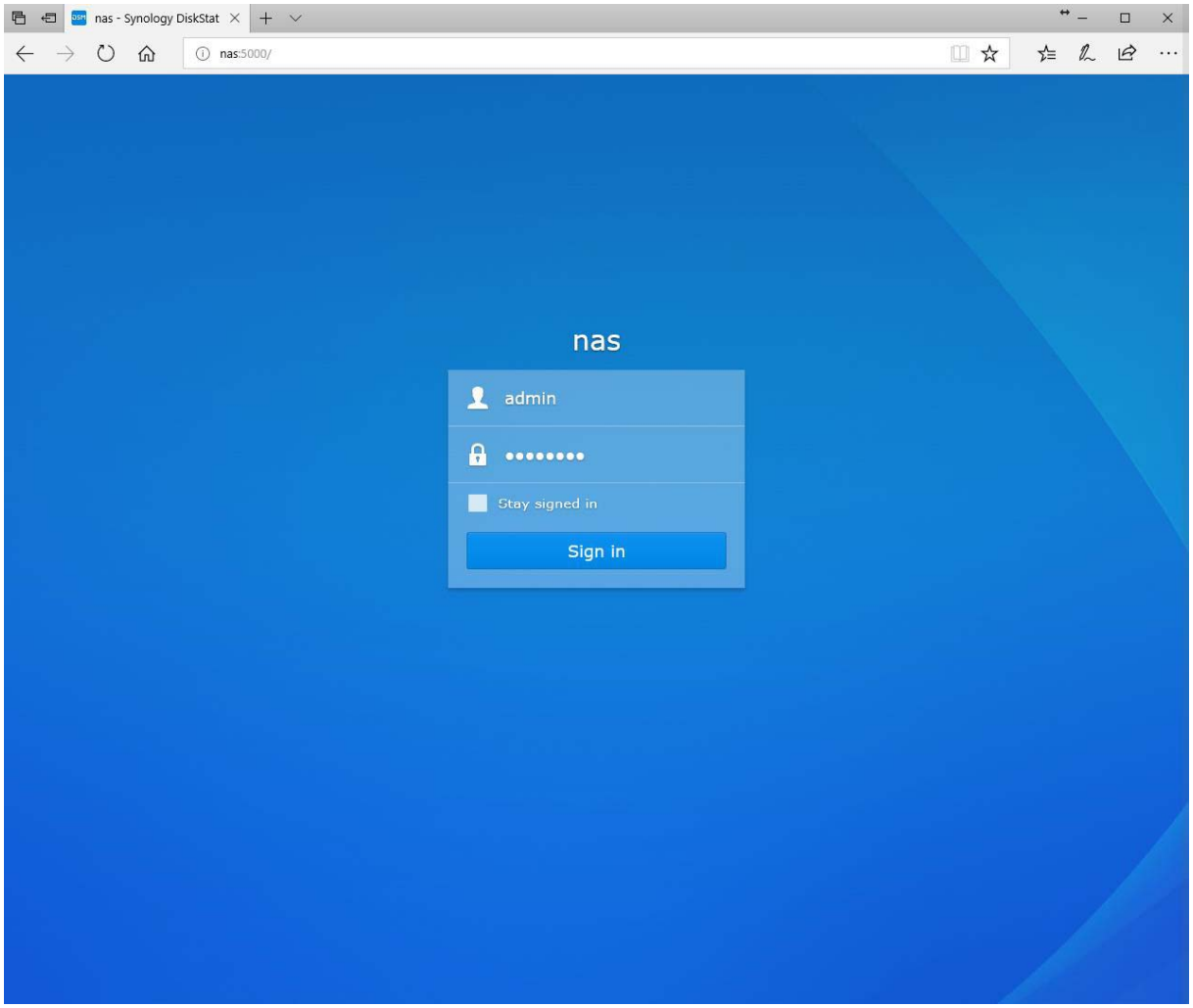
Monitor hard disk status of Synology DS416play NAS with DSM 6.1.4

