How to Expand iSCSI for NVR7316

Application Notes

Version <1.0>

Surveon Complete Megapixel Solutions Technical Support Team

Preface

In this application guide, we are going to introduce how to setup the iSCSI storage devices and how to add iSCSI storage devices to Linux based NVR.

Follow the steps below to complete configurations:

1. **How to Connect to iSCSI-based Storage and NVR7316 ?**
2. **Configure iSCSI Storage.**
3. **Add iSCSI Storage to Linux-based NVR.**

1. How to Connect to iSCSI-based Storage and NVR7316?

■ The image below shows the rear panel of iSCSI storage, and location of all ports.

■ The image below shows the LAN port for iSCSI traffic which is mainly used for the purpose of configuration management.

■ Channel 0~3 are 4-portchannelsfor iSCSI storage. Each channel, as one logical volume, will assign an IP address.
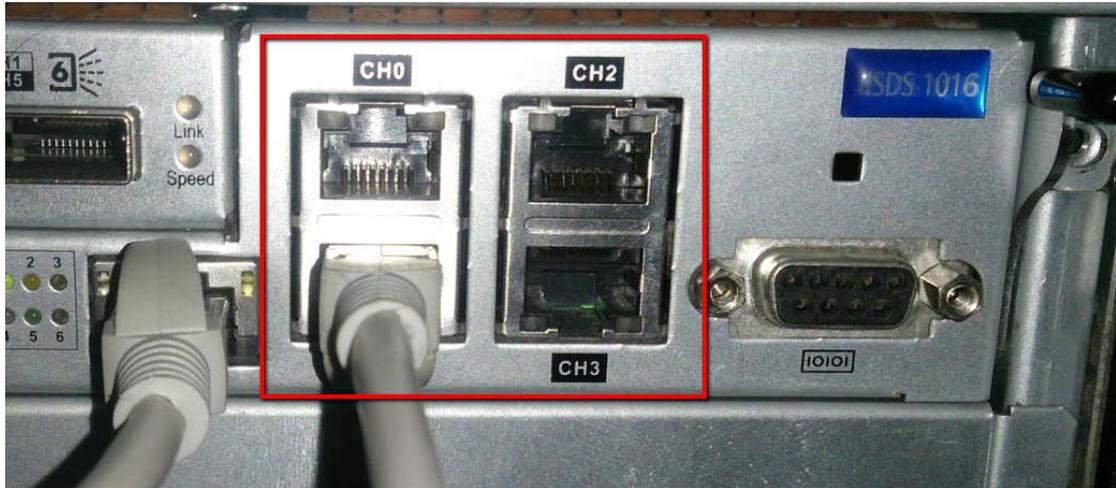
※ All the network cables must connect to GigaLAN Ports from core switch to your network.

2. Configure iSCSI Storage.

2.1 Install SANWatch Software Suite and Log in.

2.2 Add New Storage Devices.

2.3Create a New Logical Volume.

2.4Create New Partitions.

2.5 Host LUN Mapping

2.1 Install SANWatch Software Suite and Log in.

■ Go to SANWatch download link:

https://www.dropbox.com/home/Surveon/Public/Tool?preview=SANWatch_3.0.j.27.zip

■ Download the software and Unzip it.

- Double click the "setup.exe" to launch the installation wizard.
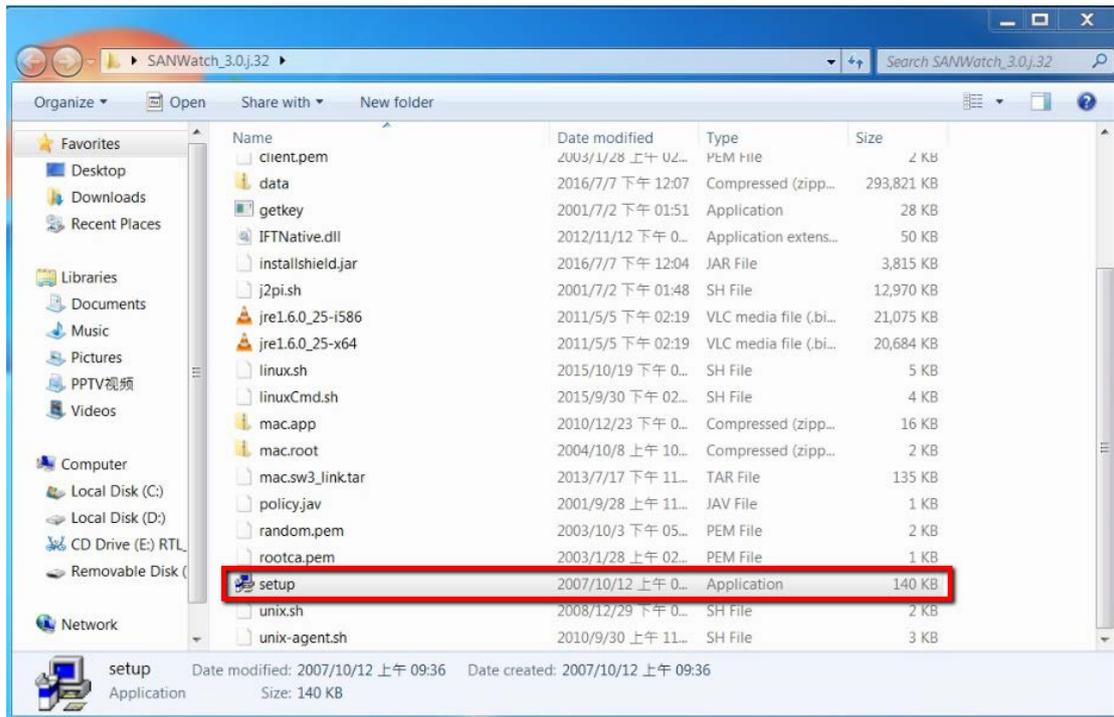
- Press "OK".

