APS Application Note:

Integration of isolation monitoring in the TS400 system with SNMP server

Initial situation:

A hospital administration wanted to extend its alerting system with additional visualization of the present isolation monitoring. The components, which were decentrally installed in the building, were already monitored using a central evaluation unit. However, the option for raising an alert was limited to sending e-mails.

Implementation:

The TS400 building management system, with its extensive alerting system and visualization options, offered the ideal basis for implementing the requirement. An SNMP client was installed in the TS400 for communication with the evaluation unit. Over the network the client can access the centralized information from the evaluation unit, which performs the SNMP server function. The information provided by the evaluation unit is usually very extensive. To simplify integration, the MIB tables from the unit manufacturer can be uploaded to the TS400 Infospace. The data from the MIB are used by the new SNMP viewer. This allows variables to be displayed and, based on this information, it can be determined which of the variables are to be integrated into the TS400 as signals.

SNMP OID list

OID	Name	Value
.1.3.6.1.2.1.1.1.0	SNMPv2-MIB::sysDescr.0: OCTET_STR	IOTEC AB - Rack Multi Control 1.70
.1.3.6.1.2.1.1.2.0	SNMPv2-MIB::sysObjectID.0: OBJECT_ID	.1.3.6.1.4.1.11072.1
.1.3.6.1.2.1.1.3.0	DISMAN-EVENT-MIB::sysUpTimeInstance: TIMETICKS	275707557
.1.3.6.1.2.1.1.4.0	SNMPv2-MIB::sysContact.0: OCTET_STR	sysadmin@aps-systems.ch
.1.3.6.1.2.1.1.5.0	SNMPv2-MIB::sysName.0: OCTET_STR	RMC
.1.3.6.1.2.1.1.6.0	SNMPv2-MIB::sysLocation.0: OCTET_STR	Sitzungszimmer
.1.3.6.1.2.1.1.7.0	SNMPv2-MIB::sysServices.0: INTEGER	72
.1.3.6.1.2.1.1.15.0	SNMPv2-MIB::system.15.0: COUNTER32	148118

View of SNMP viewer

After the SNMP client function has been activated and set up, all the information provided by the evaluation unit is automatically displayed, together with the information from the MIB in the OID table. This table can now be used to define whether and how the information will be used. Potential application uses are visualization, display of trends and naturally raising an alert.

Konfiguration Ein-, Ausgänge und Meldungen

speichern

bearbeite /Network/SNMP/0/OID/.1.3.6.1.2.1.1.1.0 **(aktueller Wert:IOTEC AB - Rack Multi Control 1.70)**

I/O-Info

mib:

```
SNMPv2-MIB::sysDescr.0
sysDescr OBJECT-TYPE
  -- FROM       SNMPv2-MIB, RFC1213-MIB
  -- TEXTUAL CONVENTION DisplayString
  SYNTAX        OCTET STRING (0..255)
  DISPLAY-HINT  "255a"
  MAX-ACCESS    read-only
  STATUS        current
  DESCRIPTION   "A textual description of the entity.  This value should
                include the full name and version identification of
                the system's hardware type, software operating-system,
                and networking software."
::= { iso(1) org(3) dod(6) internet(1) mgmt(2) mib-2(1) system(1) sysDescr(1) 0 }
```

Name: SNMPv2-MIB::sysDescr.0: OCTET_STR Trend: s

Minimaler Skalenwert: Maximaler Skalenwert: Einheit:

Signal	Intervall
hinzufügen	

View of OID

The SNMP client of the TS400 can be universally applied and, for example, is also able to monitor the network infrastructure, UPS systems or PLC controllers.

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