

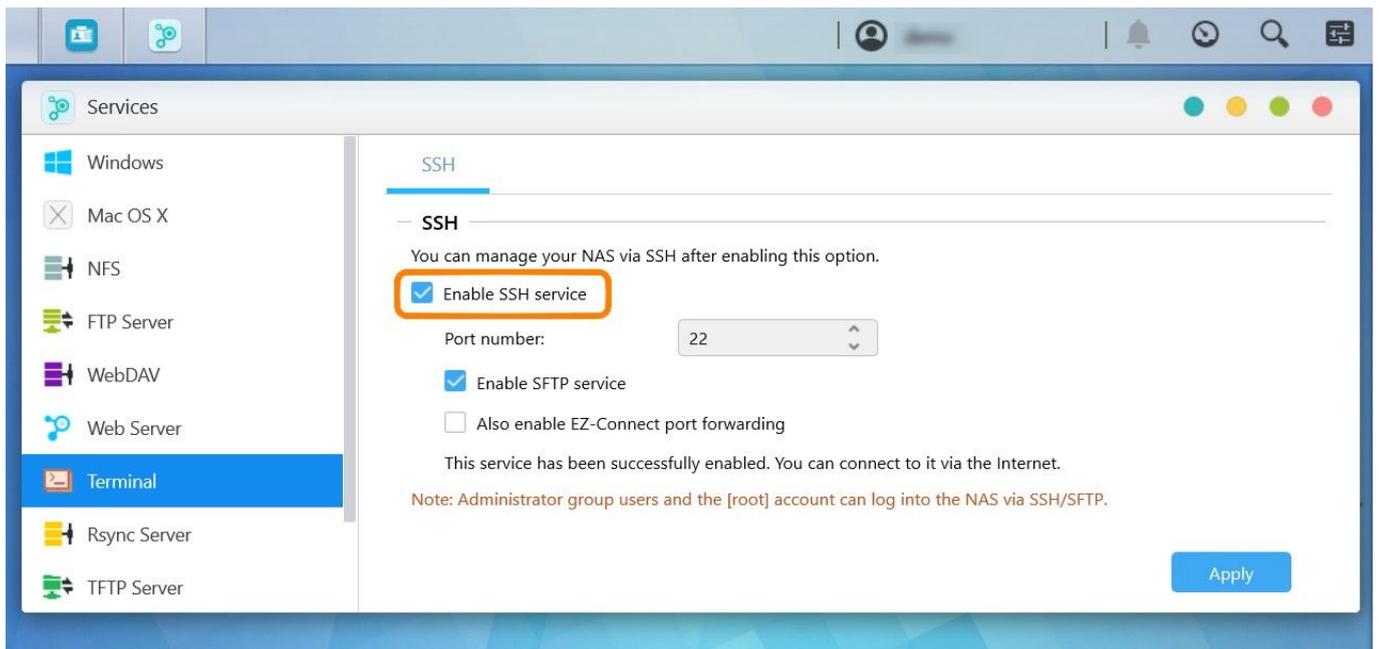
Monitor Hard Disk Status of ASUSTOR AS6202T NAS (ADM 3.5.1.R8C1)

