

How to connect a NAV recorder to a JBOD system



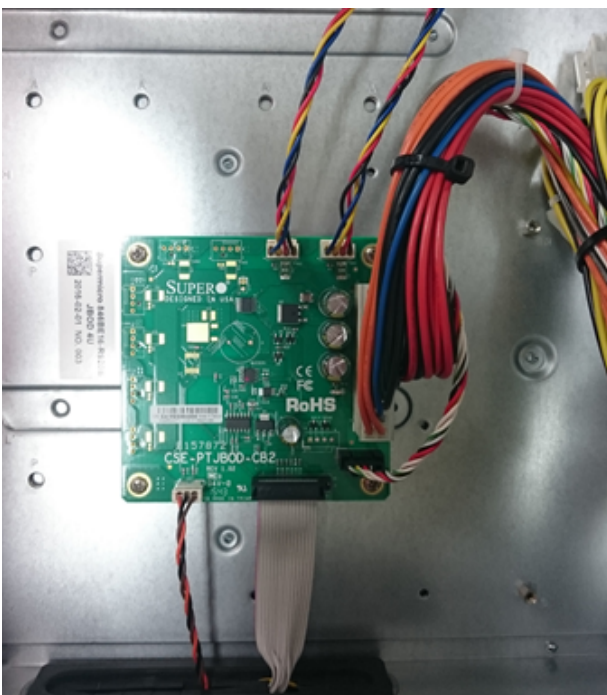
This document shows you how to connect a NAV recorder to a JBOD system, as well as set up RAID with MegaRAID.

Step #1:

1-1 A JBOD system



1-2 Main internal component: power board for JBOD



1-3 Main internal component: 2x internal Mini-SAS (SFF-8087) to 2x external Mini-SAS (SFF-8088) cable



Step #1:

1-4 For future scalability, we recommend securing the cable to the last retention bracket of the chassis.



1-5 Connect one of the internal Mini-SAS cables to the HDD control port on the far right. Remember your selection of port for later reference.
(Steps 1-1 to 1-5 complete the basic JBOD installation)

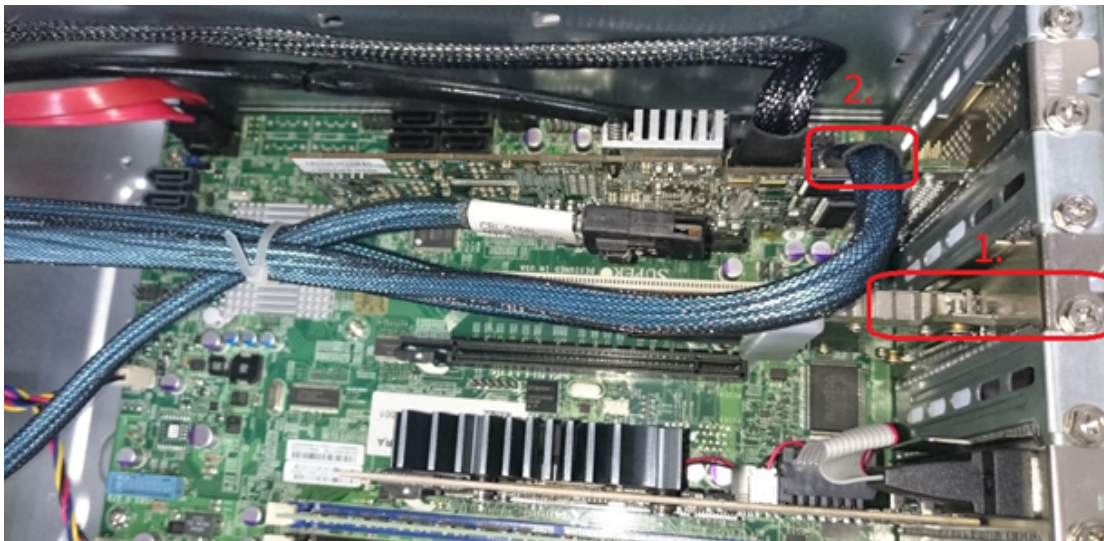


Step #2:

The following steps use NAV 1072 as example.

2-1

1. Secure another internal-to-external Mini-SAS cable to the retention bracket between the RAID card and the graphics card
2. Connect one of the Mini-SAS cable to any empty port on the RAID card. Remember your selection of port for later reference



- 2-2 The connection between the NAV recorder and the JBOD system requires an external-to-external SF-8088 Mini-SAS to Mini-SAS cable

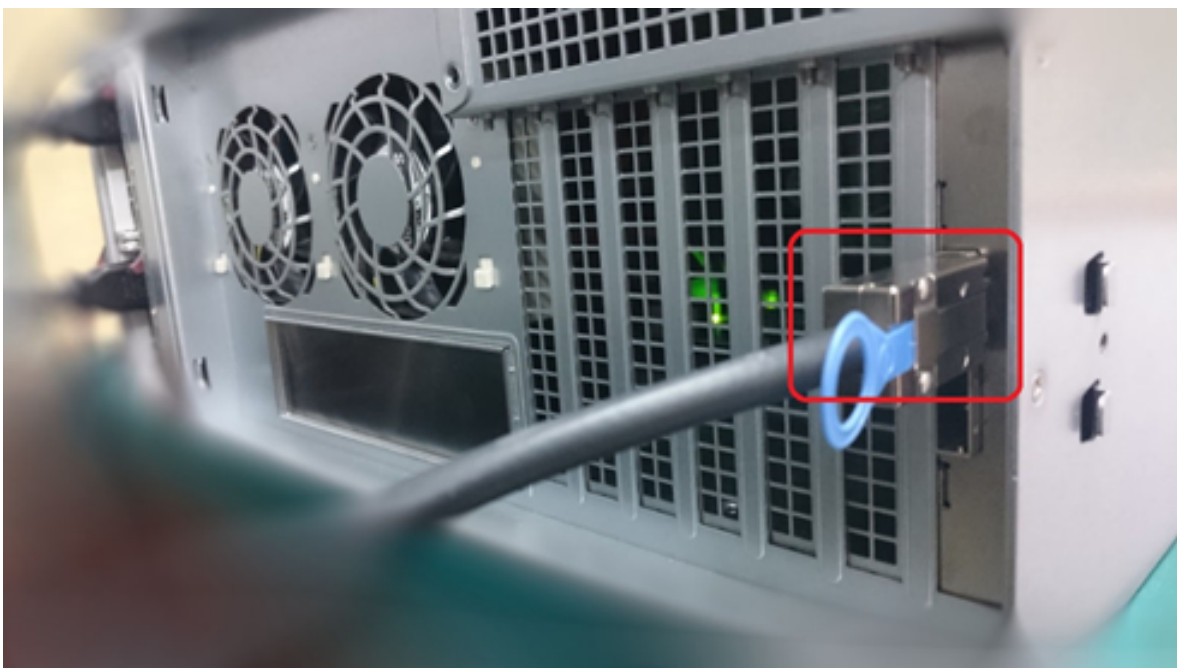


Step #2:

2-3 Make sure you choose the port that is internally connected to the RAID card.



