

HP1810-24g switch monitoren met SNMP

We gaan SNMP gebruiken om deze switch met Cacti en Nagios te monitoren.

log in op de webinterface van de switch en navigeer in het menu links naar **Network Setup - Get Connected**

The screenshot shows the HP 1810-24G switch web interface. The browser address bar shows the URL 192.168.1.252/index.htm. The interface has a left sidebar with a menu: Home, Setup Network, Status, Network Setup (selected), Get Connected (selected), SNMP, Time Zone, Daylight Saving Time, Switching, Security, Trunks, VLANs, LLDP, Diagnostics, and Maintenance. The main content area is titled 'Network Setup - Get Connected' and contains several sections: Network Details (Protocol Type: Static/DHCP, IP Address: 192.168.1.252, Subnet Mask: 255.255.255.0, Gateway Address: 192.168.1.3, MAC Address: f0:92:1c:76:b2:40), Web Parameters (Session Timeout: 5 minutes), Management Access (Management VLAN ID: 1, Management Port: None), and SNMP (Enable: checked, Community Name: public). An 'Apply' button is at the bottom.

zet bij **SNMP** het vinkje **Enable** aan en laat de community name op public staan. Druk op Apply
zorg dat je SNMP settings goed staan:

The screenshot shows the HP 1810-24G switch web interface. The top navigation bar includes the HP logo, a status bar with power and fan indicators, and a network diagram. The left sidebar contains a menu with options like Home, Setup Network, Status, Network Setup, Get Connected, SNTP, Time Zone, Daylight Saving Time, Switching, Security, Trunks, VLANs, LLDP, Diagnostics, and Maintenance. The main content area is titled 'Network Setup > SNTP' and displays the 'SNTP Configuration' form. The form includes fields for 'Enable SNTP' (checked), 'SNTP/NTTP Server' (131.155.3.3), 'Server Port' (123), 'Time Format' (24 Hour), 'Last Update' (Jan 27 21:45:26 2016), 'Attempts' (266625), 'Last Update Status' (Success), and 'Failures' (1947). An 'Apply' button is at the bottom.

SNTP Configuration	
Enable SNTP	☒
SNTP/NTTP Server	131.155.3.3 (X.X.X.X)
Server Port	123 (1 - 65535 Default : 123)
Time Format	24 Hour
Last Update	Jan 27 21:45:26 2016
Attempts	266625
Last Update Status	Success
Failures	1947

en de timezone (GMT+01:00)Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna.

Blijkbaar doet de switch geen automatische zomer/wintertijd switch en moet je die zelf instellen. Voor Nederland geldt:

The screenshot shows the HP 1810-24G switch web interface, specifically the 'Daylight Saving Time Configuration' page. The left sidebar is the same as the previous screenshot. The main content area is titled 'Network Setup > Daylight Saving Time' and displays the 'Daylight Saving Time Configuration' form. The form includes a 'Daylight Saving Time' dropdown set to 'Recurring'. Below this are 'Start Time settings' and 'End Time settings' sections, each with dropdowns for Week, Day, Month, Hours, and Minutes. The 'Offset settings' section includes an 'Offset' field set to 60 minutes. An 'Apply' button is at the bottom.

Daylight Saving Time Configuration	
Daylight Saving Time	Recurring
Start Time settings	
Week	5
Day	Sun
Month	Mar
Hours	2
Minutes	0
End Time settings	
Week	5
Day	Sun
Month	Oct
Hours	3
Minutes	0
Offset settings	
Offset	60 (1 - 1440) minutes

MRTG

Monitor de bandwidth met MRTG.

Maak een MRTG configuratie file aan door:

```
mkdir /var/www/mrtg/switch-H  
cfgmaker --global 'WorkDir: /var/www/mrtg/switch-H' --global 'Options[_]:  
bits,growright' --output /etc/mrtg/switch-H.cfg public@192.168.1.252
```

Maak de webpagina met alle gedefinieerde graphs aan met indexmaker, weer in de betreffende directory:

```
indexmaker --output=/var/www/mrtg/switch-H/index.html /etc/mrtg/switch-H.cfg
```

run een aantal keer om de eerste foutmeldingen kwijt te raken:

```
for (( i=1 ; i <= 3 ; i++ )); do env LANG=C mrtg /etc/mrtg/switch-H.cfg; done
```