Tutorial by Mario Winklmeier

1. Enable SSH on the NAS

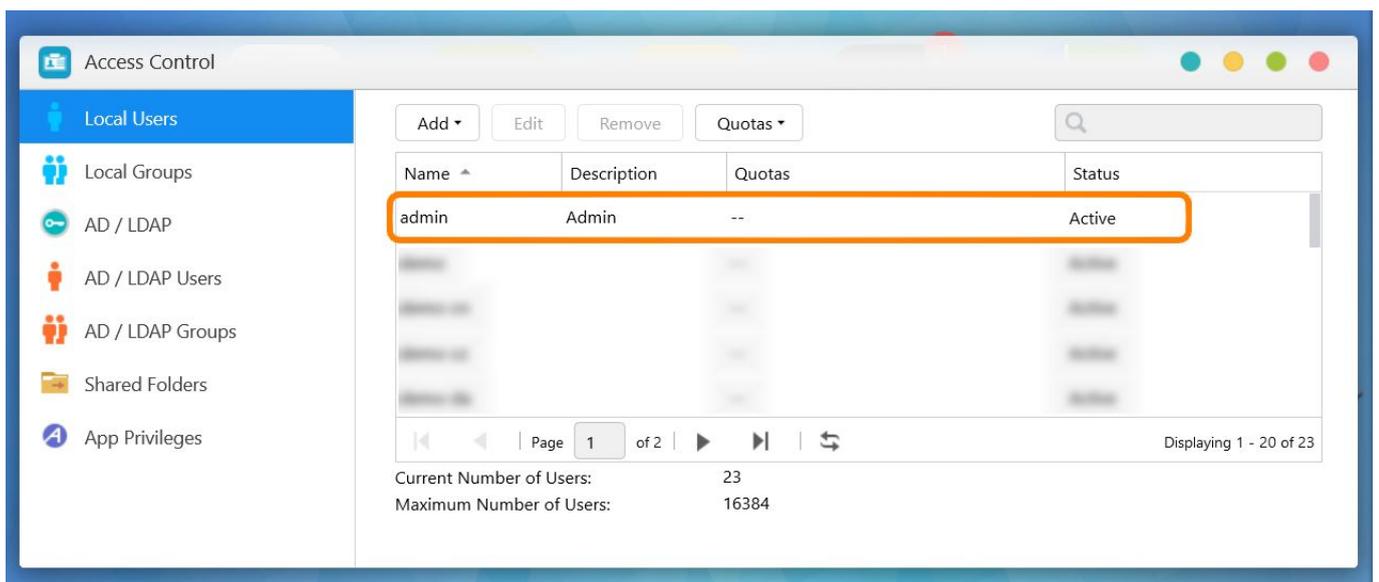
Start your browser, type in the IP-address of your ASUSTOR and login to ADM with admin rights