Preparing the NAS

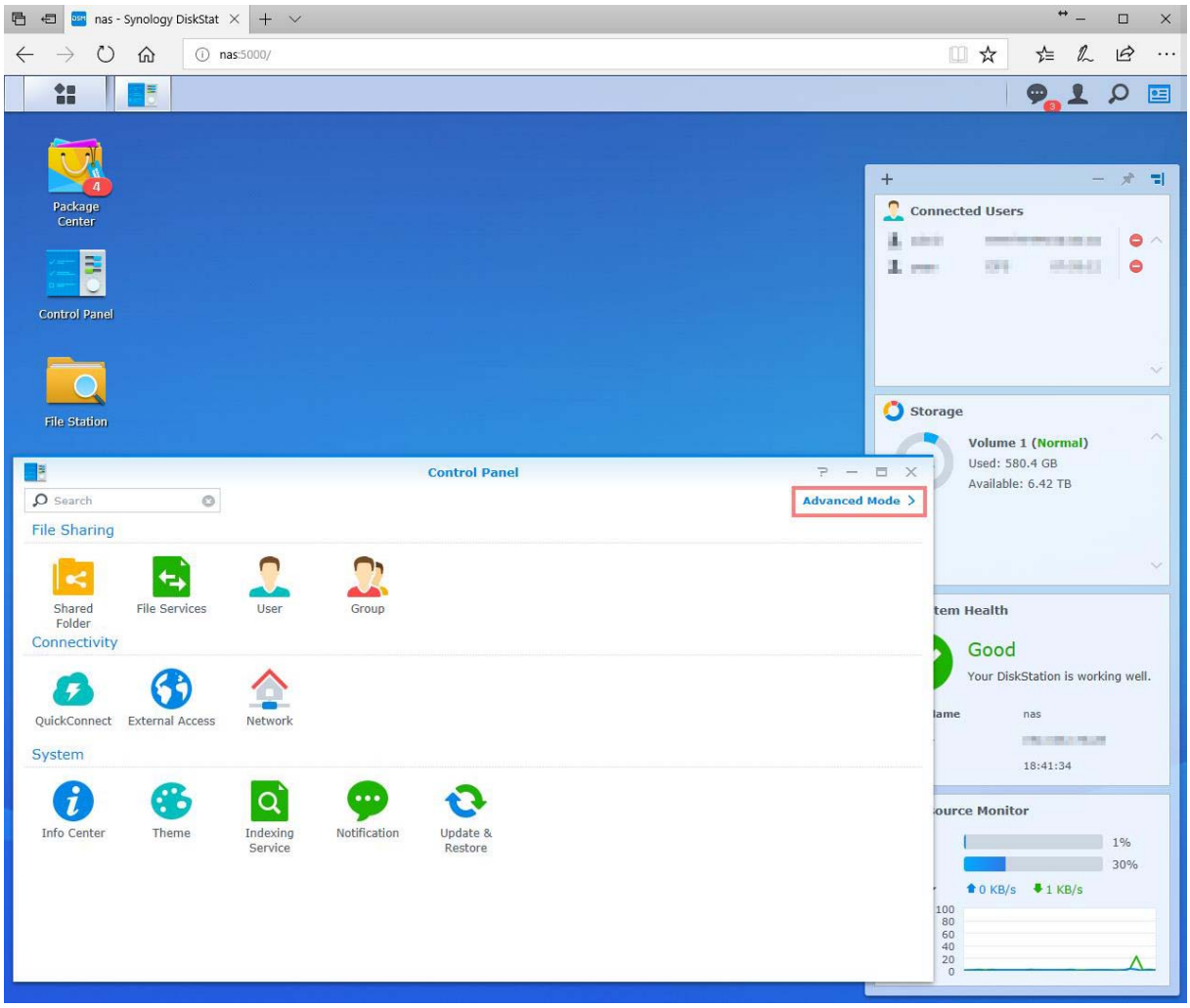
We assume that two hard disks already inserted, formatted by the NAS and they are generally readable (shared) over the network, so there are no network, user permissions or other similar issues.

In order to extend the functionality of the NAS, it is required to allow ssh access to the NAS.

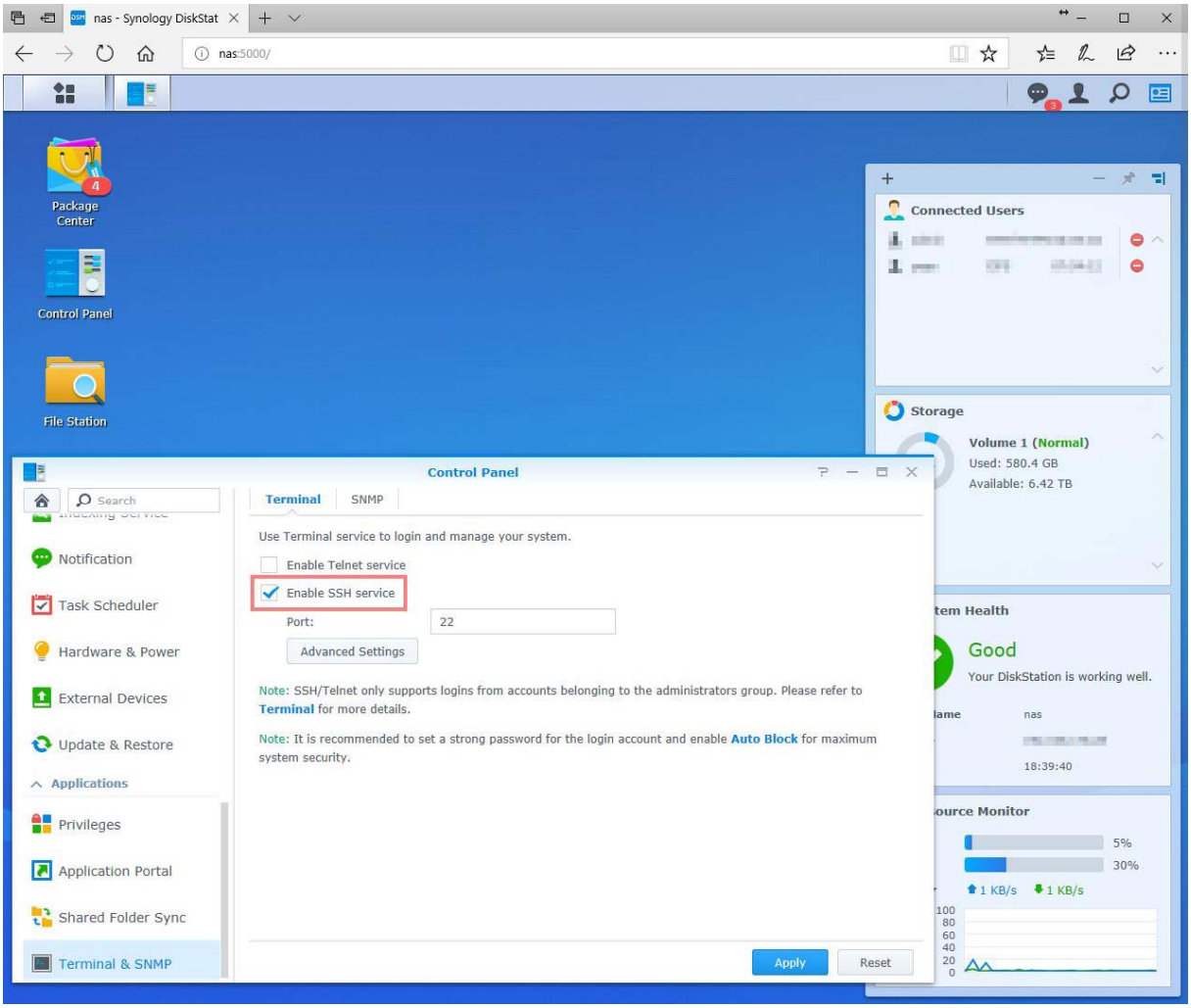
- Open the web interface of the Synology NAS by entering its IP address with port 5000 (e.g. http://192.168.1.100:5000) in your browser and log in with an account which belongs to the group **administrators**



- Open the Control Panel, switch to **advanced mode**, if not already done.

