



# Milesight-Troubleshooting

How to use NAS on Milesight NVR

NVR Version XX.9.0.2 Update 2018.12.2
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## 1. What is NAS?

NAS(Network-Attached Storage) is dedicated file storage that enables multiple users and heterogeneous client devices to retrieve data from centralized disk capacity. Users on a local area network (LAN) access the shared storage via a standard Ethernet connection. Advantages of using NAS:

The key benefits of network-attached storage are mainly speed and convenience. Instead of a hard drive connecting to your computer, NAS connects to your wireless router – enabling multiple users from multiple devices to access the files on the network.

A NAS storage appliance is a computing device that can be attached anywhere on the network, primarily to store files. NAS solutions are nothing more than dedicated file servers.

#### Disadvantages of Using NAS:

NAS appliances share the network with their computing counterparts and hence the NAS solution consumes more bandwidth from the network. Also, the performance of the NAS will depend upon the amount of bandwidth available.

### 2. How to create NAS ?

Note: The ways Milesight NVR supported is NFS.

### 2.1 Physical NAS

If you have a physical NAS, take Synology as an example, you need to configure as follow.

• Create a shared folder

Go to "Control Panel"  $\rightarrow$  "Shared Panel"  $\rightarrow$  "Create".

	Create New Share	d Folder		
General File Indexing				
Name:	MS-NVR			
Description:				
Location:	Volume 1(Available: 47.90 GB)	•		
Hide this shared folder in	"My Network Places"			
Hide folders and files from	n users without permissions			
Enable Recycle Bin				
Restrict access to ad	ministrators only			
Encrypt this shared folder				
Encryption key:				
Confirm key:				
Mount automatically	on startup			



• Enable NFS Service and give NFS permission to NVR.

Go to "Control Panel"→ "File Services"→ "Win/Mac/NFS".

	Control Panel P - E X
A Search	Win/Mac/NFS FTP TFTP / PXE WebDAV
∧ File Sharing	Enable Bonjour Printer Broadcast
kared Folder	∧ NFS Service
File Services	Enable this function to allow users to access the server via NFS protocol.
2 User	Enable NFS
🔔 Group	NFSv4 domain:
Directory Service	Apply default UNIX permissions
∧ Connectivity	Modity the default read/write packet size below. Read packet size: 8KB
🥖 QuickConnect	Write packet size: 8KB 💌
😚 External Access	Configure Kerberos authentication settings by importing keys and mapping principals to local user accounts.
1 Network	Kerberos Settings
🛜 Wireless	Apply Reset

#### Go to "Shared Folder"→ "Edit"→ "NFS Permissions".

lostname or IP*:	192.168.7.80	NVR IP Add	lress
rivilege:	Read/Write	•	
Gquash:	No mapping	-	
Security:	sys	•	
Allow connections fr	rom non-privileged ports	(ports higher tha	n 1024)
<ul> <li>Allow connections fr</li> <li>You may specify a host</li> <li>Single host</li> </ul>	rom non-privileged ports t in three ways:	(ports higher tha	n 1024)
<ul> <li>Allow connections fr</li> <li>You may specify a host</li> <li>Single host</li> <li>Wildcards: *, *.sync</li> </ul>	rom non-privileged ports t in three ways: plogy.com	(ports higher tha	n 1024)

## Note:

- 1. The IP is NVR IP address.
- 2. Enable "Allow connection from non-privileged ports(ports higher than 1024)".

## 2.2 Non-Physical NAS

If you do not have a physical NAS, you can create a NAS in Linux, take Ubuntu as an example.

Note: The version of the Ubuntu i used to test is 18.04 .

- Create a root user
- 1. # sudo passwd
- 2. # su

Milesight



System update

# apt update

Set up Static IP address

For different versions of Ubuntu, the way to set a static IP address is different and unable to explain the setup method for all versions here, so please search for how to modify the static IP address for your Ubuntu version

Install NFS

# apt-get install nfs-kernel-server

root@sky-virtual-machine:/home/sky# apt-get install nfs-kernel-server
Reading package lists Done
Building dependency tree
Reading state information Done
nfs-kernel-server is already the newest version (1:1.3.4-2.1ubuntu5).
0 upgraded, 0 newly installed, 0 to <u>r</u> emove and 474 not upgraded.

