

QNAP NAS with Meridian Sooloos Installation Guide

July 2015

MERIDIAN sooloos

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Before you begin



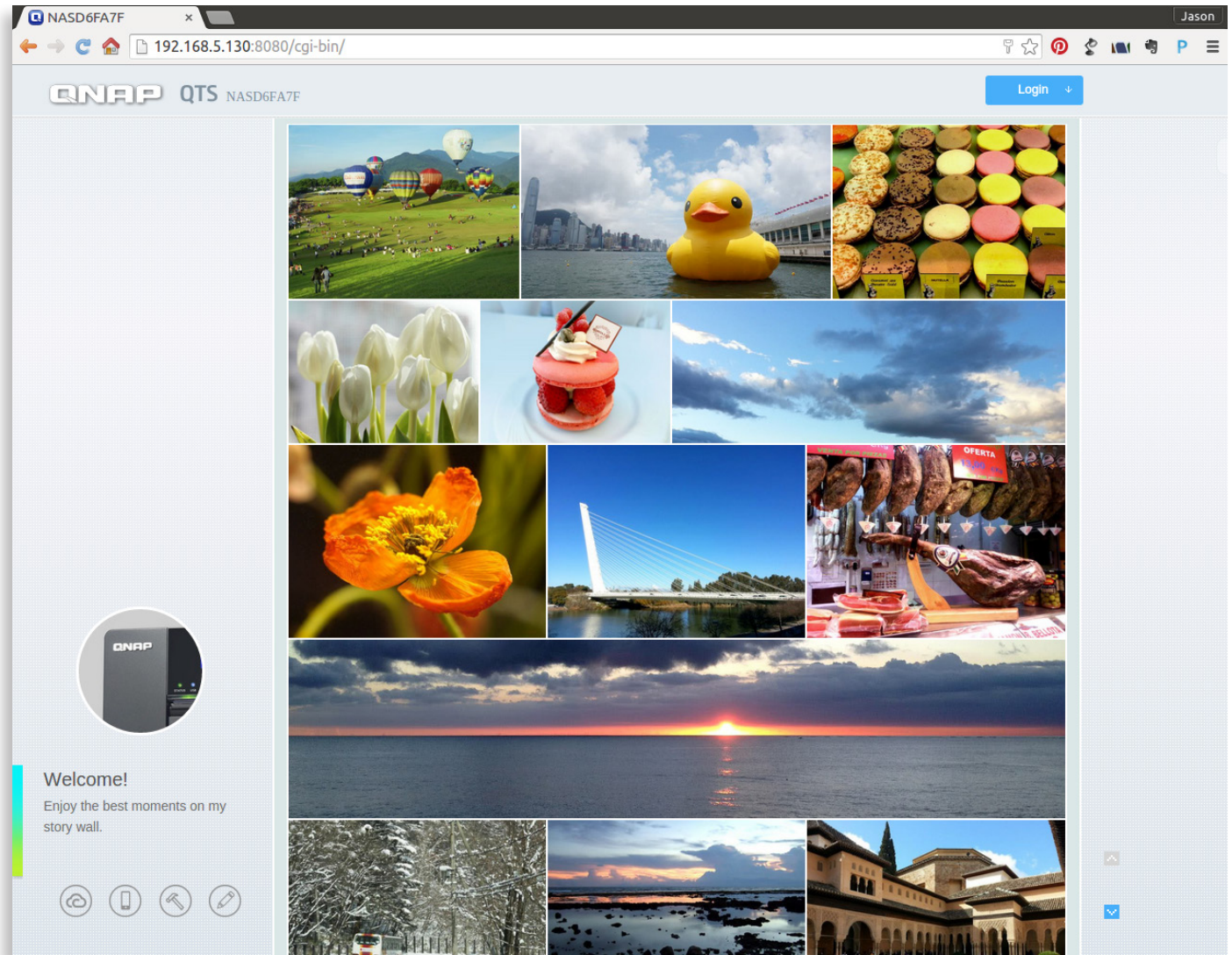
Before you configure your QNAP system for use with Meridian Sooloos, you may need to set up the QNAP product, including drive and firmware installation. QNAP provides a quick-start guide at: <https://start.qnap.com/uk/index.php>

You may need to install additional RAM in your QNAP product. For information on RAM upgrades and the size of compatible hard drives, see the **QNAP Hardware Notes Appendix** at the end of this document.

Configuring the QNAP

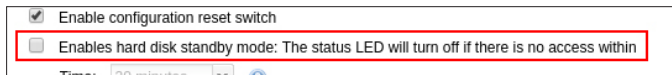
Prior to installing the Meridian Sooloos package, the QNAP NAS needs to be configured. The following sections detail this configuration.

- Start by downloading the Meridian Sooloos QNAP package available from www.meridian-audio.com.
- Once downloaded, unzip the package and save it locally on your computer, noting the location.
- To complete the configuration, you will need to log into the QNAP QTS interface as administrator.



Disable Hard Disk Standby Mode

- Open 'Control Panel'.
- Select 'System Settings' from the left-hand menu and then select 'Hardware'.
- In the General tab, ensure 'Enables hard disk standby mode' is *not* ticked.