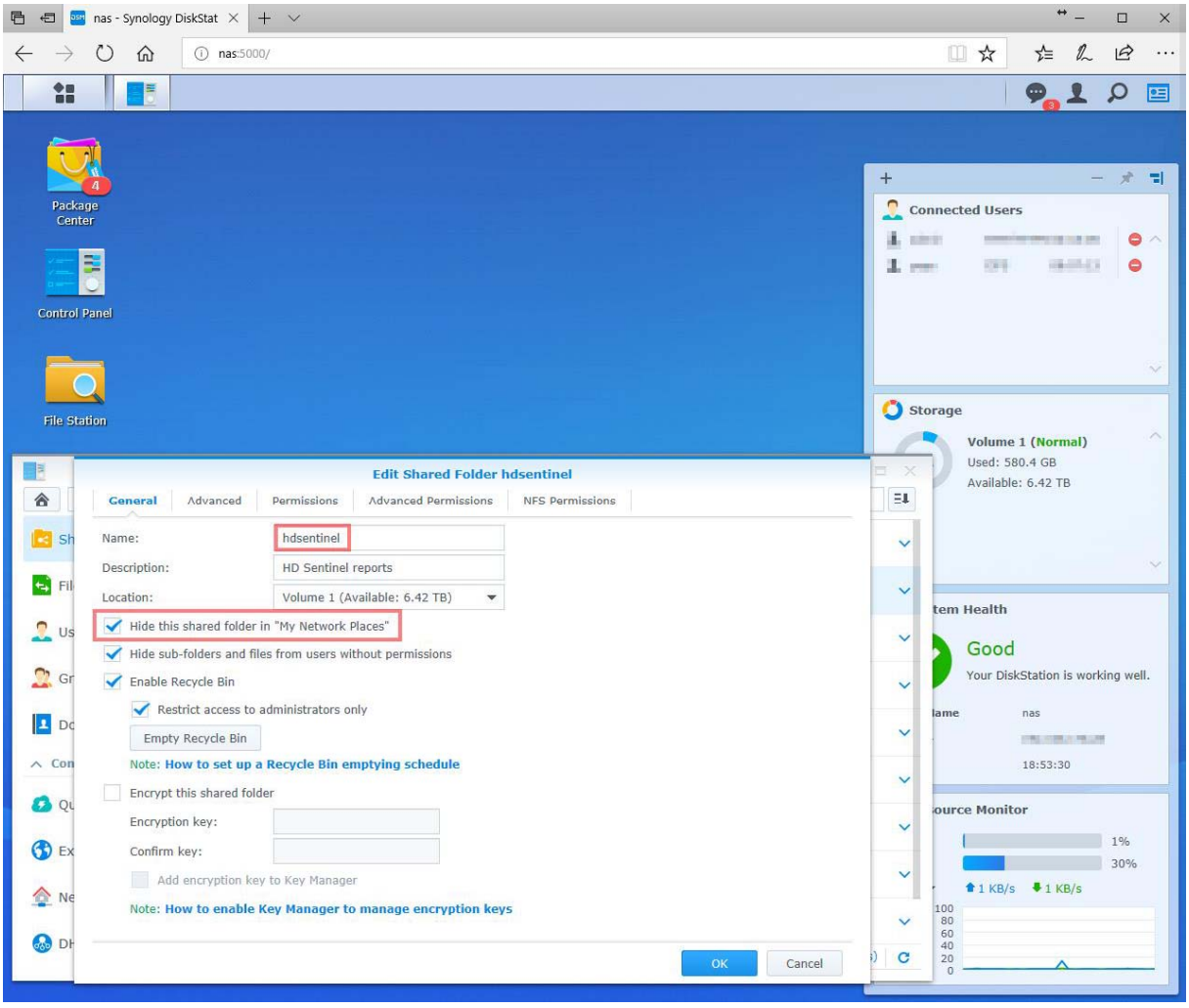


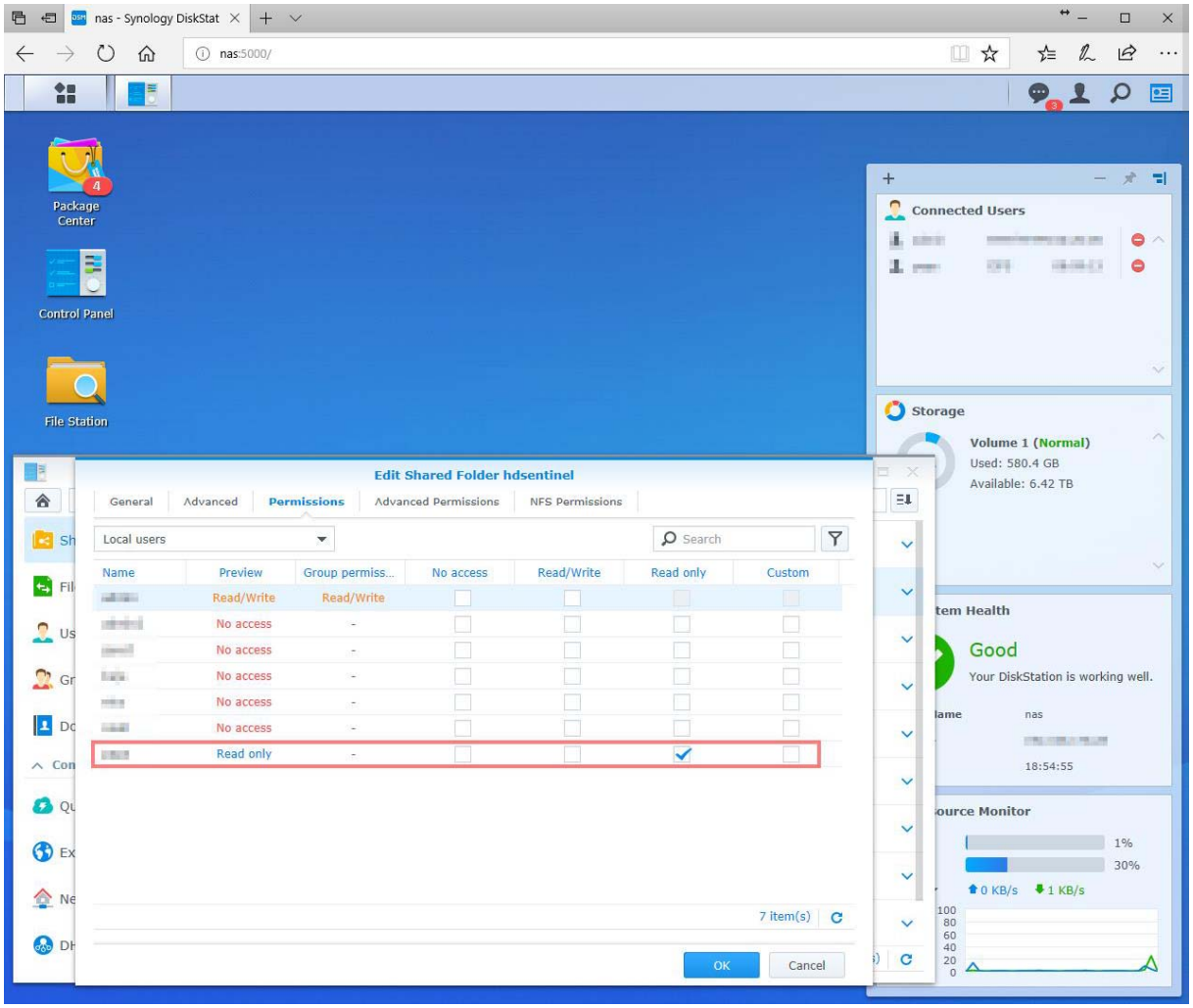
- In the search field type **ssh** and click on **Terminal & SNMP**
- Tick **Enable SSH service**.



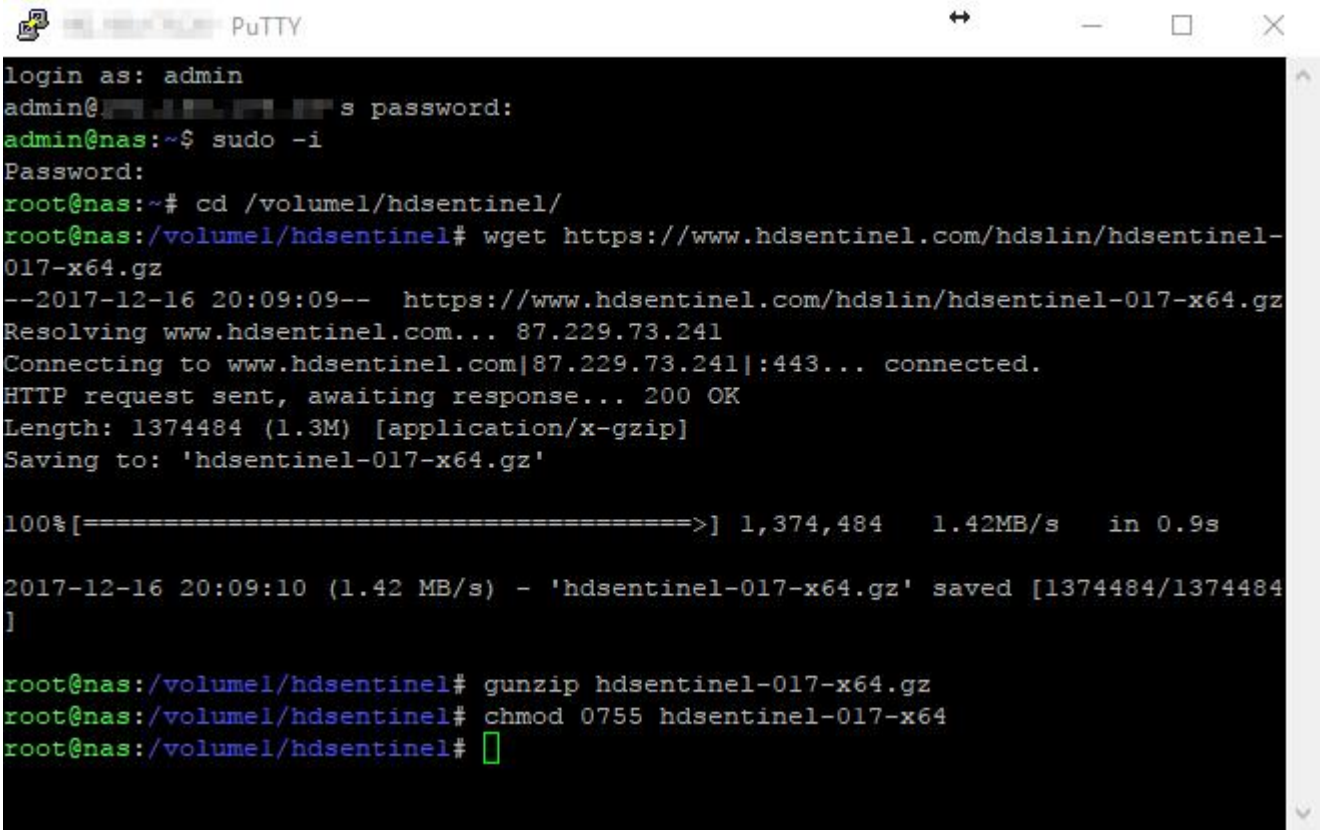
Creating the Status Source by Hard Disk Sentinel Linux

- We now need a folder, where we will place the report from HD Sentinel. I chose to create a new Shared Folder, named **hdsentinel**, which is hidden in „My Network Places“, such that it not disturbs, when browsing the NAS shared folders. You can later safely access this folder from Windows directly. For this, in the Control Panel click on Shared Folder and then click on Create. The folder must be accessible (in my case readonly) by the user, which will run HD Sentinel on the Windows system.