- Follow the steps to install it step by step. Click "Next" to continue.
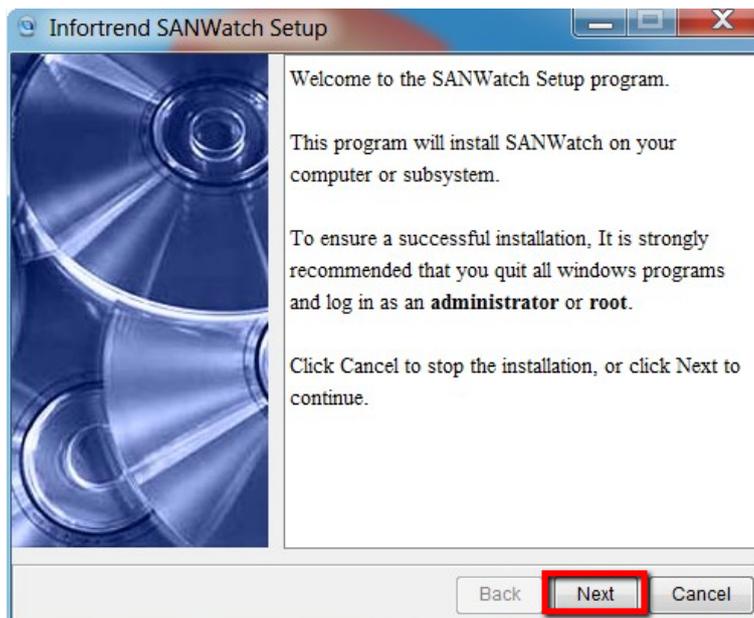
■ In this step, press "Browse…" to select the path where you want to save it.
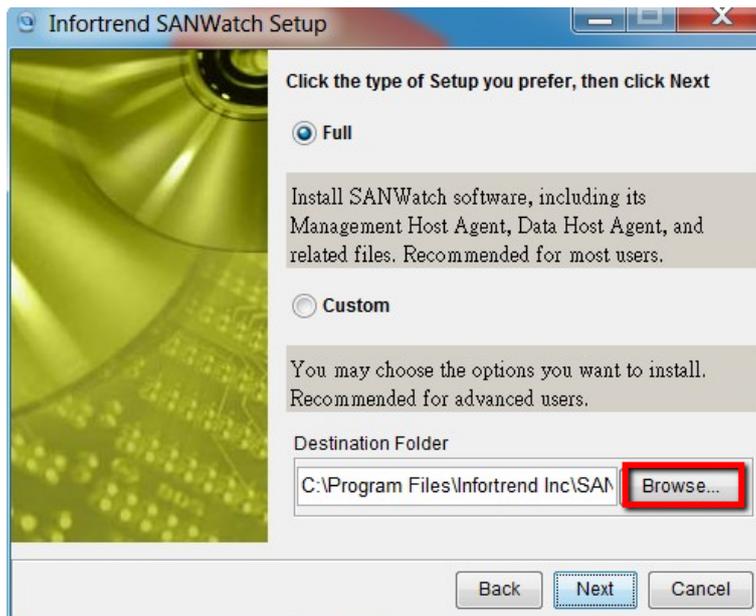
■ Press "Next".
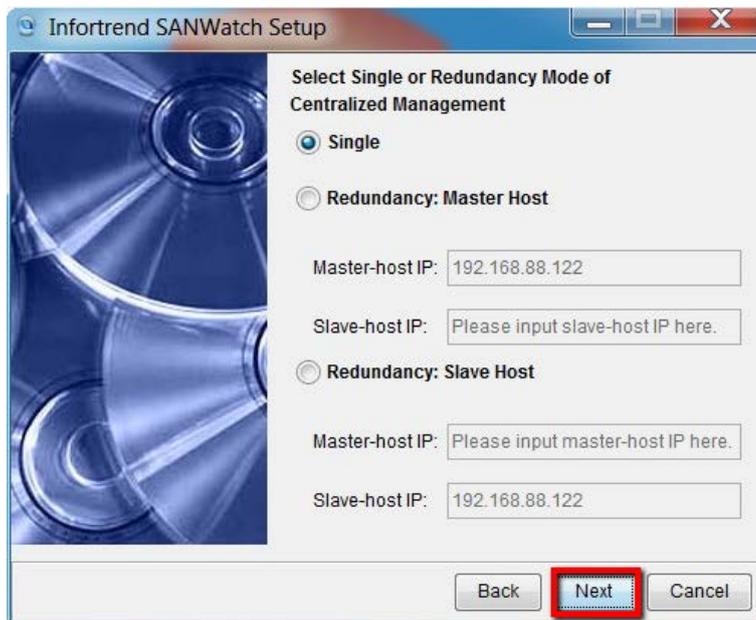
■ After finished, it will show the information below. Then close all the running programs and restart your computer to take effect the settings.
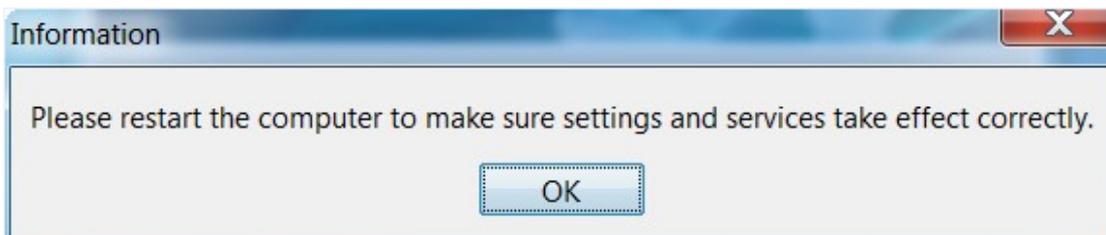
■ After restarting, press the "SANWatch" icon on your desktop.

■ Log in SANWatch platform. The default password is root and use the default as ID.
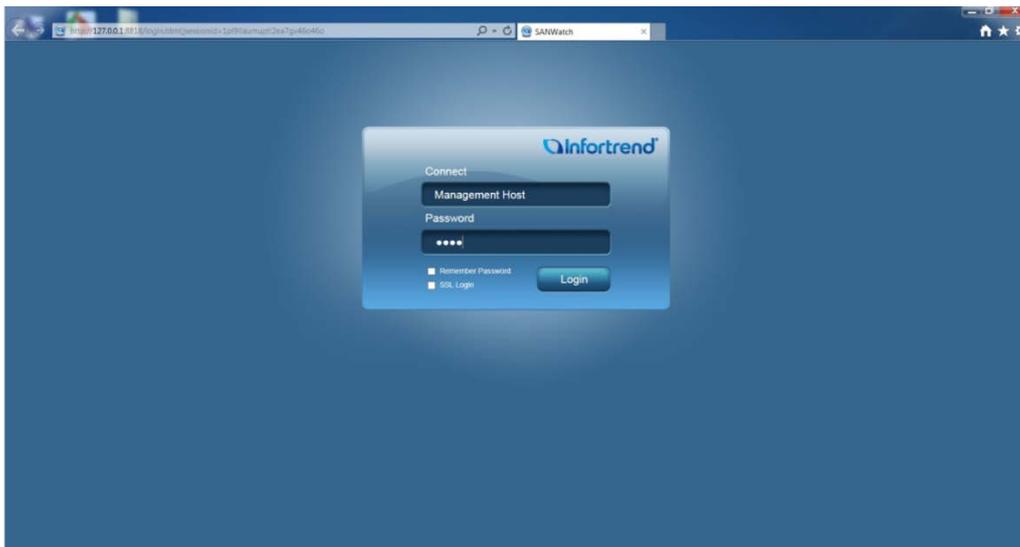
2.2 Add New Storage Devices.

