

SERVERSCHECK

www.serverscheck.com

Quick Installation Guide For Sensors with Zabbix

Copyright:

Copyright © 2011 ServersCheck BVBA

All rights reserved.

Reproduction without permission is prohibited.

Software:

The software described in this manual is furnished under a license agreement and may be used only in accordance with the terms of that agreement.

Trademarks:

ServersCheck is a trademark of ServersCheck.

All other trademarks or registered marks in this manual belong to their respective manufacturers.

Disclaimer:

Information in this document is subject to change without notice and does not represent a commitment on the part of ServersCheck.

ServersCheck provides this document "as is," without warranty of any kind, either expressed or implied, including, but not limited to, its particular purpose. ServersCheck reserves the right to make improvements and/or changes to this manual, or to the products and/or the programs described in this manual, at any time.

ServersCheck has made this document to the best of its abilities. However ServersCheck assumes no responsibility for its use, or for any infringements on the rights of third parties that may result from its use.

Document Overview

This document outlines the integration with the ServersCheck PoE & SNMP sensors with the open source and free Zabbix 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 Zabbix has been installed on a system and the user is knowledgeable with the SNMP technology. For more information on Zabbix, please visit <http://www.zabbix.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:

Protocol:

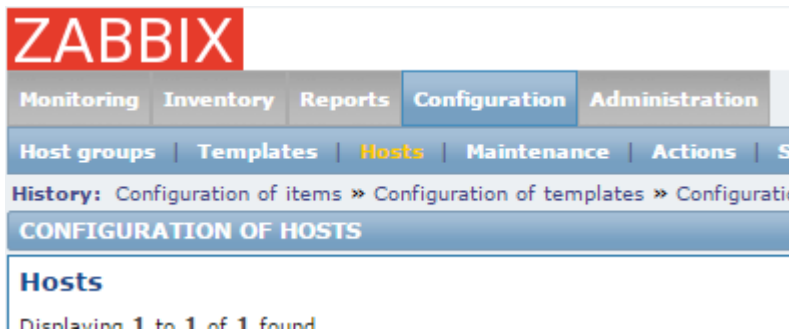
Privacy Key:

Protocol:

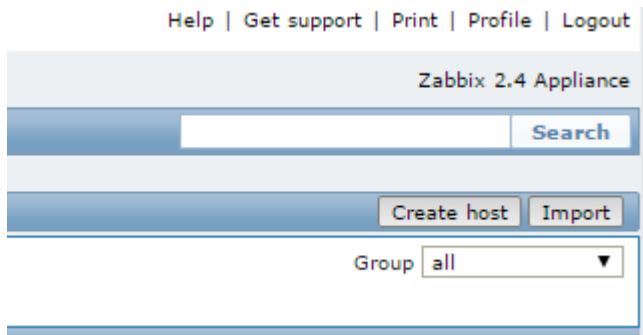
SNMP Tran

Guide to add a ServersCheck device.

1. To add a ServersCheck gateway to your software, first you have to add a host. On your zabbix dashboard click on the configuration tab and then click on Hosts



2. Then Click on Create Host located on the far right just below the search bar.

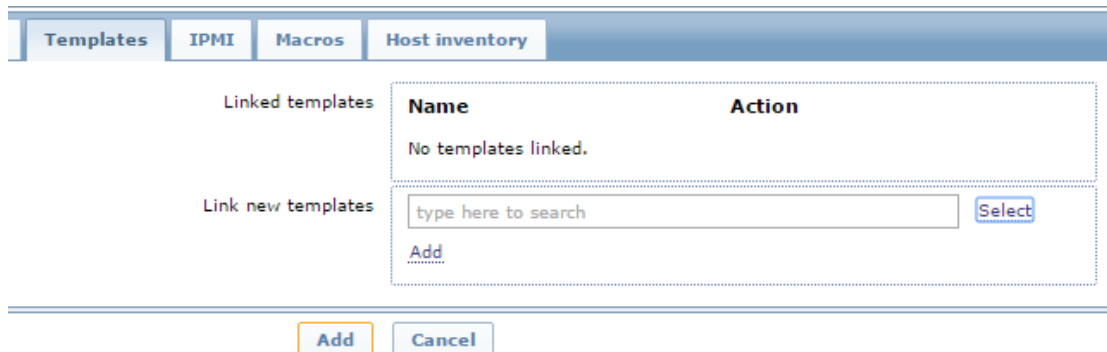


- Fill up the form with your desired name and since we don't have the gateway on one of your groups yet feel free to create a new group for the gateways.