• Create Shared projects

# cd /home/sky (Note: You can create the folder in different path as you want.)

# mkdir nfs\_shared

# chmod 777 -R nfs\_shared

root@sky-virtual-machine:/home/sky# cd /home/sky root@sky-virtual-machine:/home/sky# mkdir nfs\_shared root@sky-virtual-machine:/home/sky# chmod 777 -R nfs\_shared root@sky-virtual-machine:/home/sky#

Modify the NFS configuration file

# vi /etc/exports

root@sky-virtual-machine:/home/sky# vi /etc/exports



#### Insert content

# /home/sky/nfs\_shared \*(rw,sync,no\_root\_squash,no\_subtree\_check)



Start the service

# service portmap restart

# service nfs-kernel-server restart

root@sky-virtual-machine:/home/sky# service portmap restart root@sky-virtual-machine:/home/sky# service nfs-kernel-server restart

## 3. How to add NAS to Milesight NVR?

## 3.1 On Web

1. Go to "Setting"  $\rightarrow$  "Storage"  $\rightarrow$  "Disk Management"  $\rightarrow$  "Network Disk", and input some information about the NAS.

ŧ	Milesight	Disk Management
<u>_</u>	Local Configuration	HOD Management Hetwork Did.
Live View	Camera	
9	Storage	Loat Name L IP Address 102.108.724
Playback	Video Record	Directory /Joelung/JAS-19/8
22	Snapshot	Type INAS
Ratrieva	General Settings	Add Bach Add Delee
년 iman As	Storage Mode	<ul> <li>No. Tok Edit Tulate. Tik Marea. 19.44/sea. Tieretoo. Toes.</li> </ul>
~	Event	Note: It is visby to the data safety 2 too much bandwidth is occupied by NAS.
Settings	System	
尜		
Status		
Logs		
E+		
₽	📀 Milesight	Disk Management
÷	Local Configuration	HDD Management Network Disk
Live View	Camera	Pide Manon 1
9	Storage	P Address 192.108.7.64
Playback	Video Record	Directory /volume1/MS-NVR
	Snapshot	Type IMS
	General Settings	Add BachAdd Delete
imart An	Storage Mode	
*	Event	■         No.         Edit         Delete         Disk Nume         IP Address         Directory         Type           □         1         2 <sup>-4</sup> 1         1202187.264         Jorkman 10/65 Wit         NA5
Settings	System	
柴		
Status		
Logi		
E+		

2.Go to "HDD Management" to make sure the Status is "Normal".

₽	Milesight	Disk Management
=	Local Configuration	100 Marapernet Natasak Bisk
the View	Camera	Port Vender Status Total Free Property Type Group Edit Delete
9	Storage	□ 4 1 Normal 466 4768 RW NAS 1 1 .
Playback	Video Record	Total Capacity 93151G8
	Snapshot	Available Capacity 730.0068
Retrieve	General Settings	Referat Initializa
⊠	Disk Management	
mirt An	Storage Mode	
*	Event	
Settings	System	
** Status		
Loga		
E+ Logout		

# 3.2 On Monitor

~	Storag	ge							🗜 СРИ	5% Memory 30%
<b>.</b>		Disk Management								
	Port.	Vendo	¢	Status	Total(G8)	Free[G8]	Property	Туре	Group	Edit Delete
					ork Dick		_			
neral Settings		Network Disk	Network D	<sup>6k1</sup> 2						
sk Management		P Address	192.168.7	.84			•			
AID		No.	/volume1/	WS-NVR Dr	ectory					
	Total Capa	1		/volum	e1/MS-NVR					
					Search (	K Cancel	12			
						1				
Live View						Ad	d	Refresh	Init	Back

1.Go to "Storage"  $\rightarrow$  "Disk"  $\rightarrow$  "Add", and input some information about the NAS.

2. Make sure the Status is "Normal".

	Port V	'endor	Status	Total(GB)	Free(GB)	Property	Туре	Group	Edit	Delete
	17	1	Normal	48	46	R/W	NAS		ď	⑪
Total	Capacity(GB)	48								
Availa	able Capacity(GB)	46								

**Note:** After adding NAS, the NAS can be used to store video like ordinary HDD and form Group.