■ Users can go to "Tasks" >"Auto Discovery" to search your iSCSI device automatically. Or go to "Tasks" >"Add Device" add the iSCSI device(s) manually.
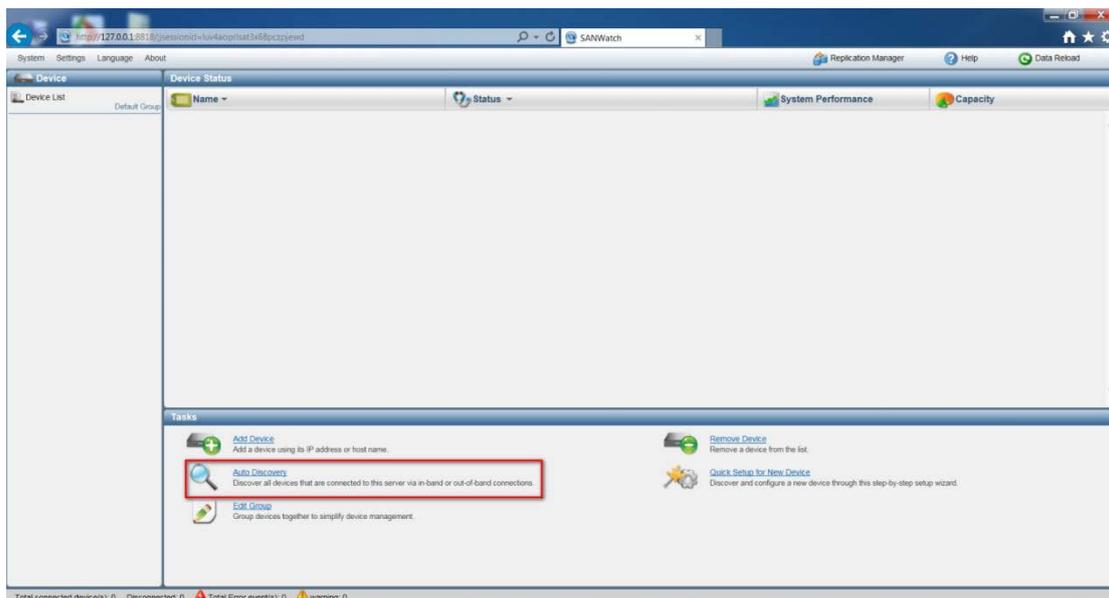
■ For "Auto Discovery" selection, assign the scan range of starting IP address, and ending IP address.
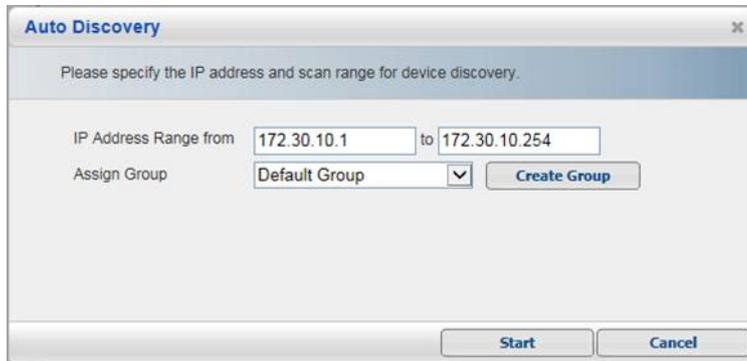
2.3 Create a New Logical Volume.

■ After adding on a new storage device to the device list, click the device name and click "Logical Volumes". Then, go to "Task" > "Create Logical Volume" to create new logical volume(s).
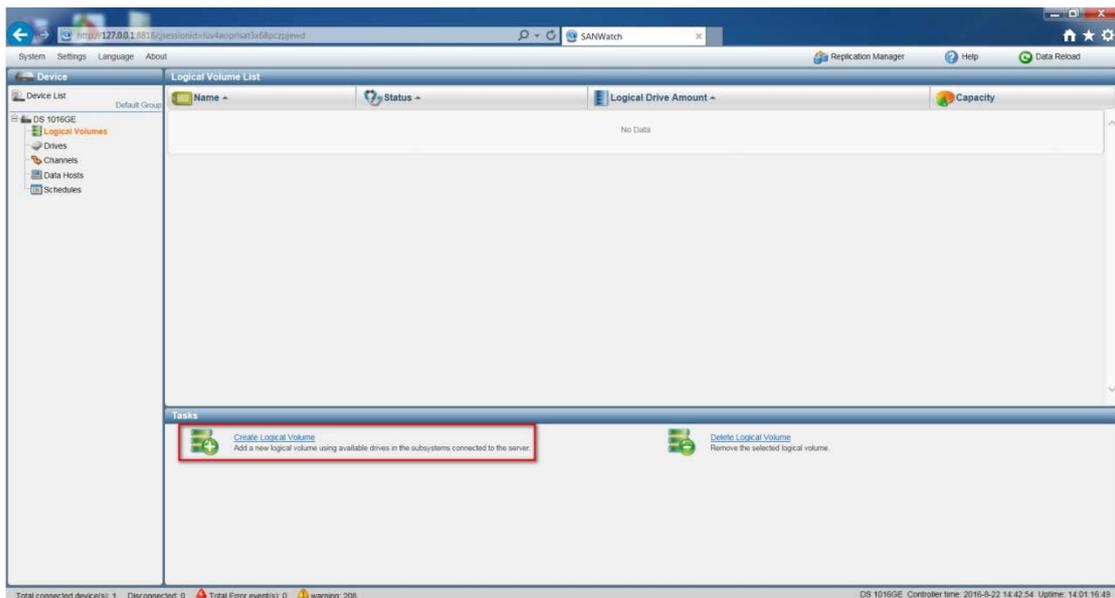
■ Select the HDD(s) from illustration below by clicking the HDD(s) or checking the slot-number. The selected HDD(s) will turn highlighted yellow. Then, in "RAID Level" drop-down list, select one RAID Level for this new logical volume. Select "Next" to proceed.

