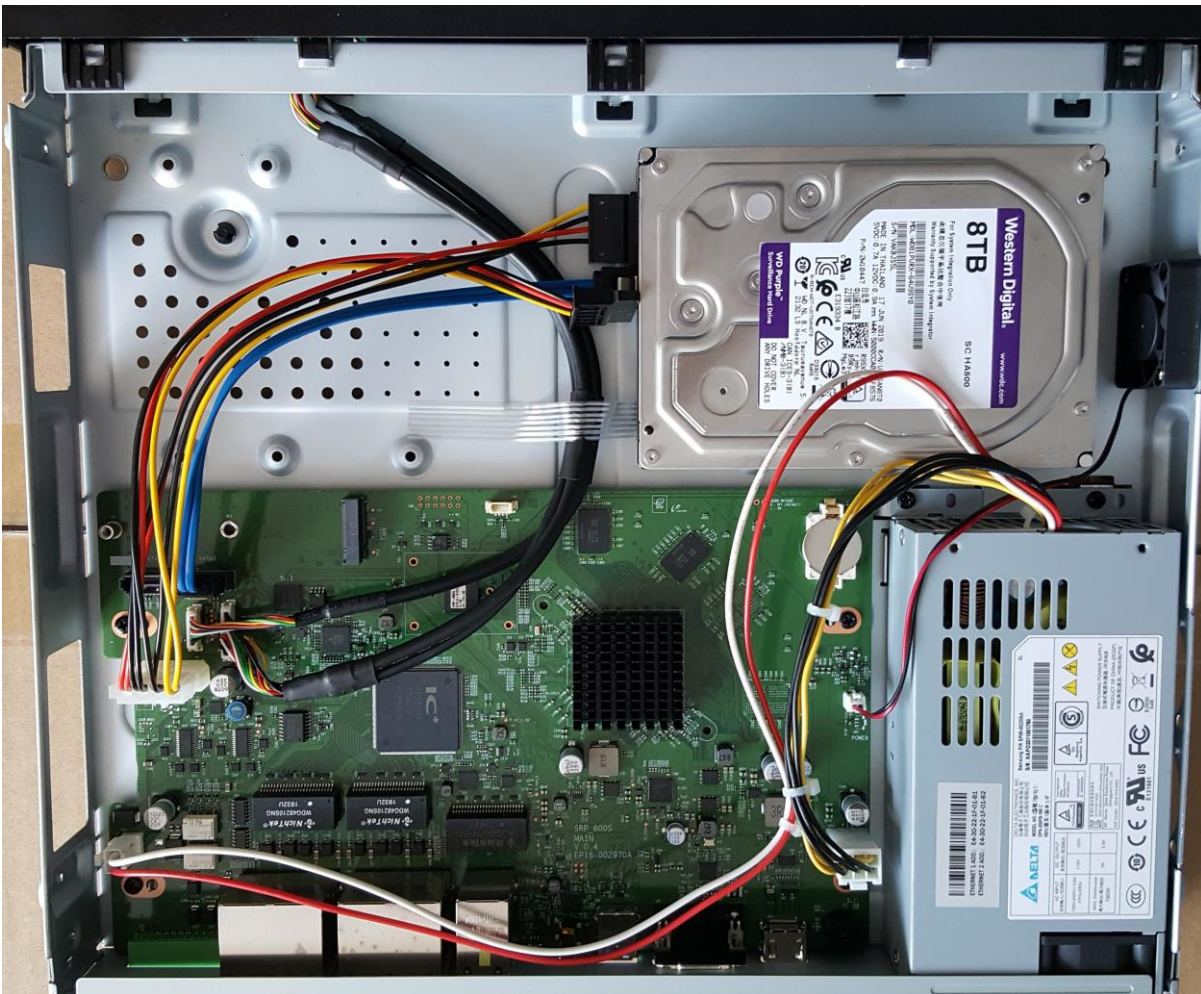# Wisenet Wave PoE NVR
Guide to adding additional storage

This guide is intended to assist anyone who requires additional storage capacity on their Wave PoE NVR. The NVR runs on the Ubuntu Linux Operating System and has a different procedure for preparing storage than a Windows PC.

