

SERVERSCHECK

www.serverscheck.com

Quick Installation Guide For Sensors with PRTG

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Document Overview

This document outlines the integration with the ServersCheck PoE & SNMP sensors with the open source and free PRTG software. This document assumes that a sensor was configured on the network as per user manual instructions.

The manual can be downloaded from www.serverscheck.com/sensors/manual.asp.

This document also assumes that PRTG has been installed on a system and the user is knowledgeable with the SNMP technology. For more information on PRTG, please visit <https://www.paessler.com/>

For this guide our gateway's SNMP settings is as shown below

SNMP Settings

SNMP Agent

Enable SNMP Agent

Port:

Version:

SNMP v2 Community

Read Community:

Write Community:

SNMP v3 USM

Username:

Auth Key:

Privacy Key:

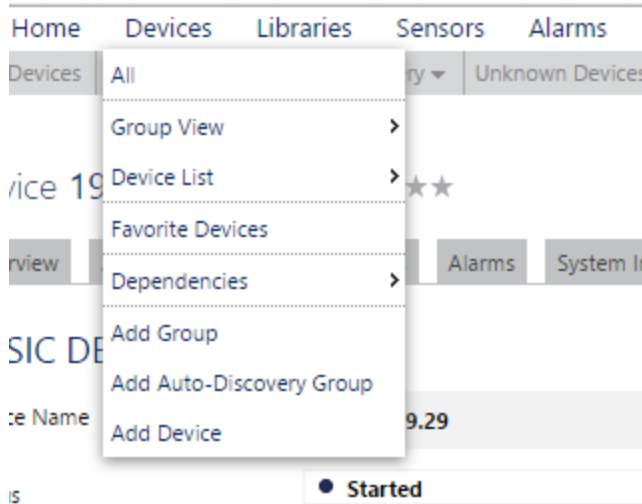
Protocol:

Protocol:

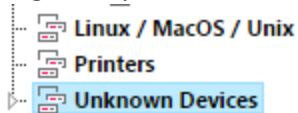
SNMP Tran

ADDING THE GATEWAY

1. On the PRTG interface click on the Device Tab then click on Add Device.



2. Since the gateways are unknown devices click on “unknown device”



3. Just fill up the IP address of the gateway then click on SNMP settings below

BASIC DEVICE SETTINGS

Device Name	Gateway
Status	<input checked="" type="radio"/> Started <input type="radio"/> Paused
IP Version	<input checked="" type="radio"/> IPv4 device <input type="radio"/> IPv6 device
IPv4 Address/DNS Name	192.168.9.29
Parent Tags	

4. After Scrolling down you should find Credentials for SNMP. Fill up the form as to what you have used with your SNMP settings in your gateway.

CREDENTIALS FOR SNMP DEVICES

inherit from Subnet 192.168.9 (SNMP Version: V2, SNMP Port: 161, SNMP Ti

SNMP Version	<input type="radio"/> v1 <input checked="" type="radio"/> v2c (recommended) <input type="radio"/> v3
Community String	public
SNMP Port	161
SNMP Timeout (Sec.)	5

Adding a Sensor

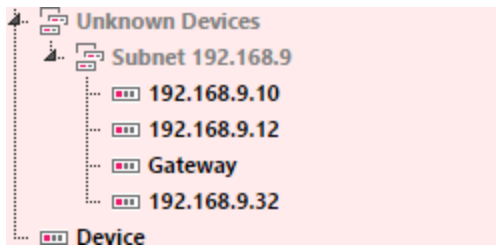
- On the PRTG interface click on the Sensors Tab then click on Add Sensor.

The screenshot shows the PRTG interface with the 'Sensors' tab selected. The 'Add Sensor' button is highlighted, and a dropdown menu is open. The menu options are:

- All
- Add Sensor
- Favorite Sensors
- Top 10 Lists
- By Current Value
- By Current Status
- By Uptime/Downtime
- By Group
- By Type
- By Tag
- Cross Reference
- Compare Sensors
- View Historic Data
- Similar Sensors Overview

The background shows a tree view of devices. A red box highlights the following devices in the tree:

- Riyo
- SAMSUNG
- Virtual Systems
 - VMWare
 - VMWare Hos
 - VMWare vCe
 - HyperV
 - HyperV Host
 - HyperV Virtu
- Linux / MacOS / Uni
 - 192.168.9.11
 - 192.168.9.20
 - 192.168.9.25
 - RIYO-2
- Printers
- Unknown Devices
 - Subnet 192.168.9
 - 192.168.9.10
 - 192.168.9.12
 - 192.168.9.29
 - 192.168.9.32
- Device



You should see a list of Devices, Click on the Device you created.