■ When finishing, check the summary list and press "OK"> "Close" to exit.

2.4 Create New Partitions.

■ In the new logical volume, select "Partitions"> "Create Partition" to create a new partition.
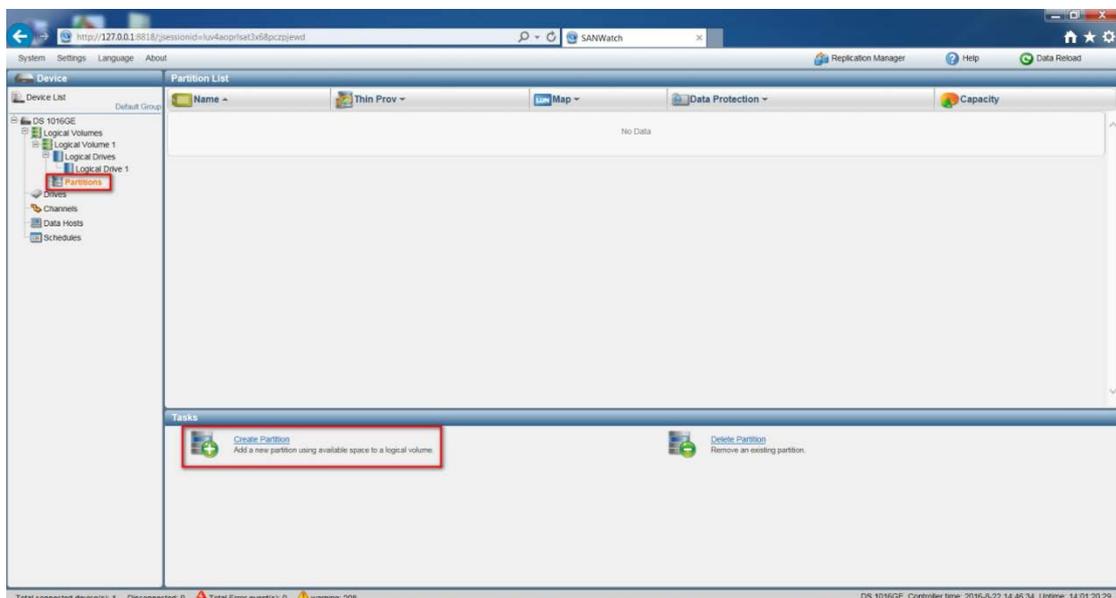
■ Create a new partition and assign complete free size in this partition.

■ Press "Yes".

■ Press "OK" to finish creating the new partition. In the pop-up information, press "Close" to exit.
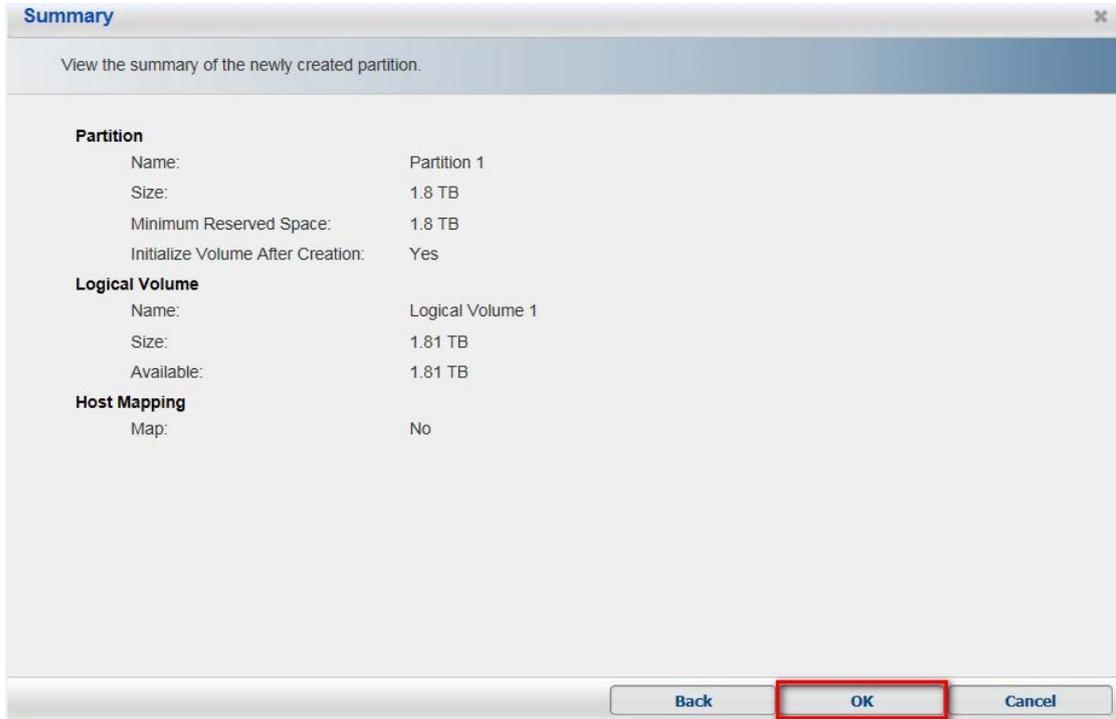
2.5 Host LUN Mapping