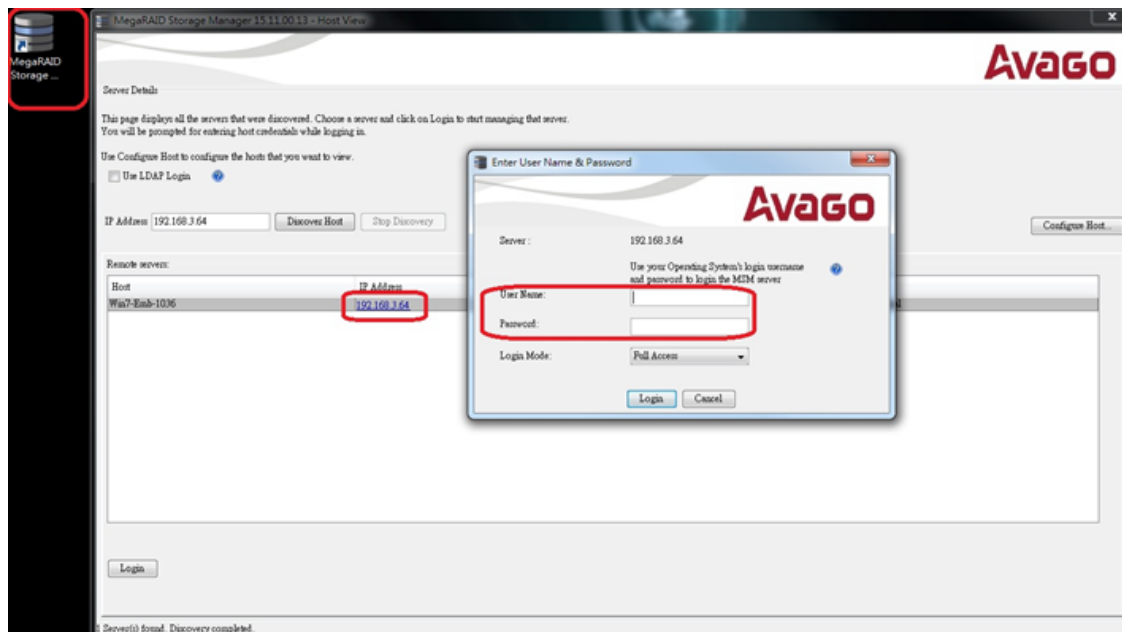
2-4 Connect the other end to the JBOD system, the port of which should be internally connected to the HDD control port. (Steps 2-1 to 2-4 completes the connection between the NAV recorder and the JBOD system)



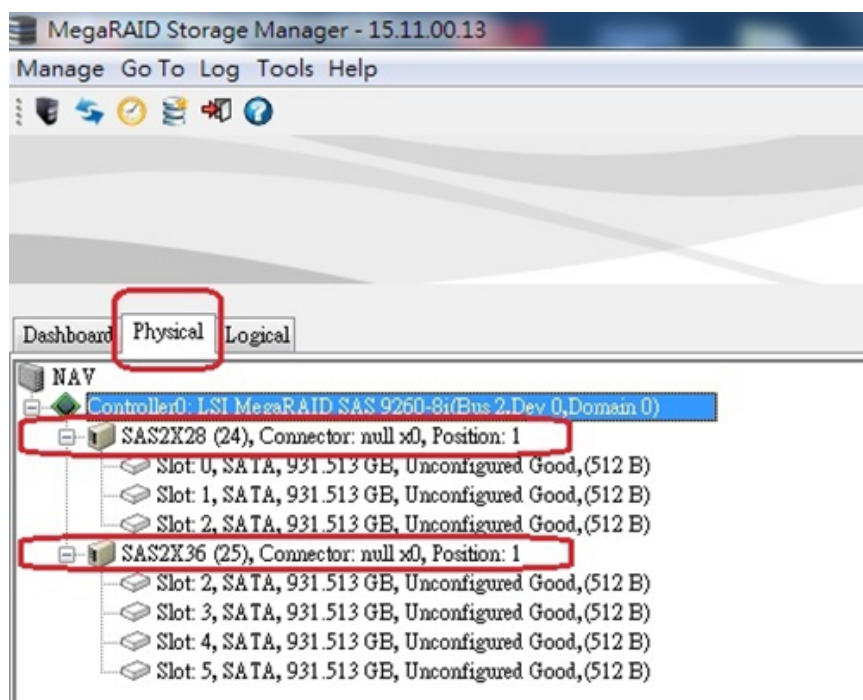
Step #3:

3-1 Double-click and open MegaRAID on the desktop

3-2 Choose the IP address shown in the middle of the screen and enter your username and password (same as your Windows log-in credentials)

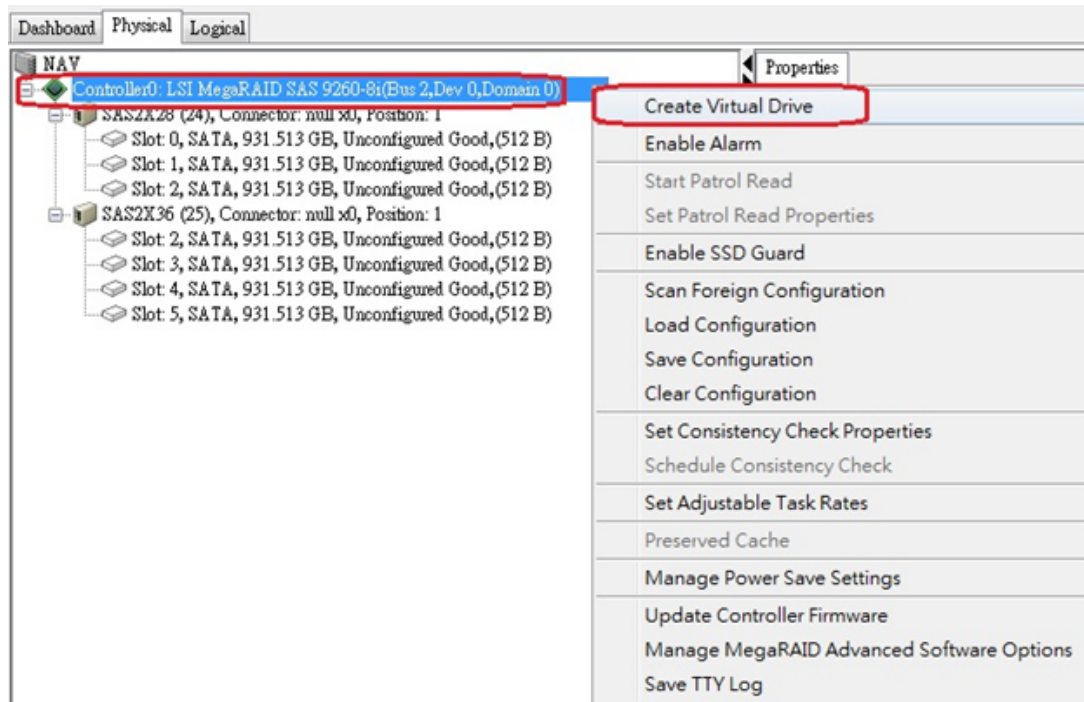


3-3 In the Physical tab, hard drives installed on the NAV recorder are shown under SAS2X28 (24), and those on the JBOD system are shown under SAS2X36 (25).