Please follow the guide carefully to ensure your new storage works correctly.
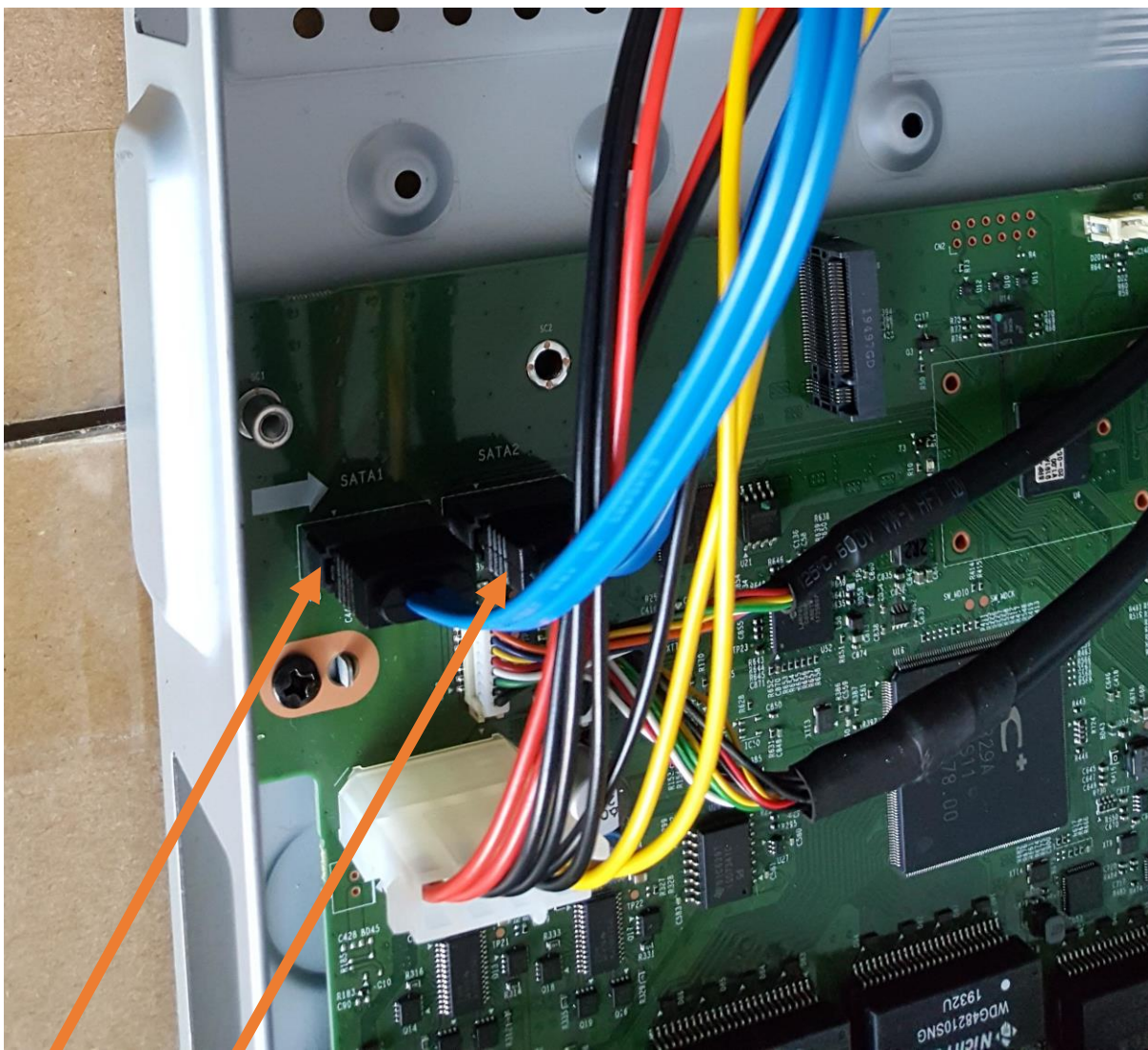
1. Installing the Hard Disk Drive

- Remove the screws for the top case and remove the casing to reveal in inside of the unit as per the instructions in the Wave PoE NVR manual.

- The image shows that one of the Hard Drive Bays is occupied with an 8TB drive.

- The naming of Linux Hard Disk Drive Storage follows the following structure:

  - sd – SATA Device

  - a – First controller

  - b – Second controller

  - Followed by the numeric order, 1, 2, etc.

- For example – this unit has the second SATA port occupied, SATA2. Therefore, the disk drive on that controller is sdb1. Meaning first drive on the second controller.