■ Select new partition and go to "Task" >"Host LUN Mapping".
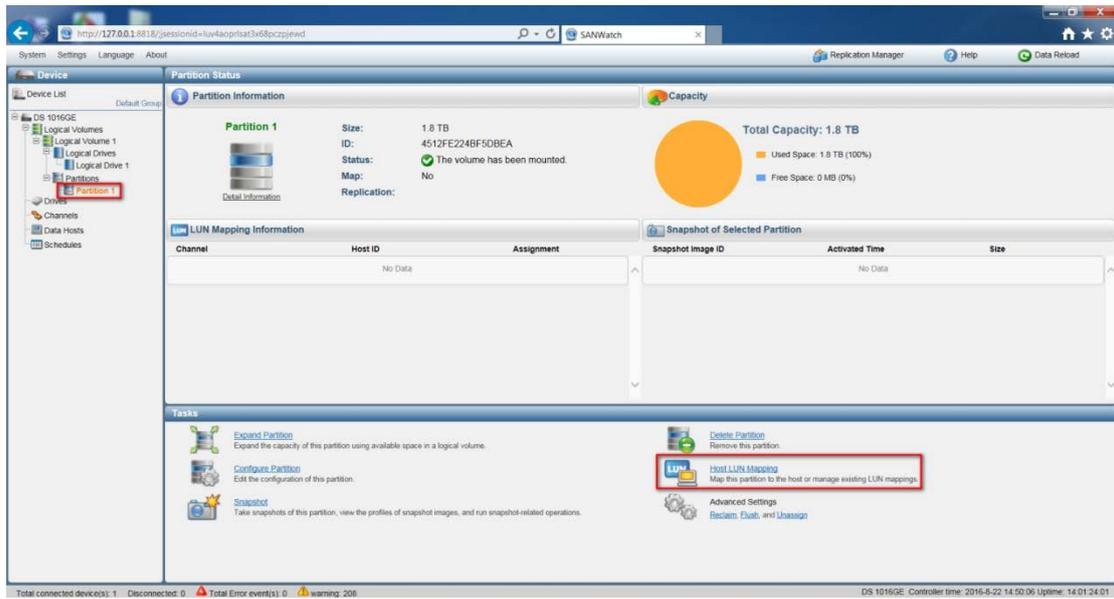
■ Press "Create" to create a new LUN Mapping.
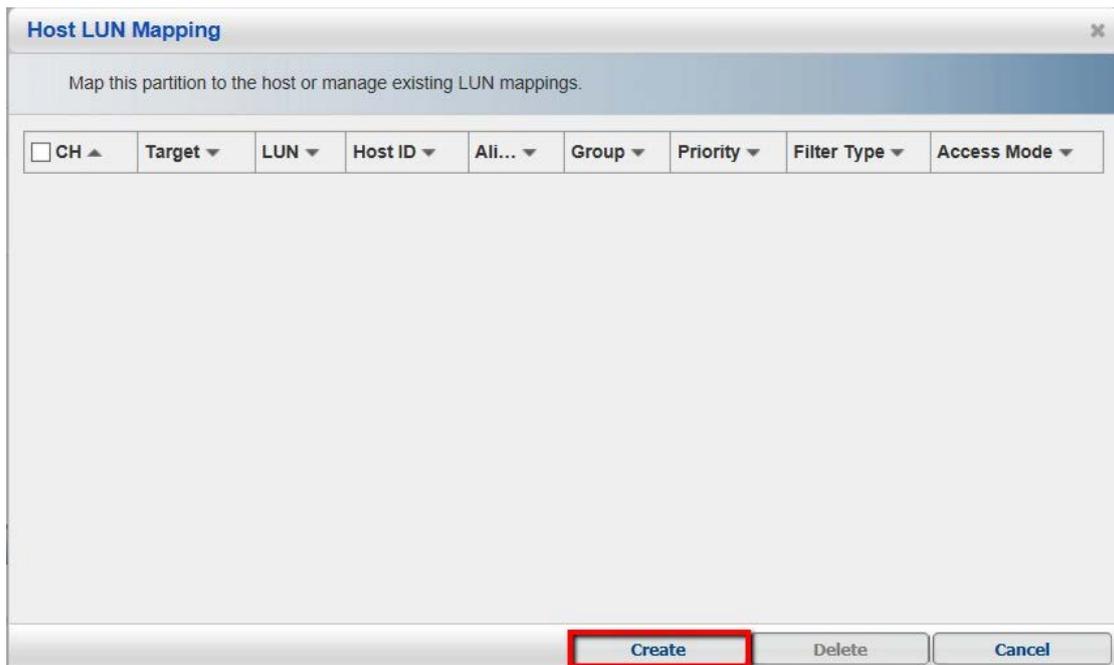
- In configuration window, check "Customize the host LUN mapping configurations" and select "iSCSI 1.0 Gbps". Then, select one Channel among Channel 0~3. Press "OK" and "Close" to exit.