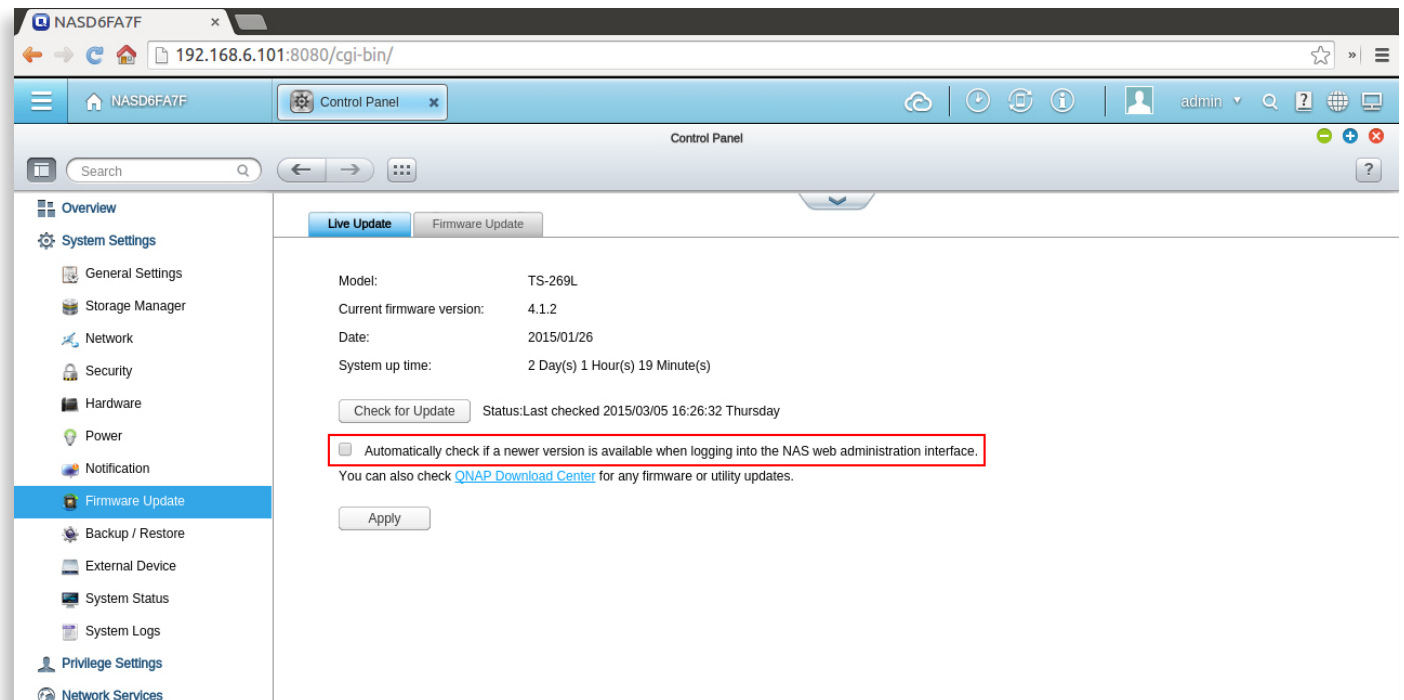
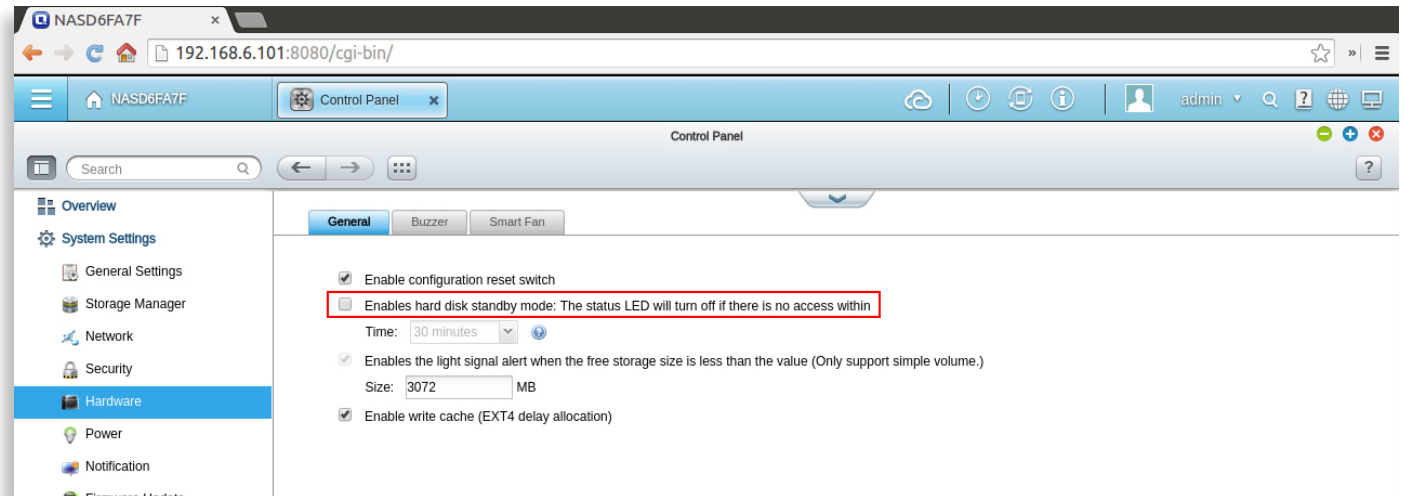
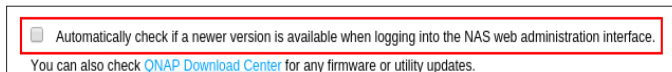


- Click 'Apply All' to save the changes.