- Then choose Custom Sensors under the “Monitor” tab as well as SNMP under the “Technology” tab.

Add Sensor to Device Gateway [192.168.9.29] (Step 1 of 2)

SEARCH

6 Matching Sensor Types

MONITOR WHAT?

- Availability/Uptime
- Bandwidth/Traffic
- Speed/Performance
- CPU Usage
- Disk Usage
- Memory Usage
- Hardware Parameters
- Network Infrastructure
- Custom Sensors**

TARGET SYSTEM TYPE?

- Windows
- Linux/macOS
- Virtualization OS
- File Server
- Email Server
- Database
- Cloud Services

TECHNOLOGY USED?

- Ping
- SNMP**
- WMI
- Performance Counters
- HTTP
- SSH
- Packet Sniffing
- NetFlow, sFlow, jFlow
- Powershell
- Push Message Receiver

- There should be a short cut to click on “SNMP custom (single value) or Advanced (multiple values)” click it.

MATCHING SENSOR TYPES

SNMP Custom ? Monitors a numerical value returned by a specific OID using SNMP Add This ▶	SNMP Custom Advanced BETA ? Monitors numerical values returned by up to 10 specific OIDs using SNMP Add This ▶
SNMP Library ?	

8. You should see a page similar to the image below, Just input the OID of the value you want to monitor. (Depending on what you want to monitor choose the Value type, for now we choose Float for Temperature)

Add Sensor to Device Gateway [192.168.9.29] (Step 2 of 2)

BASIC SENSOR SETTINGS

Sensor Name	SNMP Custom
Parent Tags	
Tags	snmpcustomsensor ✕
Priority	★★★★★

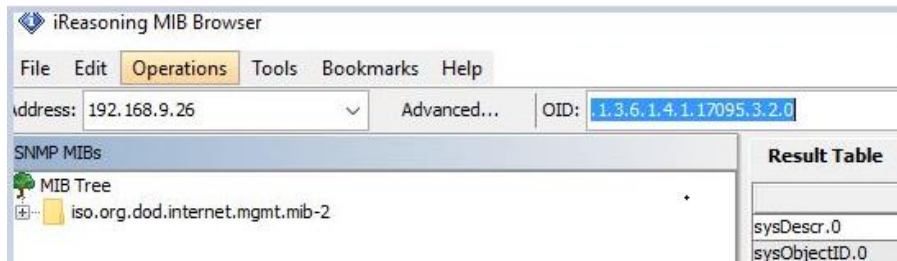
OID VALUES

OID Value	.1.3.6.1.4.1.17095.3.2.0
Channel Name	Value
Unit String	#
Value Type	<input type="radio"/> Gauge (unsigned Integer, e.g. "10", "120") <input type="radio"/> Gauge (signed integer, e.g. "-12", "120") <input checked="" type="radio"/> Gauge (float, e.g. "-5.80", "8.23") <input type="radio"/> Delta (Counter)
Multiplication	1
Division	1
Continue > Cancel Ignore changes	

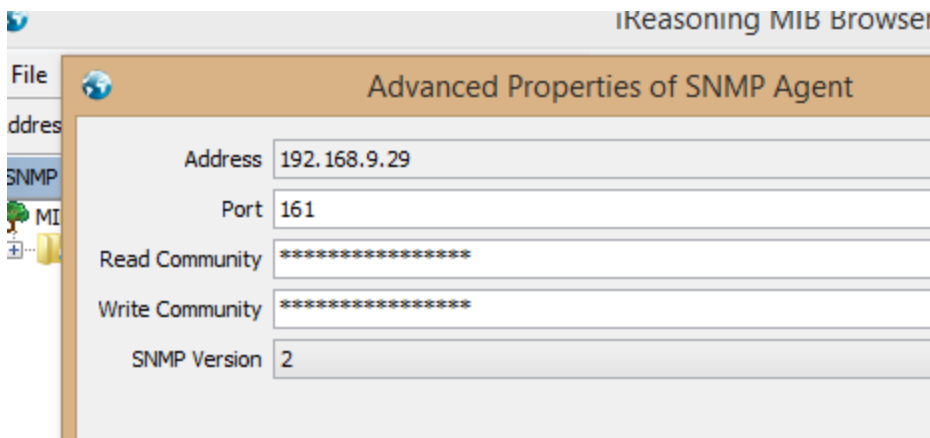
Note: The SNMP OID .1.3.6.1.4.1.17095.3.2.0 is the value for the internal temperature reading and to know the OID of specific values you need an MIB browser to explore the gateway. An example of that is the iReasoning software and our ServersCheck MIB browser. (For more information see link <http://www.ireasoning.com/mibbrowser.shtml>) (https://serverscheck.com/mib_browser/download.asp) = Only works on XP/2000/2003

