

How to Configure Storage

Expansion?

Key features:

VioStor NVR + Turbo NAS for Long-term Recording

1. Addressing user needs: Users can expand their storage capacity based on their needs.
2. Reducing expense: This is a cost-effective choice to expand storage.
3. Highly scalable for storage expansion in the future.

Note:

In order to ensure that Storage Expansion can be executed during the recording process, please be advised to estimate the limitation on network throughput for specific VioStor NVR series.

The following is suggested limitation of the network throughput for specific NVR models:

VS-8100 Pro+/8100U-RP Pro (+)/12100U-RP Pro (+) series: 360 Mbps.

VS-2100 Pro+/4100 Pro+/6100 Pro+ series: 160 Mbps.

VS-2000 Pro/4000 Pro/6000 Pro series: 90 Mbps.

Limitations and Restrictions:

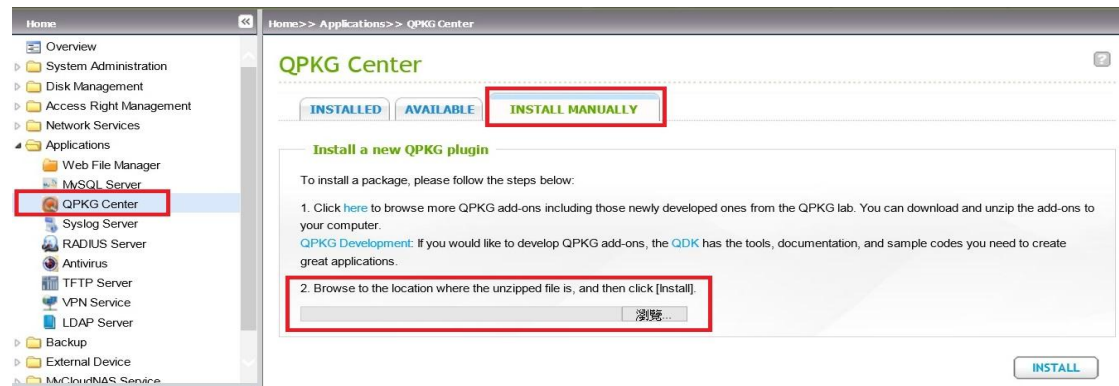
1. Currently, Storage Expansion is supported only by the VioStor Pro(+) series and QNAP Turbo NAS x69, x79, x70 series (with firmware version v3.8.3), and they are required to be set on the same LAN.
2. A gigabit switch is required for this application.
3. All NVR and NAS units are required to use only fixed IP addresses.
4. Modification on storage expansion related setting is not supported on local display.
5. The file moving process between the NVR and NAS will be completed even if it is suddenly interrupted (for example, the destination folder is deleted) . For example, the cache count is set to six hours. The destination is changed to none in the middle of the processing. When this happens, the NVR will still move recording files to the NAS until the entire process is finished.