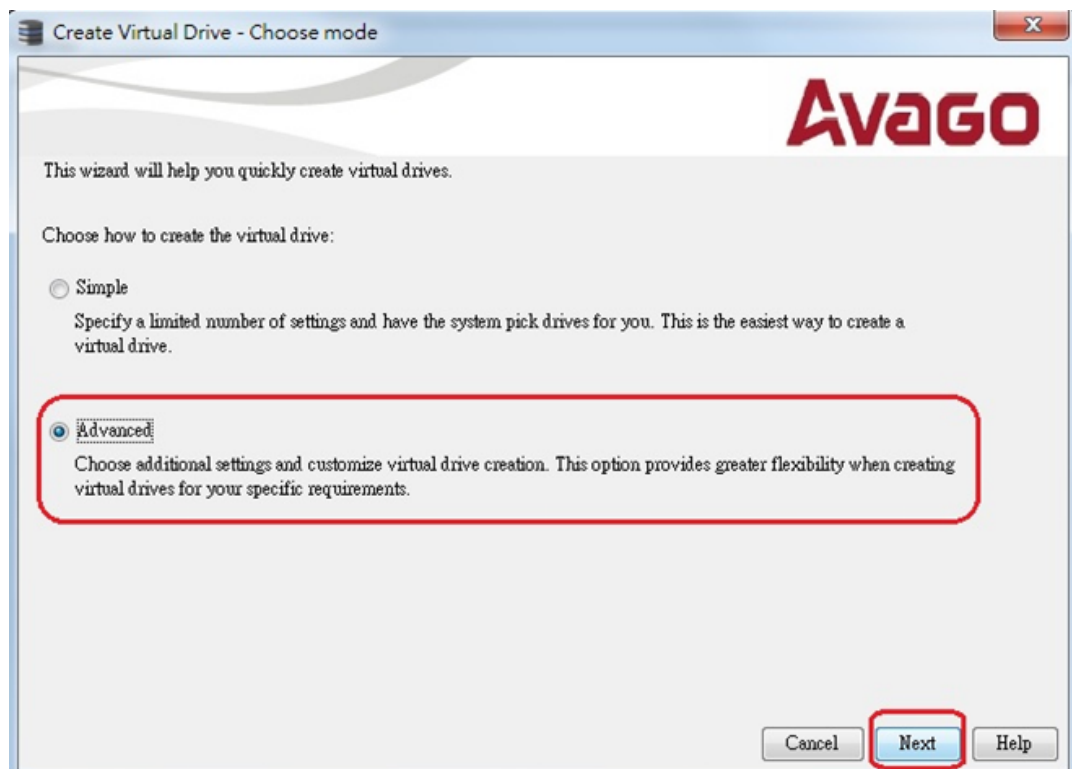


Step #4:

4-1 Right-click Controller0: LSI MegaRAID SAS 9260-8i to open a menu, and choose Create Virtual Drive.

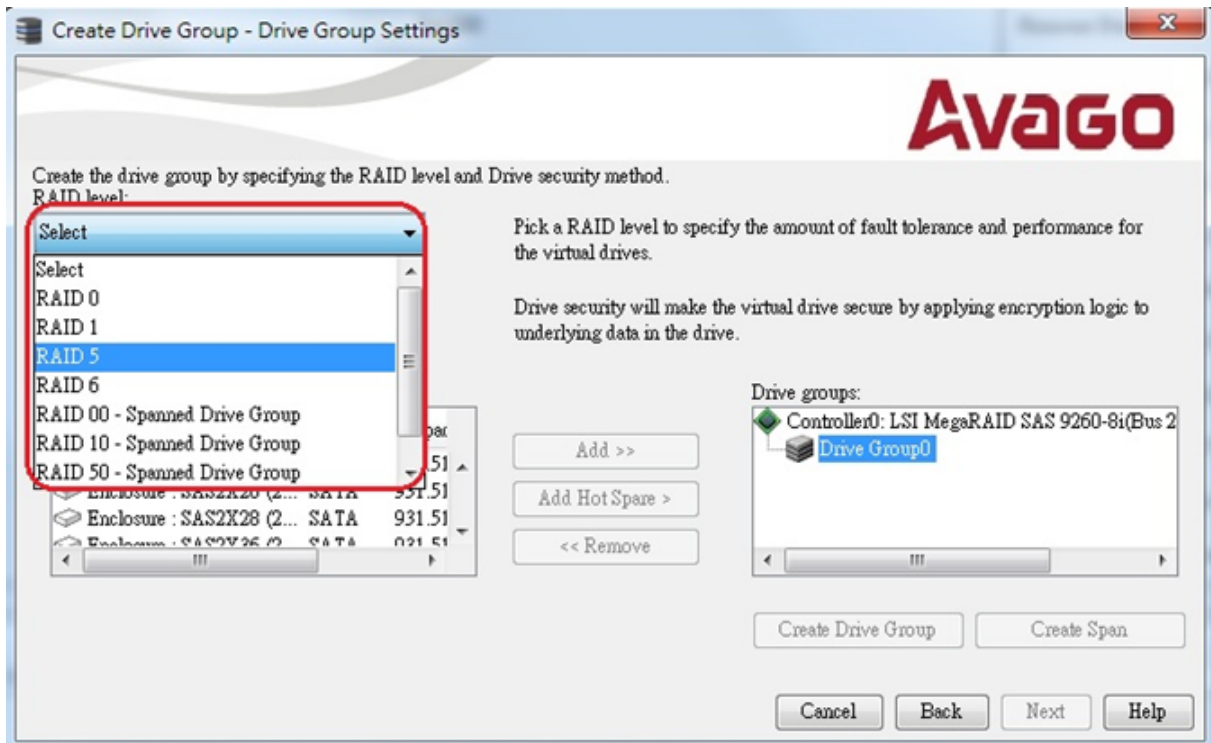


4-2 Select Advanced, then click Next to proceed.

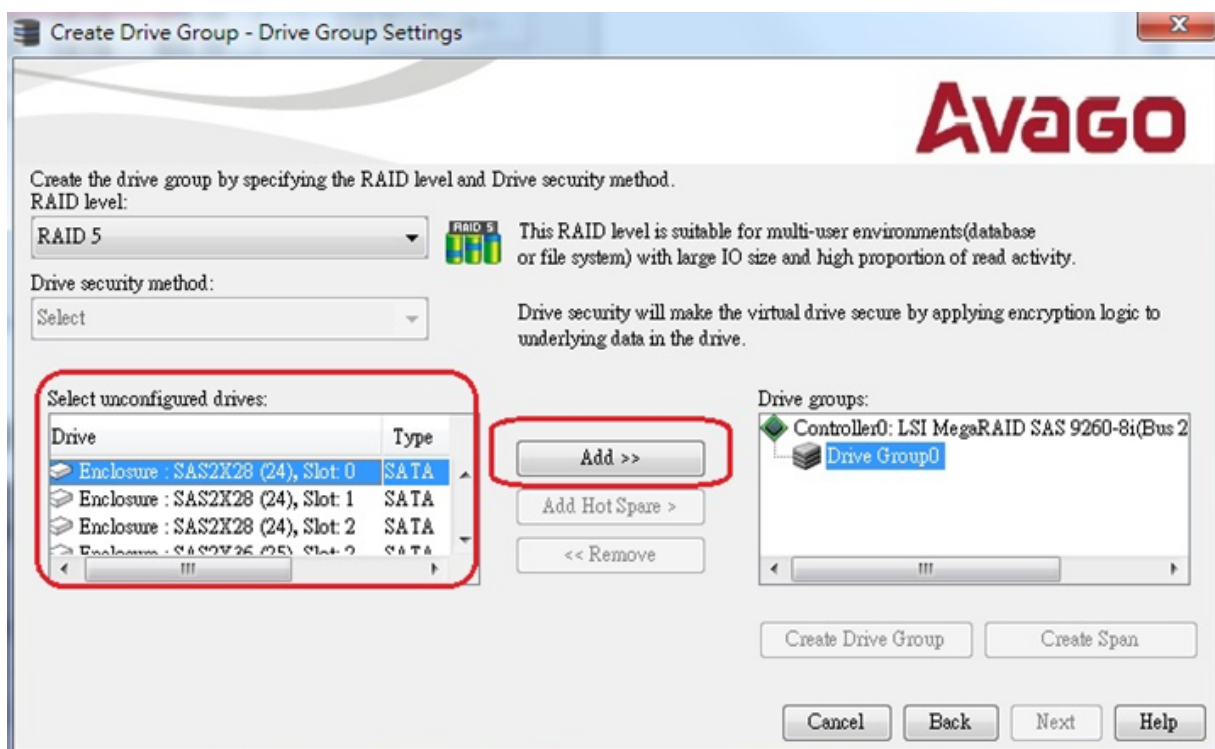


Step #4:

4-3 From the Select drop-down menu, choose the type of RAID you want to use.
(The following configuration uses RAID 5 as example)

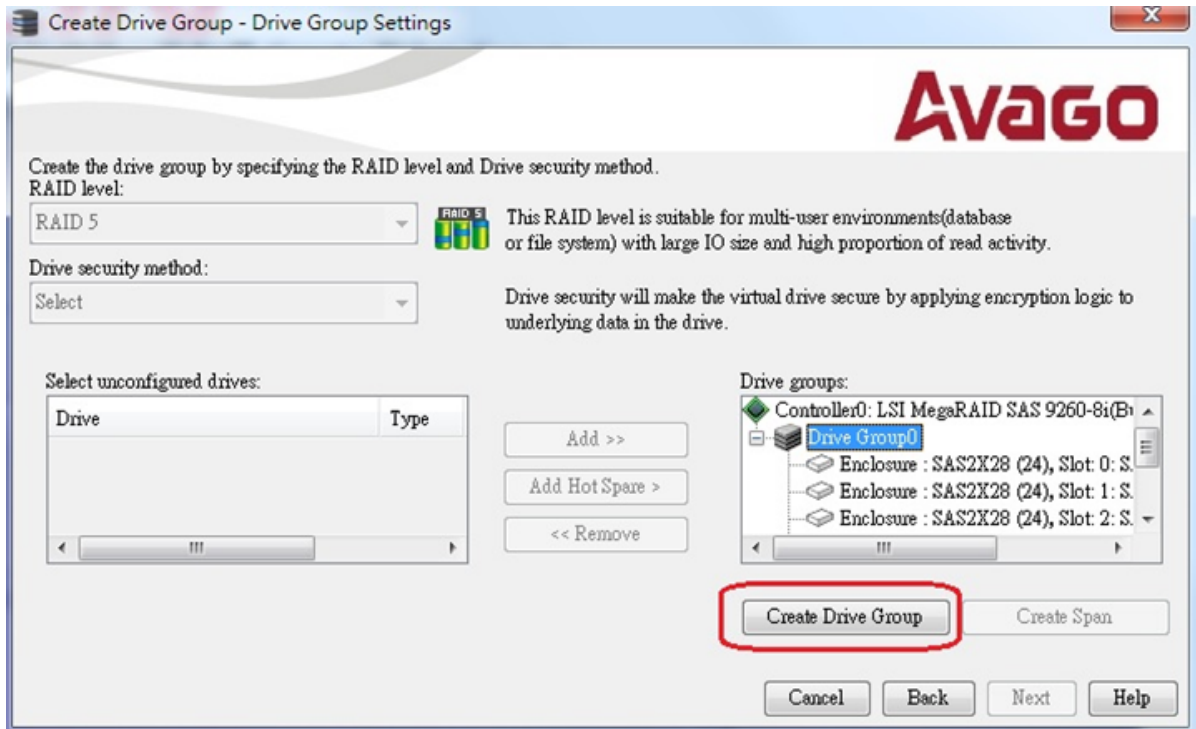


4-4 Choose all the drives and press Add >> to add all the hard drives to Drive groups.

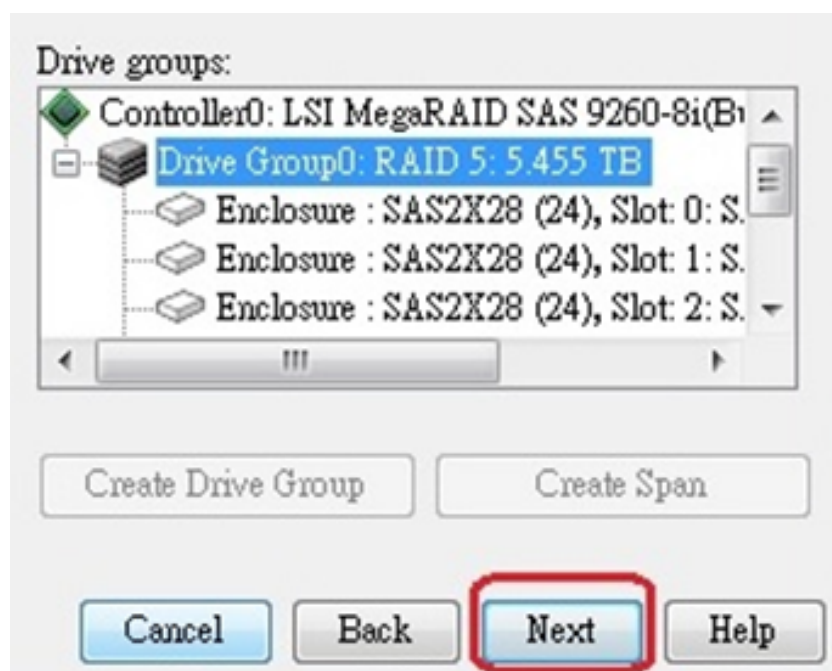


Step #4:

4-5 Make sure you have added all the drives you need before clicking Create Drive Group.



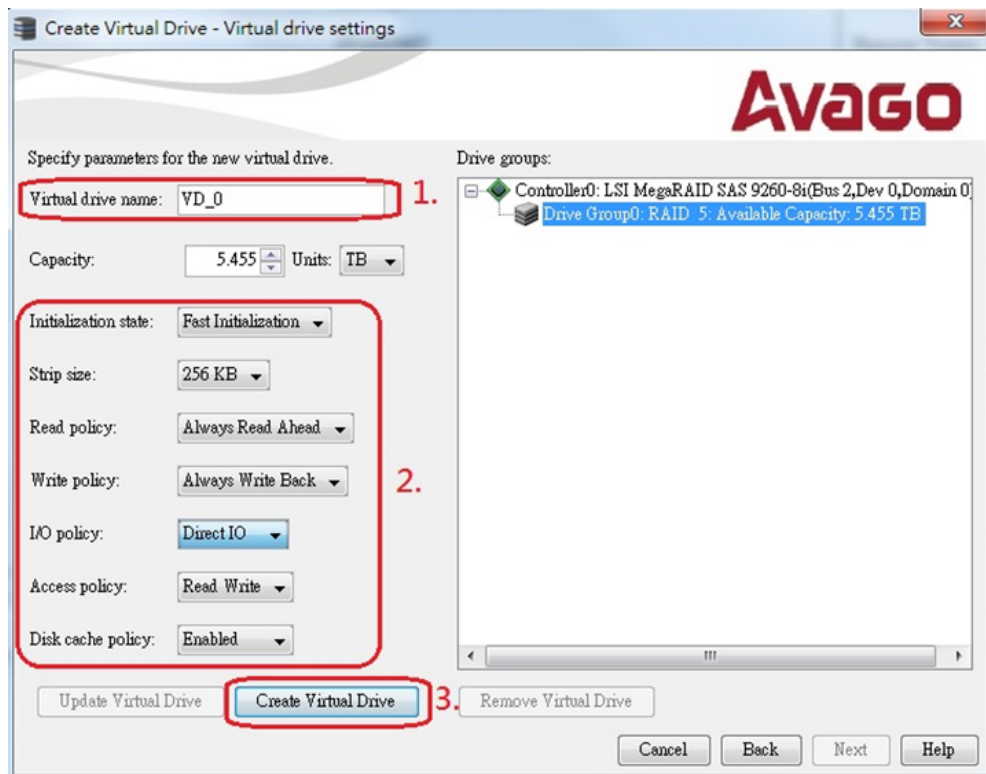
4-6 Then you will see the total capacity of cascaded hard drives appear in the same pane. Now press Next.