- The SATA ports are labelled on the mainboard as per the image below.
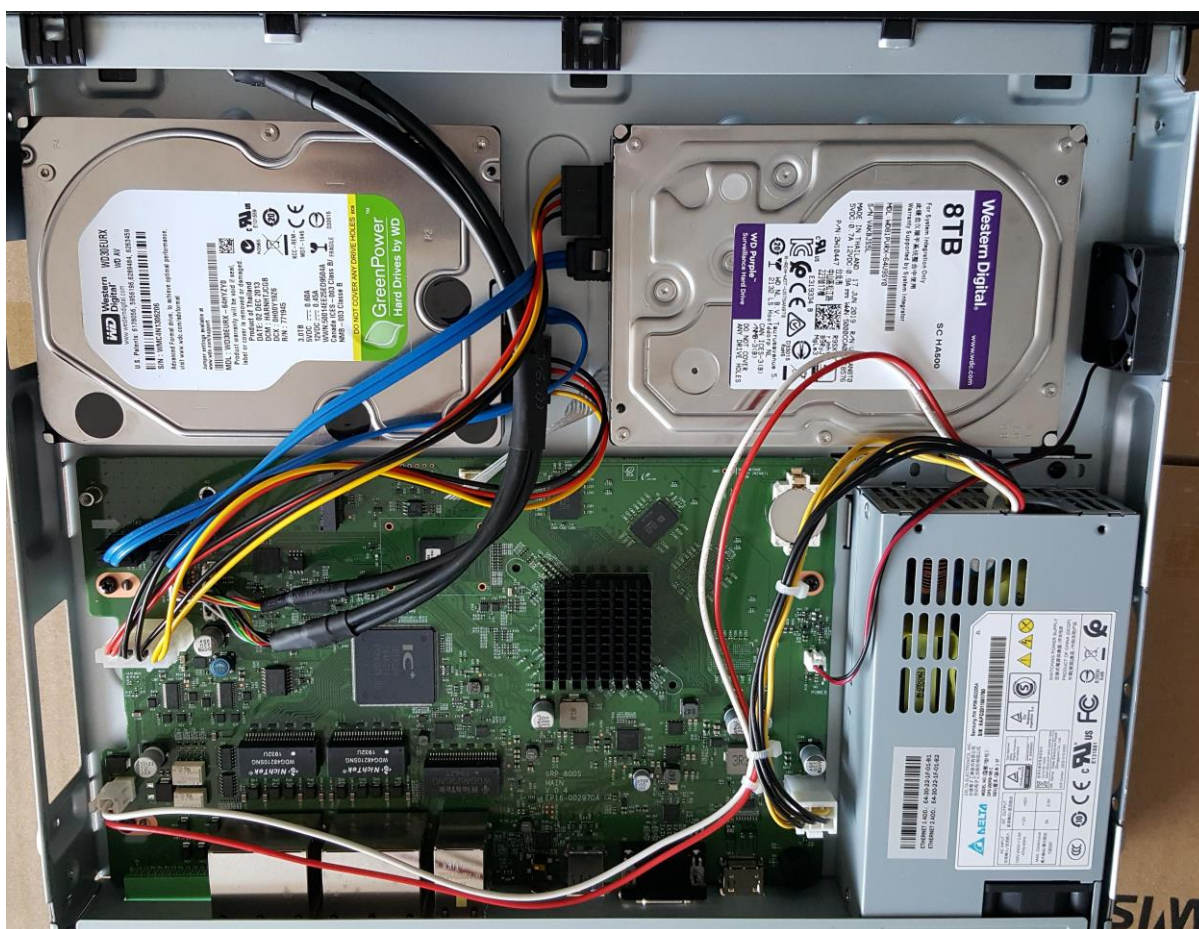
Front of case

SATA 1   SATA2

- Place your new drive into the case in the provided space and insert the required screws.

- Attach the SATA interface cable and the power cable. Image below provided for reference.
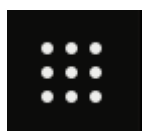
- Example of additional storage connected within the chassis. Note that the front panel cables have been raised above the drive to prevent an obstacle to the drives.

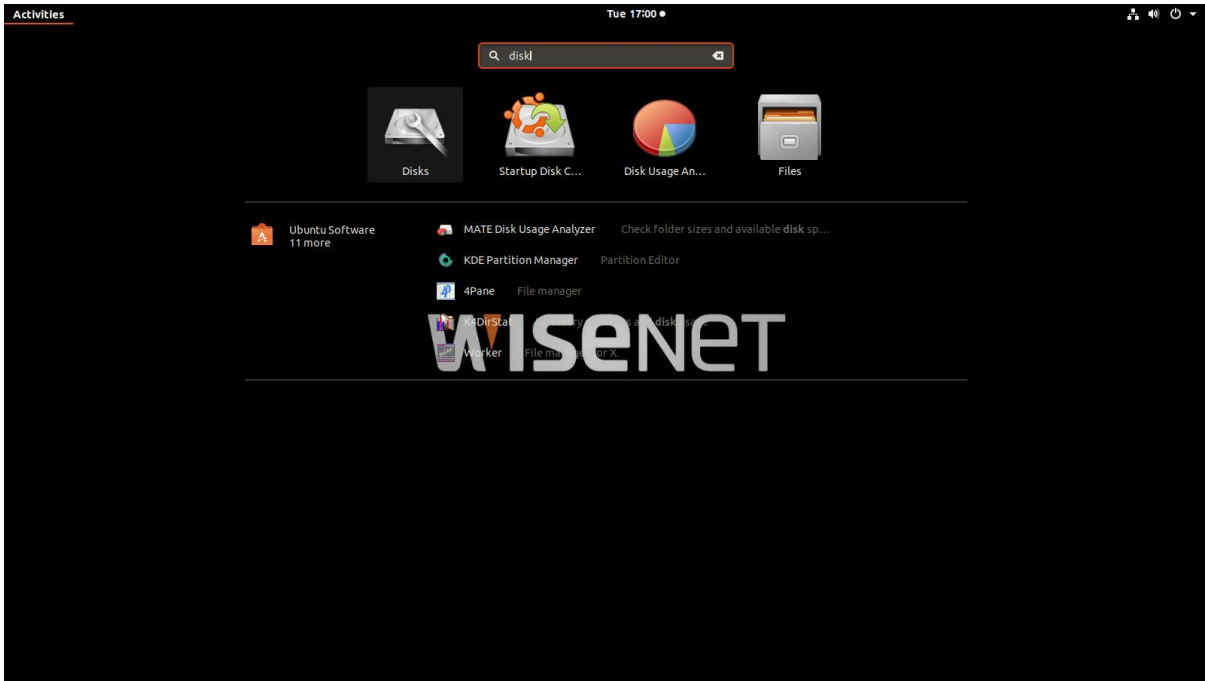- Replace the case and screws.

