

The **Simple Network Management Protocol (SNMP)** provides the ability to monitor various network elements from a central location. The various **Object Identifiers (OID)** are combined in so-called **Management Information Bases (MIB)**. There are different SNMP versions, which differ mainly in security. KentixONE supports SNMP version 2 and version 3. KentixONE can query SNMP-V2/3 capable devices and can also be queried itself via SNMP-V2/3 from external systems (e.g. network monitoring, SCADA, etc.). Furthermore, KentixONE offers the possibility to receive so-called SNMP taps (SNMP event messages).

All API and SNMP examples shown here refer to the current versions of the respective products at the time of writing. These are subject to ongoing development.

The ReST API as well as the SNMP interfaces are delivered according to the documentation. KENTIX assumes that the user has basic knowledge of these technologies when using these interfaces. In order to support you optimally in the implementation of your individual project requirements, we offer suitable support packages. You can easily book a corresponding time contingent in the [Kentix Shop](#).

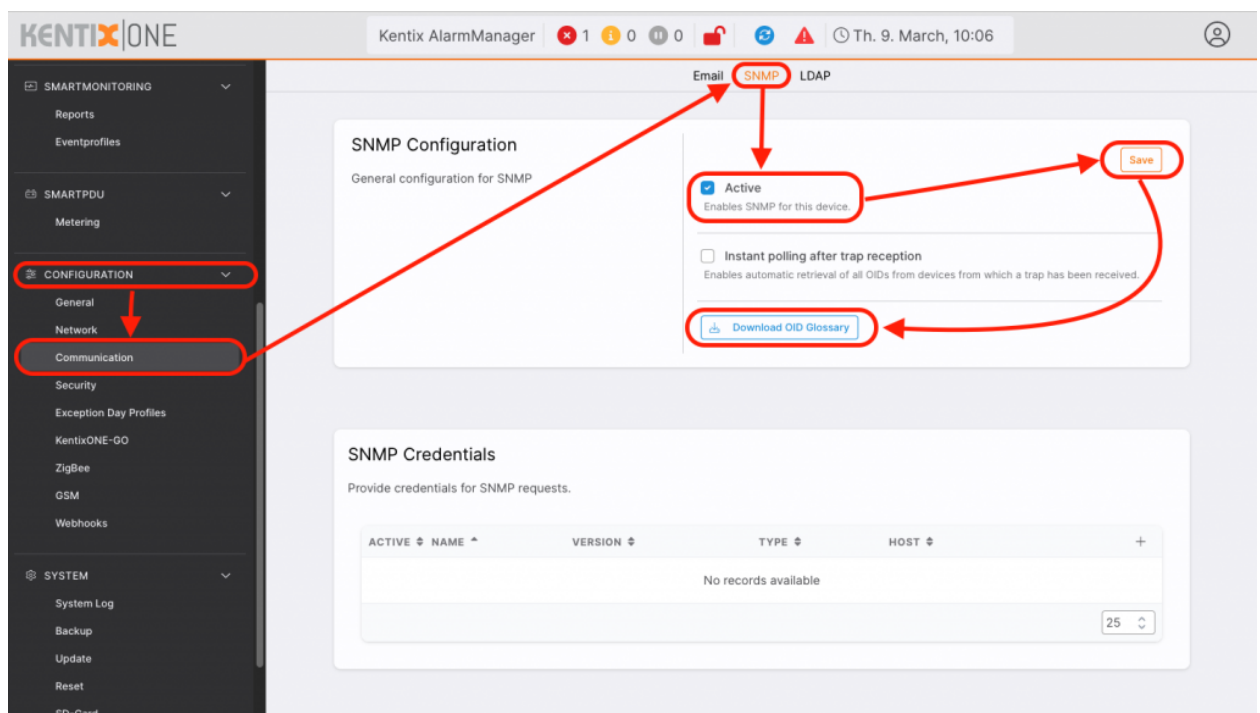
OID Glossary

The OID glossary with the individual values can be downloaded directly from the device and shows you a CSV file with all possible query values of your system.

The structure and content of the OID Glossary will be adapted and updated to the state of development.

The examples used in the following serve to describe the basic function.

Always use the latest version of the IOD glossary from the device you are using.



Download the OID Glossary

Structure of the MIB

The OIDs of the Kentix devices can best be read out with a MIB browser (e.g. <http://ireasoning.com/mibbrowser.shtml>)

The basic structure for an AlarmManager is as follows:

.1.3.6.1.4.1.37954.5	kentixdevices	
.1.3.6.1.4.1.37954.5.1	system	
.1.3.6.1.4.1.37954.5.1.1		valuemultiplier
.1.3.6.1.4.1.37954.5.1.2		alarmstate
.1.3.6.1.4.1.37954.5.1.3		energy
.1.3.6.1.4.1.37954.5.2	sensors	
.1.3.6.1.4.1.37954.5.2.1		generalTable
.1.3.6.1.4.1.37954.5.2.2		temperatureTable
.1.3.6.1.4.1.37954.5.2.3		humidityTable
.1.3.6.1.4.1.37954.5.2.4		dewpointTable
.1.3.6.1.4.1.37954.5.2.5		coTable
.1.3.6.1.4.1.37954.5.2.6		motionTable
.1.3.6.1.4.1.37954.5.2.7		vibrationTable
.1.3.6.1.4.1.37954.5.2.8		latencyTable
.1.3.6.1.4.1.37954.5.2.100		inputs
.1.3.6.1.4.1.37954.5.2.101		outputs
.1.3.6.1.4.1.37954.5.2.102		pdus
.1.3.6.1.4.1.37954.5.3	zones	
.1.3.6.1.4.1.37954.5.3.1		zoneTable
.1.3.6.1.4.1.37954.5.4	logbook	
.1.3.6.1.4.1.37954.5.4.1		systemLogbookTable
.1.3.6.1.4.1.37954.5.4.2		accessLogbookTable
.1.3.6.1.4.1.37954.5.4.3		eventLogbookTable
.1.3.6.1.4.1.37954.5.100	event	