Step #4:

4-7 You may customize the name of your virtual drive

1. Parameters in the red box are recommended for optimizing RAID performance
2. Click Create Virtual Drive to set up the RAID



4-8 A prompt window will appear asking if you want to select Always Write Back mode. Choose Yes.



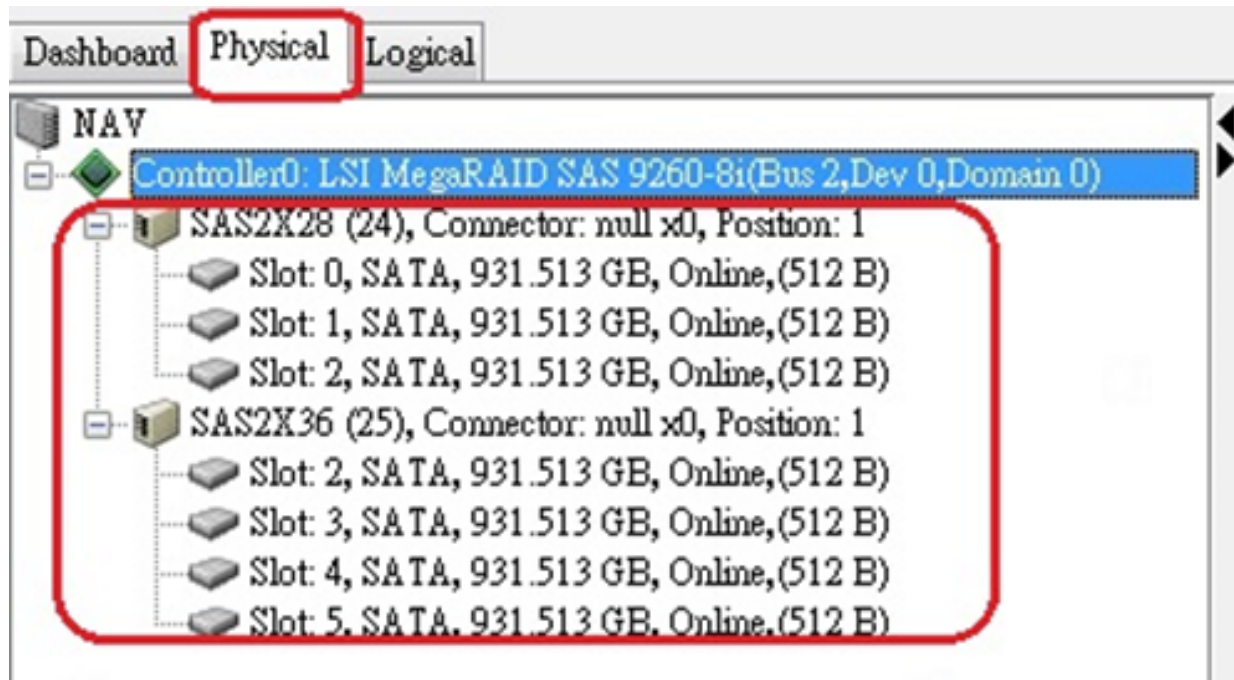
Step #5:

4-11 The virtual drive (RAID) is now created successfully. Press OK to complete the process

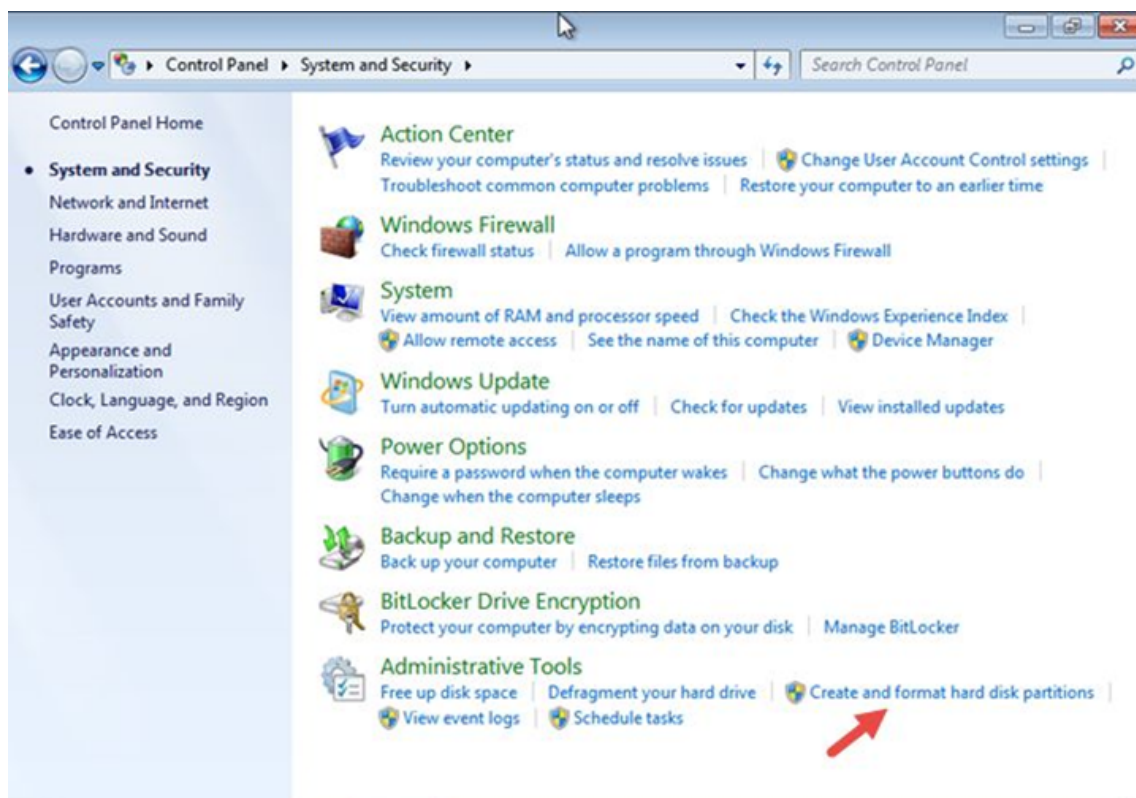


Step #5:

5-1 Return to the main screen of MegaRAID. Under the tab Physical, the statuses of all cascaded hard drives now change from Unconfigured to Online.