2. Configuring the new storage.

- Power on your Wave PoE NVR and log in with the Wave user password.
  (Default password is 4321 if this is the first time booting the unit)

- Once on the desktop click the app icon, usually bottom left, looks like a square of 9 dots.
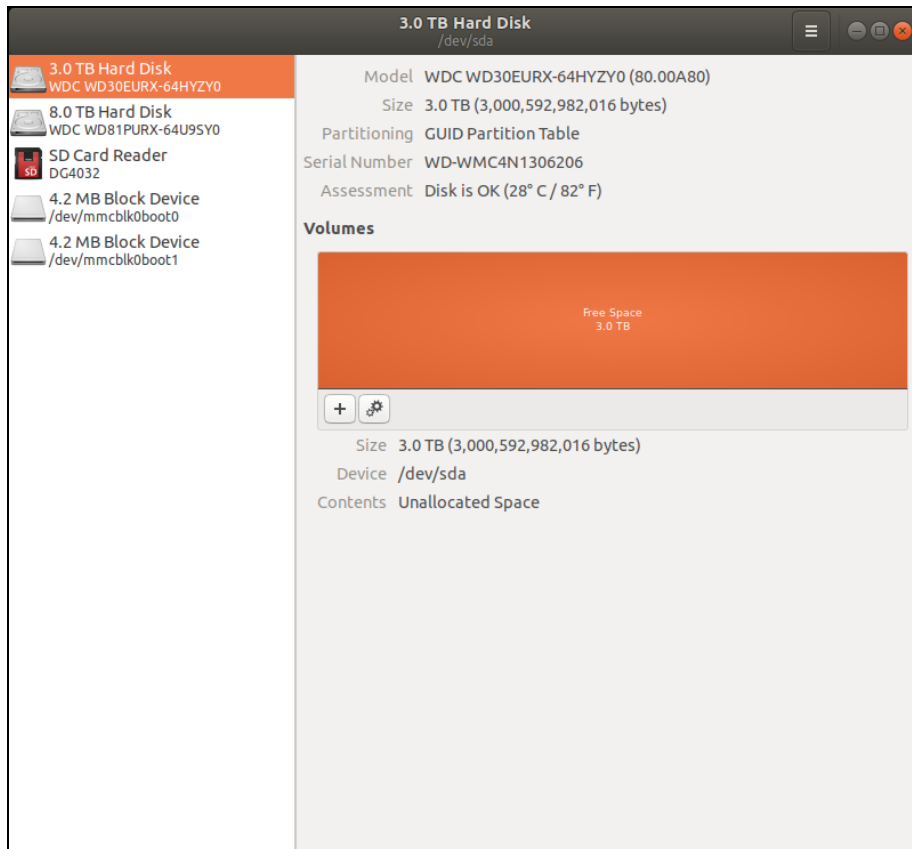

- (Also accessible via the Windows key on most keyboards.)