Disable Firmware Notification

- Open 'Control Panel'.
- Select 'System Settings' from the left-hand menu.
- Select 'Firmware Update'.
- In the 'Live Update' tab, make sure 'Automatically check if a newer version is available when logging into the NAS web administration interface' is *not* ticked.
- Click 'Apply' to save the changes.

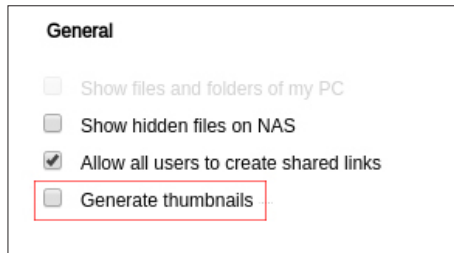


Disable Image Thumbnail Generation



This option is only available in QTS 4.1.2 and greater.

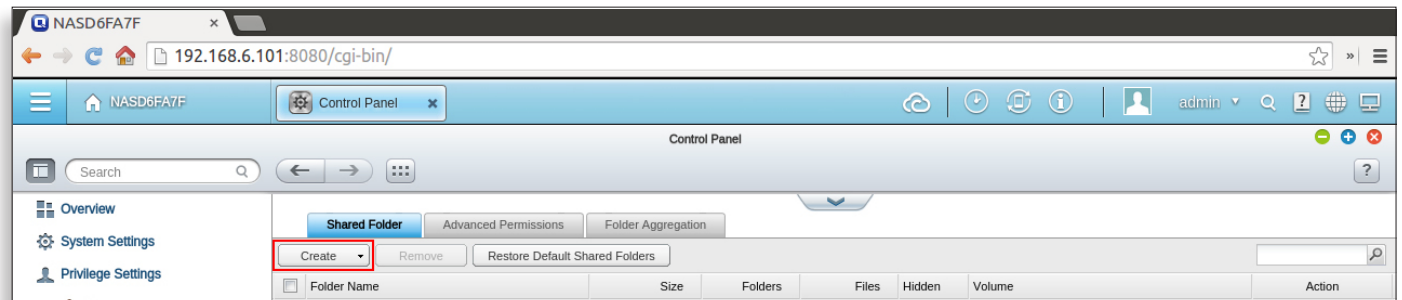
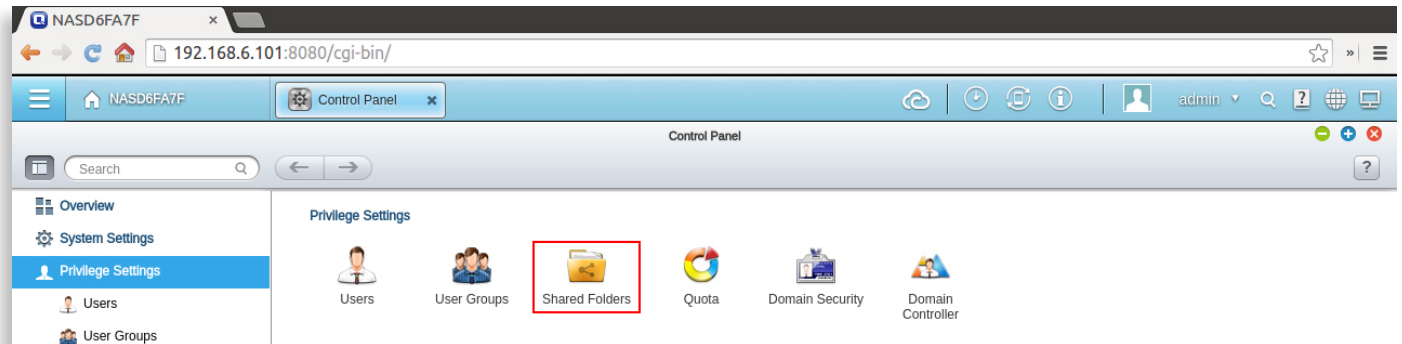
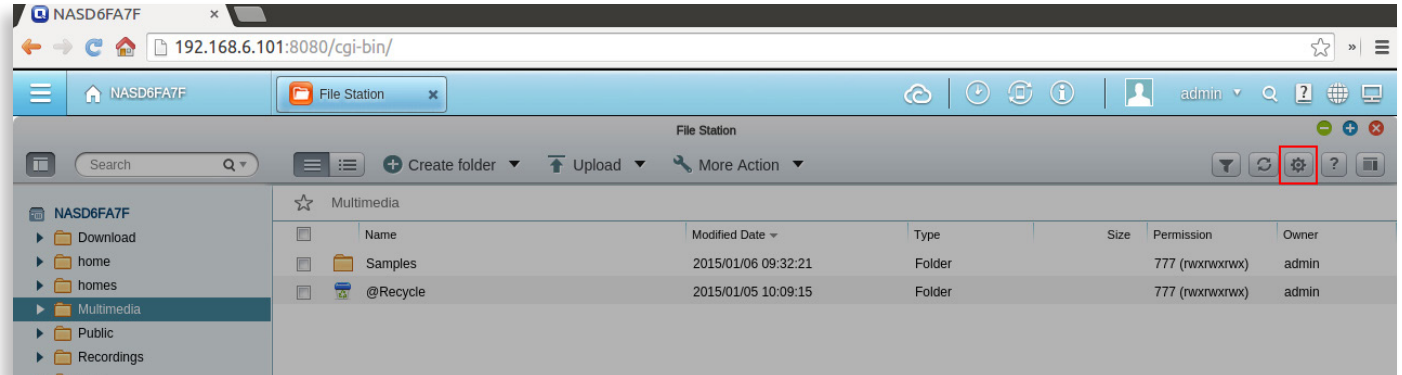
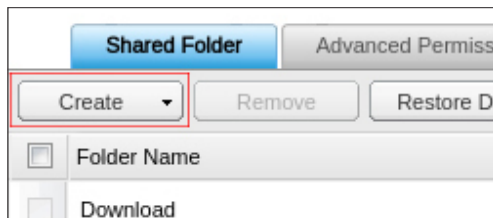
- Open **'File Station'**.
- Select **'Settings'** (cogwheel icon).
- In the Options list make sure **'Generate thumbnails'** is *not* ticked.