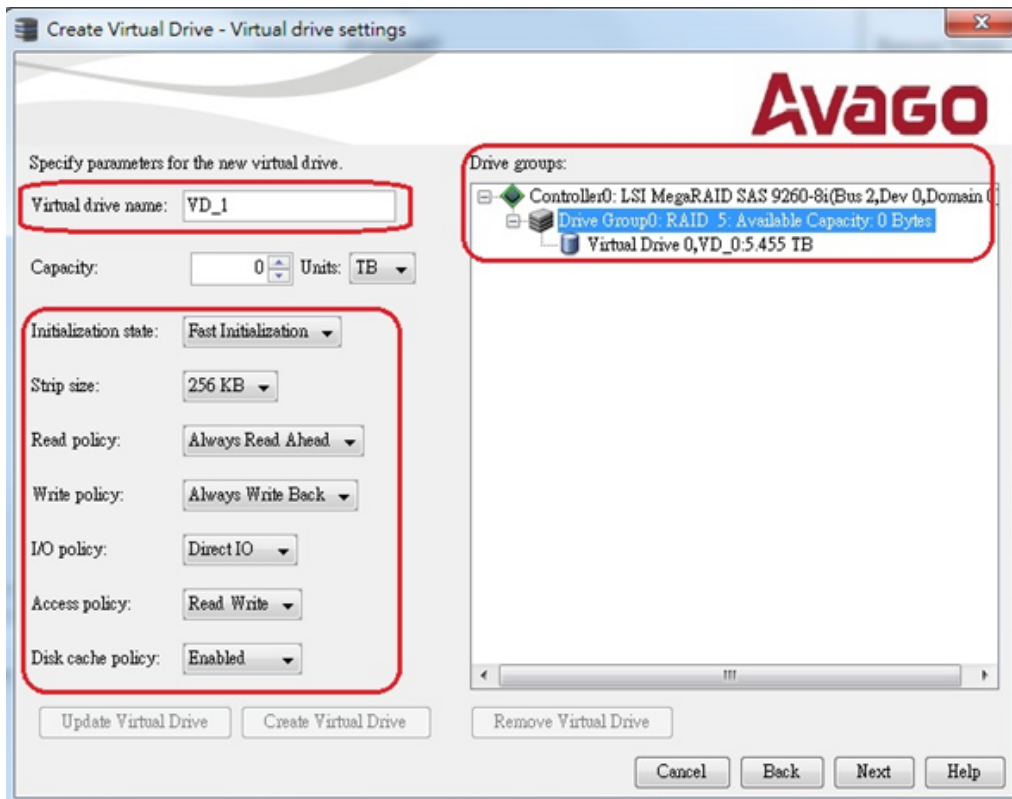


5-2 Go to Control Panel -> System and Security, and find Create and format hard disk partitions under Administrative Tools.

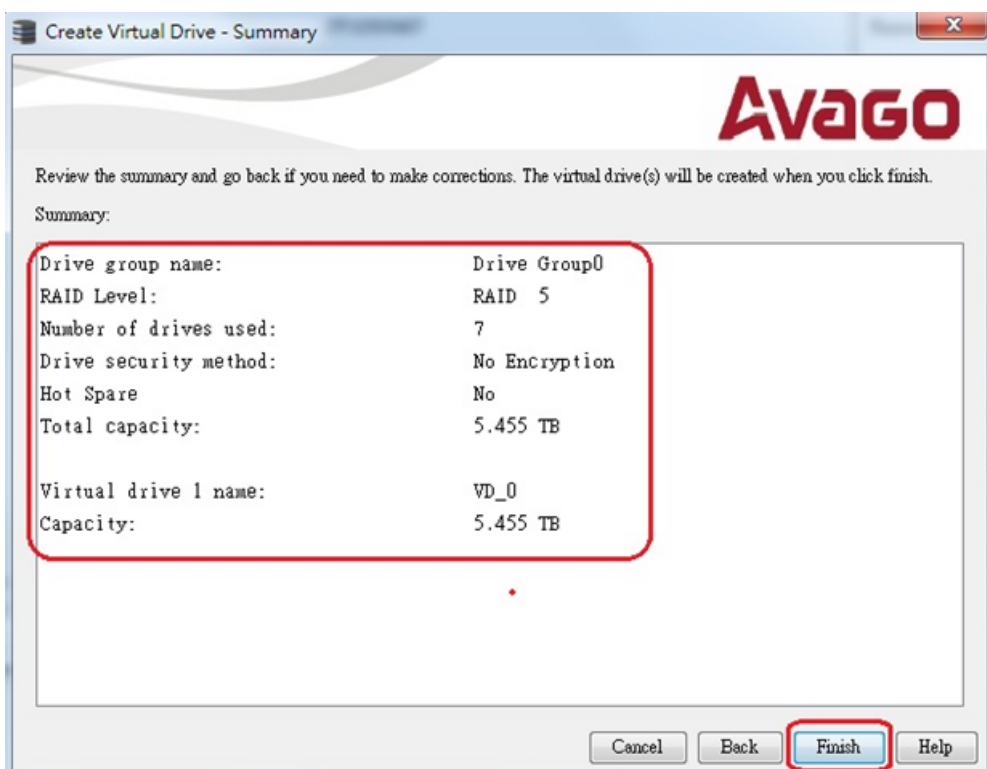


Step #4:

4-9 Now you can see one virtual drive in replacement of all the physical drives.

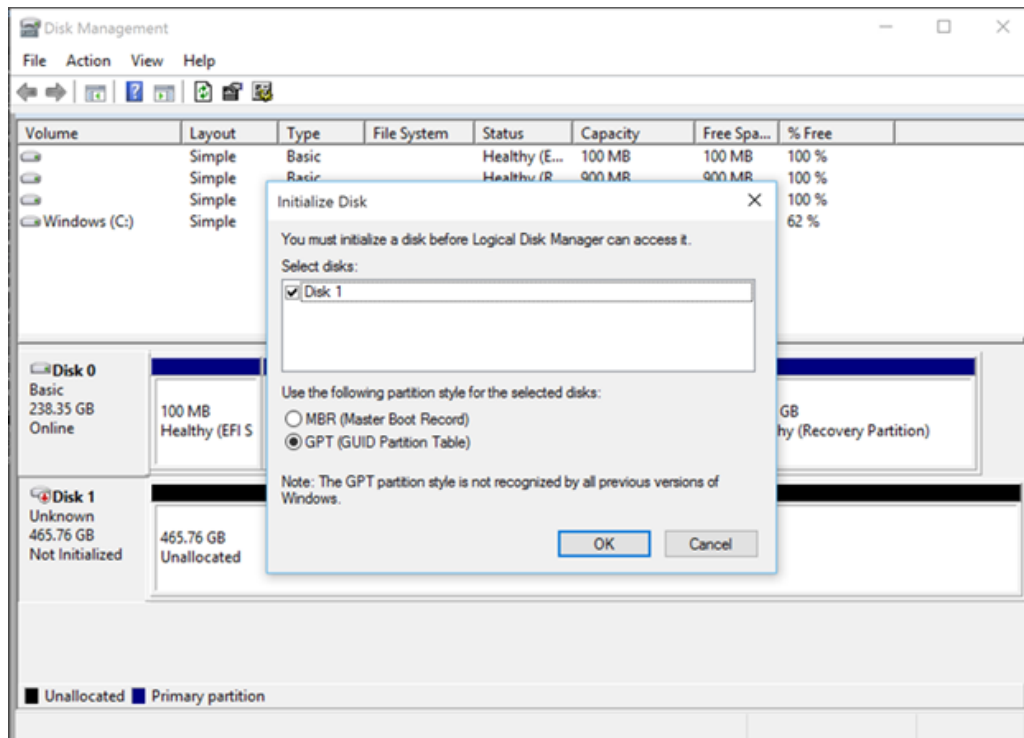


4-10 Make sure all information is correct, and click Finish.

