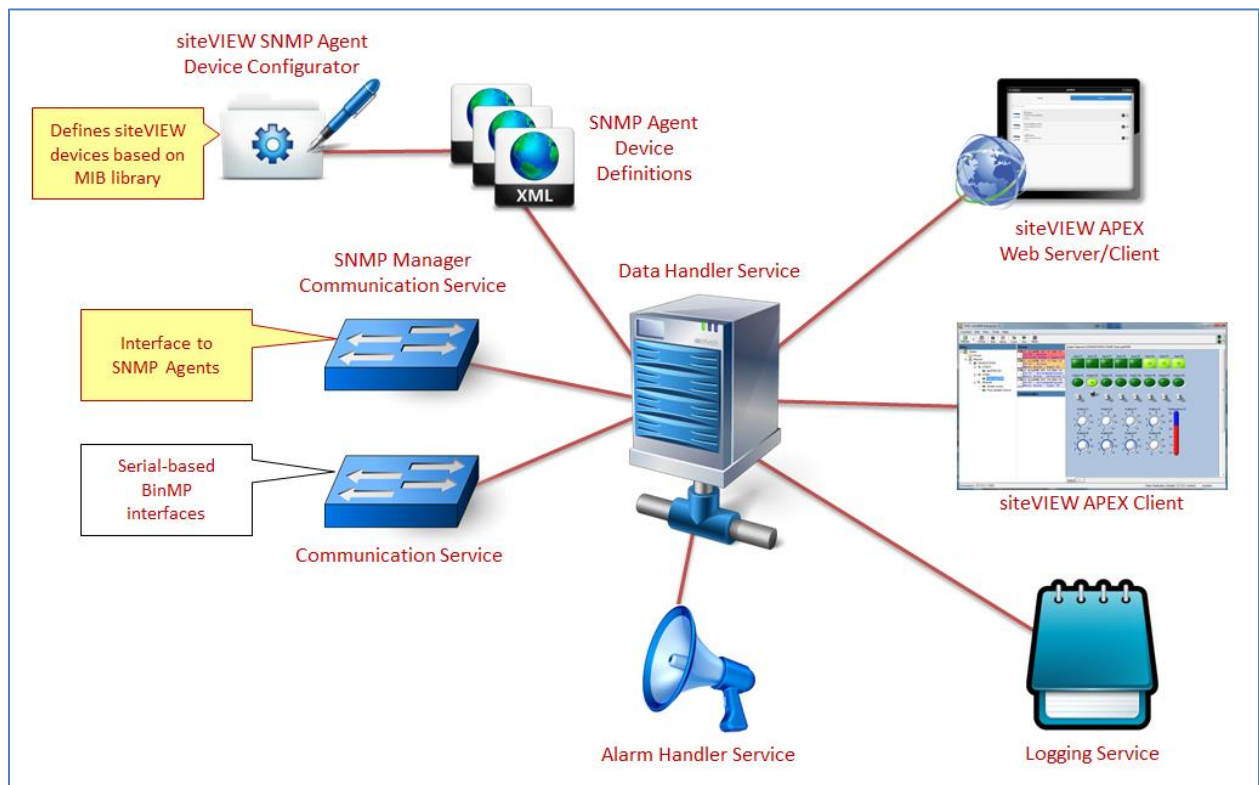


Figure 1 - siteVIEW APEX - SNMP Manager System Architecture

2. SNMP MANAGER COMMUNICATION SYSTEM

The SNMP Manager Communication is composed of two software components:

- SNMP Manager Communication Service
- SNMP Manager Communication Utility

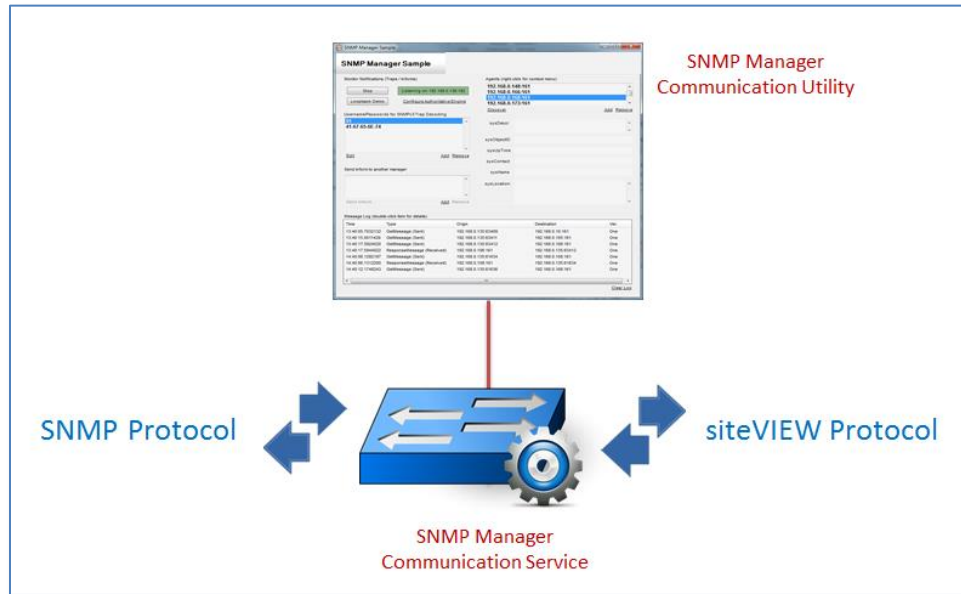


Figure 2 - siteVIEW APEX - SNMP Manager Communication System

2.1 SNMP Manager Communication Service

The SNMP Manager Communication Service (SNMPComSvc) manages communications between siteVIEW and SNMP Agents. (The SNMPComSvc is analogous to the siteVIEW Communication Service which manages communications between siteVIEW and the TASC BinMP-capable platforms.)

The SNMPComSvc provides the following capabilities:

- Receives incoming SNMP messages (e.g., Traps, Informs, Get responses) and translates them to siteVIEW Update commands
- Receives incoming siteVIEW Retrieve commands and translates them to outgoing SNMP messages (e.g., SET requests)
- Logging engine based on Log4Net logs all transactions, siteVIEW and SNMP

The SNMPComSvc runs as Windows Service. Multiple SNMPComSvc can be connected to a siteVIEW Data Handler, allowing for a distributed management of SNMP agents.

2.2 SNMP Manager Communication Utility

The SNMPComSvc is configured using the SNMP Manager Communication Utility (SNMPComUtil). The SNMPComUtil provides the following capabilities:

- Allows configuration of the SNMPComSvc parameters
- Allows configuration of siteVIEW server communication parameters (i.e., Data Handler address and port)

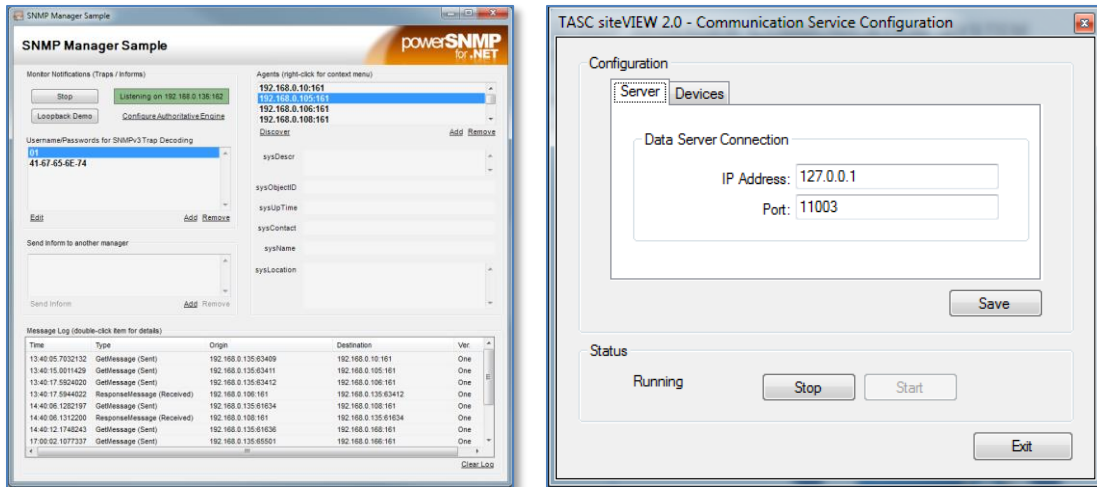


Figure 3 - siteVIEW APEX - SNMP Manager Communication Utility (Preliminary)

The SNMPComUtil is a Windows Forms application.

3. SITEVIEW SNMP AGENT DEVICE CONFIGURATOR

The siteVIEW SNMP Agent Device Configurator (SNMPDevConfig) allows the creation of SNMP Agent siteVIEW devices. These siteVIEW devices are comprised of user-selected OID parameters from a library. The library is a collection of MIB files.

The SNMPDevConfig provides the following functionality:

- Creation and maintenance of a MIB library
- Creation and maintenance of siteVIEW devices, based on MIB library OIDs

The SNMPDevConfig is a Windows Form application. Upon start up the SNMPDevConfig reads known MIB files and manages a database of OIDs. Users can then select a set of OIDs for a siteVIEW device. The final results for the siteVIEW device are recorded in an XML file.