■ In the table, we can see the channel number displayed and press "Cancel" to exit.
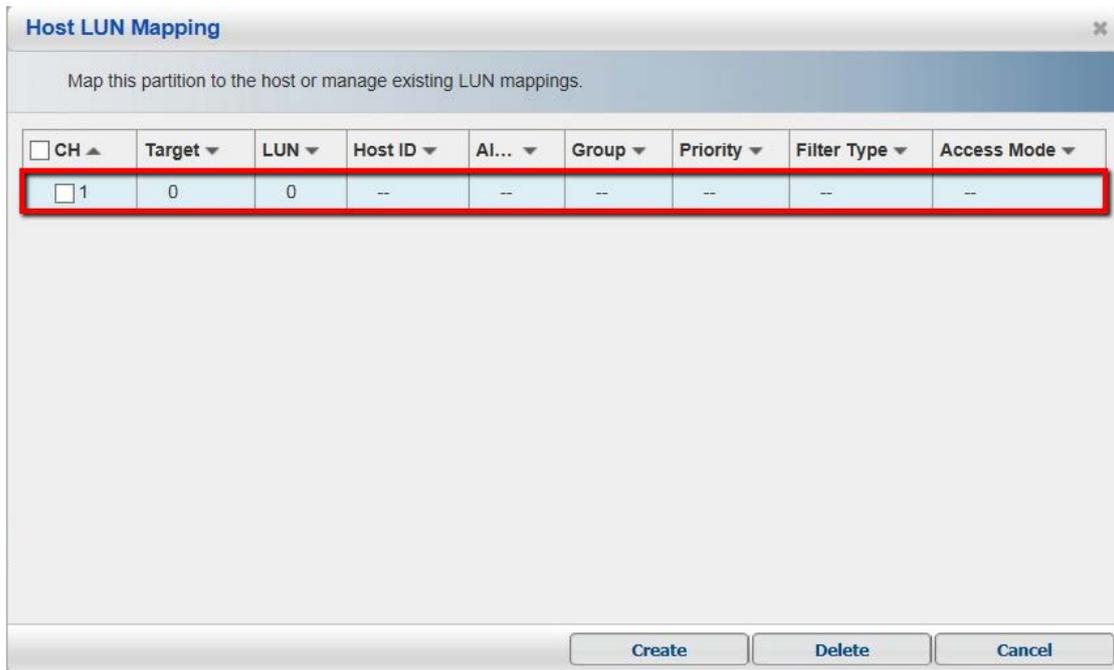
■ Go to "Channels" > "Task" > "Host Channel Settings".
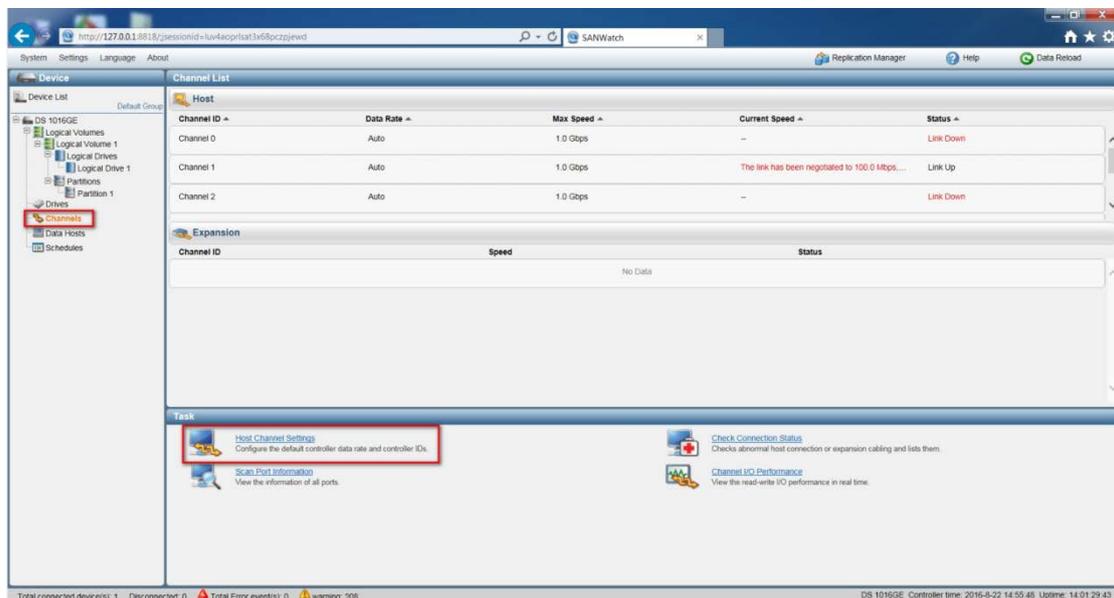
■ Select the channel just created, and then press "Configure".
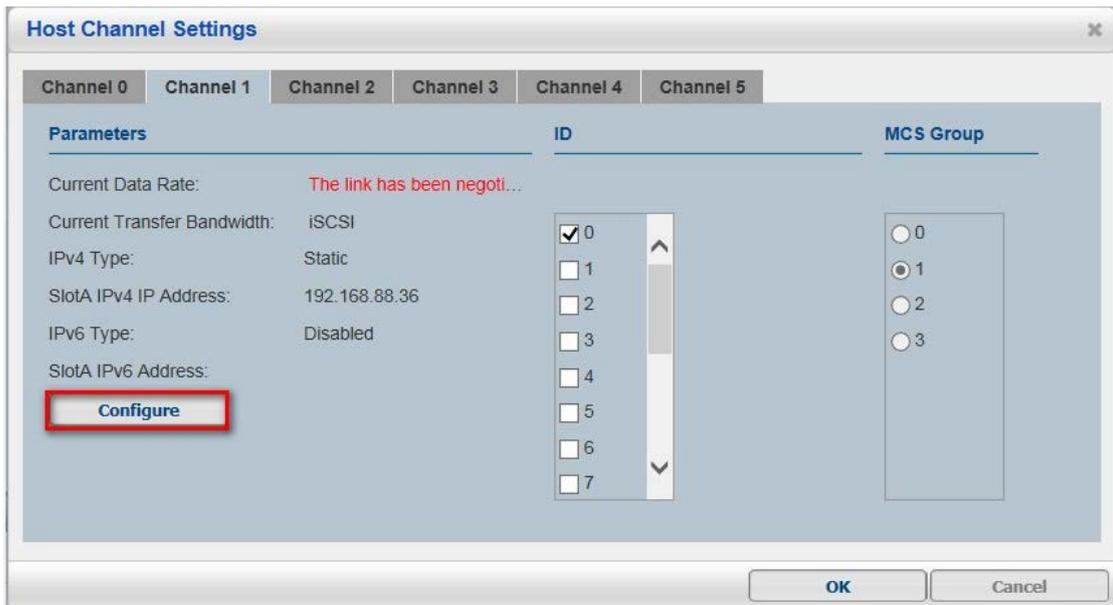
■ Setup the IP address, subnet mask and default gateway for this channel. Press "OK" and "Yes".
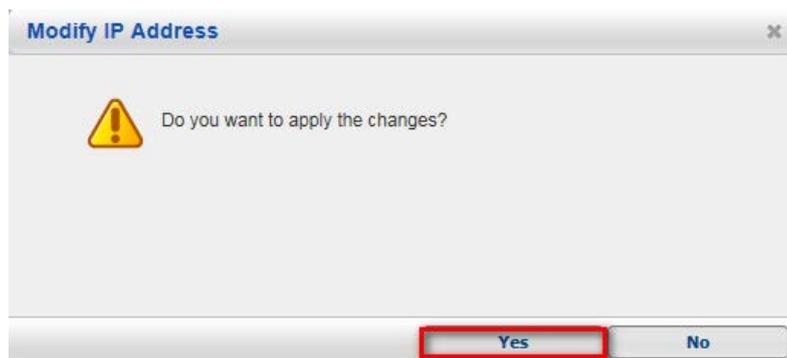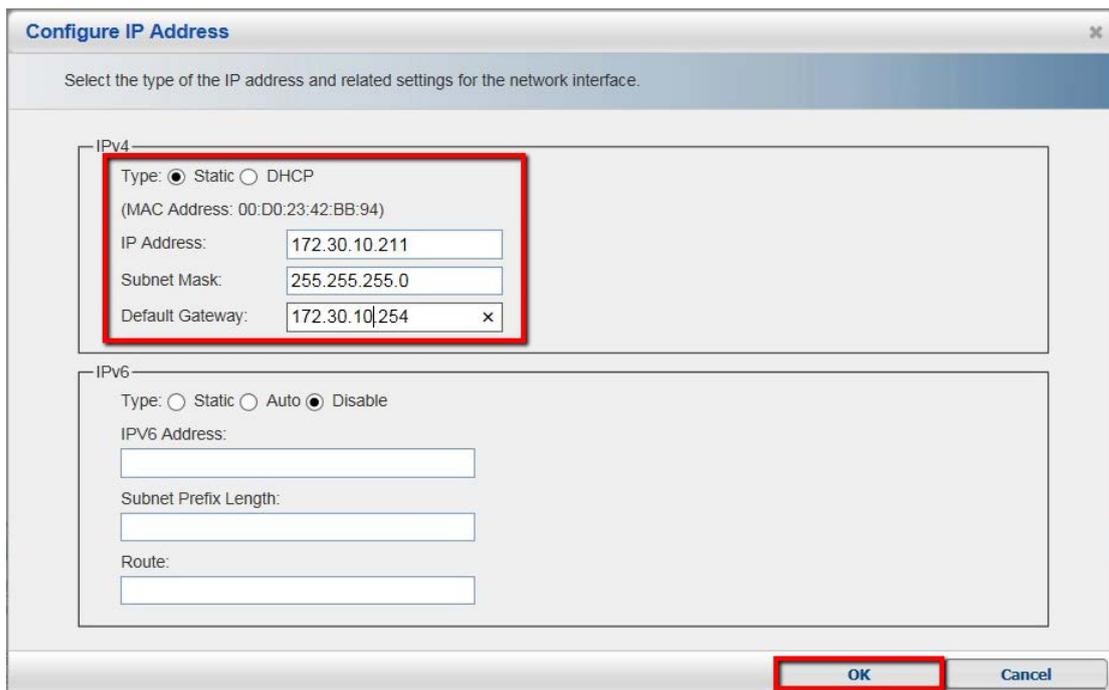
■ After finishing, clicking the channel tab, you will see the IP address has been assigned to this channel.
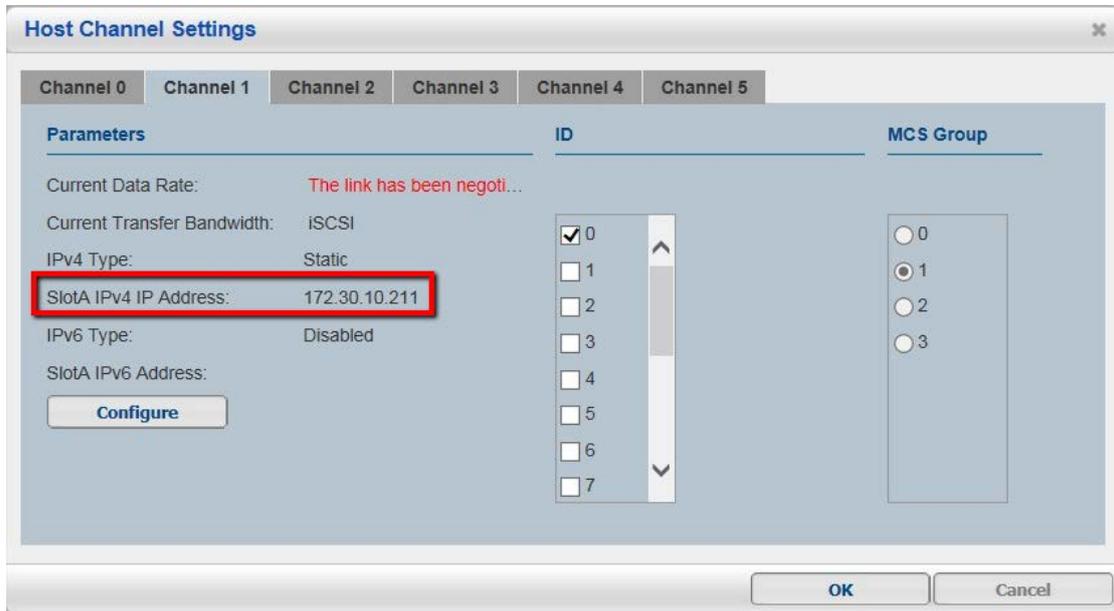
3. Add iSCSI Storage to Linux-based NVR.