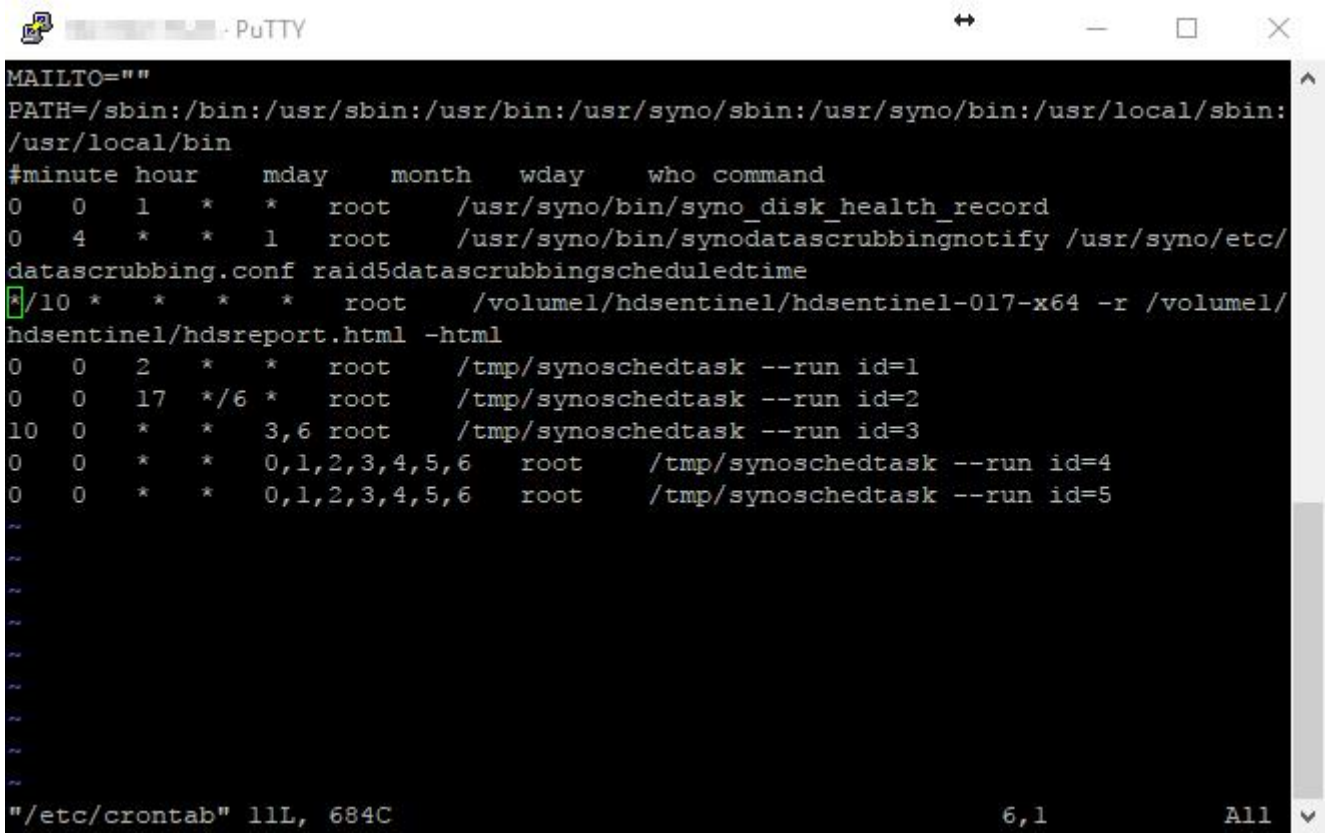



nas - Synology DiskStat
nas:5000/
Package Center
Control Panel
File Station
Connected Users
Storage
Volume 1 (Normal)
Used: 580.4 GB
Available: 6.42 TB
Good
Your DiskStation is working well.
18:54:55
1%
30%
0 KB/s
1 KB/s
Edit Shared Folder hdsentinel
General
Advanced
Permissions
Advanced Permissions
NFS Permissions
Local users
Search
Name
Preview
Group permiss...
No access
Read/Write
Read only
Custom
Read/Write
Read/Write
No access
Read only
7 item(s)
OK
Cancel

- Starting with DSM 6 it is not possible anymore to login directly as root. But this hinders us not to become root .
- So, login as an user, which belongs to the administrators group, in my case **admin**. After logging in, type **sudo -i** and use the same password as before. As this user is an administrator, he is allowed to become root.
- I chose to store hdsentinel in the folder, where the report will be saved, in this case **/volume1/hdsentinel**. So enter **cd /volume1/hdsentinel**.
- Download Hard Disk Sentinel Linux x64 version by entering **wget https://www.hdsentinel.com/hdslin/hdsentinel-017-x64.gz**
- Uncompress hdsentinel by typing **gunzip hdsentinel-017-x64.gz**
- Use chmod to enable executable permissions: **chmod 0755 hdsentinel-017-x64**

