



Milesight-Troubleshooting

How to use NAS on Milesight NVR

NVR Version	XX.9.0.2	Update	2018.12.20
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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.

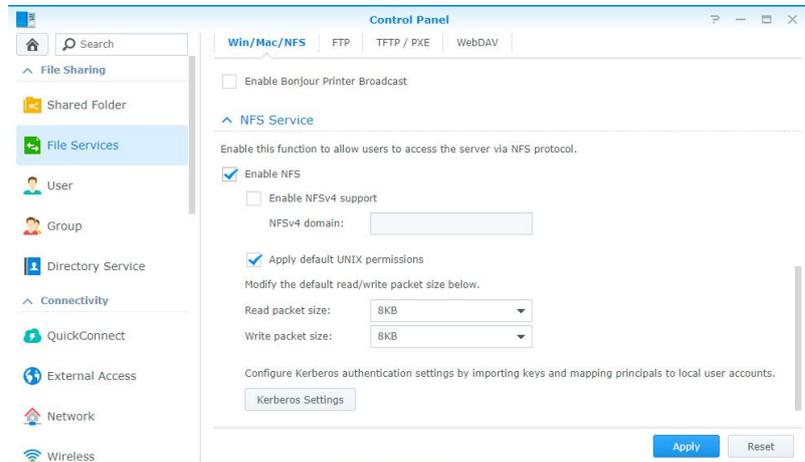
- Create a shared folder

Go to “Control Panel”→”Shared Panel”→”Create”.

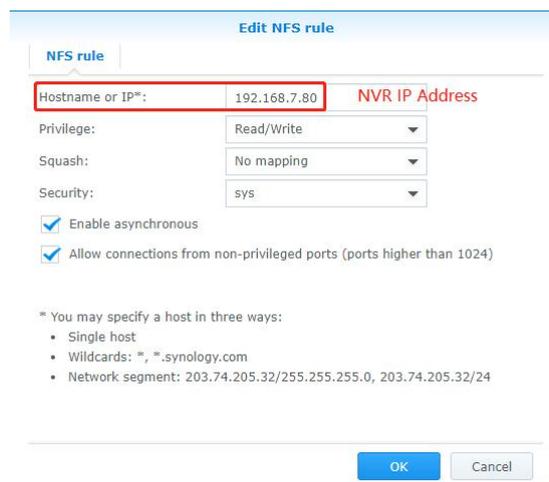
The screenshot shows a 'Create New Shared Folder' dialog box. It has two tabs: 'General' and 'File Indexing'. The 'General' tab is active. The 'Name' field contains 'MS-NVR'. The 'Description' field is empty. The 'Location' dropdown menu is set to 'Volume 1 (Available: 47.90 GB)'. There are several checkboxes: 'Hide this shared folder in "My Network Places"', 'Hide folders and files from users without permissions', 'Enable Recycle Bin', 'Restrict access to administrators only', 'Encrypt this shared folder', and 'Mount automatically on startup'. There are also fields for 'Encryption key:' and 'Confirm key:'. At the bottom right, there are 'OK' and 'Cancel' buttons.

- Enable NFS Service and give NFS permission to NVR.

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



Go to “Shared Folder”→ “Edit”→ “NFS Permissions”.



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

```
sky@sky-virtual-machine:~$ sudo passwd
[sudo] password for sky:
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
sky@sky-virtual-machine:~$ su
Password:
root@sky-virtual-machine:/home/sky#
```

- 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 remove 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)
```

```
File Edit View Search Terminal Help
# /etc/exports: the access control list for filesystems which may be exported
# to NFS clients. See exports(5).
#
# Example for NFSv2 and NFSv3:
# /srv/homes hostname1(rw,sync,no_subtree_check) hostname2(ro,sync,no_sub
# tree_check)
#
# Example for NFSv4:
# /srv/nfs4 gss/krb5i(rw,sync,fsid=0,crossmnt,no_subtree_check)
# /srv/nfs4/homes gss/krb5i(rw,sync,no_subtree_check)
/home/sky/nfs_shared *(rw,sync,no_root_squash,no_subtree_check)
```

- Start the service