- Click on **'Close'**.

Create Sooloos Storage

- Open **'Control Panel'**.
- Select **'Privilege Settings'** from the left-hand menu.
- Select **'Shared Folder'**.
- Click the **'Create'** button and from the resulting pull-down menu, select **'Shared Folders'**.



- Enter the folder name as “Sooloos”.
Note: this item is case sensitive.
- Enter the description as “Sooloos Storage”.

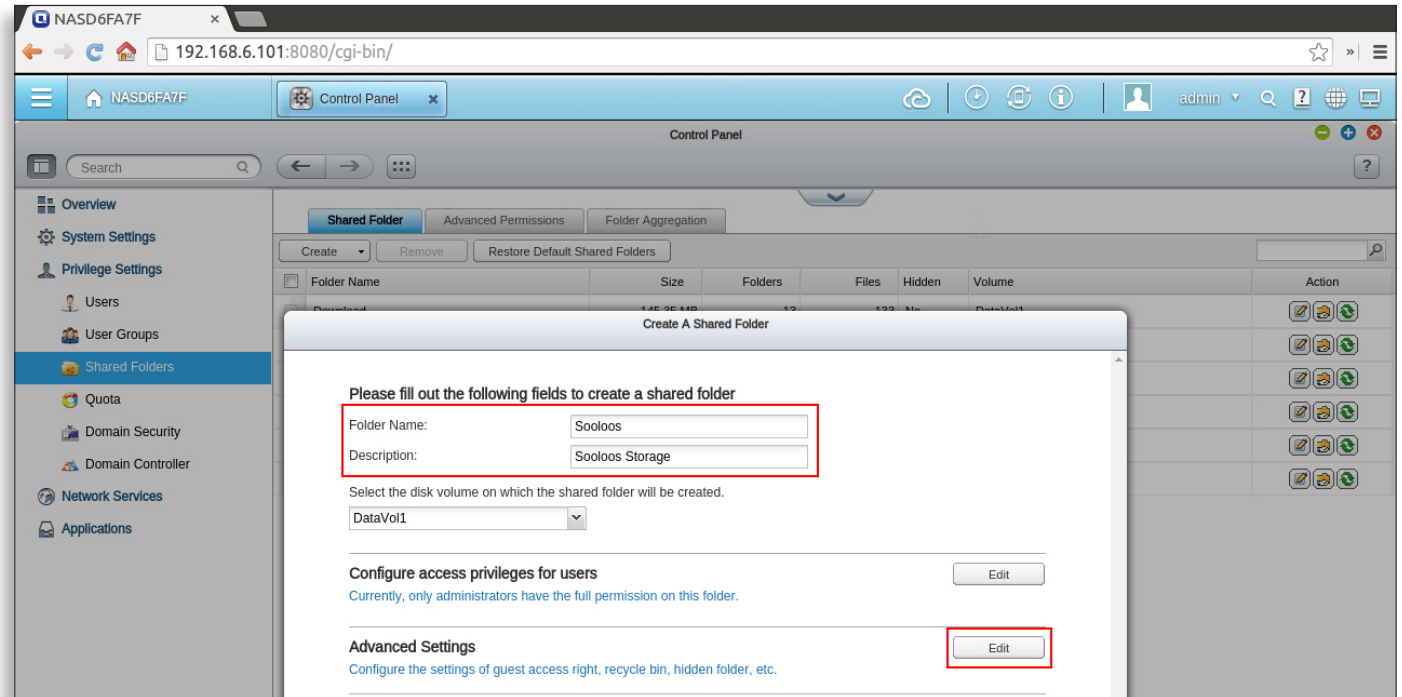
Please fill out the following fields to create a shared folder

Folder Name:

Description:

Select the disk volume on which the shared folder will be created.