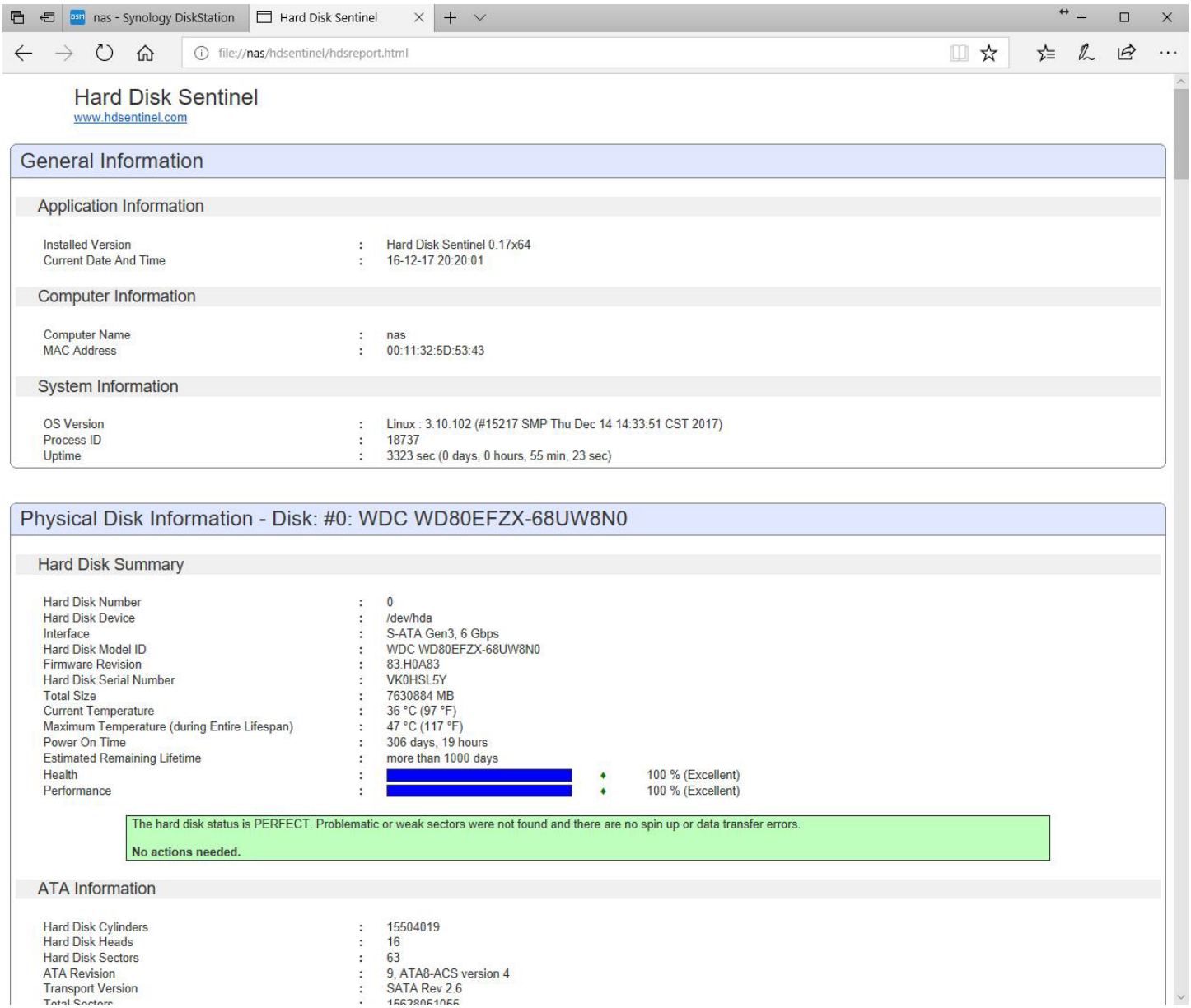


- We need now to edit the crontab. As vim is already installed on the NAS, but nano is not, we will use vim. It is a bit more complicated, but I will give you step by step directions.
- Type **vim /etc/crontab**, go down four lines (with the arrow keys), type **o** and in the new line ***/10 * * * * root /volume1/hdsentinel/hdsentinel-017-x64 -r /volume1/hdsentinel/hdsreport.html -html**



- It should now look like this or similar:
- Press **ESC** and then **:wq** and **ENTER**
- Another way would be to use echo and STDOUT redirection to append the line to the crontab.
- Type **echo „*/10 * * * * root /volume1/hdsentinel/hdsentinel-017-x64 -r /volume1/hdsentinel/hdsreport.html -html“ >> /etc/crontab**
- This should also suffice

- Now every 10 minutes, the complete status of the hard disk drives gets detected and report saved to the shared hdsentinel folder. If things are fine, in 10 minutes the **hdsreport.html** file should appear there and if you open the contents in a browser, you may see something like this:



Load status source in Hard Disk Sentinel Pro

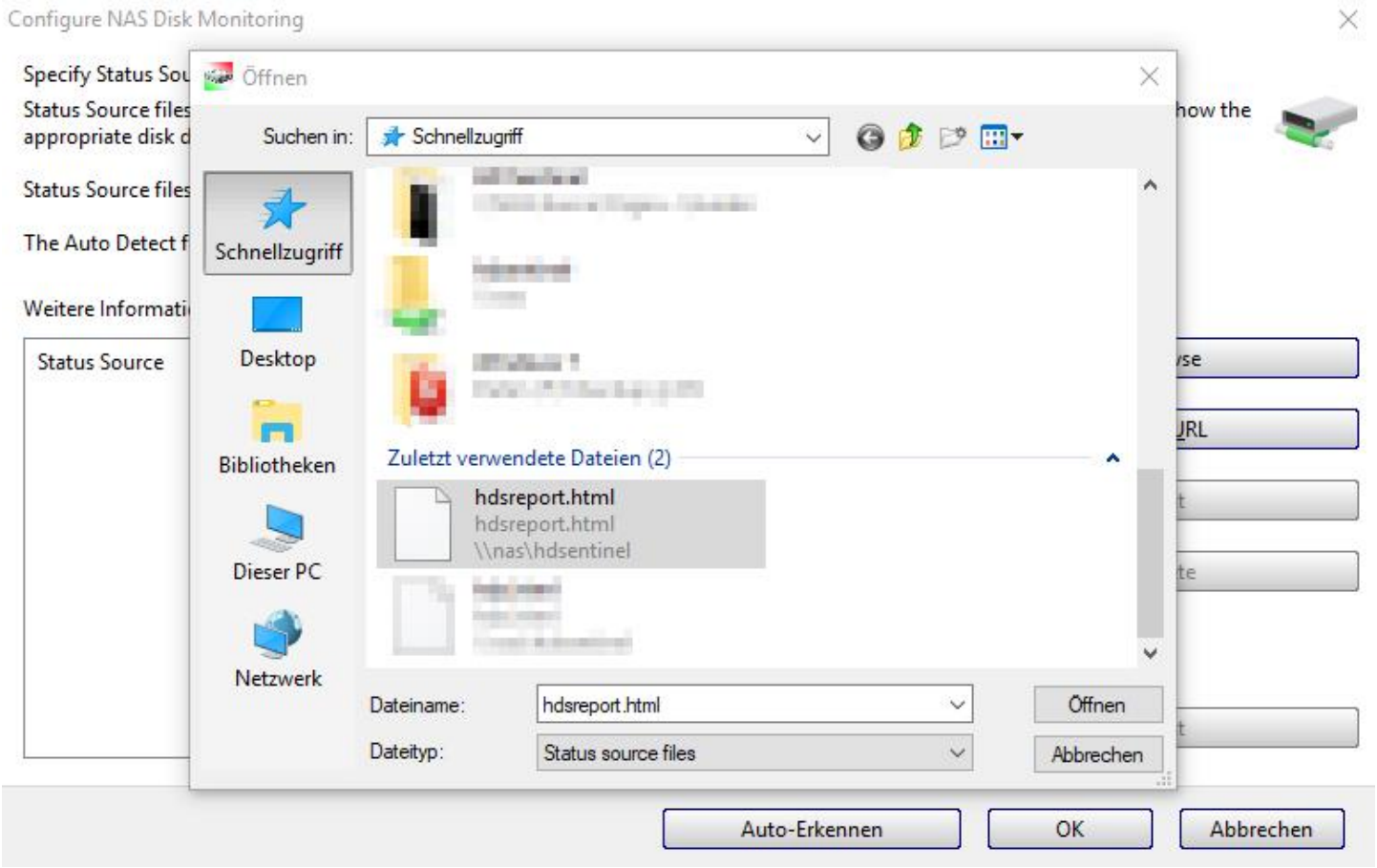
In Hard Disk Sentinel Professional, please select **File menu** -> **Configure NAS Disk Monitoring**.

If we'd have the network shared path **(\\nas\hdsentinel\)** already mapped as a network drive, then we'd only need to click on the **Auto Detect button**: then Hard Disk Sentinel Professional could automatically use the created **hdsreport.html** file as status source.

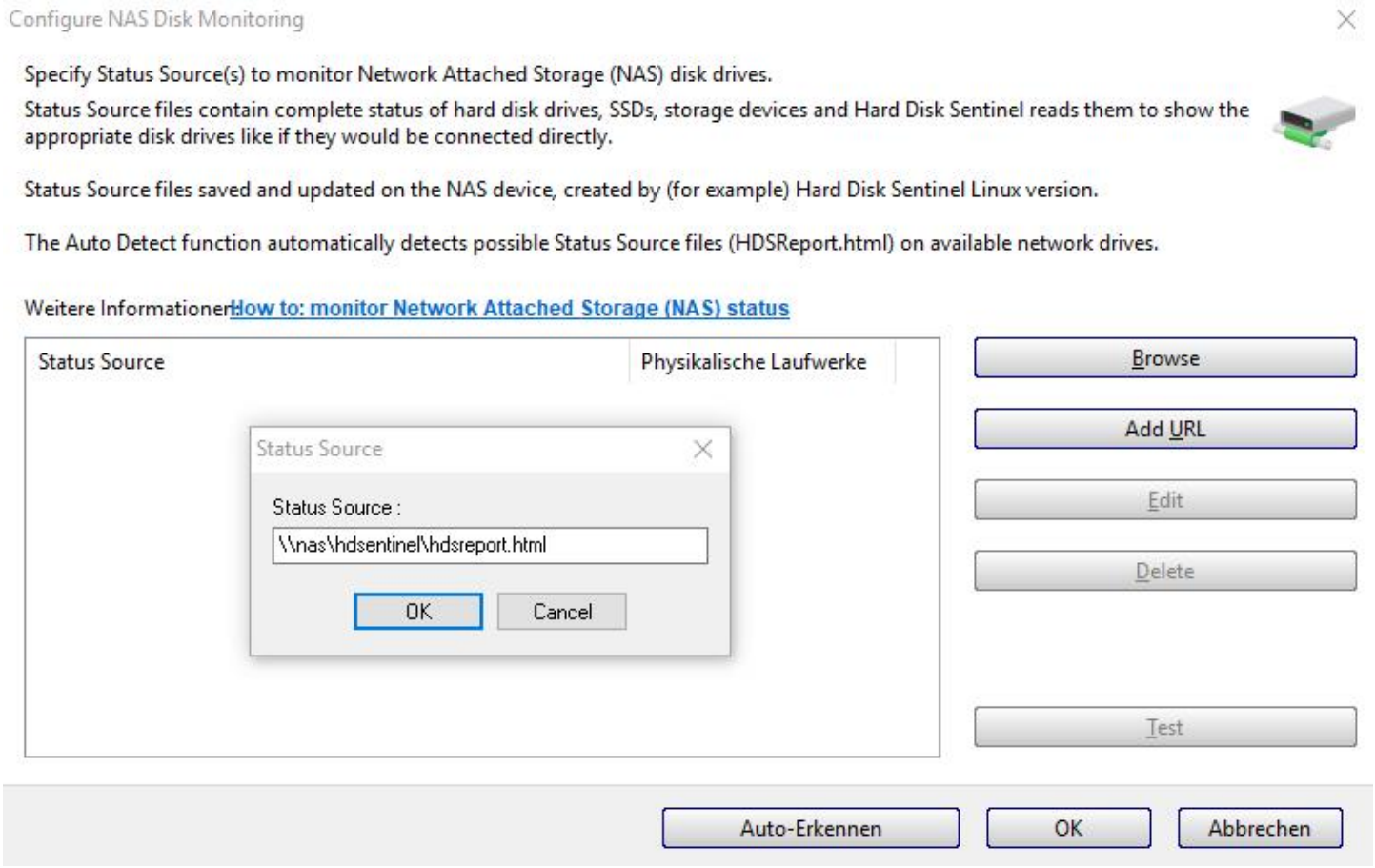
Additionally, as we chose a hidden shared folder, from Hard Disk Sentinel Pro you cannot choose this path, as it not allows to insert a direct path. A workaround is to open the hdsreport.html file once from the explorer. So open the explorer and in the address line type **\\nas\hdsentinel**

