



## **SIA SNMP Profile (Draft)**

- MUST use the IETF standards [RFC 1066, RFC 1213, RFC 2863, RFC 2790, RFC 4022 and RFC 4293] as specified. Note this includes following the mandatory rules in the RFC's. Example: Per RFC 1066 if a group is relevant you must implement it, meaning the whole group.
- SHOULD additionally use the IETF standard RFC 2465.
- SHOULD use SNMP v3 security.
- MUST support a minimum security standard of SNMP V2c.

### ***Recommended SNMP Requirements***

Roughly speaking include the following groups and standard MIBs:

- (MUST HAVE) System group (from RFC 1213)
- (MUST HAVE) IF-MIB (from RFC 2863)
- ICMP group (from RFC 1213)
- (MUST HAVE) IP MIB (from RFC 4293)
- (MUST HAVE) TCP MIB (from 4022)
- (MUST HAVE) UDP MIB (from RFC 1213)
- SNMP group (from RFC 1213)
- Host Resources MIB (from RFC 2790)
- (SHOULD HAVE) IPv6 MIB (from RFC 2465)
- All device specific Enterprise OIDs must be documented in MIB format and contain easy to understand descriptions of the OID value.

### ***Data Object Access***

- MUST be able to read all of the OIDs.
- OIDs that are defined as writable by the SNMP standard SHOULD be implemented as writable on all devices.
- MUST be able to write location(s) (sysLocation.0, sysName.0, sysContact.0)

# Appendix

## **A. Definitions**

group - collection of SNMP-accessible data objects within a network node.

IETF - internet engineering task force

sysLocation, sysName, sysContact – MIB objects defined in RFC 1213.

## **B. References**

RFC 1066 “Management Information Base for Network Management of TCP/IP-based internets.”

Defines basic data object groups. Defines MIB-I, replaced by RFC 1213 to implement basic data object groups.

RFC 1155 Structure and Identification of Management Information for TCP/IP-based Internets

RFC 1213 “Management Information Base for Network Management of TCP/IP-based internets: MIB-II”

Defines MIB groups for base SNMP, including system group.

RFC 2465 “Management Information Base for IP Version 6: Textual Conventions and General Group”

RFC 2790 “Host Resources MIB”

RFC 2863 “The Interfaces Group MIB”

RFC 4022 “Management Information Base for the Transmission Control Protocol (TCP)”

RFC 4293 “Management Information Base for the Internet Protocol (IP)”