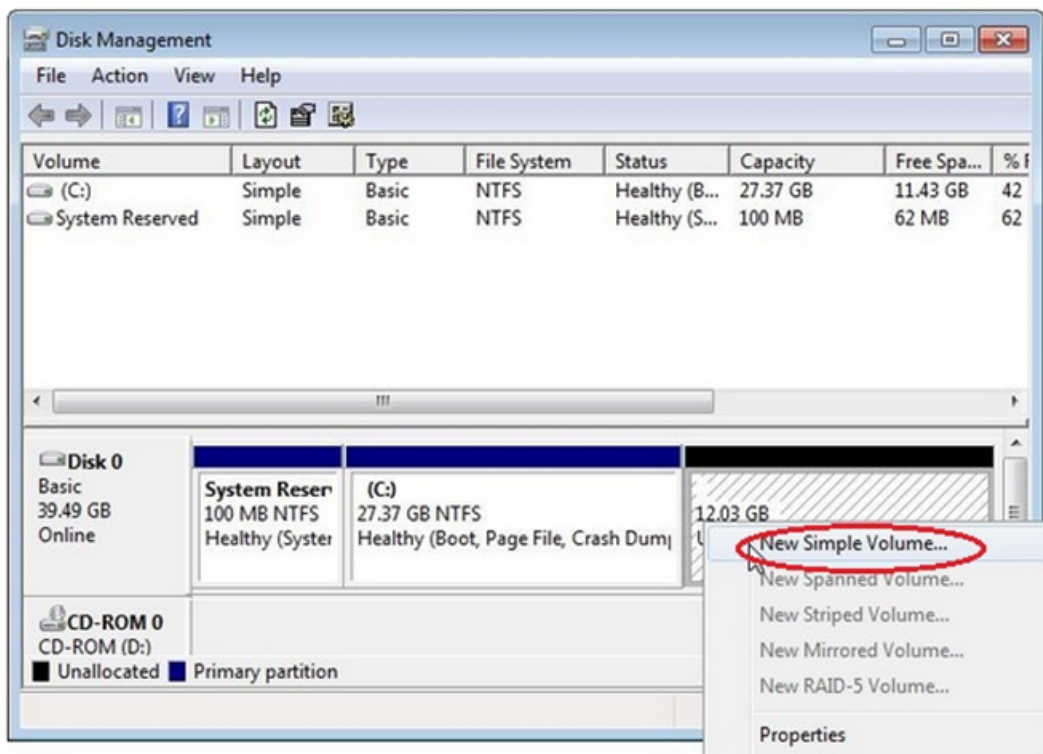


Step #5:

5-3 Choose GPT (GUID Partition Table) and click OK.

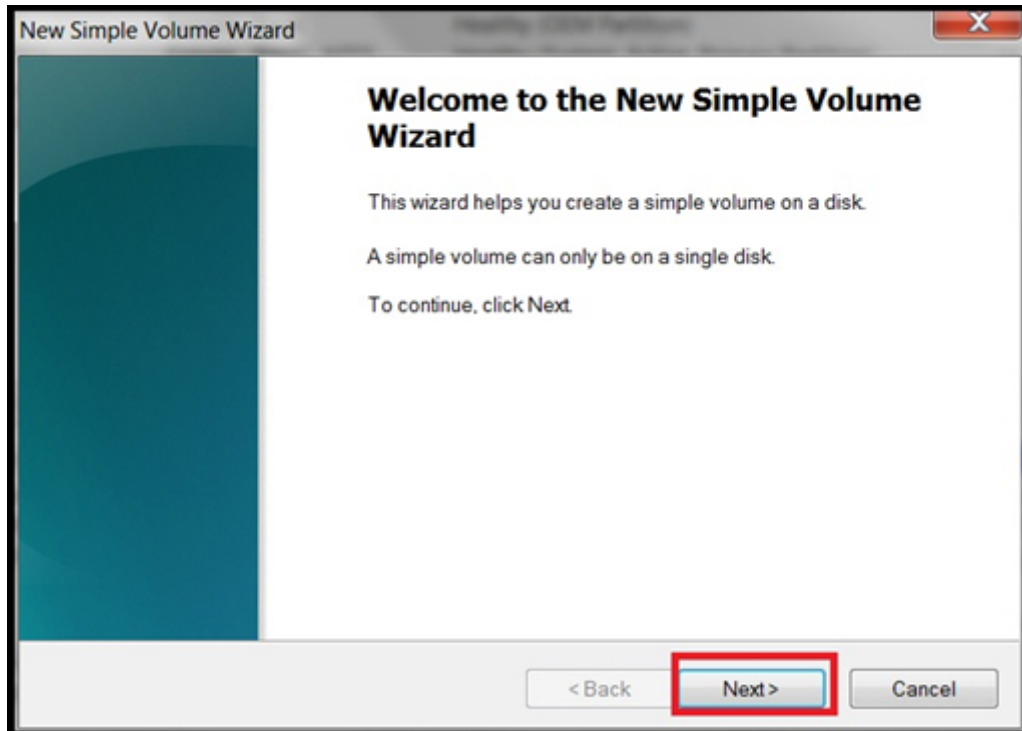


5-4 Right-click an unallocated disk to open up the menu. Click New Simple Volume...

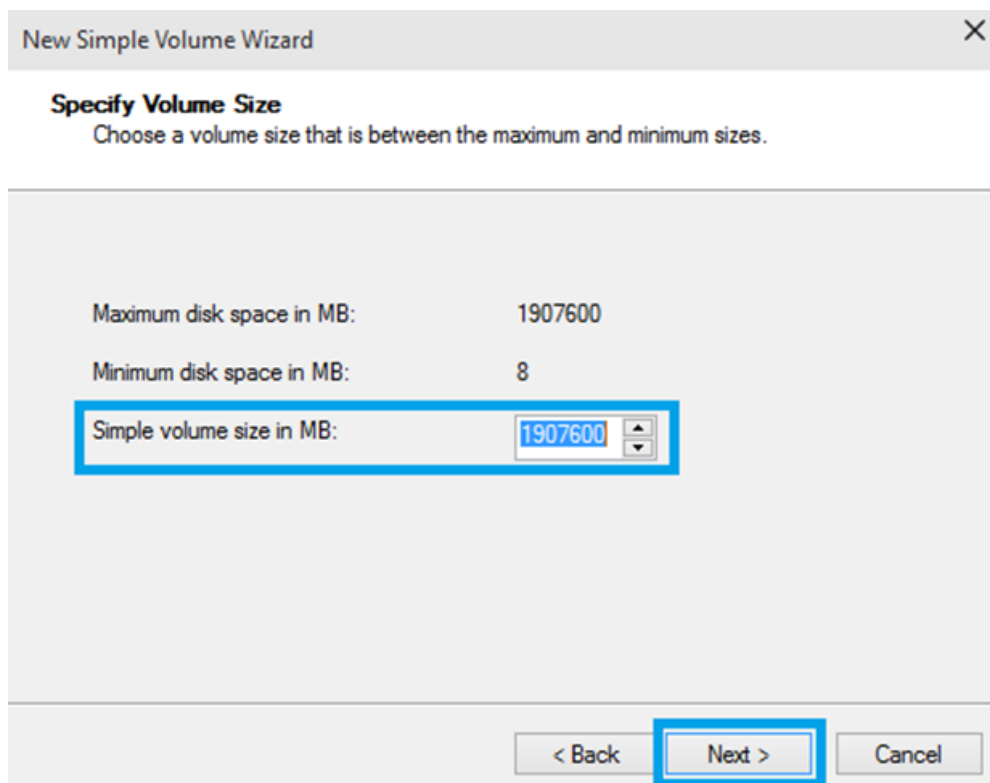


Step #5:

5-5 Click Next when the welcome page of New Simple Volume Wizard pops up.