- The application list will appear, begin typing into the application search the word "disks" and the application will appear in the list.
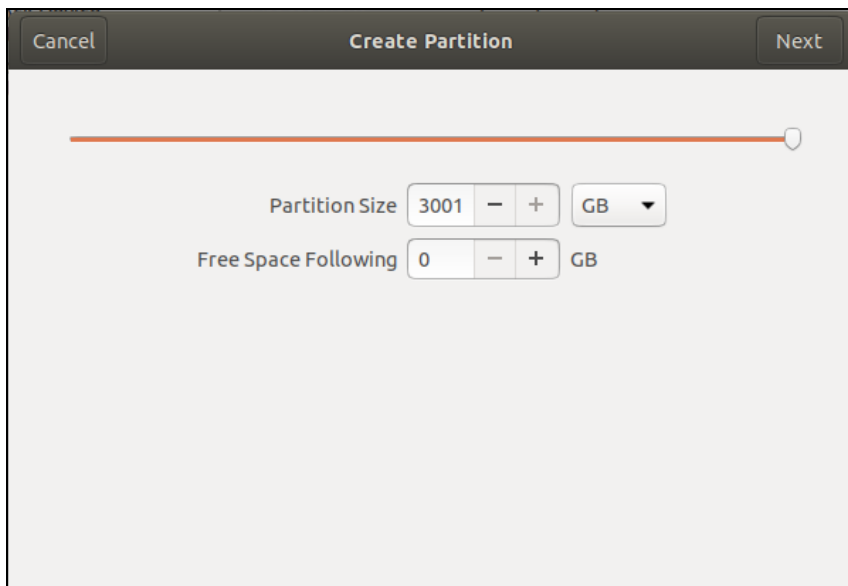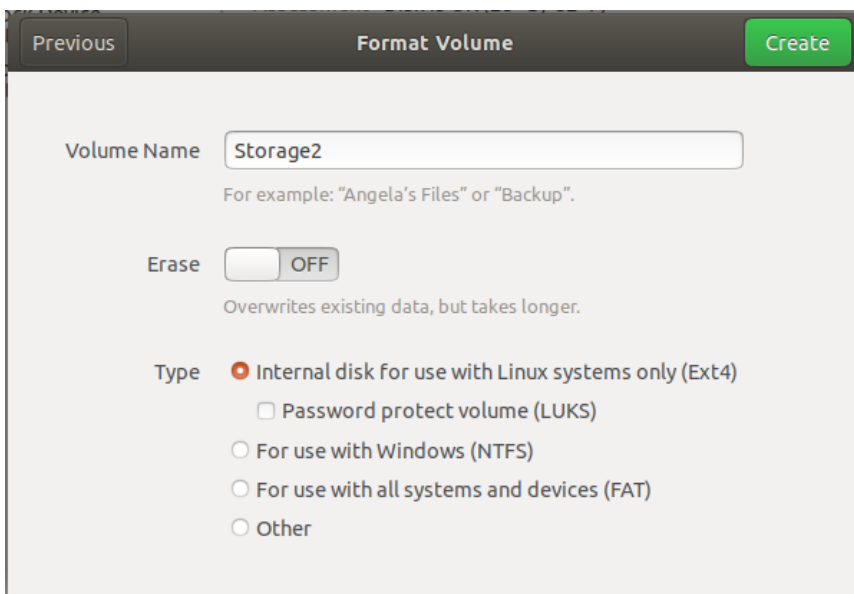
- Select Disks.

- The following window will appear.

- The added hard disk drive is displayed as free space.

- Click on the [+] button to create a partition on the new drive.