Step 1: Install the StorageExpansion App (QPKG) on the NAS

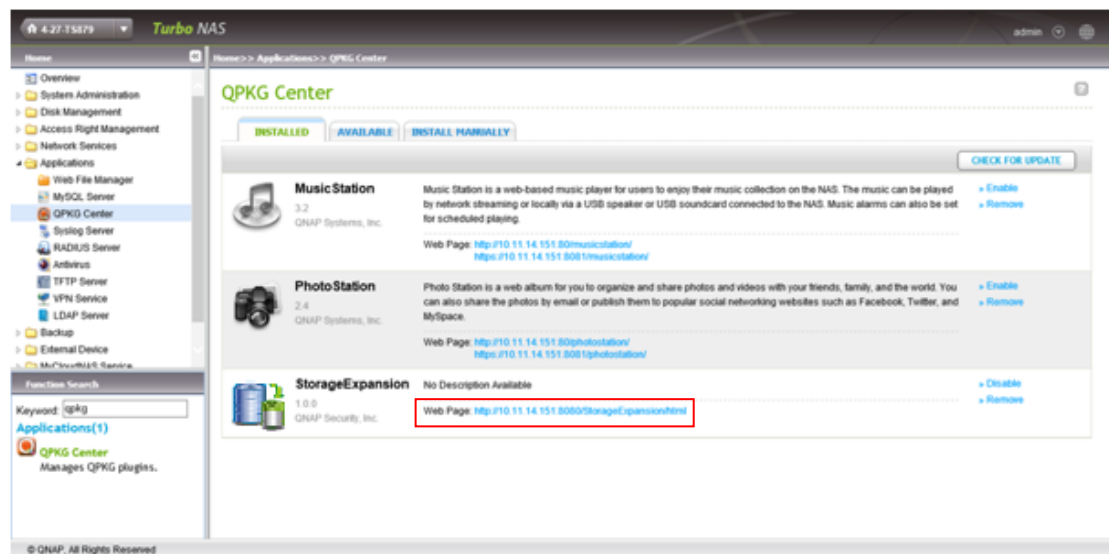
Note: Please visit our download center to download the QPKG. Before installing the QPKG package, please make sure the QPKG is correct, read the instructions carefully, and back up all the important data on the NAS.

1. Download and unzip the StorageExpansion package.

To install the QPKG, please click "Browse" to select the correct QPKG file and click "INSTALL".



2. After installation, click the link to connect to the webpage and configure the settings.



3. Check available NVRs on the list and their status on this page.

Storage Expansion

NVR List

<input type="checkbox"/>	NVR MAC Address	NVR IP Address	NVR Port	NVR Destination Folder	Status
<input type="checkbox"/>	00089BDA00DE	192.168.7.29	80	12164SEREP	

Delete

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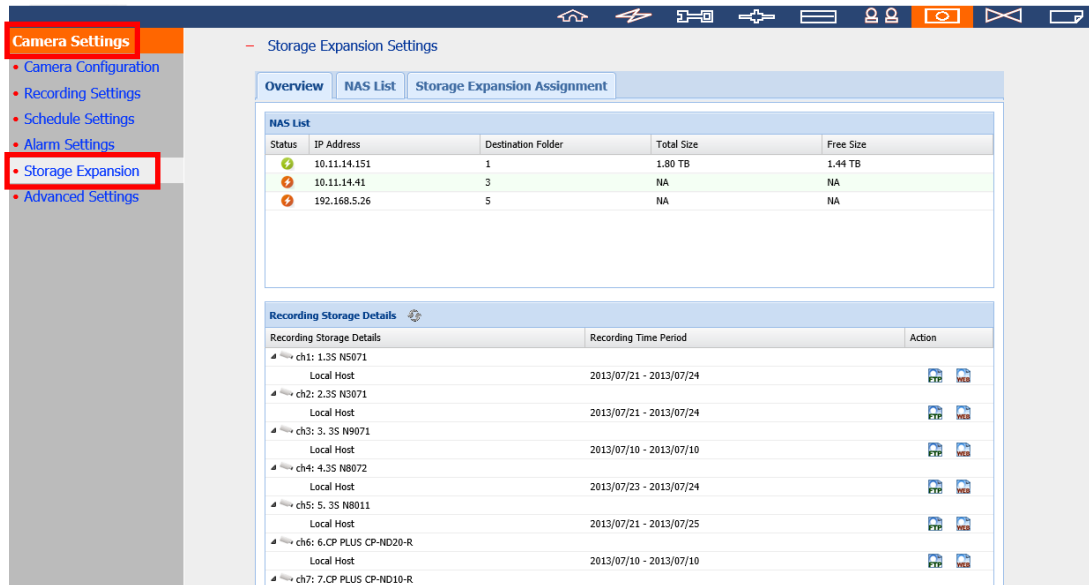
NVR 1 - 1 of 1

Status	Description
	Connection Success
	Failure of storage expansion due to incorrect storage expansion assignments (please check your setting on the storage expansion page.)
	Failure of storage expansion because Subnet Mask setting of NAS and NVR should be the same.
	Failure of storage expansion as the NVR (MAC address) is changed.
	Failure of storage expansion because no NVR is found.