■ Go to NVR local server screen, "Setup" ⚙ >"Record">"Storage".
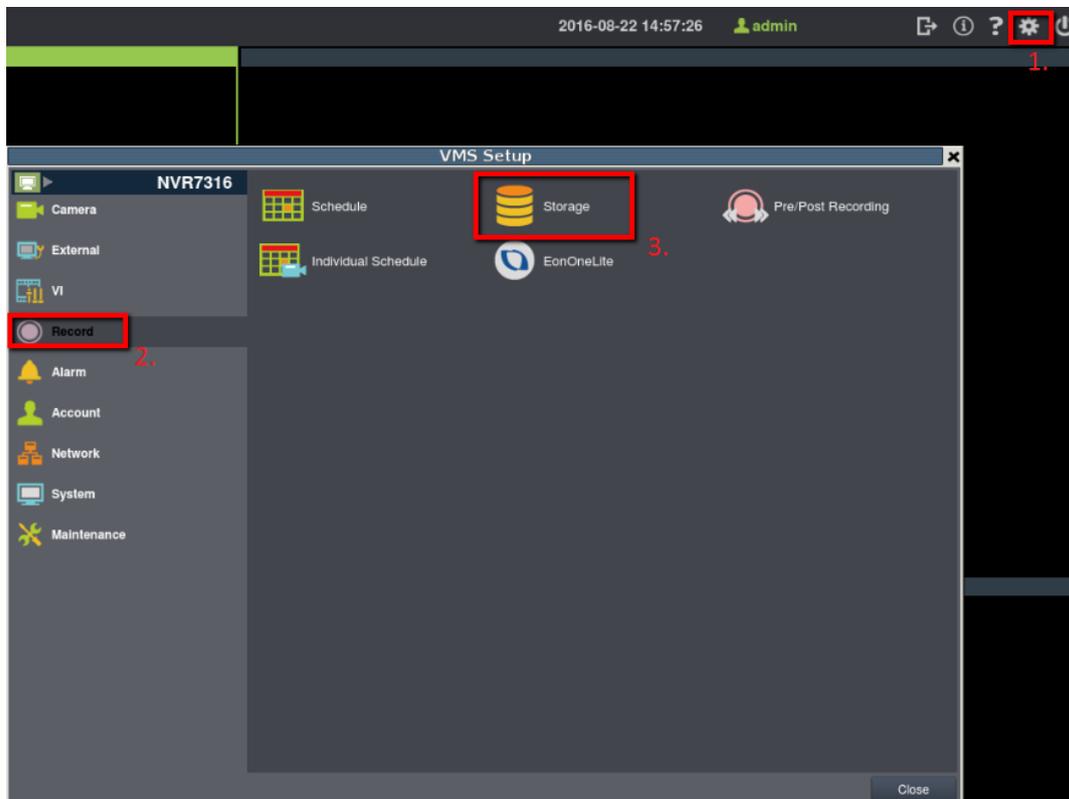
■ Press "Setting".
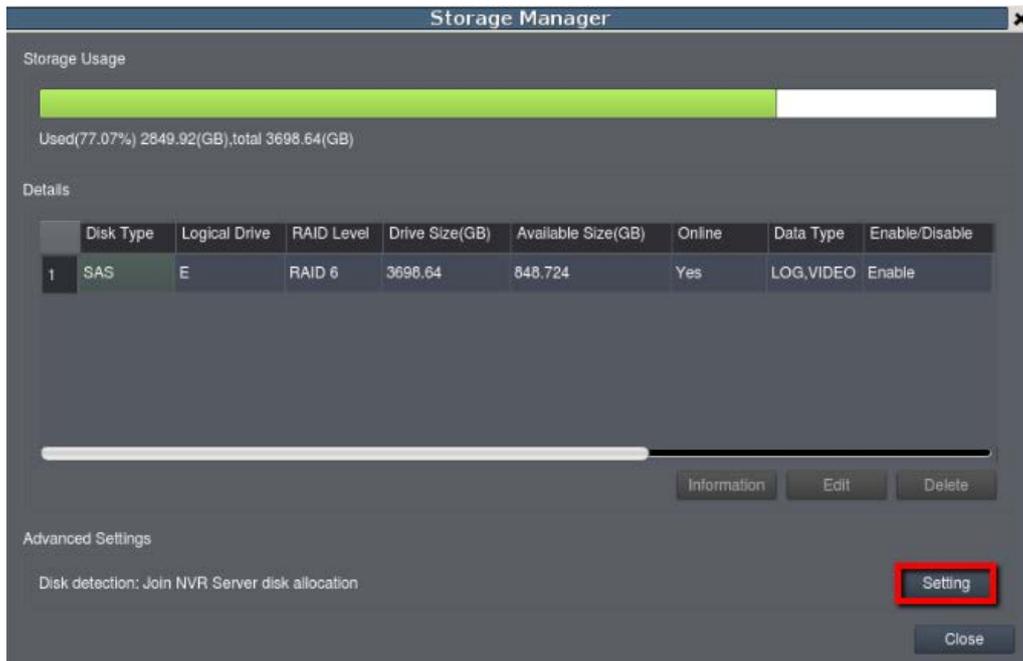
■ Select "IP Storage" tab>"Add".
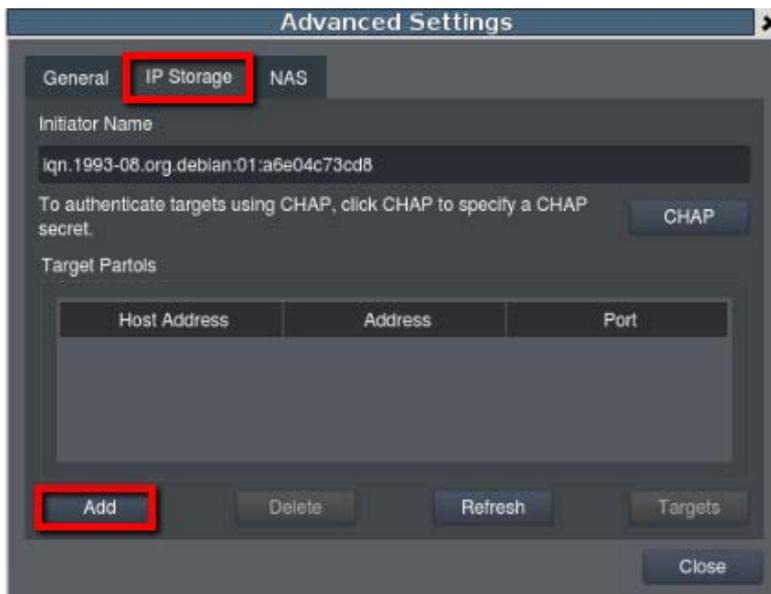
■ Enter one iSCSI IP address.

Type the Host Address to setup your iSCSI: Enter the storage LAN IP address.

➢ (For example, we set IP as 172.30.10.241.)

Data Address: Enter the storage Channel IP and port number.

➢ (For example, we set IP as 172.30.10.211.)

■ Click "Targets".

■ Click "Connect". After connected, the status will change to "Connected", and then press "Close" to exit.

■ Select "General" tab>"Check".
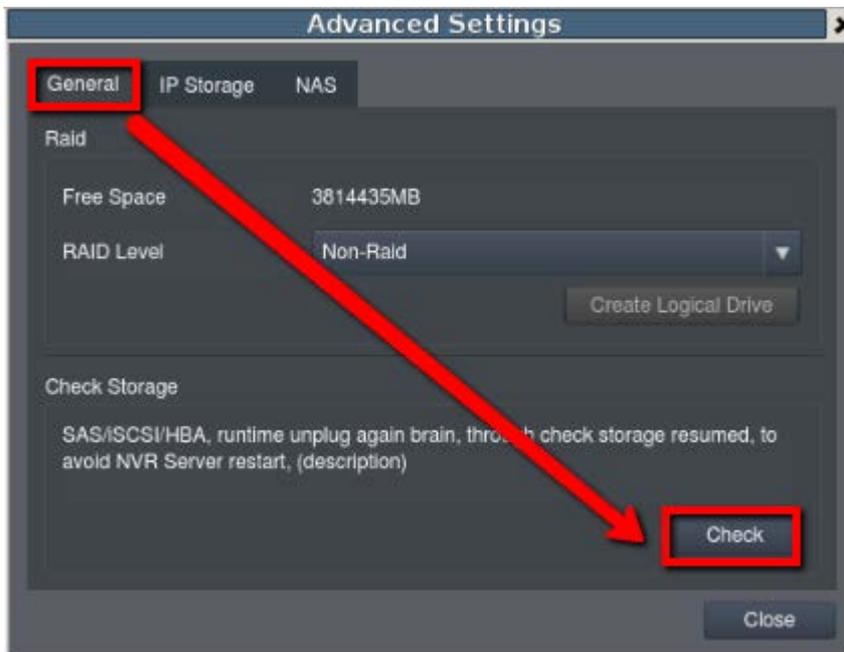
■ After finishing all steps, close the window. In Storage Manager, you will see from the list that iSCSI has been added to NVR system.

	Disk Type	Logical Drive	RAID Level	Drive Size(GB)	Available Size(GB)	Online	Data Type	Enable/Disable
1	SAS	E	RAID 6	3696.94	848.124	Yes	LOG VIDEO	Enable
2	ISCSI	F	RAID 6	1845.95	1660.96	Yes	NO	Enable

Storage Manager

Storage Usage

Used(54.74%) 3034.92(GB),total 5544.60(GB)

Details

Information   Edit   Delete

Advanced Settings

Disk detection: Join NVR Server disk allocation   Setting

Close