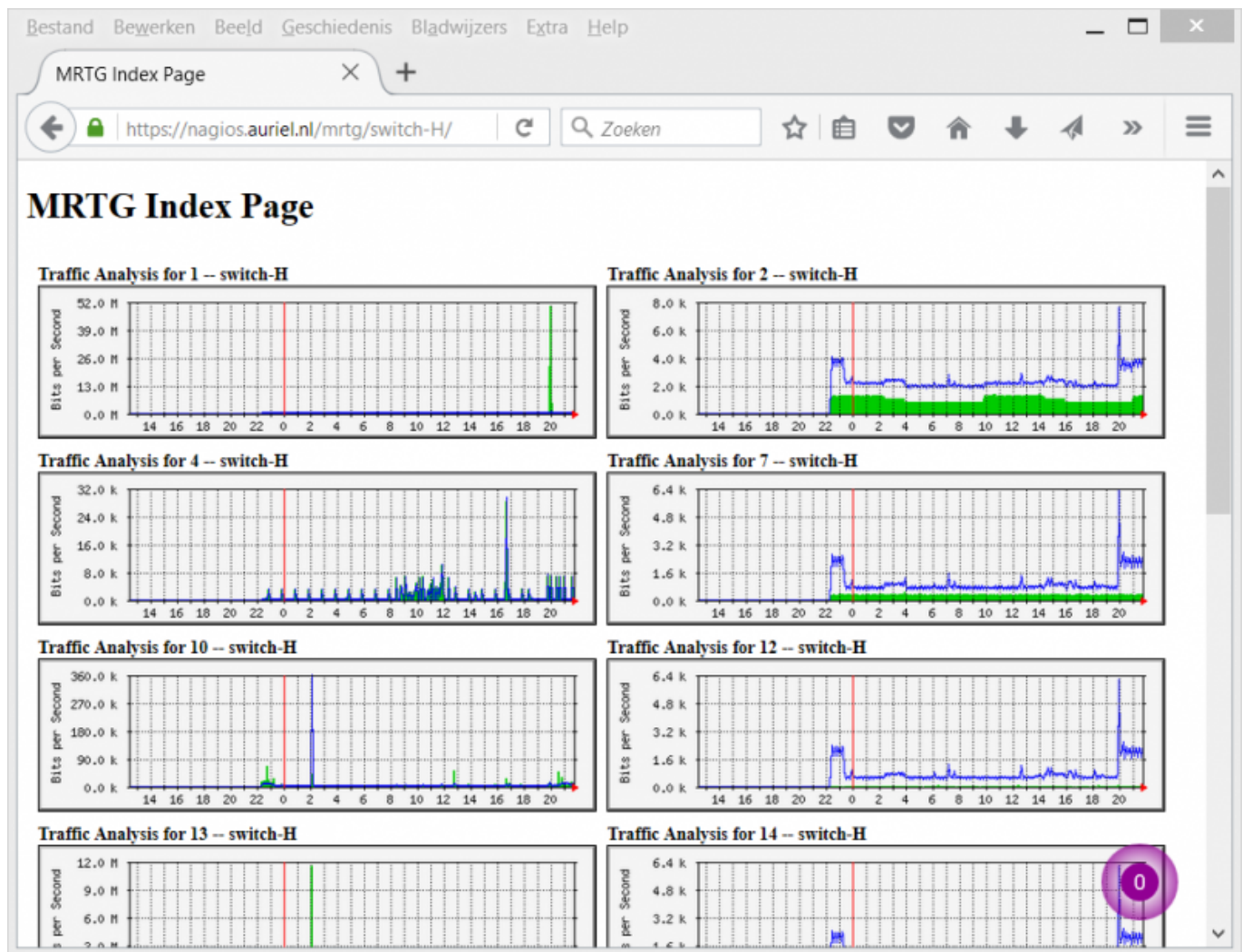
zorg dat elke 5 minuten data wordt opgehaald, maak hiervoor een cron job aan:

```
vi /etc/cron.d/mrtg
```

en zet hier in:

```
*/5 * * * * root LANG=C LC_ALL=C /usr/bin/mrtg /etc/mrtg/switch-H.cfg --  
lock-file /var/lock/mrtg/switch-H_l --confcache-file /var/lib/mrtg/mrtg.ok
```

Na een tijdje kan je kijken op de betreffende web pagina <http://example.com/mrtg/switch-h>



Nagios

Maak een nagios conf file aan:

```
vi /etc/nagios/objects/network/HP-switch.cfg
```

en zet daar in:

```
# Define the switch that we'll be monitoring

define host{
    use                generic-switch        ; Inherit default values
    from a template
    host_name          HP_1810-24G          ; The name we're giving to
this switch
    alias              Switch beneden       ; A longer name associated
with the switch
    address            192.168.1.252        ; IP address of the switch
    hostgroups          switches             ; Host groups this switch is
associated with
}
```

```
# Create a service to PING to switch
```

```
define service{
    use                generic-service ; Inherit values from a
template
    host_name          HP_1810-24G      ; The name of the host the
service is associated with
    service_description PING            ; The service description
    check_command       check_ping!200.0,20%!600.0,60% ; The
command used to monitor the service
    normal_check_interval 5              ; Check the service every 5
minutes under normal conditions
    retry_check_interval 1              ; Re-check the service every
minute until its final/hard state is determined
}
```

```
# Monitor uptime via SNMP
```

```
define service{
    use                generic-service ; Inherit values from a
template
    host_name          HP_1810-24G
    service_description Uptime
    check_command       check_snmp!-C public -o sysUpTime.0
}
```

```
# Monitor Port 1 status via SNMP
```

```
define service{
    use                generic-service ; Inherit values from a
template
    host_name          HP_1810-24G
    service_description Port 1 Link Status
    check_command       check_snmp!-C public -o ifOperStatus.1 -r 1
-m RFC1213-MIB
}
```

```
# Monitor bandwidth via MRTG logs
```

```
define service{
    use                generic-service ; Inherit values from a
template
    host_name          HP_1810-24G
    service_description Port 1 Bandwidth Usage
    check_command       check_local_mrtgtraf!/var/www/mrtg/switch-
H/192.168.1.252_1.log!AVG!1000000,1000000!5000000,5000000!10
}
```

From:
<https://wiki.auriel.nl/> -

Permanent link:
https://wiki.auriel.nl/doku.php?id=werkinstructies:snmp:hp1810-24g_switch_monitoren_met_snmp 

Last update: **2016/03/15 21:54**