- Go to ‘Advanced Settings’ and click ‘Edit’.



Edit the ‘Advanced Settings’ as follows:

- Set Guest Access Right to ‘Read/Write’.
- Set Media Folder to ‘No’.
- Set Hidden Folder to ‘No’.
- Set Lock File to ‘No’.
- **Disable** the Recycle Bin.
- Click the ‘Create’ button.

Recycle Bin to administrators only for now.

Specify path automatically

Enter path manually

Advanced Settings

Guest Access Right: Deny Access
 Read only
 Read/Write

Media Folder: Yes No

Hidden Folder: Yes No

Lock File (Oplocks): Yes No

SMB Encryption: Yes No

Recycle Bin: Enable Disable

Restrict the access of Recycle Bin to administrators only for now.

Path: Specify path automatically
 Enter path manually

The Sooloos shared directory is created, and can be seen in the list of shared folders. The associated settings can now be reviewed using the Action icons for the shared folder:



Shared Folder Properties

Network share name: Sooloos

Comment (optional): Sooloos Storage

Disk Volume: DataVol1

Path: /Sooloos

Hide network drive
 Lock File (Oplocks)
 SMB Encryption
 Enable Network Recycle Bin
 Restrict the access of Recycle Bin to administrators only for now.
 Enable write-only access on FTP connection
 Only allows applications to access files using the long file name format.

OK Cancel

Folder Name	Size	Folders	Files	Hidden	Volume	Action
Download	145.35 MB	13	133	No	DataVol1	[Action Icons]
Multimedia	7.65 MB	6	50	No	DataVol1	[Action Icons]
Public	0 KB	1	0	No	DataVol1	[Action Icons]
Recordings	0 KB	1	0	No	DataVol1	[Action Icons]
Sooloos	0 KB	0	0	No	DataVol1	[Action Icons]
Web	4 KB	1	1	No	DataVol1	[Action Icons]
homes	76 KB	11	5	No	DataVol1	[Action Icons]

Configure Web Server

- Open 'Control Panel'
- Select 'Applications' from the left-hand menu
- Select 'Web Server'.
- Change the Port number from its current value (*right*) to 81 and click on 'Apply'.

Enable Web Server

Port number: 81

register_globals: On Off

Web Server

After enabling this function, you can upload the webpage files to "Web" network share to publish your website.

Enable Web Server

Port number: 80

register_globals: On Off

Enable secure connection (HTTPS)

Port number: 8081

Enable WebDAV



From now on, to enter the QNAP QTS interface you must append the port number 8080 to the IP address (for example: 192.168.1.101:8080).

Configuring the Network Interface

There are two approaches for configuring the Network.

Using a single network interface



Many QNAP systems have multiple network interfaces, and by default each network interface is configured to obtain individual IP addresses.

In this configuration, the Sooloos application expects to access the network using the first Ethernet interface, Ethernet 1.

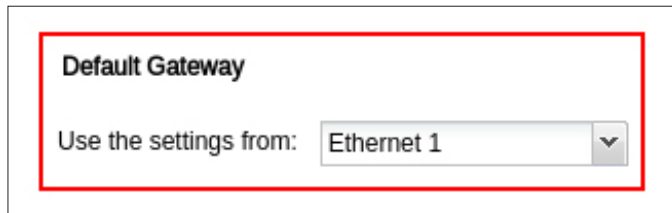
Since Ethernet 2 is not being used, ensure it is unplugged.

- Open **'Control Panel'**
- Select **'System Settings'** from the left-hand menu