Example on How to get an OID through iReasoning

- First type the IP address then click on advanced.



- Then Fill up the nessary information for the SNMP settings.



To scan the OID's we have to perform an SNMP Walk

The screenshot shows the 'Result Table' of an SNMP Walk operation. The table has columns for Name/OID, Value, Type, and IP:Port. The OID '1.3.6.1.4.1.17095.3.2.0' is selected in the top bar, and the 'Operations' dropdown is set to 'Walk'.

Name/OID	Value	Type	IP:Port
sysDescr.0	Temperature & Sensor Gateway	OctetString	192.168.9.1
sysObjectID.0	.1.3.6.1.4.1.17095	OID	192.168.9.1
sysUpTime.0	116 hours 29 minutes 35 seconds (41937512)	TimeTicks	192.168.9.1
sysContact.0	http://www.serverscheck.com	OctetString	192.168.9.1
sysName.0	SensorGateway	OctetString	192.168.9.1
sysLocation.0	Data Center	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.1.0	Temperature & Sensor Gateway	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.2.0	Beta 7.01	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.3.0	Feb 5 2016	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.4.0	SensorGateway	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.5.0	Data Center	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.1.6.0	192.168.9.26	IpAddress	192.168.9.1
.1.3.6.1.4.1.17095.1.7.0	192.168.9.1	IpAddress	192.168.9.1
.1.3.6.1.4.1.17095.1.8.0	4.2.2.2	IpAddress	192.168.9.1
.1.3.6.1.4.1.17095.1.9.0	8.8.8.8	IpAddress	192.168.9.1
.1.3.6.1.4.1.17095.3.1.0	Int. Temp1	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.3.2.0	26.63	OctetString	192.168.9.1
.1.3.6.1.4.1.17095.3.3.0	-	OctetString	192.168.9.1

software requires an MIB file you can download it from our site)

<https://serverscheck.com/support/downloads.asp>

(if your

9. You should now see the unit on your overview with the sensor value that was added.


✓ Sensor SNMP Custom TM ★★★★★

Overview | Live Data | 2 days | 30 days | 365 days | Historic Data | Log | Settings | Notifications

Last Message:
OK

Last Scan:	Last Up:	Last Down:	Uptime:	Downtime:	Coverage:
0 s	0 s		100.0000%	0.0000%	100%

Value



25.76 # 0 25.76 #

Channel	ID	Last Value	Minimum	Maximum
Downtime		-4		
Value		0	25.76 #	25.76 #

Adding Alerts

1. Click on the “Notifications” TAB

OBJECT TRIGGERS

Type ▾	Notifications	
(no triggers defined)		
+ Add State Trigger	+ Add Threshold Trigger	+ Add Change Trigger

Then Click on the “Add Threshold Trigger”

2. Now set up as many thresholds as need be. An example is shown below that an alert will be sent via email if the value goes above 45.

OBJECT TRIGGERS

Type ▾	Notifications	Actions
Threshold Trigger	When Value (#) channel is Above <input type="text" value="45"/> for at least <input type="text" value="20"/> seconds perform Email and push notification to admin	✓ Save ✕ Cancel
	When condition clears after a notification was triggered perform Email and push notification to admin	Note: Please enter channel values as bytes or seconds.

OBJECT TRIGGERS

Type ▾	Notifications	Actions
Threshold Trigger	When Value (#) channel is Above <input type="text" value="45"/> for at least <input type="text" value="20"/> seconds perform Email and push notification to admin	✎ Edit 🗑 Delete
	When condition clears after a notification was triggered perform Email and push notification to admin	
+ Add State Trigger	+ Add Threshold Trigger	+ Add Change Trigger

You can then add additional conditions as to what you prefer.