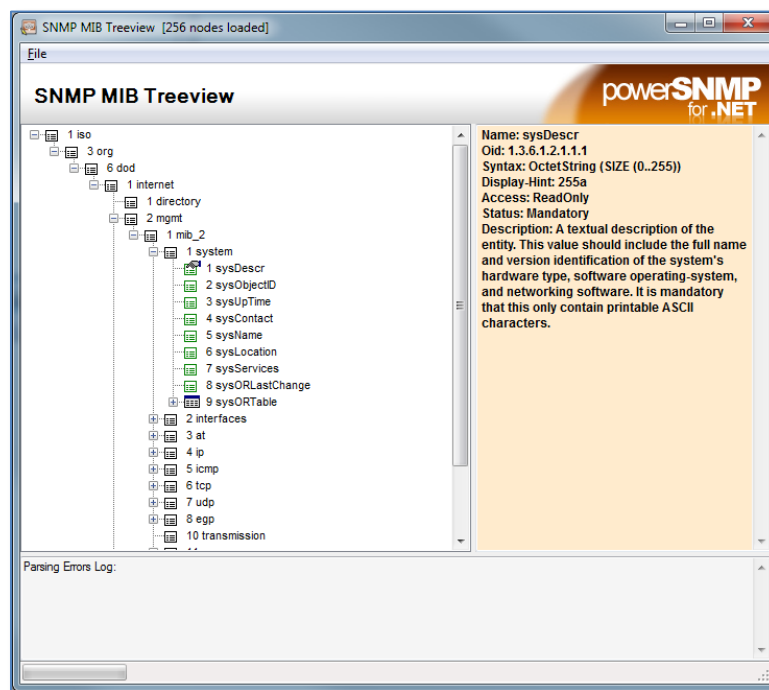


Figure 4 - siteVIEW APEX - siteVIEW Agent Device Configurator - MIB Library

4. SITEVIEW APEX CLIENT

The siteVIEW APEX Client (Client) provides a user interface for the siteVIEW user, allowing organization of all devices, including SNMP Agent devices.

4.1 Adding a SNMP Agent Device

To add a SNMP Agent device, the user must use the following process:

1. Add a SNMP Manager Communication Service
2. Add a Ethernet connection
3. Add an SNMP Agent Device

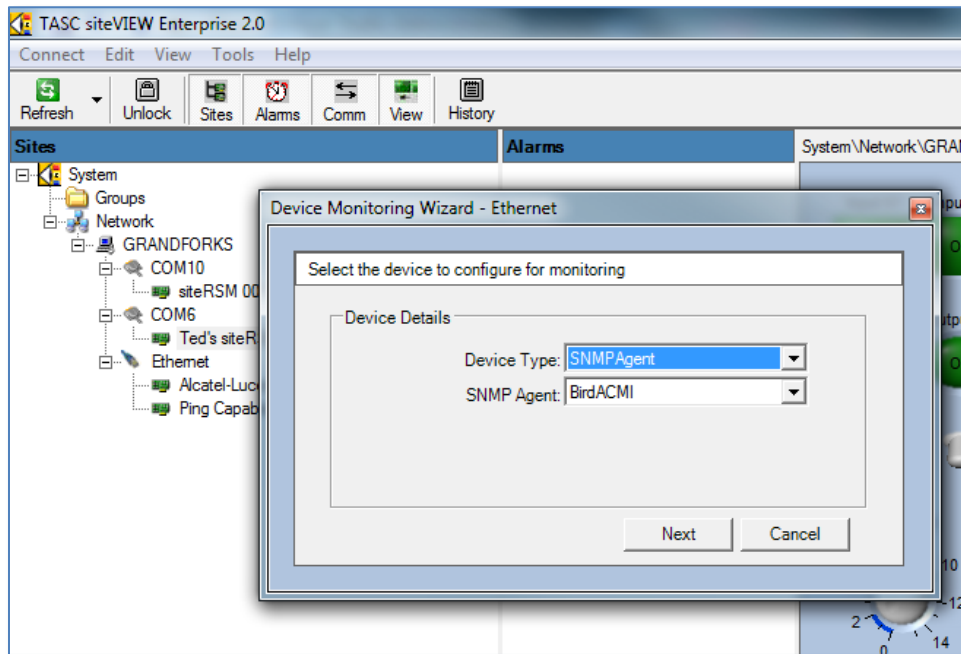


Figure 5 - siteVIEW APEX - siteVIEW Client - Add SNMP Agent

4.2 SNMP Agent Panels

TBD

4.3 SNMP Agent Alarms

TBD

5. SITEVIEW ALARM HANDLER

The siteVIEW Alarm Handler will process all relevant SNMP activity:

- All alarms associated with SNMP Agent Device

6. SITEVIEW LOGGING SERVICE

The siteVIEW Logging Service will log the following SNMP activity:

- All reported SNMP Traps that are associated with a SNMP Agent Device
- All alarms associated with SNMP Agent Device