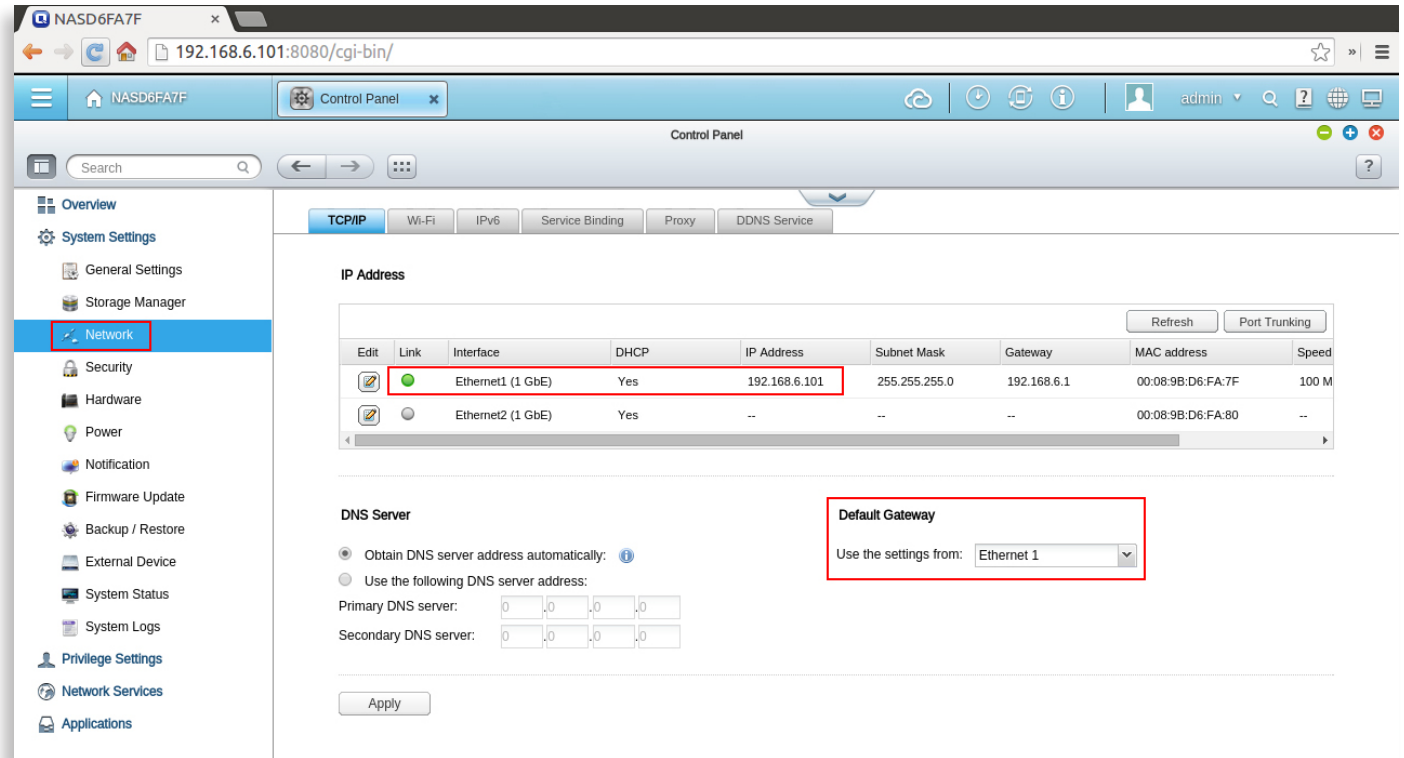
Link	Interface	DHCP	IP Address
	Ethernet1 (1 GbE)	Yes	192.168.6.101
	Ethernet2 (1 GbE)	Yes	--

- Select **'Network'**.

Notice that only Ethernet1 has been issued with an IP address.



- Ensure the **'Default Gateway'** is using settings from **'Ethernet 1'**.



Using a dual network interface configured for Port Trunking

- Ensure there are *two* Ethernet cables connected from the QNAP into a Gigabit Ethernet switch.
- Open **'Control Panel'**
- Select **'System Settings'** from the left-hand menu.
- Select **'Network'**.
- Click on **'Port Trunking'**.
- From the **'Trunking Group 1'** list, select the mode as **'Balance-alb'**.
- Select the radio buttons under **'Trunking Group 1'**.
- Click **'Apply'**.



The network will now restart, and you may need to reconnect to QTS. Notice the new Ethernet 1+2 on the network page.

Edit	Link	Interface	DHCP	IP Address	Subnet M
		Ethernet 1+2 (1 GbE)	Yes	192.168.6.101	255.255.2

The screenshot shows the QNAP Control Panel interface. The 'Port Trunking' tab is active, and a dialog box titled 'TCP/IP - Port Trunking' is open. The dialog box contains the following information:

Select the port trunking membership and mode. Please note that incompatible mode settings might cause the network interface to hang or affect the overall performance. For more information, please click [here](#).

Interface	Standalone	Trunking Group 1
Ethernet 1	<input type="radio"/>	<input checked="" type="radio"/> Balance-alb
Ethernet 2	<input type="radio"/>	<input checked="" type="radio"/>

Use the settings from:

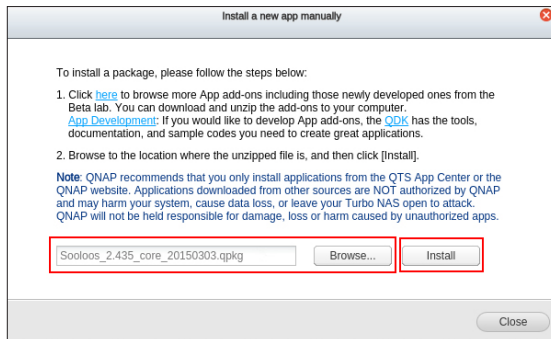
Buttons: Apply, Cancel

Installing the Sooloos QNAP Application



This section details installing the Meridian Sooloos package on to the QNAP. Please ensure that the previous configuration sections have been followed before installing the Meridian Sooloos package.

- From the QNAP desktop open the ‘**App Center**’.
It is recommended that you disable all unnecessary applications by turning them off.
- Click on ‘**Install Manually**’.
- Browse to the location of the downloaded Meridian Sooloos QNAP package.
- Click on ‘**Install**’ and follow the prompts to install the application.

