

Nagios plugin – STE

Configuring Nagios for monitoring STE devices

1) Configuring the device

1.1) Open the device's web UI in your browser (enter the device IP address into the browser's address field, e.g. <http://192.168.1.1/>).

1.2) Select the SNMP tab.

HWg-STE
Home | General Setup | **SNMP** | Email | Time | Sensors | System

SNMP

General SNMP Settings

Name	Value	Description
System Name	HWg-STE	0 to 16 characters
System Location		0 to 16 characters
System Contact	HWg-STE:For more information try http://www.hw-group.com	
SNMP port	161	Default port 161

SNMP Access

Community	Read	Enable
public	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
private	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Save

1.3) Make sure that **Read** is selected and take note of the “Community” setting if it is different from “public”.

1.4) Note the ID of the temperature sensor, “215”.

HWg-STE

Home | General Setup | **SNMP** | Email | Time | Sensors | System

General

Base Information

Device Name	HWg-STE
Time	01:08:28
Date	01.02.2010

Sensors

State	Name	Type	Current Value
	Sensor 215	Temp.	29.3 °C
	Sensor 216	Humidity	48.7 %RH

1.4) Note the ID of the humidity sensor, “216”.

HWg-STE:For more information try www.hw-group.com

2) Installing the plugin

2.1) For correct operation of the plugin, a **Perl** interpreter and the **Net-SNMP module** must be installed on the server. In Redhat/Centos, both Perl and Net-SNMP are installed by default. In Debian/Ubuntu, the Net-SNMP module needs to be installed with the following command:

```
nagios-server:~# sudo aptitude install libnet-snmp-perl
```

2.2a) Unpack **hwg-ste.zip** and verify that the plugin works correctly. For a device with IP 192.168.1.1 and sensor ID 215 (temperature), enter the following command:

```
nagios-server:~# perl check_hwg-ste.pl -H 192.168.1.1 -S 215
Sensor: Sensor 215, State: normal, Value: 27.8 | Sensor 215=27.8;
```

Note: Alternatively, you can specify -S 1 or -S 2 for the first or second sensor, respectively. The plugin automatically converts -S 1 to ID 215 and -S 2 to ID 216.

2.2b) If you use a SNMP community **other** than “**public**”, specify it with the **-C community** parameter:

```
nagios-server:~# perl check_hwg-ste.pl -C mycommunity -H 192.168.1.1 -S 215
Sensor: Sensor 215, State: normal, Value: 27.4 | Sensor 215=27.4;
```

3) Configuring Nagios

3.1a) Copy **hwg-ste.cfg** to **/etc/nagios-plugins/config**.

3.1b) If you do not use split configuration files in the nagios-plugins directory, add the contents of **hwg-ste.cfg** to **/etc/nagios3/commands.cfg**.

```
nagios-server:~# cat hwg-ste.cfg >>/etc/nagios3/commands.cfg
```

3.2) Copy **check_hwg-ste.pl** to **/usr/lib/nagios/plugins**.

*Caution: If you copy this file to a **directory other than /usr/lib/nagios/plugins** (some systems use **/usr/lib64/nagios/plugins**), you **MUST** modify the plugin path in **/etc/nagios-plugins/config/hwg-ste.cfg** (step 3.1a) or in **/etc/nagios3/commands.cfg** (step 3.1b).*

3.3) Create the **/etc/nagios3/conf.d/hwg-ste.cfg** configuration file. Define the device (**host**) which will monitor the values. Individual values are defined as services that refer to the respective device using the **host_name** parameter.

*Note: If you do not use the **/etc/nagios3/conf.d/** configuration directory, add the configuration to the appropriate file on your system. To determine the file, use:*

```
nagios-server:~# grep ^cfg_file /etc/nagios3/nagios.cfg
```

In case of the configuration directory:

```
nagios-server:~# grep ^cfg_dir /etc/nagios3/nagios.cfg
```

```

define host {
    host_name          stel
    alias              STE 1
    address            192.168.1.1
    use                generic-host
}

define service {
    host_name          stel
    service_description Temperature
    check_command      check_ste-hwg!public!1
    use                generic-service
}

define service {
    host_name          stel
    service_description Humidity
    check_command      check_ste-hwg!public!2
    use                generic-service
}

```

Note: The `check_ste-hwg` arguments are the SNMP community and sensor ID.

3.4) Restart Nagios: /etc/init.d/nagios restart

3.5) Check the status of the monitored sensors in Nagios.

The screenshot shows the Nagios 3.0.6 web interface. On the left, there's a navigation sidebar with links for General, Monitoring (selected), Service Problems, and Network Outages. The Monitoring section includes links for Tactical Overview, Service Detail, Host Detail, Hostgroup Overview, Hostgroup Summary, Hostgroup Grid, Servicegroup Overview, Servicegroup Summary, Servicegroup Grid, Status Map, 3-D Status Map, and Network Outages.

In the center, there are three main status summary boxes:

- Current Network Status:** Last Updated: Thu Apr 29 17:37:41 CEST 2010. Updated every 90 seconds. Nagios® 3.0.6 - www.nagios.org. Logged in as nagiosadmin.
- Host Status Totals:** Up (1), Down (0), Unreachable (0), Pending (0). Buttons for All Problems and All Types, with values 0 and 1 respectively.
- Service Status Totals:** Ok (2), Warning (0), Unknown (0), Critical (0), Pending (0). Buttons for All Problems and All Types, with values 0 and 2 respectively.

Below these is a section titled "Service Status Details For Host 'stel'". It lists two services for host 'stel1':

Host	Service	Status	Last Check	Duration	Attempt	Status Information
stel1	Humidity	OK	2010-04-29 17:36:43	0d 0h 10m 58s	1/4	Sensor: Sensor 216, State: normal, Value: 22.4
	Temperature	OK	2010-04-29 17:33:09	0d 0h 9m 32s	1/4	Sensor: Sensor 215, State: normal, Value: 26.3

At the bottom of this section, it says "2 Matching Service Entries Displayed".