AlarmManager example table MIB

Configuration in KentixOne

The function can be activated under Configuration → SNMP. The Kentix devices support SNMP versions 2 and 3 and the following SNMP types:

Provide data	The data can be queried from an external device
Send trap	Alarm messages are sent to external devices

Retrieve data	The Kentix device retrieves data from external systems
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SNMP table SNMP types

The screenshot shows a web interface for configuring SNMP. At the top, there are tabs for 'Email', 'SNMP', and 'LDAP'. Below the tabs, there are buttons for '< Cancel' and 'Save'. The main content area is titled 'General' and contains the following settings:

- Active
Activate SNMP.
- SNMP Type dropdown menu:
 - ✓ Provide Data (selected)
 - Retrieve Data
 - Trap
- Name*
Enter here a name for the Request.
- SNMP Version dropdown menu:
 - SNMP v2
- Choose here the SNMP Version.

SNMP Type Selection

Trap description

AlarmManager / PowerManager / PDU

Name	OID	Description	Possible values
eventGlobalIndex	.1.3.6.1.4.1.37954.5.100.1	Unique identification number of the device	e.g. 5 (AlarmManager)
2. eventTimestamp	.1.3.6.1.4.1.37954.5.100.2	Timestamp at time of alarm/acknowledgeable status in Unix time format.	e.g. 1600438199 (Friday 18 September 2020)

<p>3. eventTraptype</p>	<p>.1.3.6.1.4.1.37954.5.100.3</p>	<p>Alarm type is entered as integer</p>	<p>1 = temperature 2 = humidity 3 = Dew point 4 = Fire (Co, DI if this has been configured as a fire alarm). 5 = Break-in (movement, reed contact) 6 = Vibration 7 = Latency 8 = Service connection lost 9 = SNMP 11 = heat 12 = Air quality 14 = TI fire 15 = PeopleCount 16 = Fire air quality 18 = Co2 21 = Current deviation 24 = Active power exceeded 30 = Fuse 31 = RCM (AC) 32 = RCM (DC) 33 = Power failure 51 = Sabotage (Tilt, DI if configured as fire alarm) 52 = Connection lost (camera, device) 53 = Voltage failure 54 = Battery 101 = Digital input (If not configured as fire or sabotage alarm)</p>
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4. eventAlarmState	.1.3.6.1.4.1.37954.5.100.4	Alarm status	0 = No alarm present 1 = pending alarm (alarm state is also 1 if the alarm can be acknowledged)
5. eventAlarmDescription	.1.3.6.1.4.1.37954.5.100.5	Depending on the assignment of the alarm, the following values are output	Sabotage alarm = In case of sabotage alarm System message = In case of battery alarm Alarm = For the remaining alarms (Continuously active, Sharp active, etc.)
6. eventSource	.1.3.6.1.4.1.37954.5.100.6	Which alarm was triggered	Battery CO Carbon dioxide Thermal image People counting Air quality Heat detector Dew point Power Room temperature Rel. Humidity Reed Movement Latency Connection Sabotage Vibration SNMP Name of the digital input (if the alarm was triggered by a DI)
7. eventDevice	.1.3.6.1.4.1.37954.5.100.7	Device name which has triggered the alarm	e.g. MultiSensor Office 1
8. eventMeasurement	.1.3.6.1.4.1.37954.5.100.8	Measured value at which the alarm/reset trap was triggered	e.g. 30.2 °C

9. eventAlarmZone	.1.3.6.1.4.1.37954.5.100.9	Name of the alarm zone in which the alarm occurred	e.g.: server room
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AccessManager

Name	OID	Description	Possible values
eventGlobalIndex	.1.3.6.1.4.1.37954.5.100.1	unique identification number of the device	e.g. 7 (AccessManager)
2. eventTimestamp	.1.3.6.1.4.1.37954.5.100.2	Timestamp at time of alarm/acknowledgeable status in Unix time format.	e.g. 1600438199 (Friday 18 September 2020)
3. eventTraptype	.1.3.6.1.4.1.37954.5.100.3	Trap type	151 = Access
4. eventTrapstate	.1.3.6.1.4.1.37954.5.100.4	Trap status	0 = no access 1 = access granted
5. eventDoor	.1.3.6.1.4.1.37954.5.100.5	Door name	e.g. Rack 01
6. eventUser	.1.3.6.1.4.1.37954.5.100.6	Name of the user who booked	e.g. admin
7. eventDetail	.1.3.6.1.4.1.37954.5.100.7	Booking details	e.g. no door authorization
8. eventAlarmZone	.1.3.6.1.4.1.37954.5.100.8	Zone name	

Examples for queries

Battery level query for DoorLocks

The battery level at the SNMP query returns the following values

- 0 = Battery OK
- 1 = Warning, battery soon empty (but usually lasts for several days)
- 2 = Critical, battery almost empty (should be replaced "immediately")
- 3 = Battery empty

GSM signal

The query on the GSM signal provides the following values

- 0 = no reception
- 1 = 25% reception
- 2 = 50% reception

3 = 75% reception