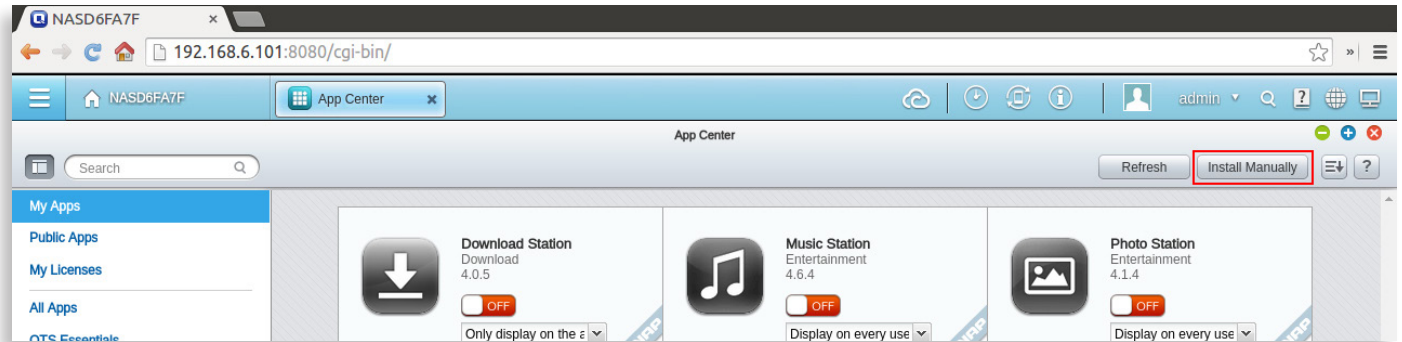


Once the Meridian Sooloos application has been installed, it appears as an application in the App Center.



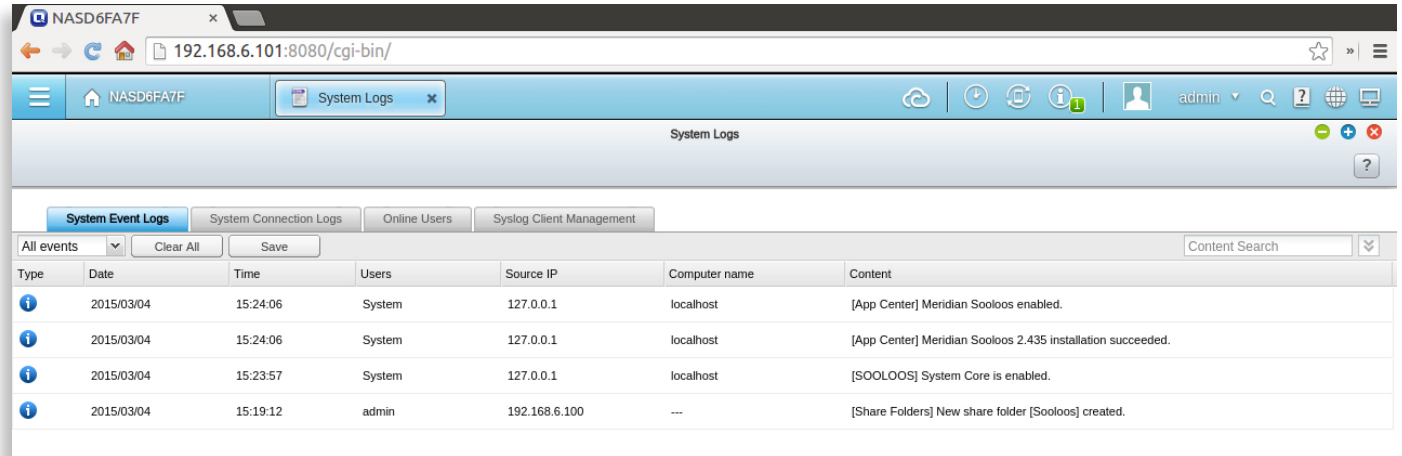
When upgrading a QNAP that already contains a Sooloos music library, there will be an initial delay before the Core becomes available due to the first-time creation of the library database. The delay is dependent on the number of albums in the library and is only present on the first run after installation.

- Click ‘**Open**’ in the Meridian Sooloos application section to launch the Sooloos WebClient (*right*) in a new tab.



Troubleshooting the Sooloos QNAP App installation

'Control Panel > System Logs' can be used to view any errors that occurred when enabling the Sooloos application.



Device Configuration

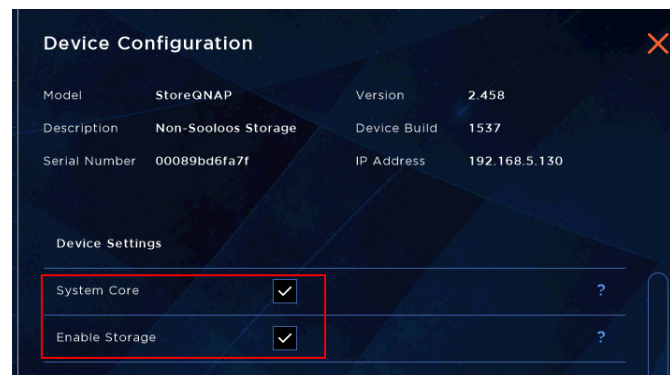
This section details the available device configuration for a StoreQNAP operating in a Meridian Sooloos system.

Device configuration can be accessed via a Control, or using the Meridian Sooloos Configure application.

- On a Control, access the 'Device Manager'.
- Select the 'StoreQNAP' from the device list.