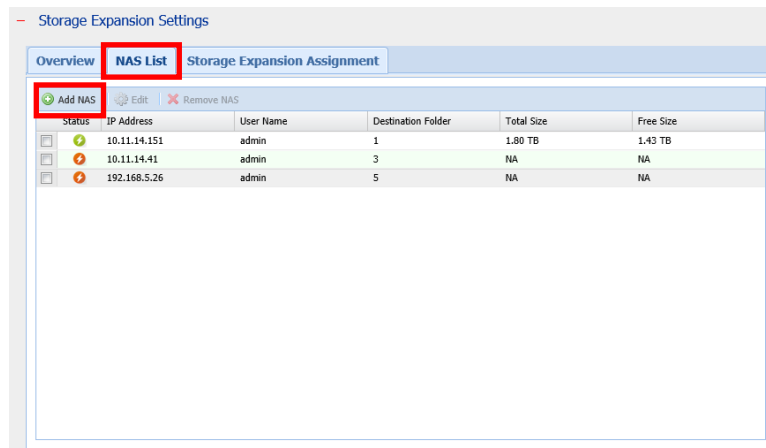
Note: The status of an NVR will become after storage expansion assignment is completed.

Step2: Please make sure that the StorageExpansion App (QPKG) has been installed on the NAS and enable Storage Expansion.

1. Go to "Camera Setting" → "Storage Expansion" to configure relevant settings on the page.



- Click "NAS List" then the "Add NAS" button.



- Please enter the IP, port, username, password, destination, volume and cache count for the NAS.

Add NAS

NAS IP Address:

Port:

User Name:

Password:

Destination Folder:

Volume:

Backup buffer: Hours

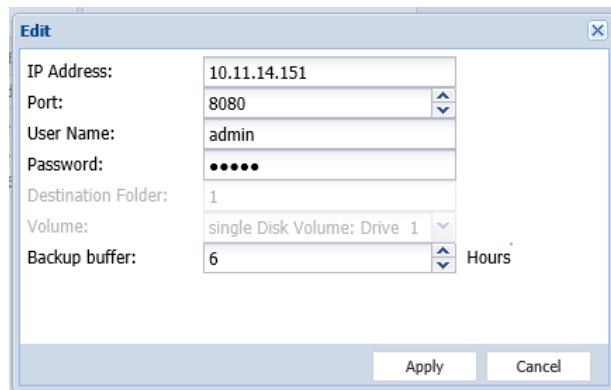
Note:

Destination Folder: The folder created on the NAS to save recording files.

Obtain NAS volume details: The volume assigned for storage expansion.

Backup buffer: The time it takes to move recording files to the NAS. The maximum value is 12.

4. You can enable a NAS and click Edit to modify NAS settings on this page.

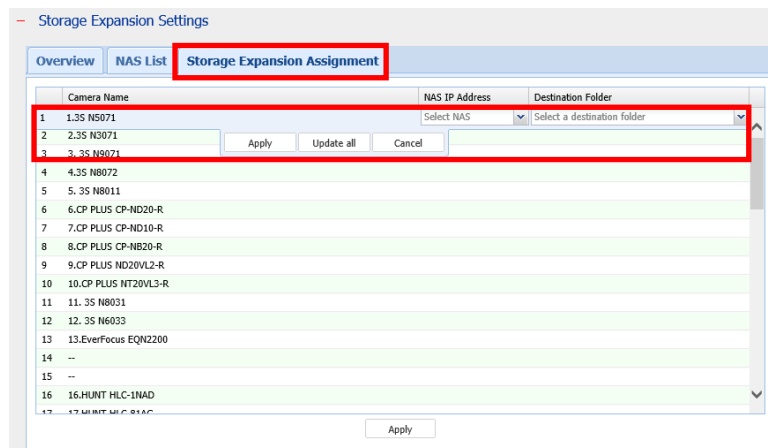


The 'Edit' dialog box contains the following fields:

