

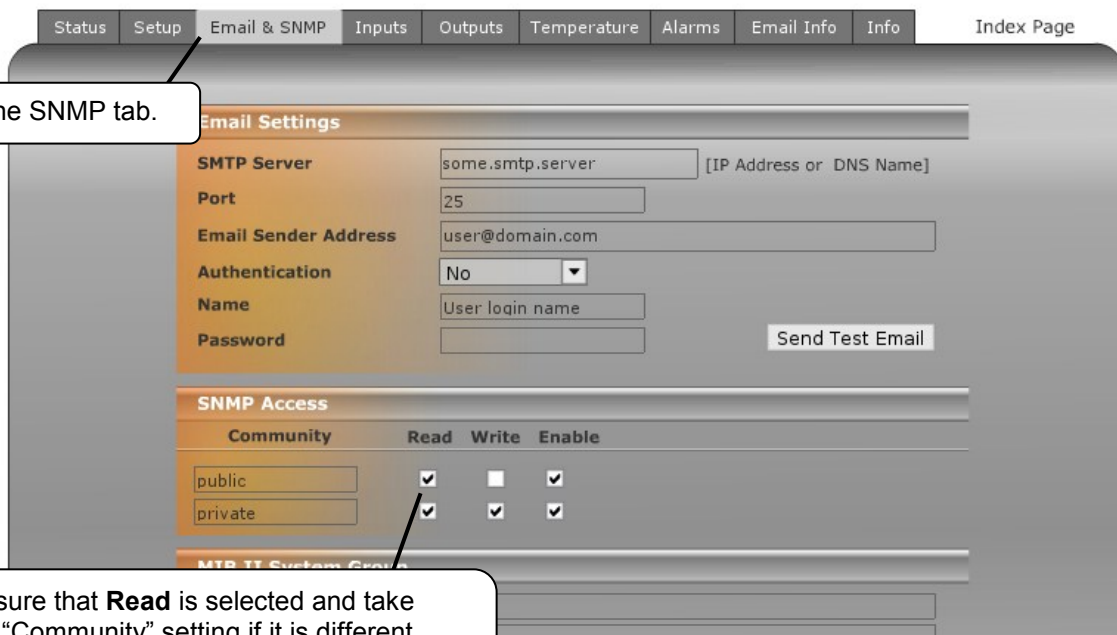
# Nagios plugin – Damocles

## Configuring Nagios for monitoring Damocles 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/>) and click “Flash Setup” under the list of sensors.

1.2) Select the SNMP tab.



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

### Damocles model MINI

1.4) The number of an input relates to its ID (Input 1 = ID 1).

Digital inputs					
Name	Current Value	Alarm Alert	Name	Current Value	Alarm Alert
Input 1	OFF	Active if OFF	Input 3	ON	Active if ON
Input 2	ON	Disabled	Input 4	OFF	Active if ON

Digital outputs					
Name	Current Value	Mode	Name	Current Value	Mode
Output 1	OFF	Manual	Output 2	OFF	Manual

1.5) The number of an output relates to its ID (Output 1 = ID 1).

Device name: Damocles MINI online  
Flash Setup  
on (TCP Setup): Connect with Telnet to [damocles-mini.hwq.cz](http://damocles-mini.hwq.cz) Port 99

## 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 **damocles.zip** and verify that the plugin works correctly. For a device with IP 192.168.1.1 and sensor ID 66 (humidity), enter the following command:

```
nagios-server:~# perl check_damocles.pl -H 192.168.1.1 -I 1
Input: Input 1, AlarmState: alarm, AlarmSetup: activeOff, Value: off
```

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

```
nagios-server:~# perl check_damocles.pl -C mycommunity -H 192.168.1.1 -I 1
Input: Input 1, AlarmState: alarm, AlarmSetup: activeOff, Value: off
```

**2.3)** *Digital Inputs* are monitored with the **-I** parameter, *Digital outputs* are monitored with **-O**.

```
nagios-server:~# perl check_damocles.pl -C mycommunity -H 192.168.1.1 -I 2
Input: Input 2, AlarmState: normal, AlarmSetup: inactive, Value: on
nagios-server:~# perl check_damocles.pl -C mycommunity -H 192.168.1.1 -O 2
Output: Output 2, Type: relay (off, on), Mode: manual, Value: off
```

## 3) Configuring Nagios

**3.1a)** Copy **damocles.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 damocles.cfg to **/etc/nagios3/commands.cfg**.