Click on **Services** -> **Terminal** -> **SSH** -> **Enable SSH service**



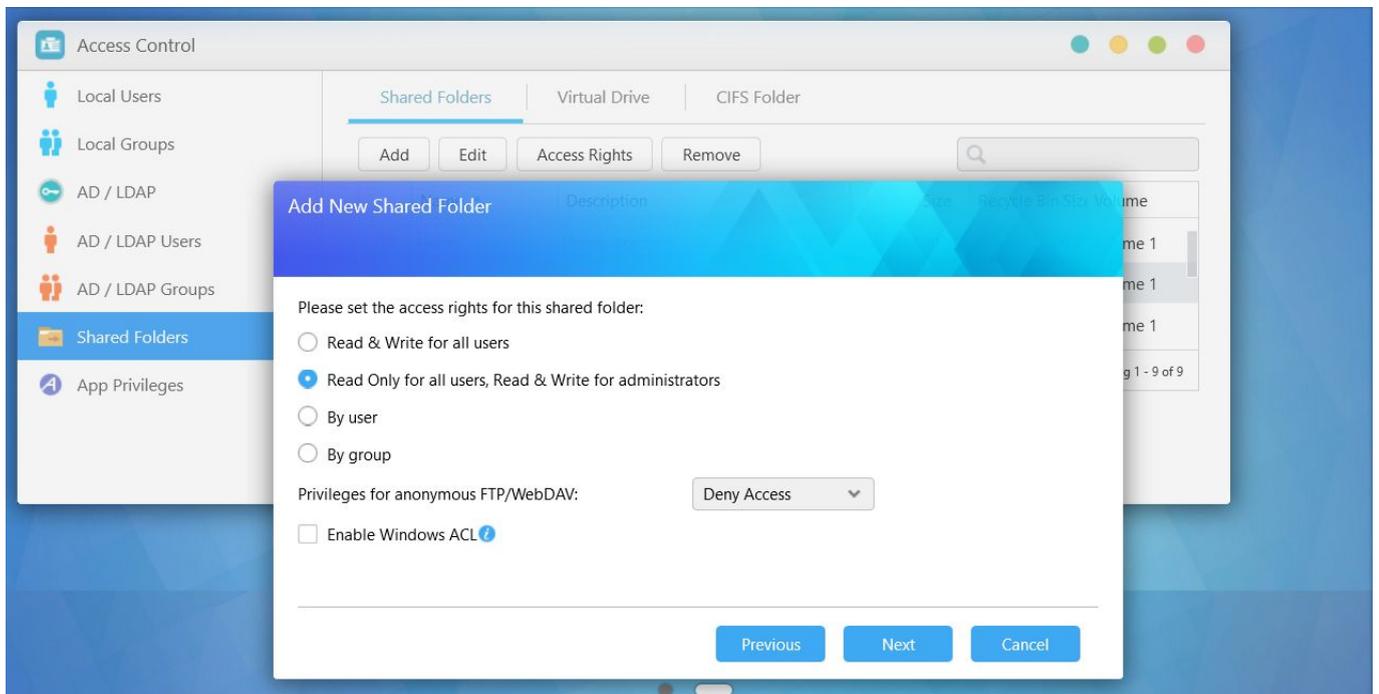
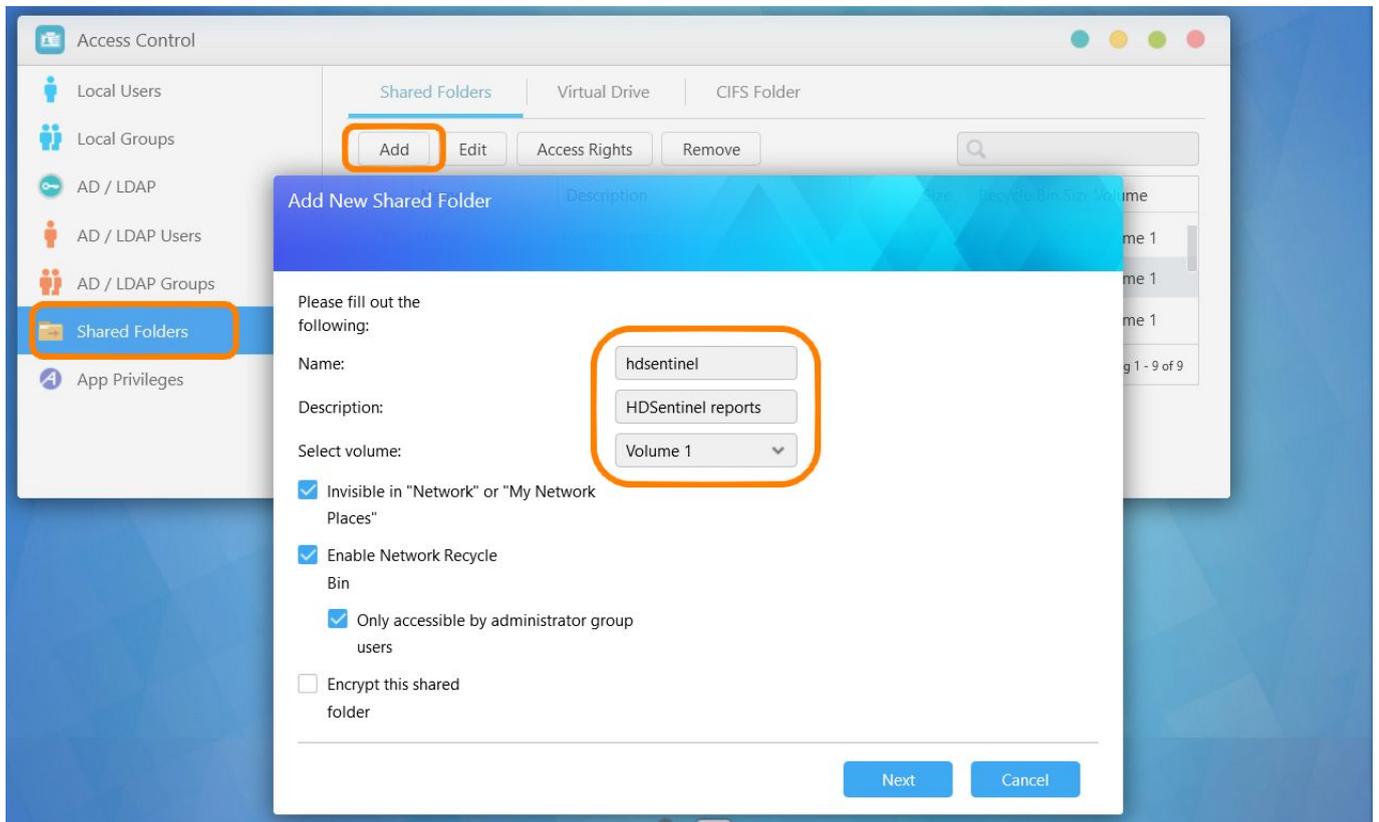
2. Make sure the admin account is active because you need it later for the root access