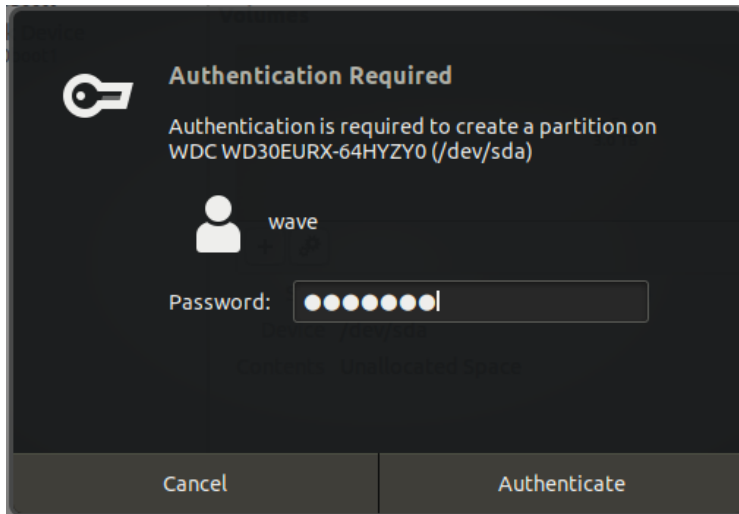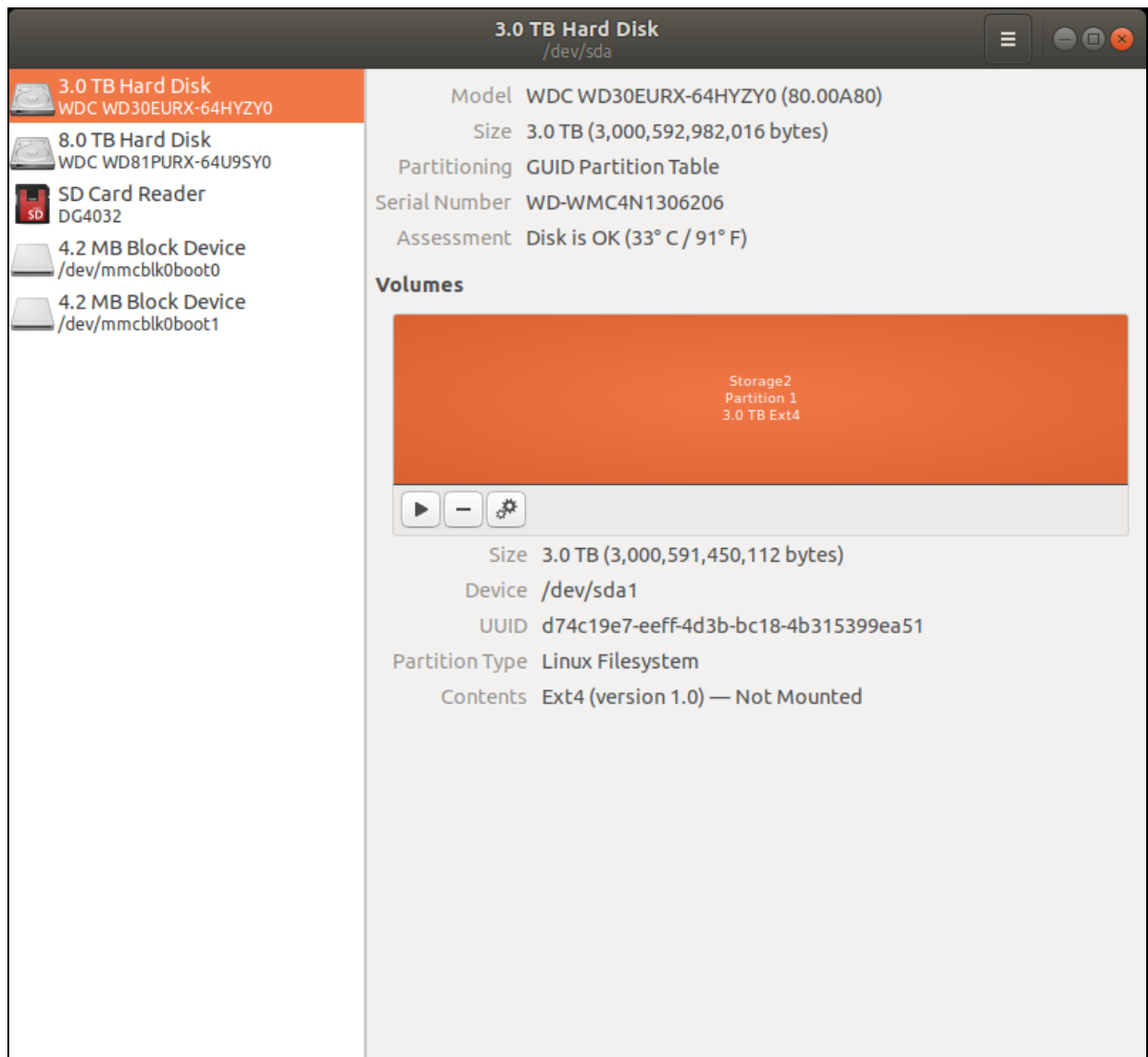- Click [Next] to accept all the space as the partition for recording video.

- Name the new partition StorageX, where X is the next number of installed drive.

- Leave the Erase setting to "OFF"

- (If the drive has information on it you can set Erase to "ON")

- Ensure that the type is selected as:

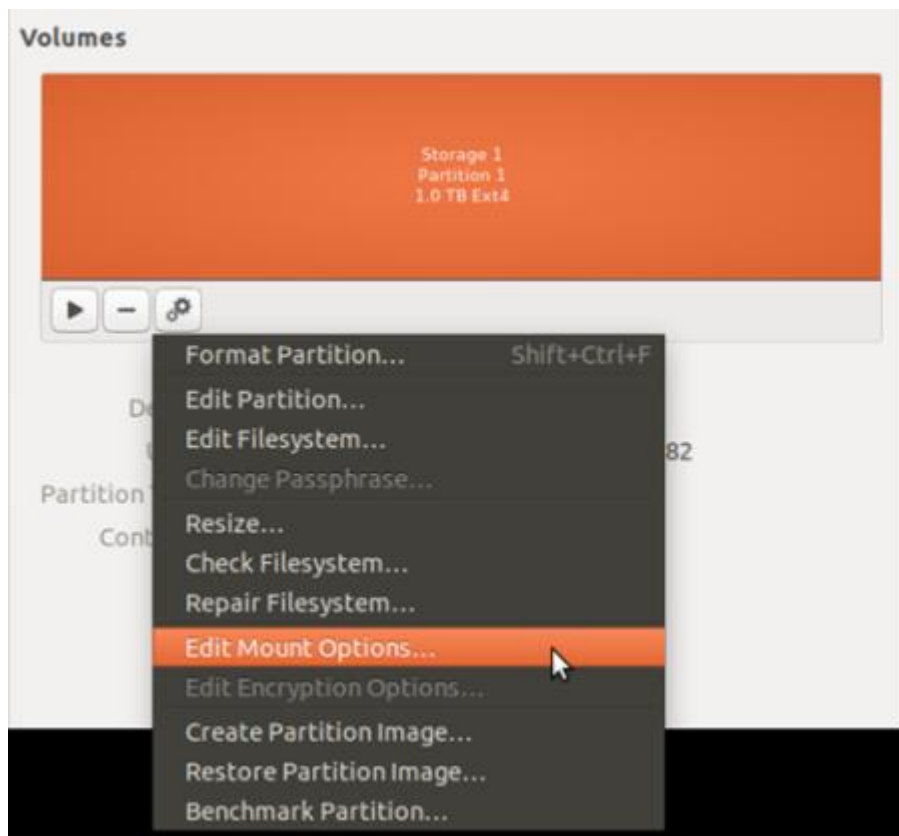 o   Internal disk for use with Linux systems only (Ext4)

- Click [Create] to continue.

▪ Enter the user password to allow settings to be applied.

Authentication Required

Authentication is required to create a partition on
WDC WD30EURX-64HYZY0 (/dev/sda)

wave

Password: ●●●●●●●|

Cancel   Authenticate

▪ The drive setting should now appear with your new settings as below.

3.0 TB Hard Disk
/dev/sda

3.0 TB Hard Disk
WDC WD30EURX-64HYZY0

8.0 TB Hard Disk
WDC WD81PURX-64U9SY0

SD Card Reader
DG4032

4.2 MB Block Device
/dev/mmcblk0boot0

4.2 MB Block Device
/dev/mmcblk0boot1

Model WDC WD30EURX-64HYZY0 (80.00A80)
Size 3.0 TB (3,000,592,982,016 bytes)
Partitioning GUID Partition Table
Serial Number WD-WMC4N1306206
Assessment Disk is OK (33° C / 91° F)

Volumes

Storage2
Partition 1
3.0 TB Ext4

▶ — ⚙

Size 3.0 TB (3,000,591,450,112 bytes)
Device /dev/sda1
UUID d74c19e7-eeff-4d3b-bc18-4b315399ea51
Partition Type Linux Filesystem
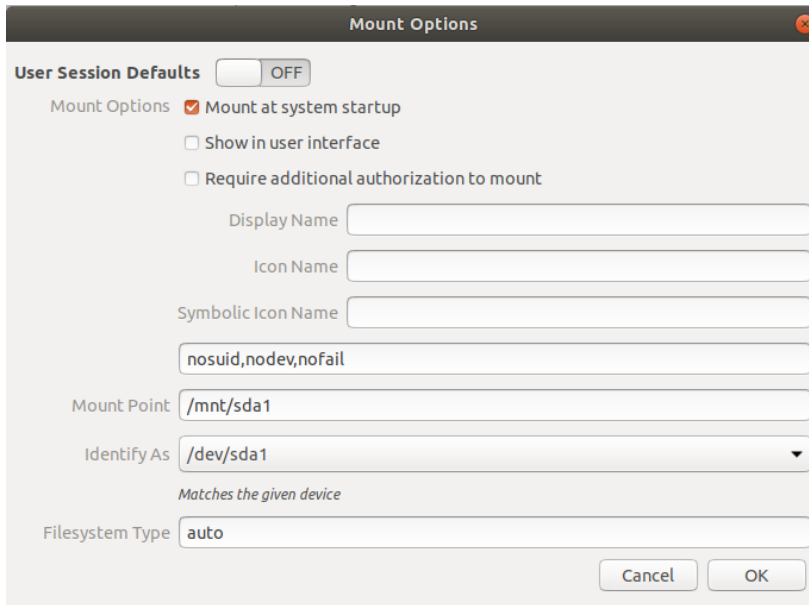Contents Ext4 (version 1.0) — Not Mounted

- Click the ⚙ button to set the Mount Options.

- Choose Edit Mount Options from the list.

- Set the User Session Defaults to "OFF"

- Ensure that Mount at system startup is checked.

- Ensure that Show in user interface is unchecked.

- Choose the mount point as either of the following:

    o /dev/sdb1

- Where sdb1 is your new drive. Or…

    o /mnt/sdb1

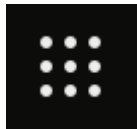- Where sdb1 is your new drive. Substitute sdb1 for the drive you have installed, refer to steps above.