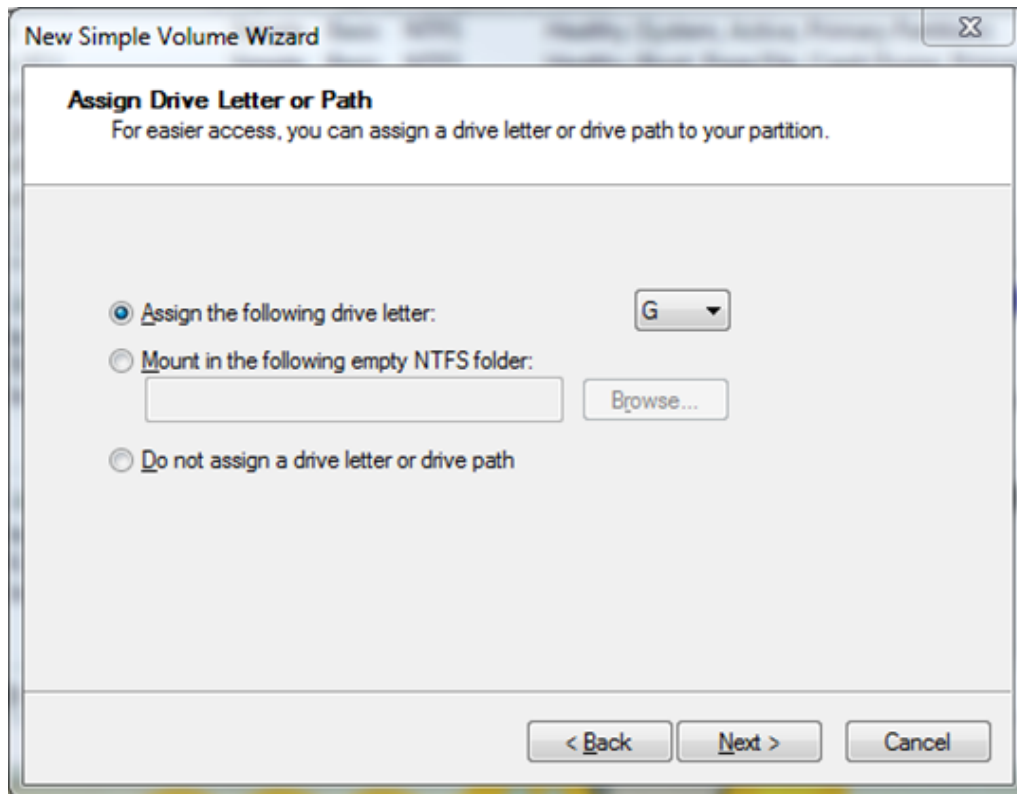


5-6 The wizard will automatically allocate the size of the simple volume. Use the default value and choose Next.

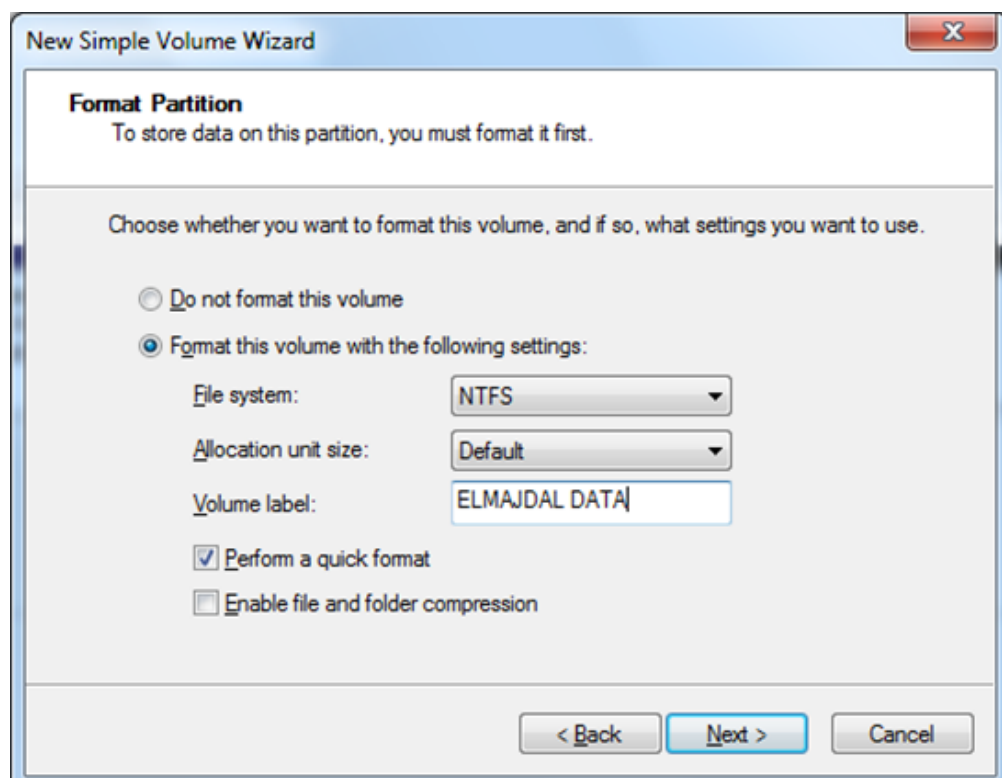


Step #5:

5-7 Leave the drive letter to its default value and choose Next.

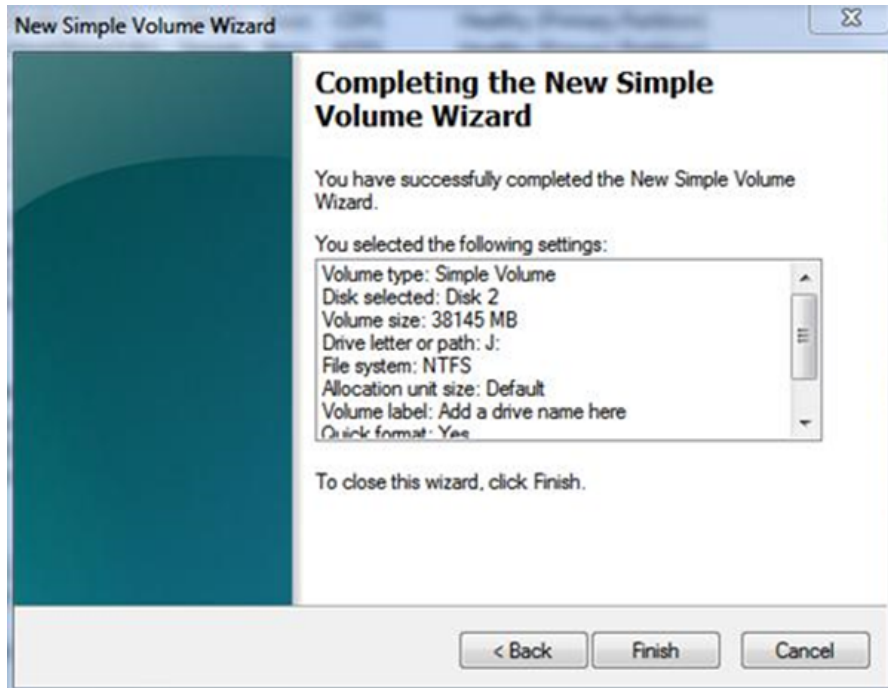


5-8 Name your disk and click Next.



Step #5:

5-9 Now the simple volume is created. Click Finish.



Step #6:

6-1

1. Return to MegaRAID, and the tab named Dashboard.
2. You will see a message "Background Initialize" on the right of the screen under Background Operations, meaning that the RAID is initializing.
3. Click More details to show estimated remaining for the initialization.