Find it in **Access Control** -> **Local Users**. You can mark it and click on **Edit** to change the status



3. Create a folder for Hard Disk Sentinel and for the report to store

Go to **Access Control** -> **Shared Folders**. Click **Add** and fill in the name for the new folder. I named it **hdsentinel**. You can also set a description and set the folder invisible on the network.



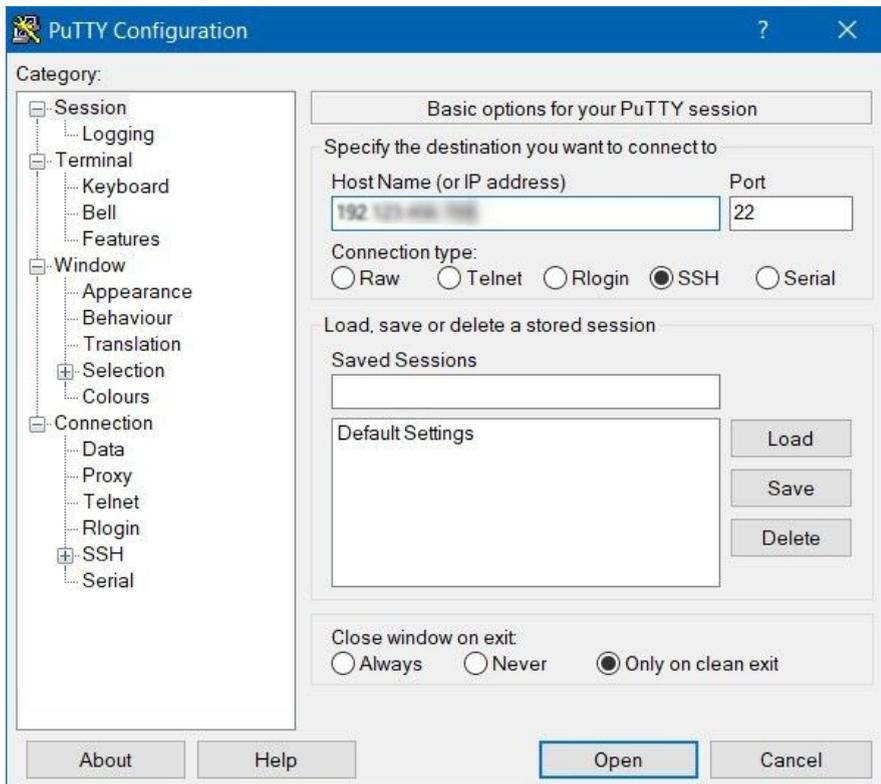
4. Check the Hard Disk Sentinel website for the available version

Go to https://www.hdsentinel.com/hard_disk_sentinel_linux.php and scroll down to **Hard Disk Sentinel 64-bit Linux console version - executable, gzip-compressed**. Do a right click on it and select **copy link address** or write it down or remember it. In my case it's <https://www.hdsentinel.com/hdslin/hdsentinel-018c-x64.gz>