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

**3.2)** Copy **check\_damocles.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/damocles.cfg** (step 3.1a) or in **/etc/nagios3/commands.cfg** (step 3.1b).*

**3.3)** Create the **/etc/nagios3/conf.d/hwg-damocles.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          damocles1
    alias              DAMOCLES MINI
    address            192.168.1.1
    use                generic-host
}

define service {
    host_name          damocles1
    service_description Input 1
    check_command       check_damocles_input!public!1
    use                generic-service
}

define service {
    host_name          damocles1
    service_description Output 1
    check_command       check_damocles_output!public!1
    use                generic-service
}

```

*Note: The check\_damocles arguments are the SNMP community and sensor ID.*

Pay attention – unlike sensors, **Dry Contact Inputs** must be monitored with the **check\_damocles\_input** command, and **Relay Outputs** with the **check\_damocles\_output** command.

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

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

The screenshot displays the Nagios web interface. On the left is a navigation menu with sections for General (Home, Documentation) and Monitoring (Tactical Overview, Service Detail, Host Detail, Hostgroup Overview, Hostgroup Summary, Hostgroup Grid, Servicegroup Overview, Servicegroup Summary, Servicegroup Grid, Status Map, 3-D Status Map, Service Problems, Host Problems, Network Outages). The main content area shows the 'Current Network Status' (Last Updated: Thu Apr 29 18:03:34 CEST 2010), 'Host Status Totals' (Up: 1, Down: 0, Unreachable: 0, Pending: 0), and 'Service Status Totals' (Ok: 4, Warning: 0, Unknown: 0, Critical: 2, Pending: 0). Below these is a table titled 'Service Status Details For Host 'damocles1'' showing 6 entries: Input 1 (CRITICAL), Input 2 (OK), Input 3 (CRITICAL), Input 4 (OK), Output 1 (OK), and Output 2 (OK). Each entry includes the last check time, duration, and attempt count. At the bottom, it states '6 Matching Service Entries Displayed'.

Last Updated: Thu Apr 29 18:03:34 CEST 2010
Updated every 90 seconds
Nagios® 3.0.6 - <a href="http://www.nagios.org">www.nagios.org</a>
Logged in as nagiosadmin

Up	Down	Unreachable	Pending
1	0	0	0
All Problems		All Types	
0		1	

Ok	Warning	Unknown	Critical	Pending
4	0	0	2	0
All Problems		All Types		
2		6		

Host	Service	Status	Last Check	Duration	Attempt	Status Information
damocles1	Input 1	CRITICAL	2010-04-29 18:02:31	0d 0h 4m 3s	4/4	Input: Input 1, AlarmState: alarm, AlarmSetup: activeOff, Value: off
	Input 2	OK	2010-04-29 18:00:46	0d 0h 2m 48s	1/4	Input: Input 2, AlarmState: normal, AlarmSetup: inactive, Value: on
	Input 3	CRITICAL	2010-04-29 18:03:01	0d 0h 1m 33s	2/4	Input: Input 3, AlarmState: alarm, AlarmSetup: activeOn, Value: on
	Input 4	OK	2010-04-29 18:03:16	0d 0h 0m 18s	1/4	Input: Input 4, AlarmState: normal, AlarmSetup: activeOn, Value: off
	Output 1	OK	2010-04-29 17:59:46	0d 0h 3m 48s	1/4	Output: Output 1, Type: relay (off, on), Mode: manual, Value: off
	Output 2	OK	2010-04-29 18:01:01	0d 0h 2m 33s	1/4	Output: Output 2, Type: relay (off, on), Mode: manual, Value: off

6 Matching Service Entries Displayed