```
# service portmap restart
```

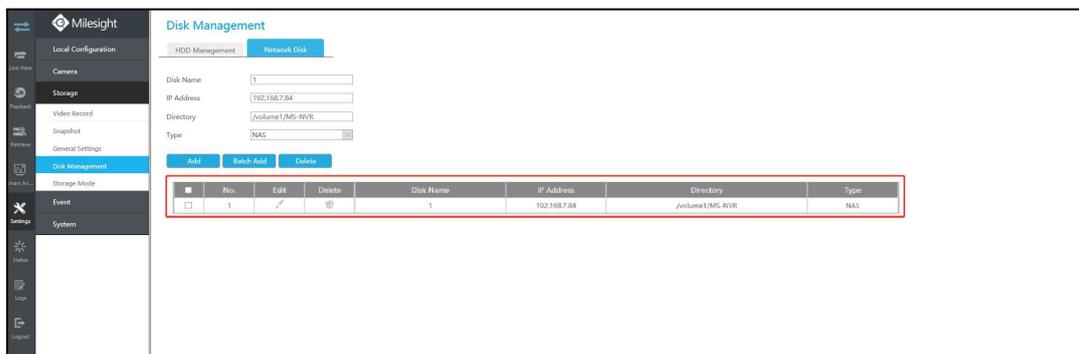
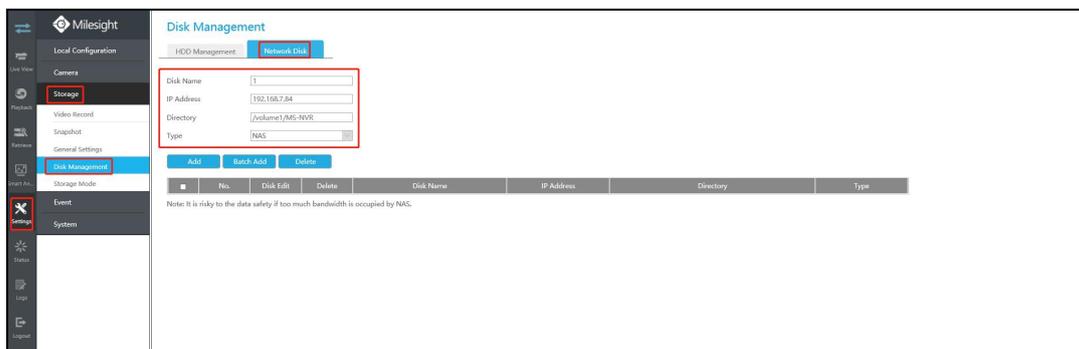
```
# service nfs-kernel-server restart
```

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

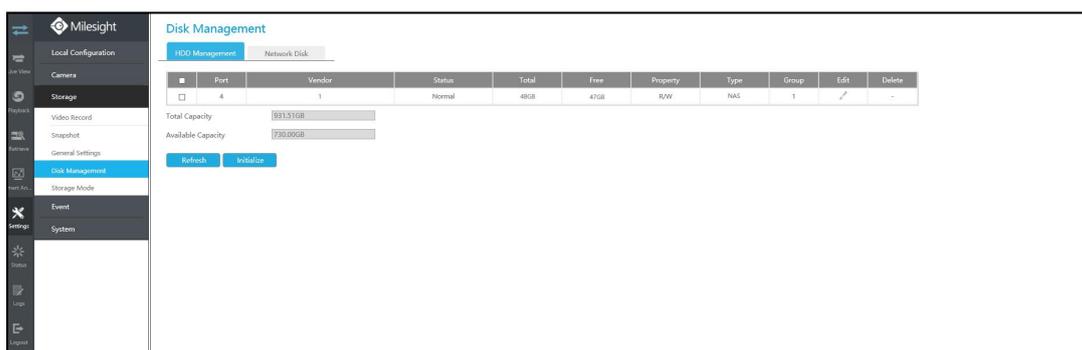
3. How to add NAS to Milesight NVR?

3.1 On Web

1. Go to “Setting” → “Storage” → “Disk Management” → “Network Disk”, and input some information about the NAS.

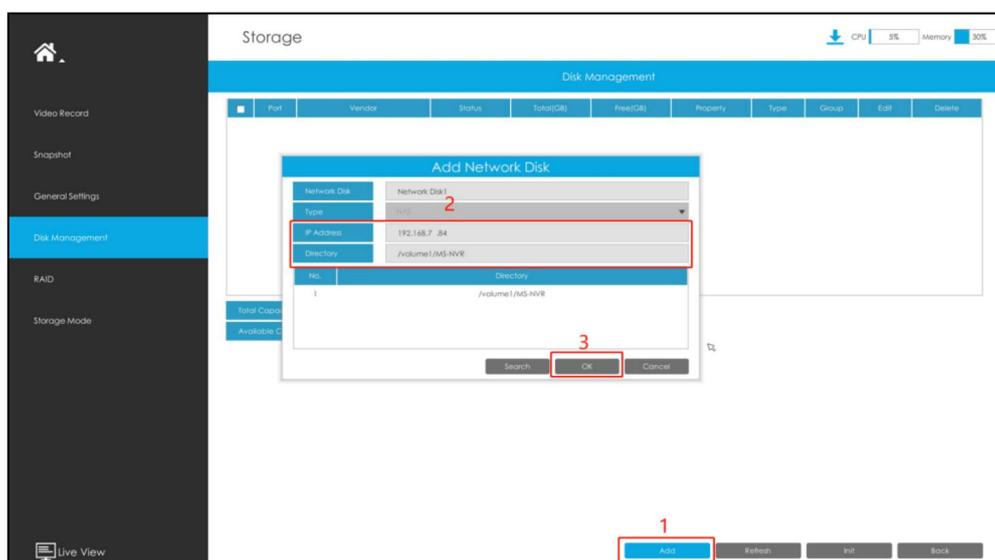


2.Go to “HDD Management”to make sure the Status is “Normal”.



3.2 On Monitor

1.Go to “Storage”→ “Disk”→“Add”, and input some information about the NAS.



2.Make sure the Status is “Normal”.



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

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