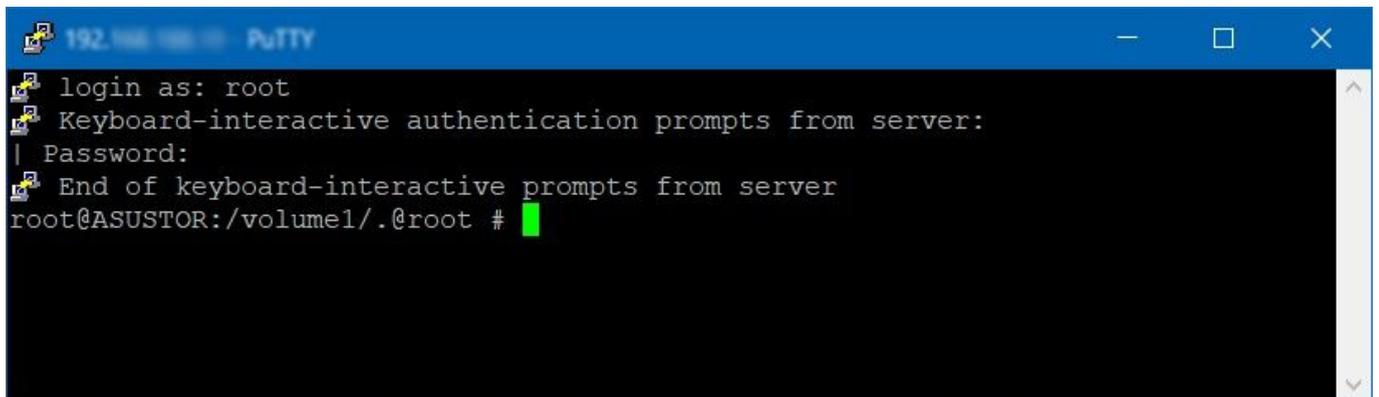
5. Using PuTTY

Download PuTTY to your Desktop PC from <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

Start Putty and type in your NAS IP address, then click **Open**



6. Login as: **root**, password: same as the admin account password



7. Enter the folder you created before, in my case by typing **cd /volume1/hdsentinel** and press **ENTER**

8. Download the Hard Disk Sentinel Linux x64 version you checked before by typing **wget https://www.hdsentinel.com/hdslin/hdsentinel-018c-x64.gz** then hit **ENTER**

If you copied the link to your clipboard before you only have to type "**wget** " and with a right click on your mouse the copied text automatically filled in, hit **ENTER**

9. Uncompress hdsentinel by typing **gunzip hdsentinel-018c-x64.gz**

10. Use chmod to enable executable permissions by typing **chmod 755 hdsentinel-018c-x64**

```
- PuTTY
login as: root
Keyboard-interactive authentication prompts from server:
| Password:
End of keyboard-interactive prompts from server
root@ASUSTOR:/volume1/.@root # cd /volume1/hdsentinel
root@ASUSTOR:/volume1/hdsentinel # wget https://www.hdsentinel.com/hdslin/hdsentinel-018c-x64.gz
--2020-09-27 22:12:03-- https://www.hdsentinel.com/hdslin/hdsentinel-018c-x64.gz
Resolving www.hdsentinel.com (www.hdsentinel.com)... 79.172.252.41
Connecting to www.hdsentinel.com (www.hdsentinel.com)|79.172.252.41|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1429427 (1.4M) [application/x-gzip]
Saving to: 'hdsentinel-018c-x64.gz'

100%[=====>] 1,429,427  2.27MB/s  in 0.6s

2020-09-27 22:12:04 (2.27 MB/s) - 'hdsentinel-018c-x64.gz' saved [1429427/1429427]

root@ASUSTOR:/volume1/hdsentinel # gunzip hdsentinel-018c-x64.gz
root@ASUSTOR:/volume1/hdsentinel # chmod 755 hdsentinel-018c-x64
root@ASUSTOR:/volume1/hdsentinel #
```