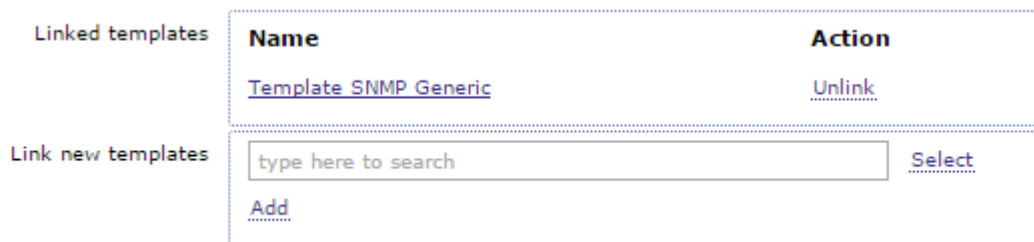
Remove the IP Agent interface as it has a value by default and instead add an SNMP interface by placing the IP address of the gateway and the port you have set on your gateway (reference to SNMP settings port used)

- Click on the macros tab and type in `{SNMP_COMMUNITY}` under macro and then the value of your community string for "read" access.

- Now don't click on add yet as we have to go to the templates tab



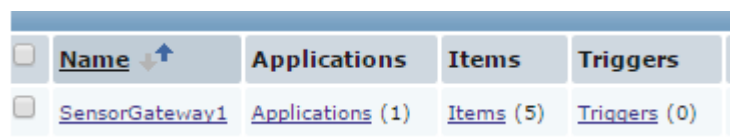
Click on Select, A number of options would appear, look SNMP Generic and click on the add button below the "select button", it should appear like the image below.



Once done we can finally click on the add button farthest down.

Note: in zabbix you can customize templates and add various checks on a single template but for this guide we will use the basic and available one.

- You should be back on the host page where you can now see your device. The next step is to add the values of the sensor/sensors attached on your gateway so that it would be shown on zabbix. To do that we need to click on the items button as shown below.



- On the upper right corner click on **Create item**, on the next page is a sample form where we integrated the value for the internal temperature reading.

Name

Type

Key

Host interface

SNMP OID

SNMP community

Port

Type of information

Units

Custom multiplier

Interval (in sec)

Flexible intervals

Interval	Period	Action
No flexible intervals defined.		

flexible interval Interval (in sec) Period

period (in days)

period (in days)

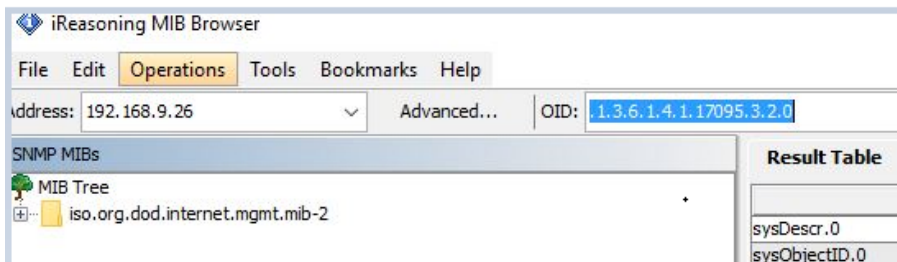
Store value

Show value [show value mappings](#)

New application

Feel free to use the version of SNMP you have configured the gateway, As for this guide we used SNMP v2 agent with as reference to the gateway configuration shown on the 1st page of this guide.