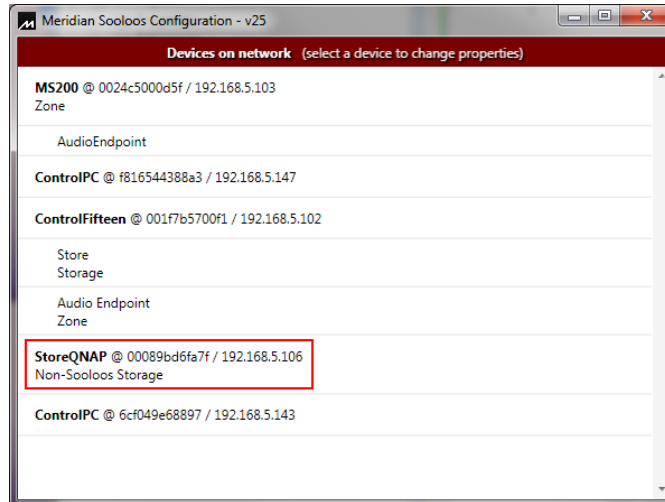
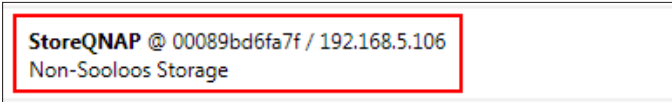
This will bring-up the 'Device Configuration' page.

The device settings available are to activate or deactivate 'System Core' and 'Enable Storage'.



Alternatively:

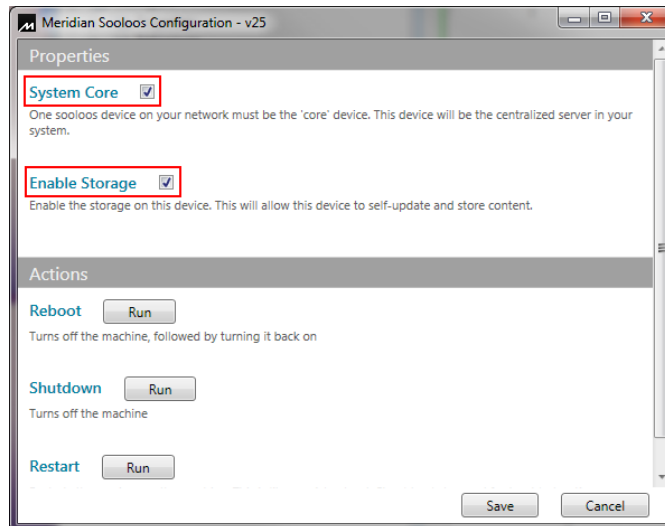
- On a Windows PC, launch 'Meridian Sooloos Configuration'.
- Select the 'StoreQNAP' from the device list.



This will bring up the 'Properties' page.

The device settings available are enable or disable 'System Core' and 'Enable Storage'.

- Click on 'Save' to store the configuration or 'Cancel' to disregard changes.



Appendix: QNAP Hardware Notes

The following is a recommended hardware specification for a QNAP running StoreQNAP. This document suggests two QNAP systems that employ Intel Celeron processors.

Note that QNAP products are not made by Meridian, and while the suggestions in this document have been tested by Meridian, we cannot guarantee performance or compatibility.

QNAP TS-251

The QNAP TS-251 is suitable for the majority of customers who require a capable media storage system for use with Sooloos.

<https://www.qnap.com/i/uk/product/model.php?II=142>

QNAP TS-453 Pro

The QNAP TS-453 is suitable for:

- The power user
- The user with an extensive collection
- Where there is a requirement to run an advanced RAID configuration, for example RAID 5;
- When the QNAP is required for other duties as well as running StoreQNAP.

<https://www.qnap.com/i/in/product/model.php?II=149>

The TS-453 is also available in a rack-mount version as the TS-453U.

RAM Expansion

It is recommended to upgrade the RAM of the QNAP from its default (typically 1GB) to a minimum of 4GB. As a guide, you need about 2GB of RAM for every 2,000 albums in your collection. All QNAPs can be upgraded by the end user without invalidating the warranty. QNAP provides detailed instructions on upgrading the RAM modules for each specific unit on their website.

The TS-251 is capable of being populated with 2 x 4GB RAM. This is advisable for large collections and when the QNAP is hosting other applications. When installing two memory modules, ensure that they are the same size and type of RAM for both memory slots.

The instructions to upgrade the RAM module in QNAP TS-251 can be found on the QNAP web site:

https://www.qnap.com/i/uk/support/con_show.php?cid=9#5_4

Hard drives

QNAP maintains a list of compatible hard drives for each QNAP product. For example, the hard drive list for the TS-251 can be found on the QNAP web site:

https://www.qnap.com/i/uk/product_x_grade/product_intro.php?g_cat=1&II=142

It is only possible to give broad guidelines on disk storage requirement for a given size of collection, as there are several variables. For example, if your entire collection is in FLAC format (having used Sooloos to import all your albums from CD), it will take up more space than a collection imported in lossy formats such as mp3 or AAC. As a guide, we would suggest you allow 1TB storage per 2,000 albums.

For a typical RAID configuration, two drives are used in parallel. You need an additional 1TB *on each drive* per 2,000 albums. We would recommend a minimum of 2 x 2TB drives: no more than 2 x 4TB should be necessary.