11. Type **crontab -e** to edit the crontab

go down to the end of the list (with the arrow keys), type **o** and in the new line type

```
*/10 * * * * /volume1/hdsentinel/hdsentinel-018c-x64 -r /volume1/hdsentinel/hdsreport.html -html
```

Press **ESC** and then **:wq** and hit **ENTER**

You can check it now by typing **crontab -l**

```
- PuTTY
root@ASUSTOR:/volume1/hdsentinel # crontab -l
0 0 * * * TAG=CERTIFICATE /usr/builtin/bin/certificate update-cert
0,1 0 * * * /usr/sbin/usermanutil -check_expiration
*/10 * * * * /volume1/hdsentinel/hdsentinel-018c-x64 -r /volume1/hdsentinel/hdsreport.html -html
30 0 * * 0 /bin/sh /usr/builtin/sbin/ntpupdate.sh europe.pool.ntp.org
0 7 * * * /usr/builtin/sbin/recybin cleaner -resyncdb 5 0 7
0 6 * * 1 /usr/builtin/sbin/recybin cleaner -scheckclean 1
root@ASUSTOR:/volume1/hdsentinel #
```

By this new entry in crontab, the Linux HDsentinel launches every full 10 minutes and saves the report to **/volume1/hdsentinel/hdsreport.html**

12. Open your windows explorer and type in the path to the hdsentinel folder on your NAS

e.g. **\\192.xxx.xxx.xxx\hdsentinel** or **\\ASUSTOR\hdsentinel** and check if the **hdsreport.html** is already created.

If so, you can view this file in a browser and see somewhat like this:

Hard Disk Sentinel

www.hdsentinel.com

General Information

Application Information

Installed Version : Hard Disk Sentinel 0.18c
Current Date And Time : 28-9-20 08:10:02

Computer Information

Computer Name : ASUSTOR
MAC Address : ██████████

System Information

OS Version : Linux : 4.14.x (#1 SMP Wed Aug 12 00:30:38 CST 2020)
Process ID : 19554
Uptime : 12472 sec (0 days, 3 hours, 27 min, 52 sec)

Physical Disk Information - Disk: #0: HGST HDN726060ALE614

Hard Disk Summary

Hard Disk Number : 0
Hard Disk Device : /dev/sda
Interface : S-ATA Gen3, 6 Gbps
Hard Disk Model ID : HGST HDN726060ALE614
Firmware Revision : APGNW7JH
Hard Disk Serial Number : ██████████
Total Size : 5723167 MB
Current Temperature : 41 °C (106 °F)
Maximum Temperature (during Entire Lifespan) : 57 °C (135 °F)
Power On Time : 660 days, 14 hours
Estimated Remaining Lifetime : more than 1000 days
Health :  ◆ 100 % (Excellent)
Performance :  ◆ 100 % (Excellent)

The hard disk status is PERFECT. Problematic or weak sectors were not found and there are no spin up or data transfer errors.
No actions needed.

ATA Information

13. Remote SMART Monitoring of the ASUSTOR AS6202T NAS using Hard Disk Sentinel Pro

Open Hard Disk Sentinel Pro on your Desktop PC

Click **File** -> **Configure NAS Disk Monitoring**

Click **Auto Detect**

If this doesn't work click **Add URL** and type the full path to the HDSReport.html

e.g. \\192.xxx.xxx.xxx\hdsentinel\HDSReport.html or \\ASUSTOR\hdsentinel\HDSReport.html and click **OK**.

Now the hard disk drives of the NAS should appear in Hard Disk Sentinel Pro. In my NAS are only 2 hard disk drives working at raid 1 but Hard Disk Sentinel Pro shows me 3 disks. 1 drive for each hard drive and also 1 unknown for the raid device too.

This unknown drive can be hidden by clicking with the right mouse button on it and deselecting it.