- IP Address: 10.11.14.151
- Port: 8080
- User Name: admin
- Password: [masked]
- Destination Folder: 1
- Volume: single Disk Volume: Drive 1
- Backup buffer: 6 Hours

Buttons: Apply, Cancel

5. Click "Storage Expansion Assignment" to choose a NAS as the storage unit for each channel.

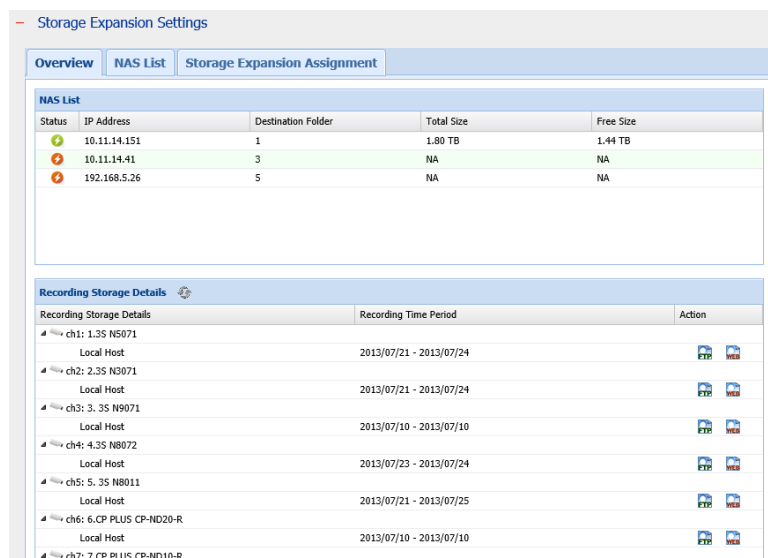


The 'Storage Expansion Assignment' tab shows a list of channels and their assigned NAS and destination folders. A red box highlights the first three channels.

Camera Name	NAS IP Address	Destination Folder
1. 1.3S N5071	Select NAS	Select a destination folder
2. 2.3S N3071		
3. 3.3S N9071		
4. 4.3S N8072		
5. 5.3S N8011		
6. CP PLUS CP-ND20-R		
7. CP PLUS CP-ND10-R		
8. CP PLUS CP-NB20-R		
9. CP PLUS ND20VL2-R		
10. CP PLUS NT20VL3-R		
11. 3S N8031		
12. 3S N6033		
13. EverFocus EQN2200		
14. --		
15. --		
16. HUNT HLC-1NAD		
17. HUNT HLC-1NAD		

Buttons: Apply, Update all, Cancel

6. Review all the configured settings and recording storage details under "Overview".



The 'Overview' tab displays the 'NAS List' and 'Recording Storage Details'.

Status	IP Address	Destination Folder	Total Size	Free Size
✓	10.11.14.151	1	1.80 TB	1.44 TB
✗	10.11.14.41	3	NA	NA
✗	192.168.5.26	5	NA	NA

Recording Storage Details	Recording Time Period	Action
ch1: 1.3S N5071	2013/07/21 - 2013/07/24	FTP
ch2: 2.3S N3071	2013/07/21 - 2013/07/24	FTP
ch3: 3.3S N9071	2013/07/10 - 2013/07/10	FTP
ch4: 4.3S N8072	2013/07/23 - 2013/07/24	FTP
ch5: 5.3S N8011	2013/07/21 - 2013/07/25	FTP
ch6: 6. CP PLUS CP-ND20-R	2013/07/10 - 2013/07/10	FTP
ch7: 7. CP PLUS CP-ND10-R		FTP

The page will automatically refresh the status every fifteen minutes.

The various QNAP Turbo NAS models are the solution that expands on the storage capacity of the NVR to save more recording files. Integration of both QNAP devices can help users to more flexibly and efficiently save recording files.