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. (for more information see link <http://www.ireasoning.com/mibbrowser.shtml>)



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

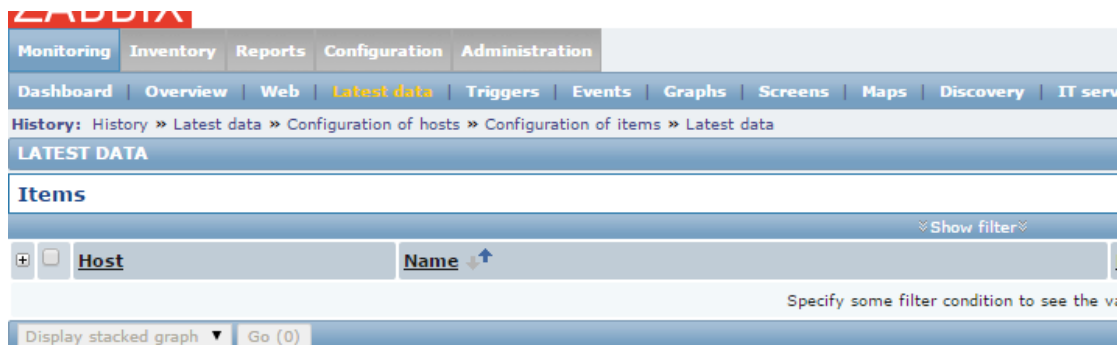
The screenshot shows the SNMP Walk operation in progress. The address is 1.3.6.1.4.1.17095.3.2.0 and the operation is Walk. The Result Table shows the following data:

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

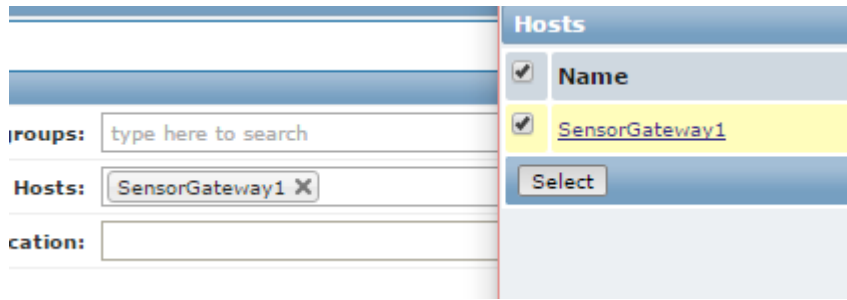
(if your software requires an MIB file you can download it from our site)

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

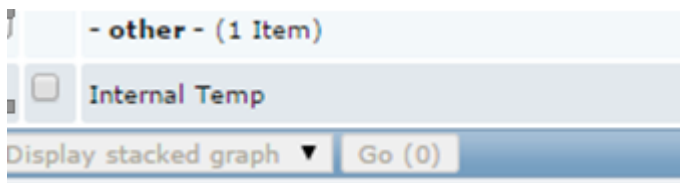
- Once you have placed a similar configuration as shown above click on update/save
- After saving wait for 2-3 minutes depending on the interval you have placed. As shown above we placed the interval at 5 seconds. Then click on to the monitoring tab and then Click on to "Latest Data" you should be on the page as shown on the image below



- Click on show filter. Then click on one of the filters so that it can show the latest data of your units as for the guide we simply click on host and then select our gateway. Then click on the Filter button.



11. It should now show the data zabbix has received from our units



2016-03-22 19:43:40	29.98 c	-	Graph
---------------------	---------	---	-----------------------

12. By clicking on the “Graph Button” it would show you the graphical data of the values that has been received by zabbix over our gateways and on the graph page you can also click on the dropdown menu option on the upper right and choose “500 latest values” to see the the history of data gathered.

Timestamp	Value
2016-03-22 19:46:35	30.04
2016-03-22 19:46:30	30.04
2016-03-22 19:46:25	29.99
2016-03-22 19:46:20	29.99
2016-03-22 19:46:15	29.99
2016-03-22 19:46:10	29.99
2016-03-22 19:46:05	29.99
2016-03-22 19:46:00	29.99
2016-03-22 19:45:55	30.05
2016-03-22 19:45:50	30.05
2016-03-22 19:45:45	30.11
2016-03-22 19:45:40	30.11

This is the end of the guide as you can now add specific OID's of the specific values that you need to monitor on your Zabbix Software. And customise to your needs.