- *In the example shown, sdb1 was the initial hard disk drive, the new drive is sda1.*

- Click OK to confirm settings. Enter the user password to allow settings to apply.
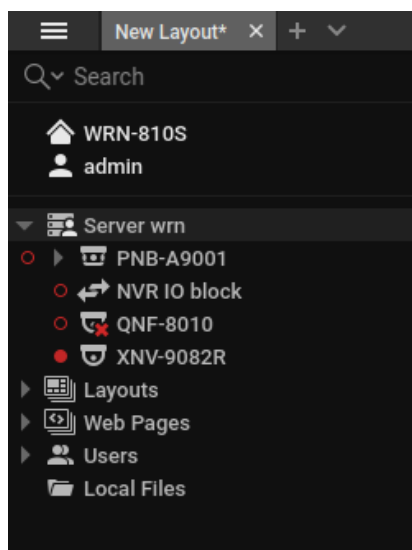
3. Setting WAVE to record on the new storage
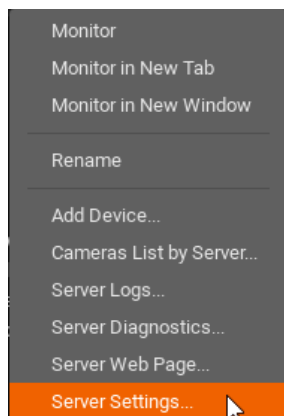
- Open WAVE.

- Use the application menu to find WAVE.

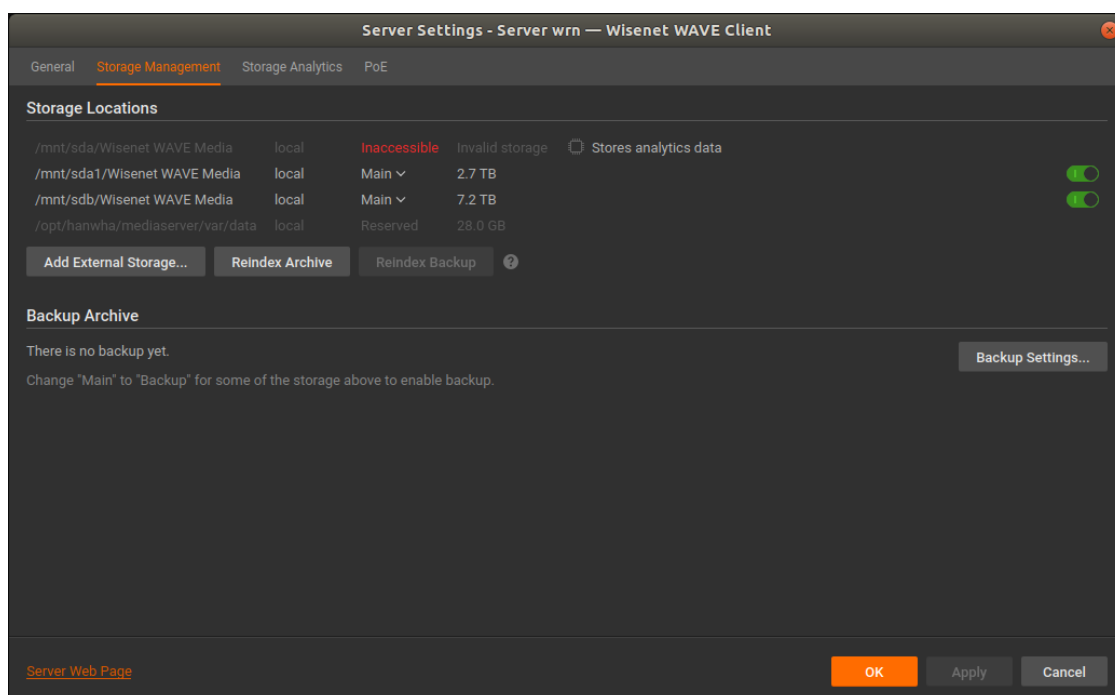- Type WAVE or select from the menu.
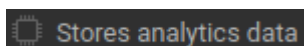- When in WAVE right click the Server.

- The server in this example is "Server wrn"

- Choose Server Settings from the drop down list.

- Select Storage Management from the top row of options.

- Your storage locations will show in the list. Look for the sda1/sdb1 in the list.

- Ensure that the new storage location is enabled for recording with this icon .

- Enable it if it is not already enabled.

- If you have video analytics on your cameras and want to use the new storage space to record analytics hover to the right hand side of the drive and click where is says:

- This feature is only available to one of the drives installed.

- Click Apply or OK to save the settings and ensure the Server Settings window has closed.

- Close WAVE and restart the system.

This is the end of the Adding Additional Storage to your WAVE PoE NVR guide.