Double click on **hdsreport.html**. A new tab in your browser will open with the report. The advantage is, that in the quick access of the explorer, **hdsreport.hmtl** will be one oft he last used files. We will use this to create the source in Hard Disk Sentinel Pro.

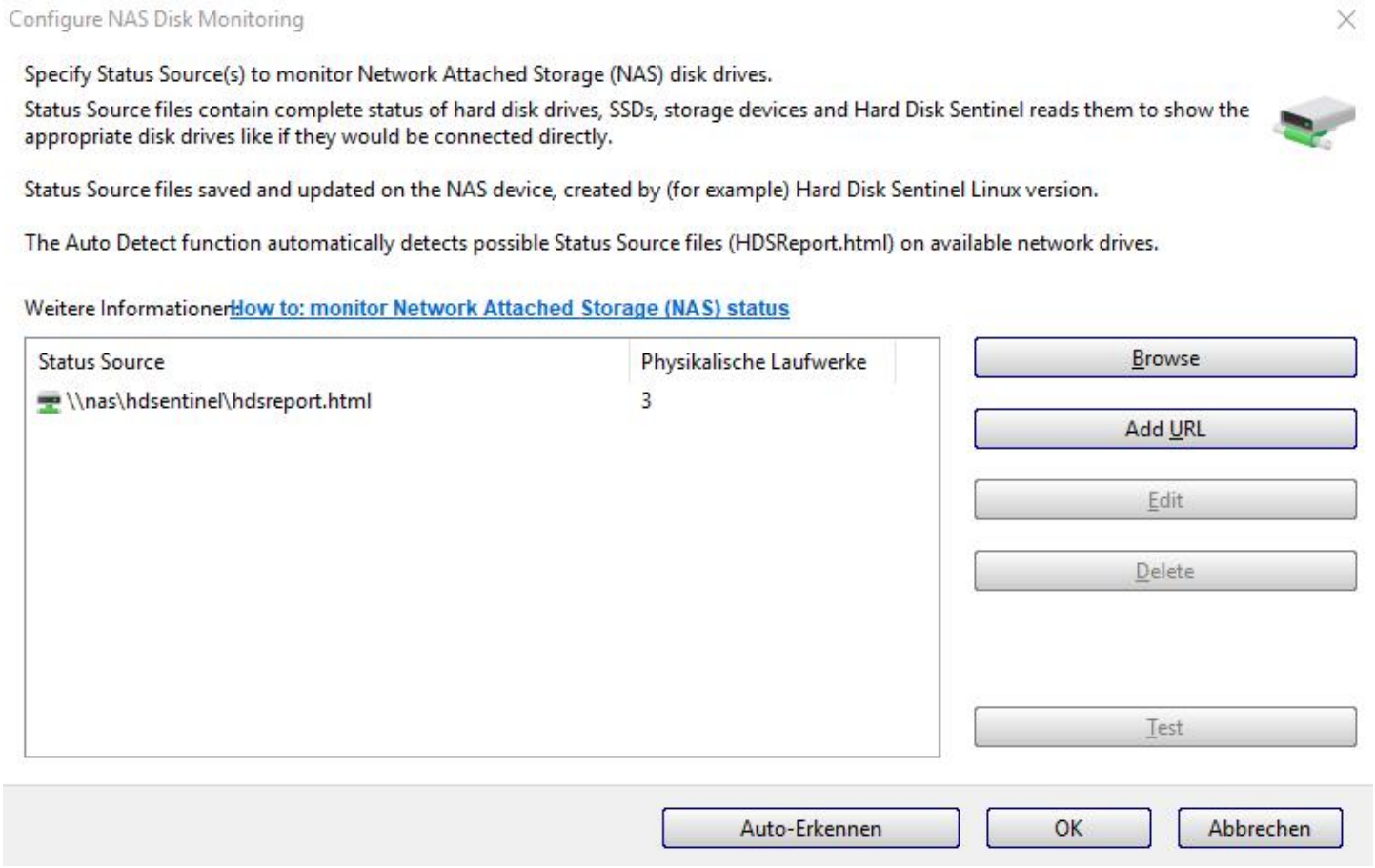
Now assume there is no mapped network drive, so click on **Browse** and in the network locations, we would need to manually select the network path where the hdsreport.html file is located. But we can already find the file in the quick access.



OK, my fault, just detected the way how one can enter the direct path. Instead of **Browse**, choose **Add URL** and entert there the path: **\\nas\hdsentinel\hdsreport.html**



After the detection (or manual adding the Status Source), the configured network path displayed, indicating that 3 hard disks found in it:



In fact, there are only two disks, one is the RAID device. Hard Disk Sentinel Pro will only monitor the „real“ disks. And after clicking OK, Hard Disk Sentinel Professional reads the status source and displays the hard disks just like other internal hard disks: