



How to clone image and rebuild RAID for NVR5400

Application Notes

Version <1.0>



Preface

This application note can instruct user step by step to rebuild RAID.

Caution

Rebuild NVR5400 will delete all data.

Scope

Product model	Firmware version
NVR5400	Full version

There are 3 steps.

You can find each step in the following pages.

Step 1. Clone image

Step 2. Delete RAID

Step 3. Create RAID

Step 1. Clone image

Agenda as below:

1. Install free trial Acronis True Image 2016
2. Build up Bootable USB
3. Recover USB DOM by Bootable USB
4. Enter DOM Mode to initialize all disks

1. Install free trial Acronis True Image 2016

1.1 Please download free trial Acronis True Image 2016 as below:

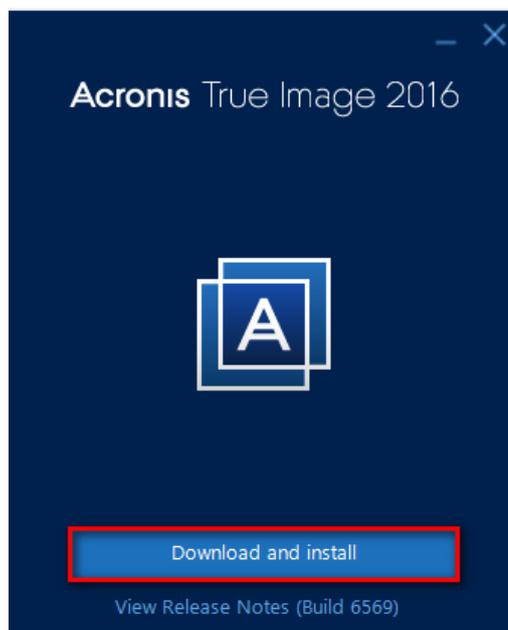
https://www.dropbox.com/s/g57glx5v4vl6p4/AcronisTrueImage2016_Trial_version_only_available_30%20days.exe?dl=0

Note: 30 days trial license.

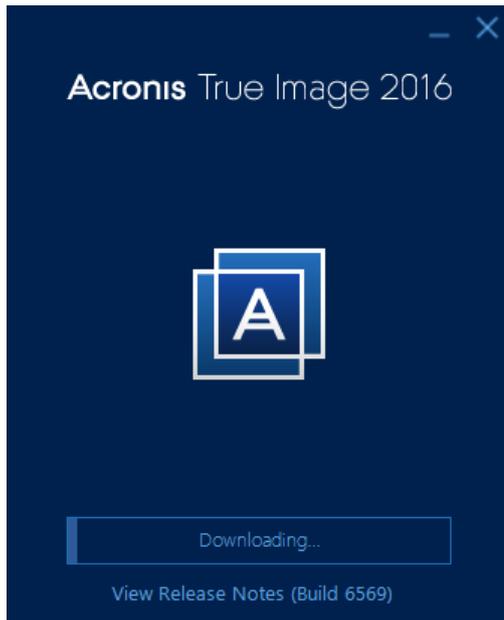
1.2 Press “AcronisTrueImage2016_web”.



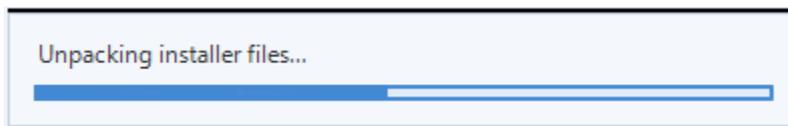
1.3 Press “Download and install”.



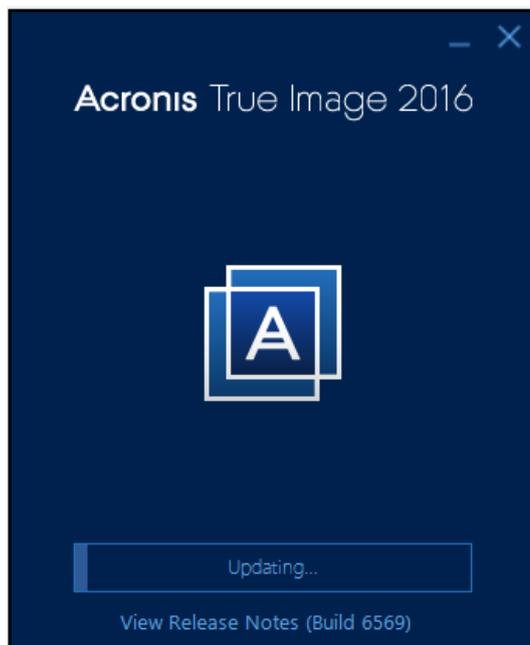
1.4 Please wait for a while.



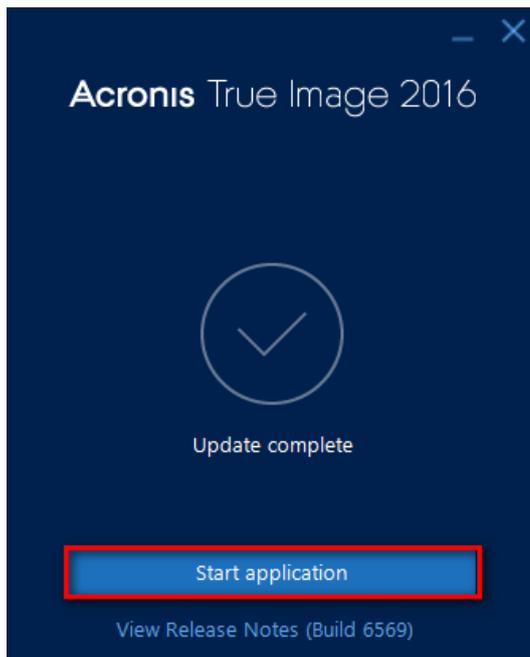
1.5 After Downloading, it will show “Unpacking installer files”.



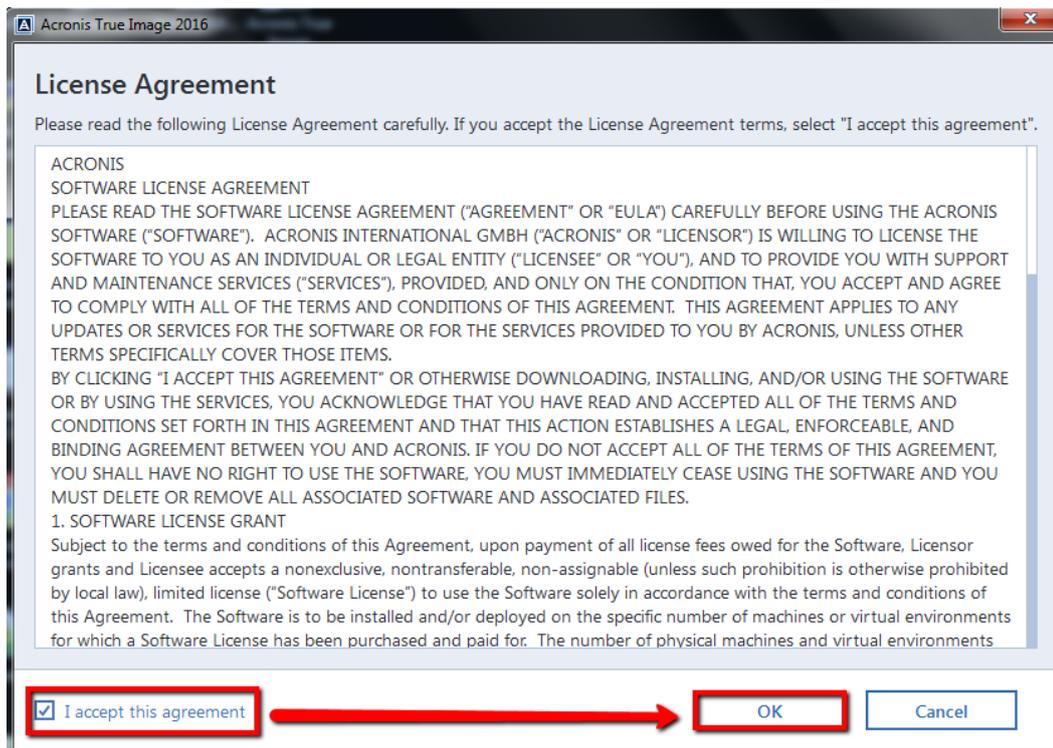
1.6 Please wait for a while.



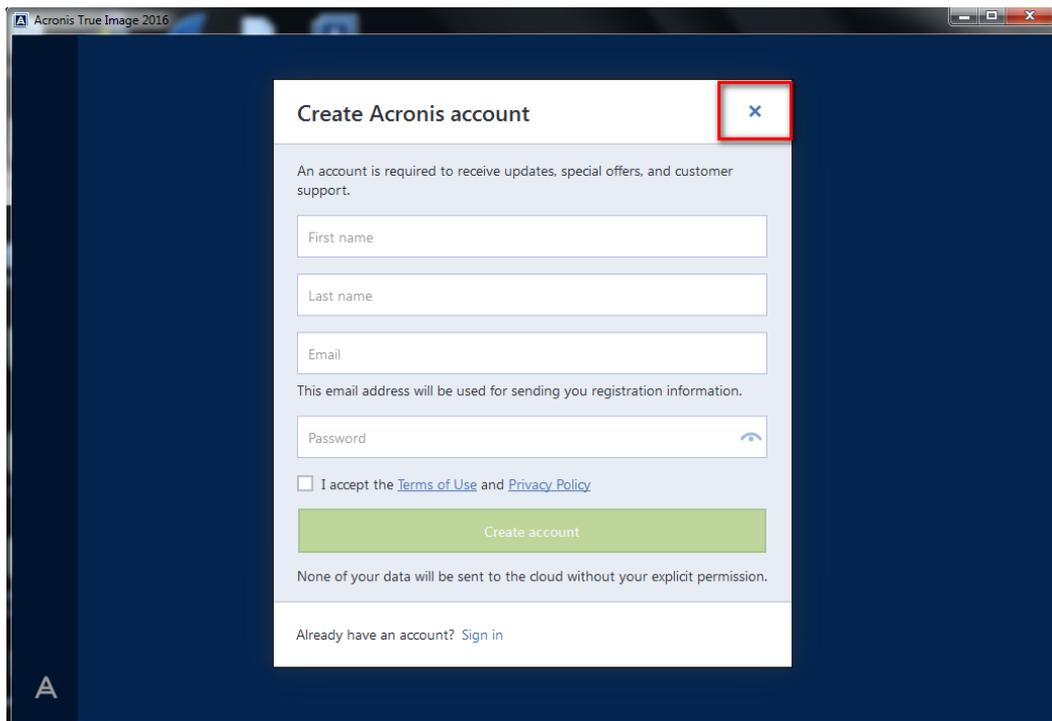
1.7 After it is finished, please press “Start application”.



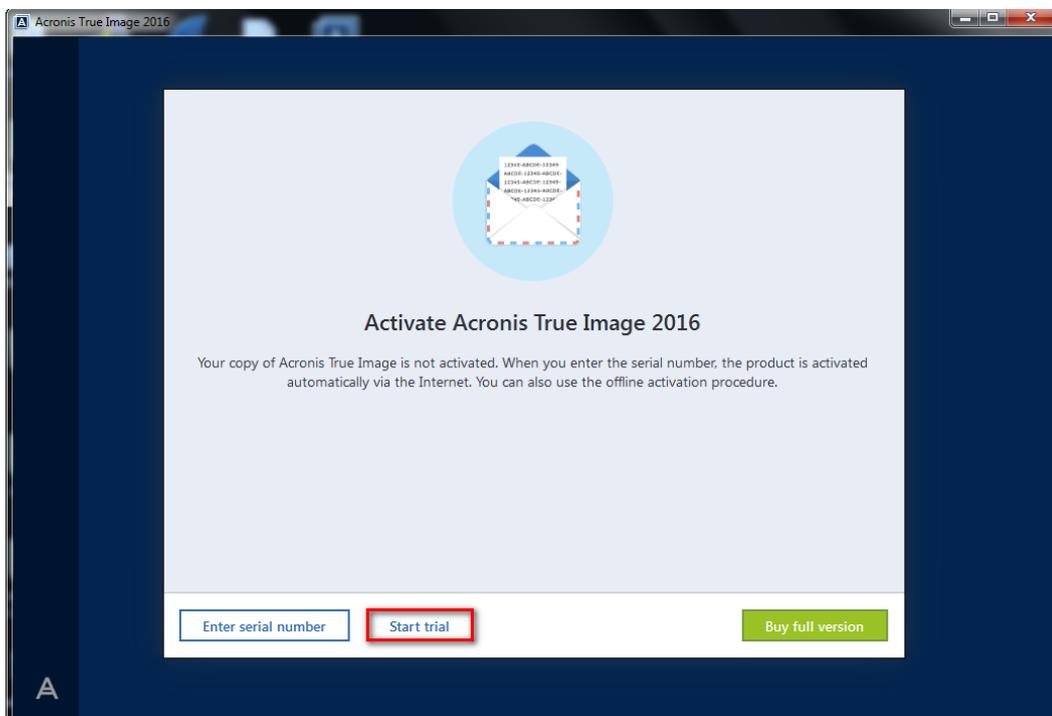
1.8 Check “I accept this agreement”, and press OK.



1.9 Please close this window.



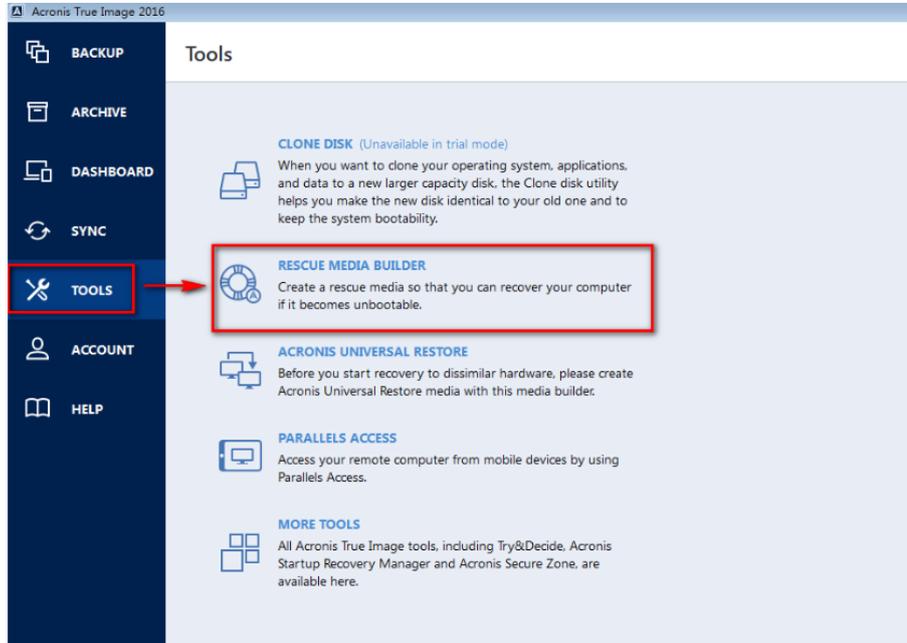
1.10 Press "Start trial".



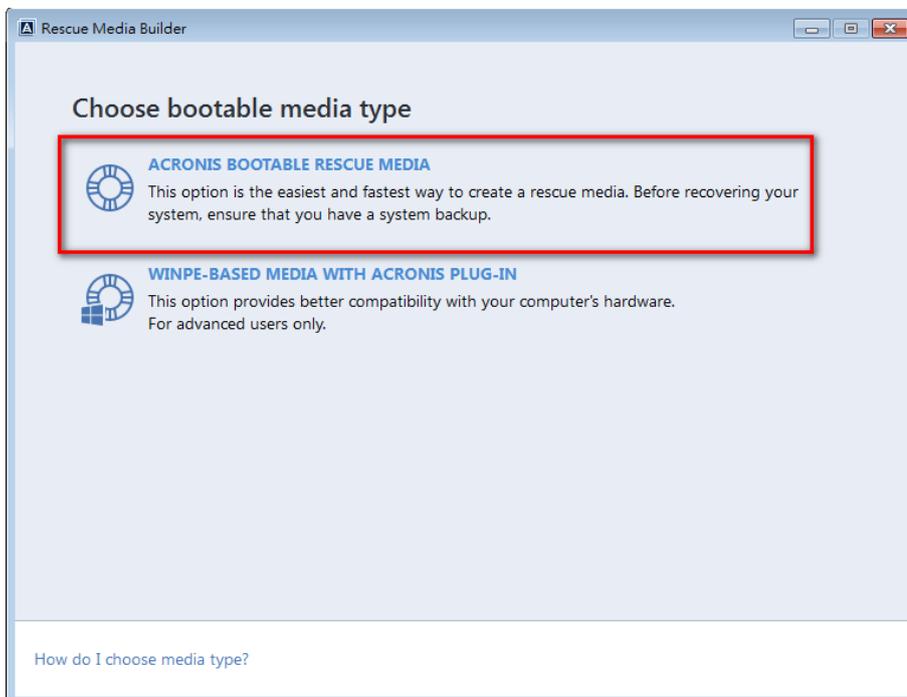
2. Make Bootable USB

✘ Before you make bootable USB, please format your USB to “FAT32”.

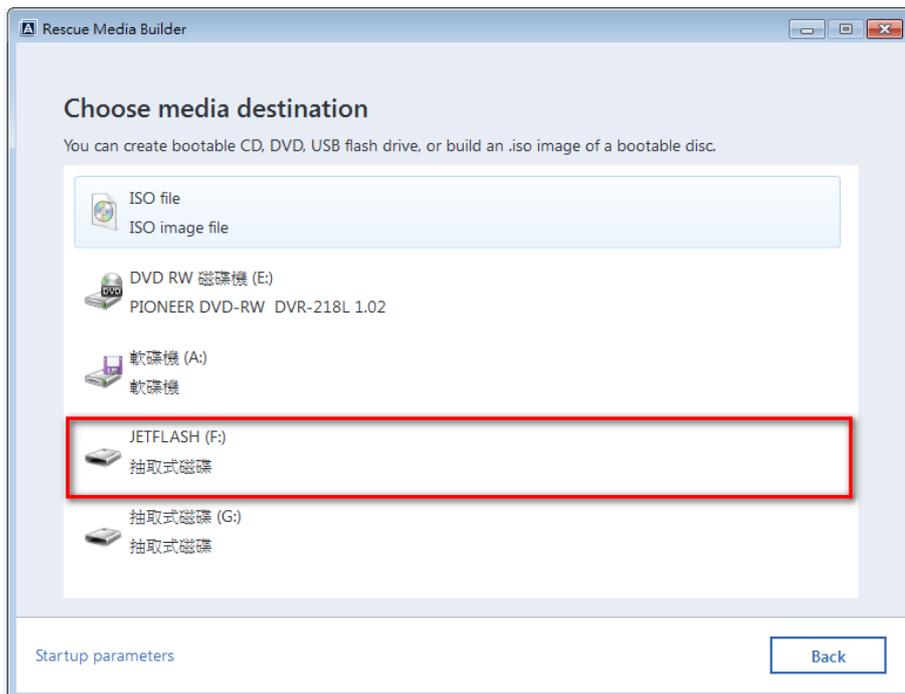
2.1 Select “TOOLS”, and press “RESCUE MEDIA BUILDER”.



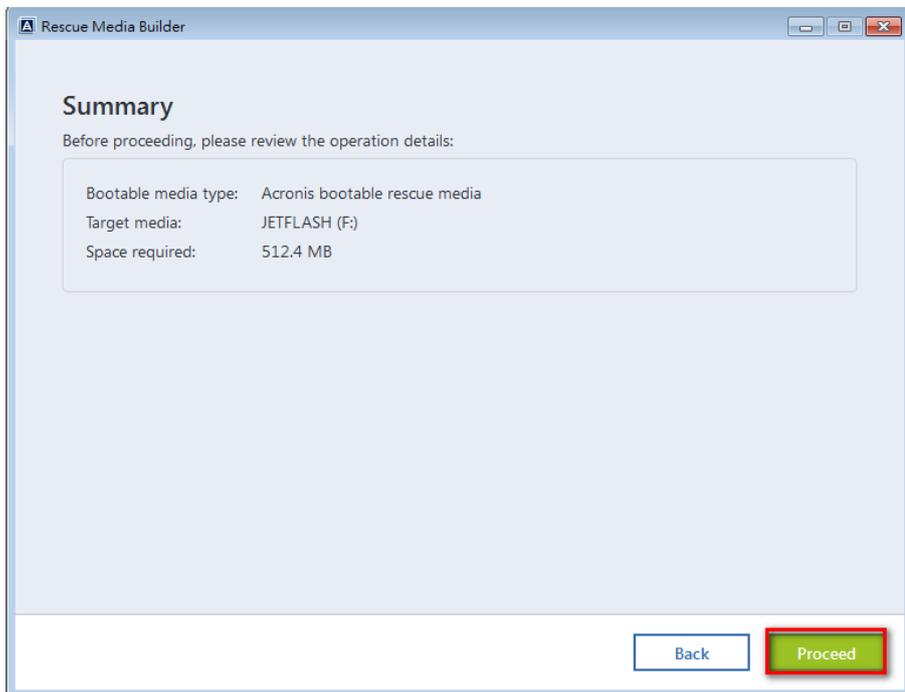
2.2 Press “ACRONIS BOOTABLE RESCUE MEDIA”.



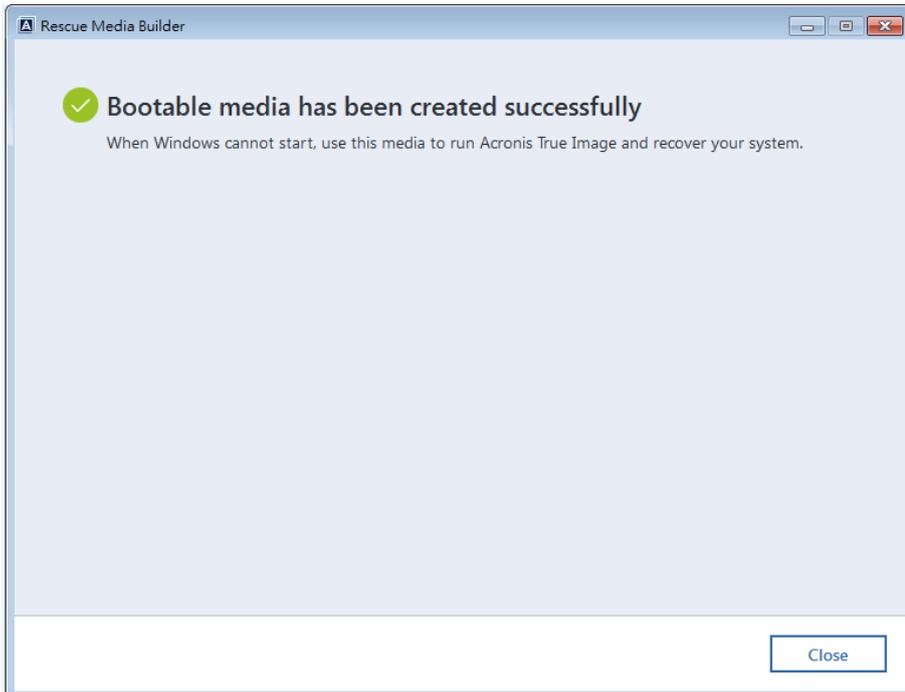
2.3 Select your USB which you want to make Bootable USB.



2.4 Press "Proceed".



2.5 Please wait until the process completed with message shown below, then close the dialog window. It takes about 3 minutes.



3 Recover USB DOM by Bootable USB

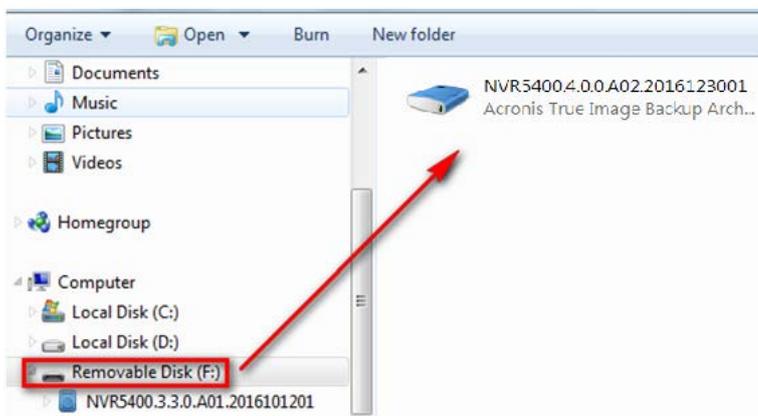
3.1 Please download NVR's OS (.tib)-**4.0.0.A02**

NVR5400-4.0.0.A02-image:

<https://drive.google.com/open?id=0B2WharsH2jc-ZFdTWmJBRDM1ZFU>

Note: In this case we use 4.0.0.A02 for example.

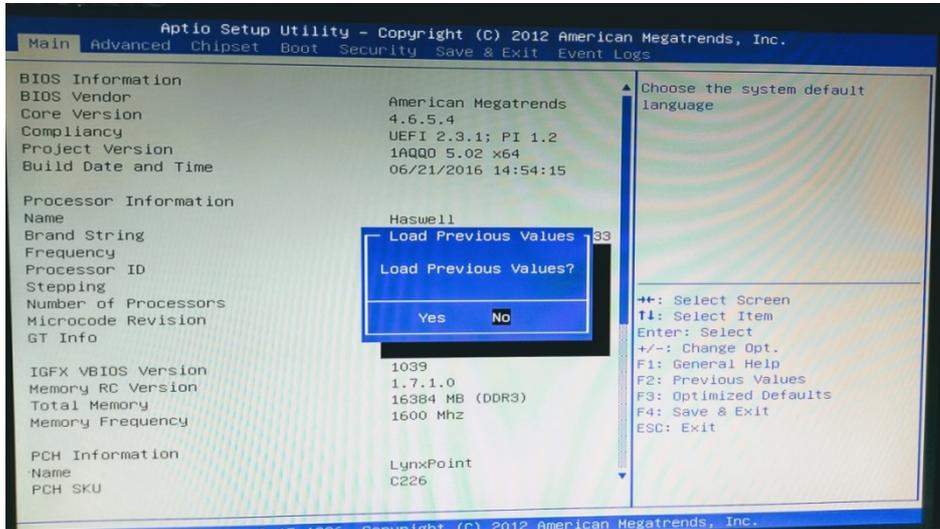
3.2 Please put NVR's OS (.tib) in your USB, you can put in your bootable USB.



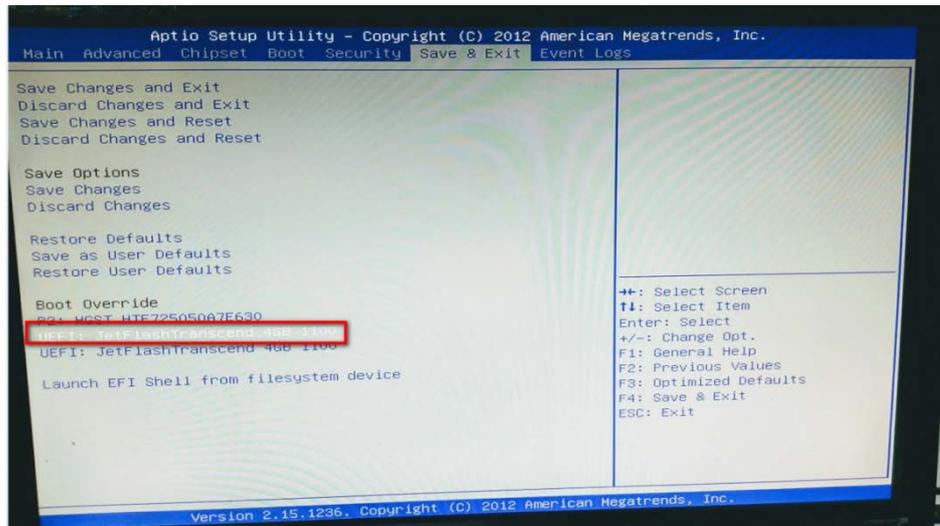
Plug in your USB (Bootable USB and NVR's OS (.tib) USB).

3.3 Turn on the NVR, and press "F2" to enter bios.

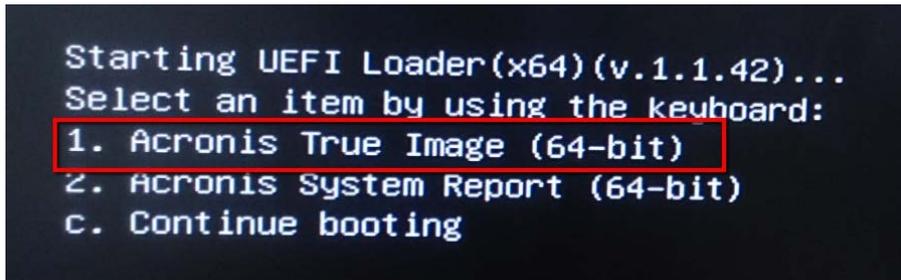
Please select "No".



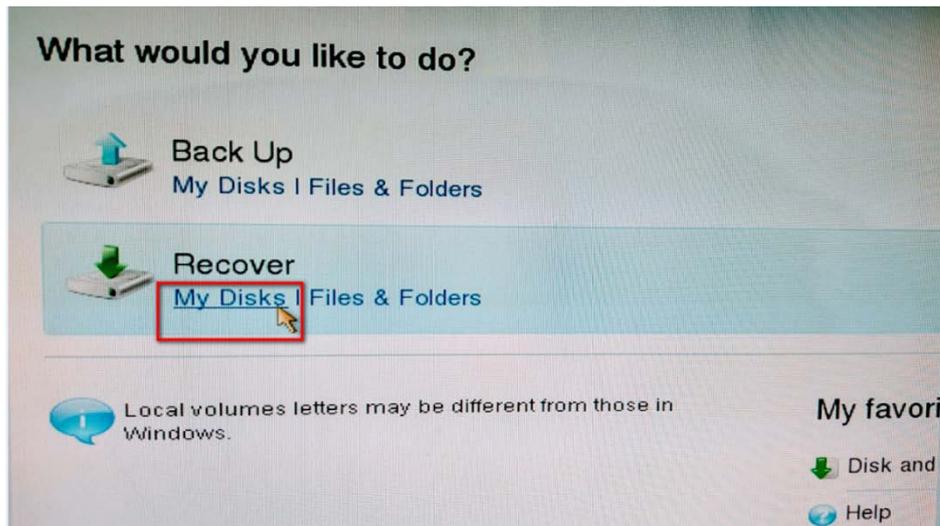
3.4 Please select "Save & Exit" and select your USB device in the row of Boot Override.



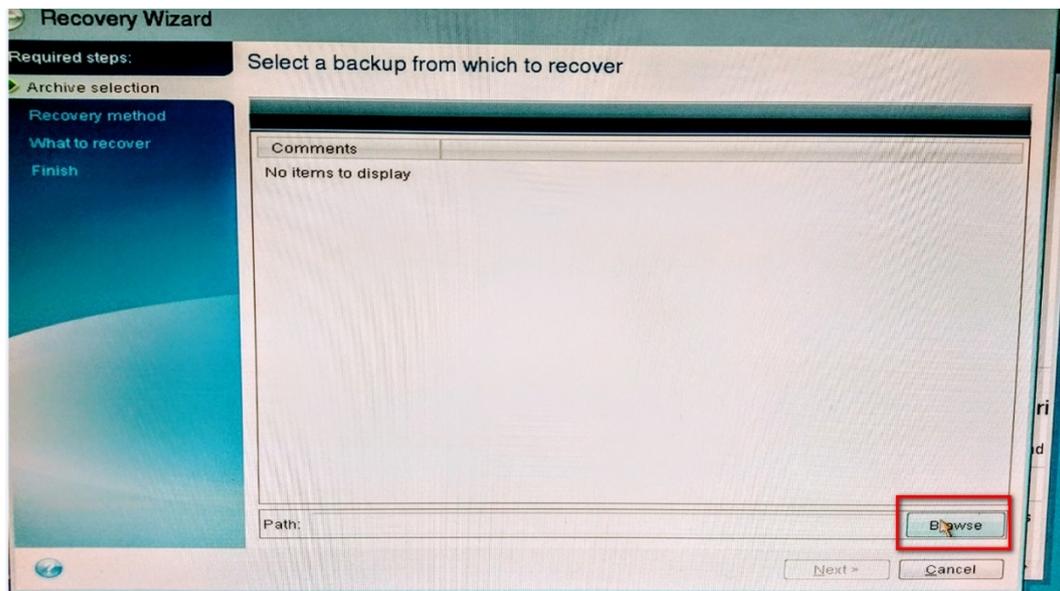
3.5 After NVR reset, you can see these options, please press “1”.



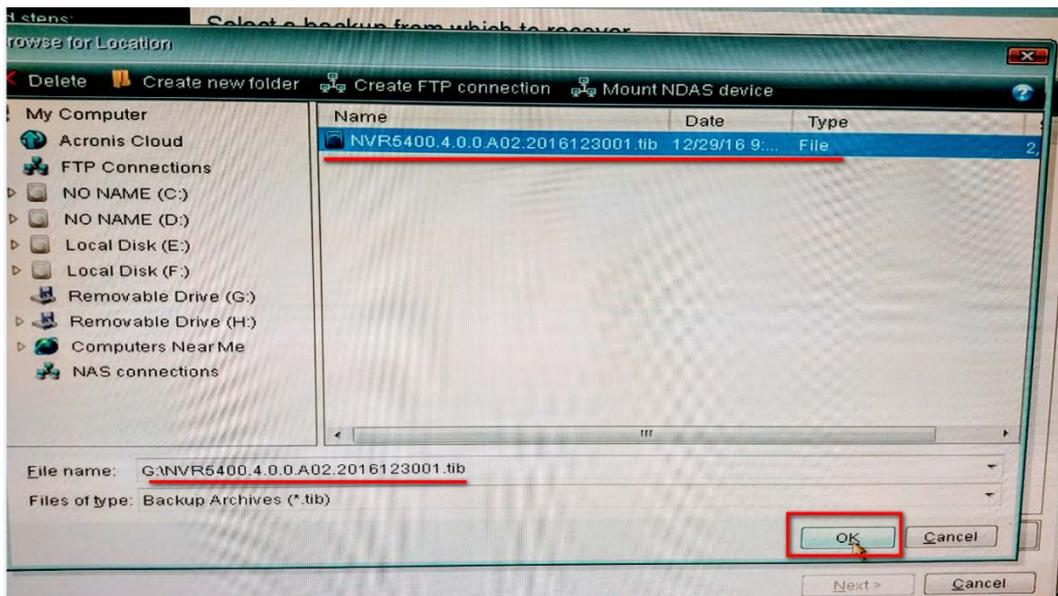
3.6 Please press “Recover My Disks”.



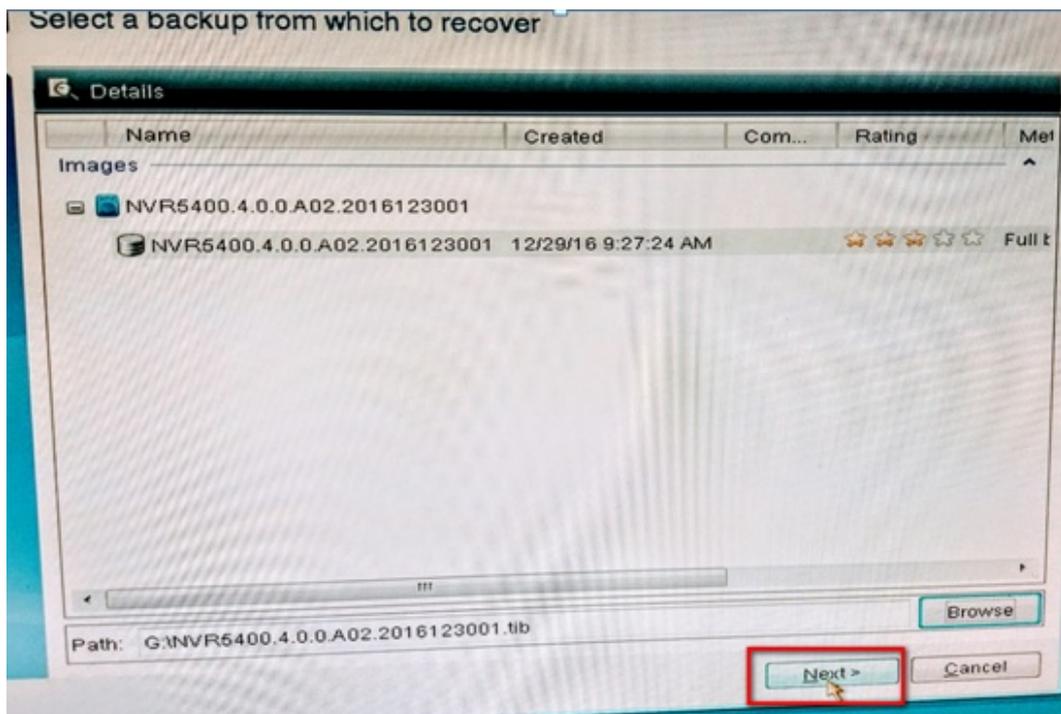
3.7 Press “Browse”.



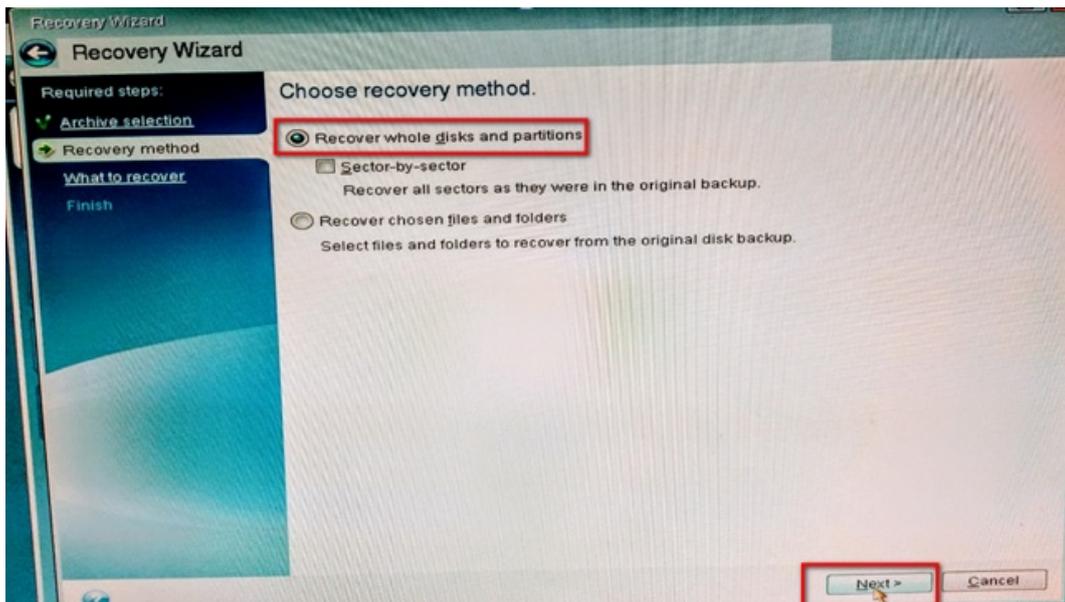
3.8 Select your NVR's 4.0.0.A02 OS (.tib) which you want to restore and press "OK".



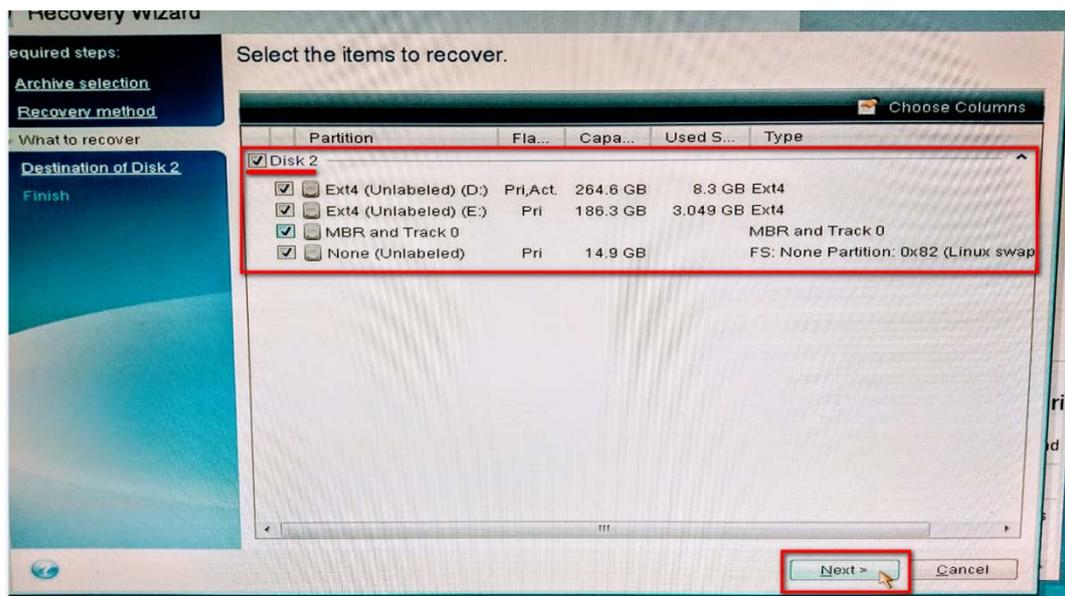
3.9 Press "Next".



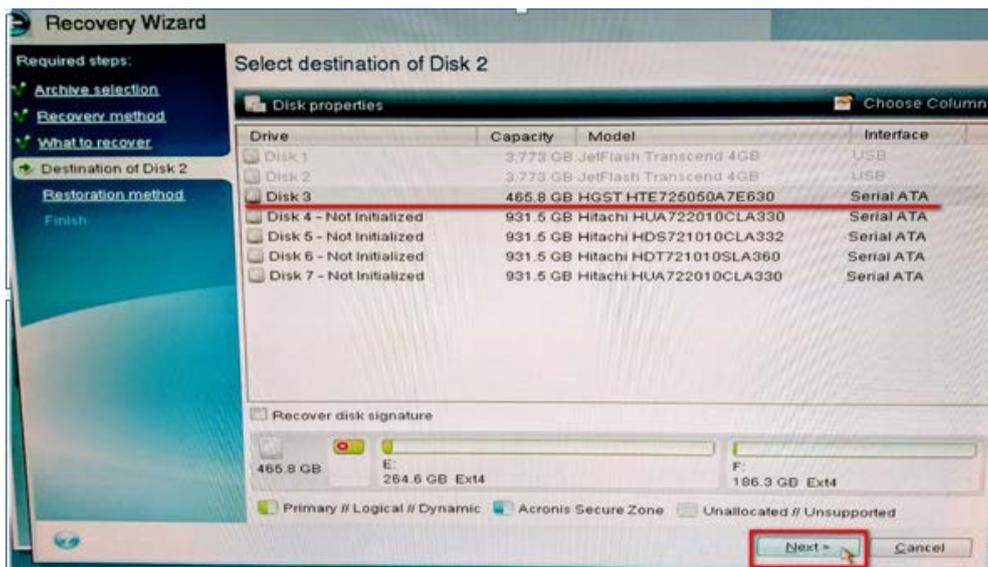
3.10 Select “Recover whole disks and partitions” and press “Next”.



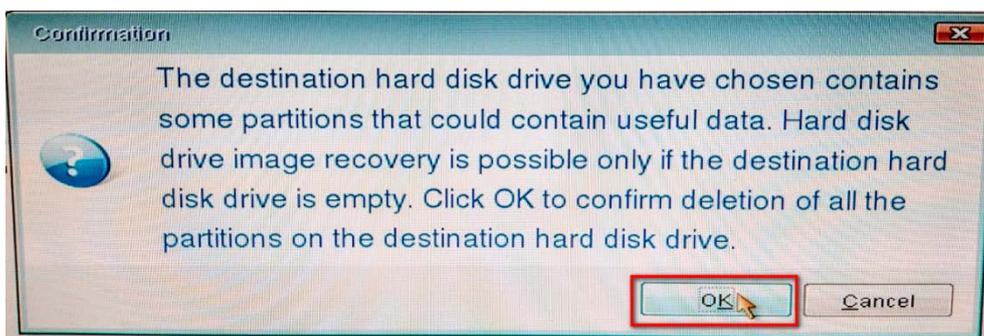
3.11 Select “Disk2” and press “Next”.



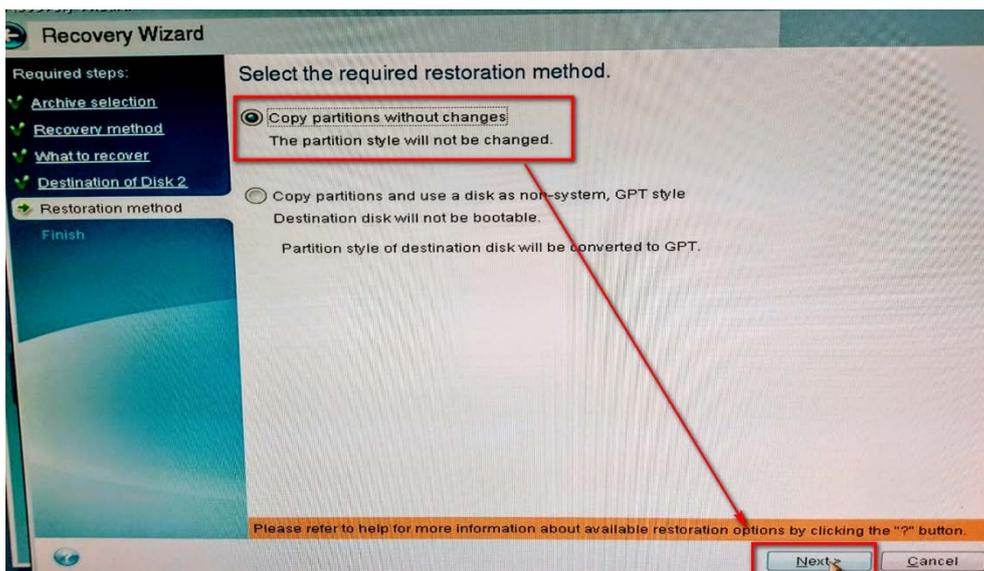
3.12 Select your 2.5 inch HDD (465.8GB) and press “Next”.



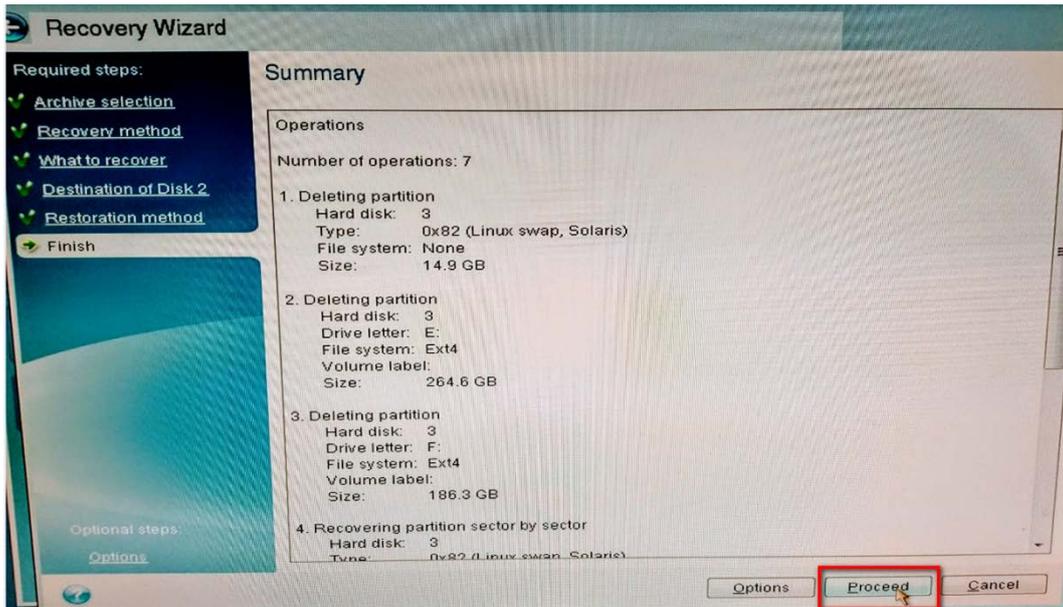
3.13 Press “OK”.



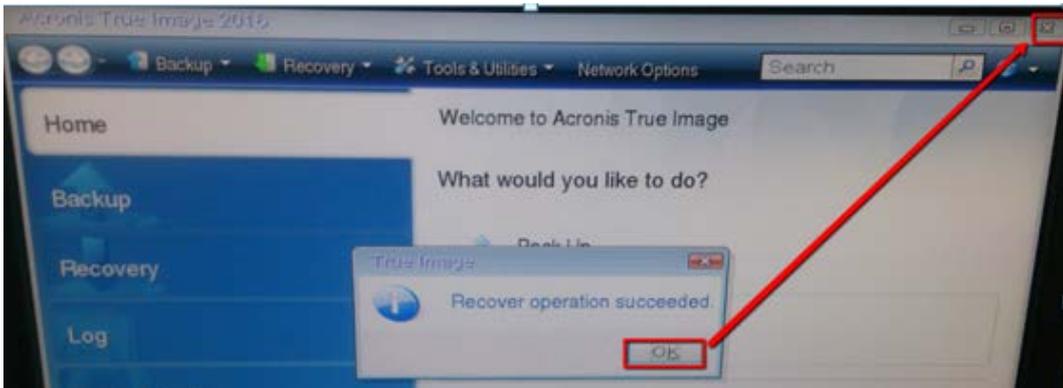
3.14 Press “Copy all partitions without changes” and press “Next”.



3.15 Recover DOM is processing, please wait about 10 minutes.

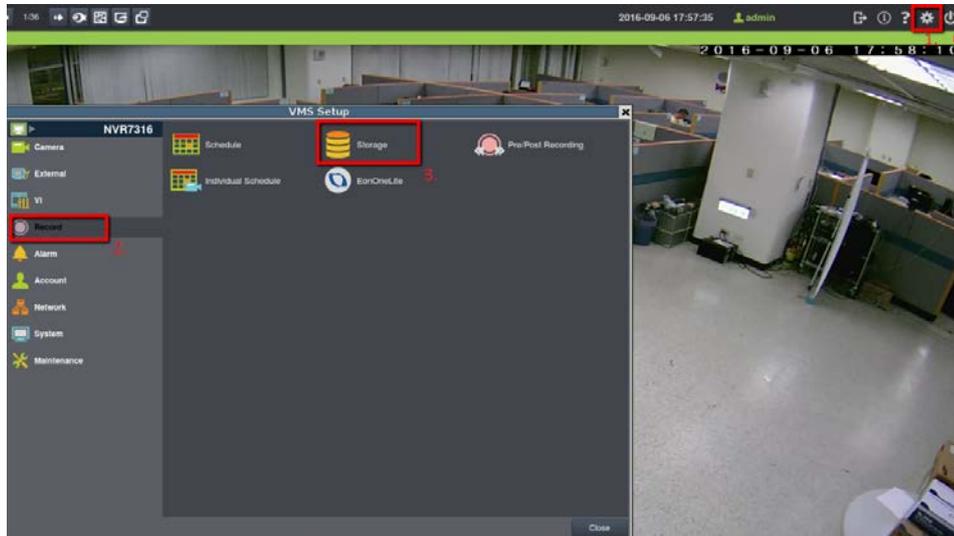


3.16 When succeeded, it will show "Recover operation succeeded", please press "OK" and close this window, and the NVR will restart.

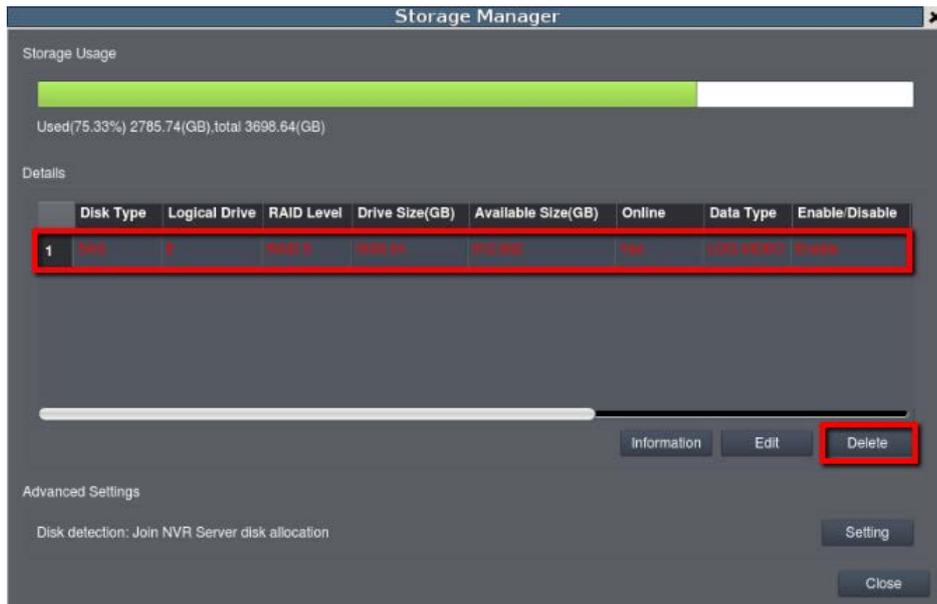


Step 2. Delete RAID

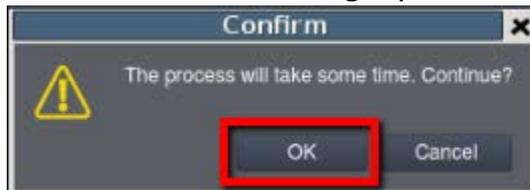
1. Go to "Setup" → "Record" → "Storage".



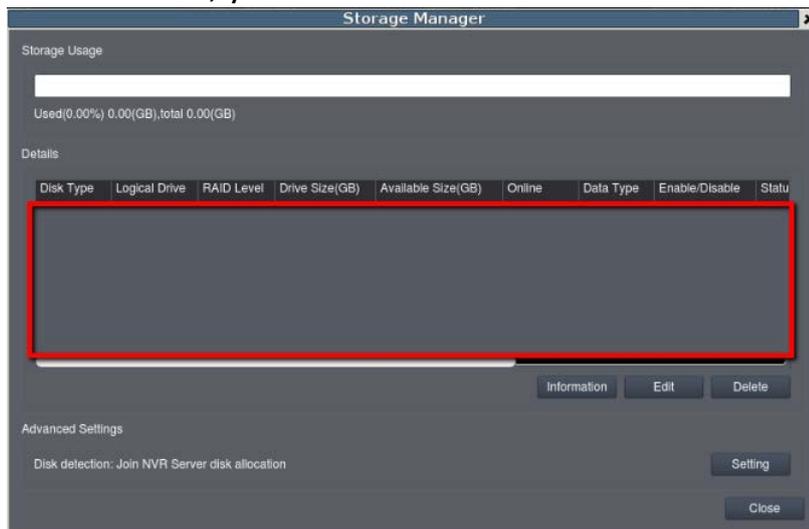
2. Select your RAID and press "Delete".



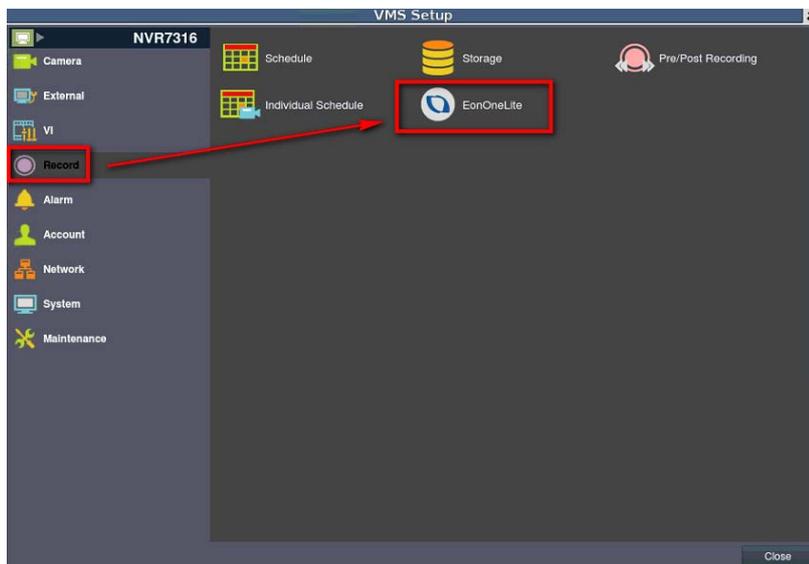
3. You will see the message, press "OK".



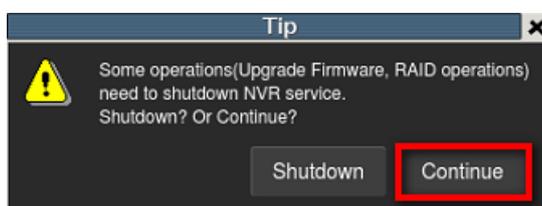
4. After finished, you will see RAID has been deleted.



5. Press "Record" and "EonOneLite"



6. Press "Continue"



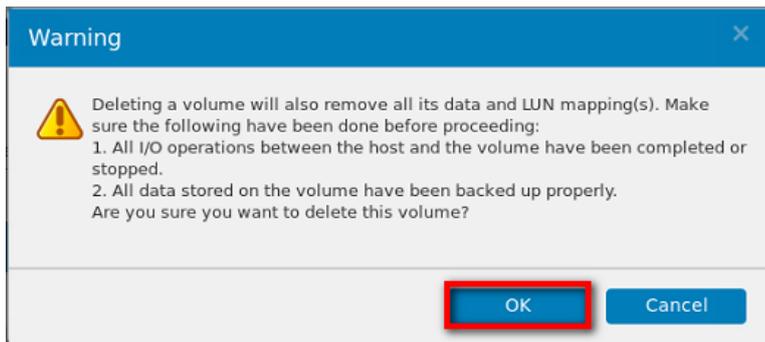
7. Username / Password : admin / admin



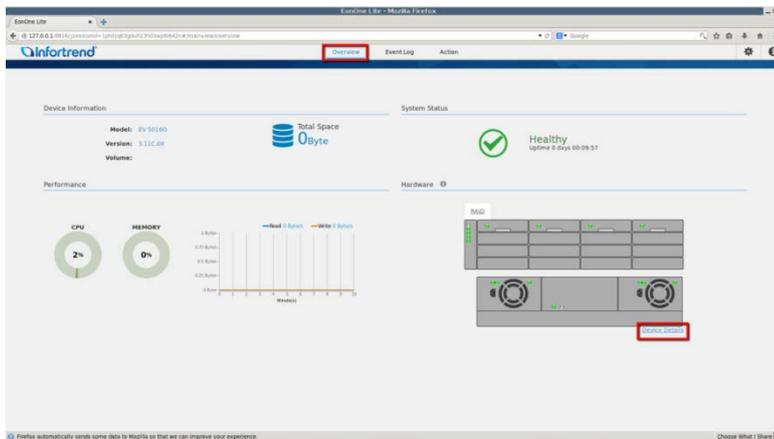
8. Press "Action" and



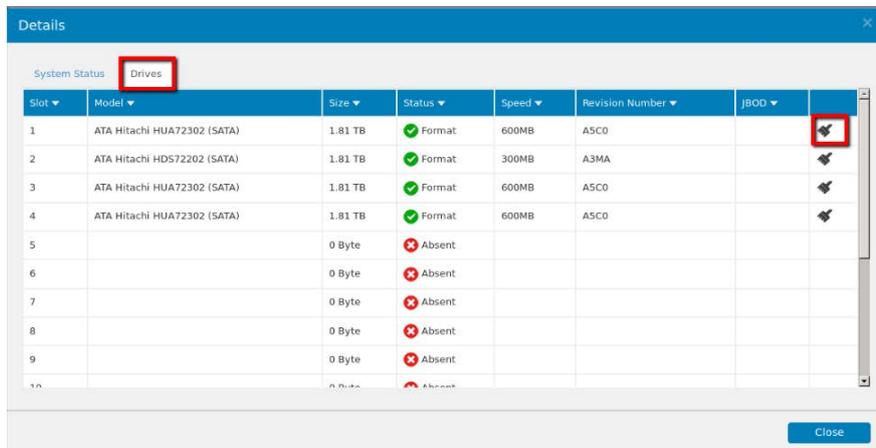
9. Press "OK"



10. Select "Overview" and press "Device Details".



11. Press "Drives" and marked icon to reserved HDD.



Details

System Status **Drives**

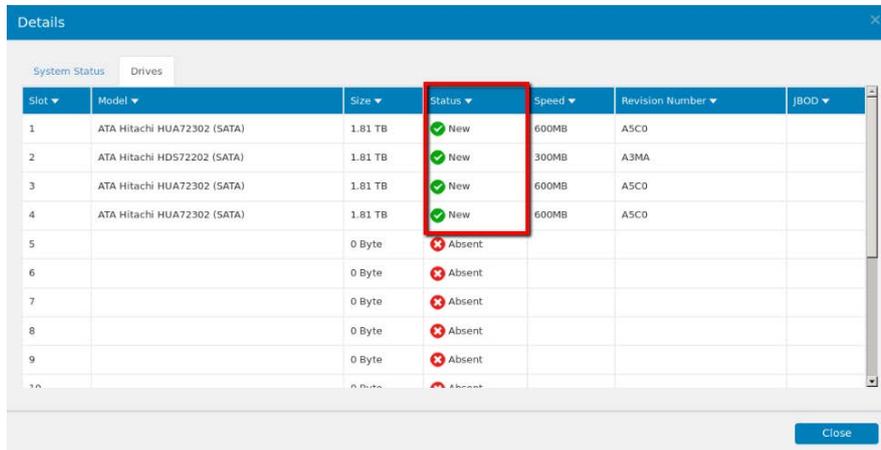
Slot	Model	Size	Status	Speed	Revision Number	JBOD
1	ATA Hitachi HUA72302 (SATA)	1.81 TB	Format	600MB	A5C0	
2	ATA Hitachi HDS72202 (SATA)	1.81 TB	Format	300MB	A3MA	
3	ATA Hitachi HUA72302 (SATA)	1.81 TB	Format	600MB	A5C0	
4	ATA Hitachi HUA72302 (SATA)	1.81 TB	Format	600MB	A5C0	
5		0 Byte	Absent			
6		0 Byte	Absent			
7		0 Byte	Absent			
8		0 Byte	Absent			
9		0 Byte	Absent			
10		0 Byte	Absent			

Close

12. Press "OK" and wait for a while.



13. After resumed, the status will change to "New".



Details

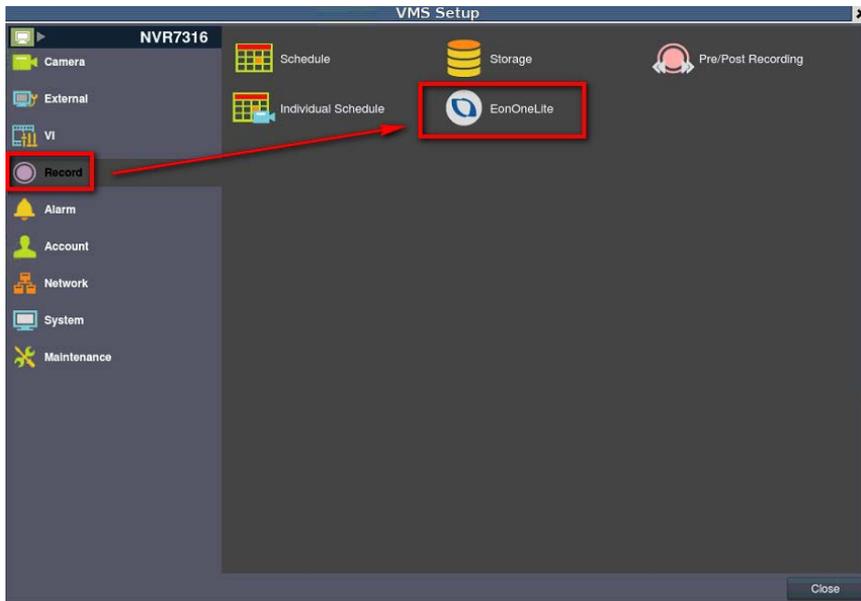
System Status **Drives**

Slot	Model	Size	Status	Speed	Revision Number	JBOD
1	ATA Hitachi HUA72302 (SATA)	1.81 TB	New	600MB	A5C0	
2	ATA Hitachi HDS72202 (SATA)	1.81 TB	New	300MB	A3MA	
3	ATA Hitachi HUA72302 (SATA)	1.81 TB	New	600MB	A5C0	
4	ATA Hitachi HUA72302 (SATA)	1.81 TB	New	600MB	A5C0	
5		0 Byte	Absent			
6		0 Byte	Absent			
7		0 Byte	Absent			
8		0 Byte	Absent			
9		0 Byte	Absent			
10		0 Byte	Absent			

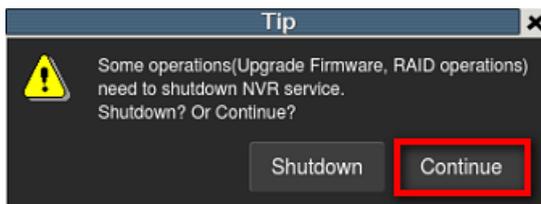
Close

Step 3. Create RAID

1. Press “Record” and “EonOneLite”



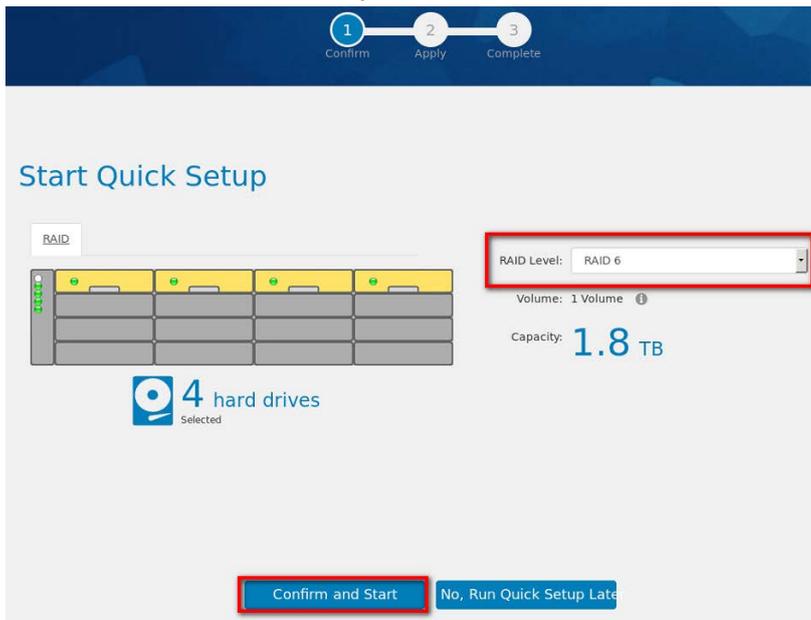
2. Press “Continue”



3. Username / Password : admin / admin

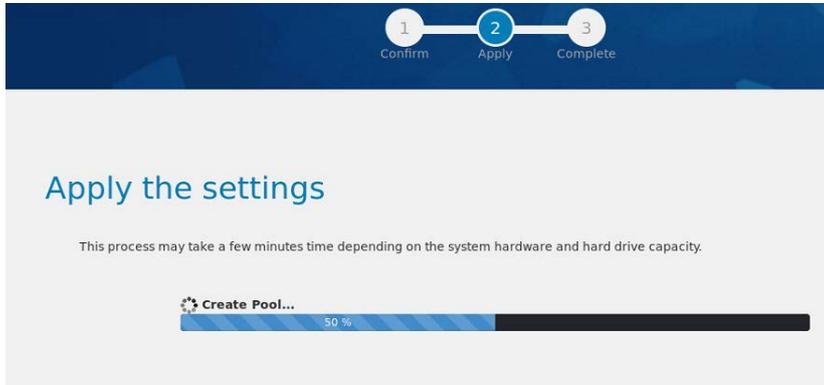


4. Choose RAID Level and press “Confirm and Start”

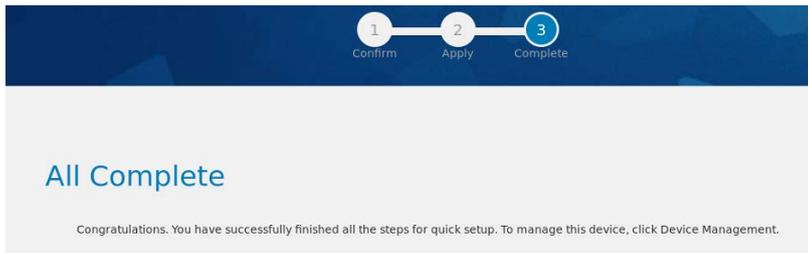


Note: Base on data protection view point, Surveon recommends RAID creation priority as: (1) RAID6 + spare > (2) RAID 6 > (3) RAID 5 + spare > (4) RAID 5

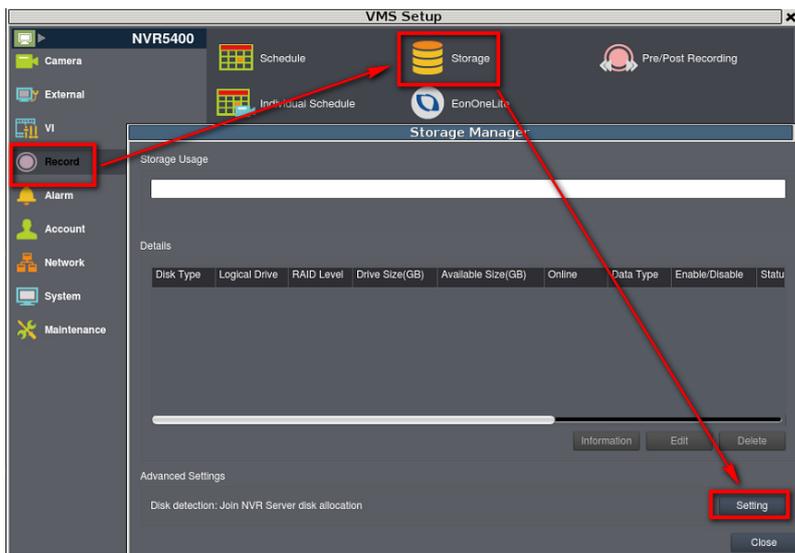
5. Apply the settings (it will take about 3~5 min)



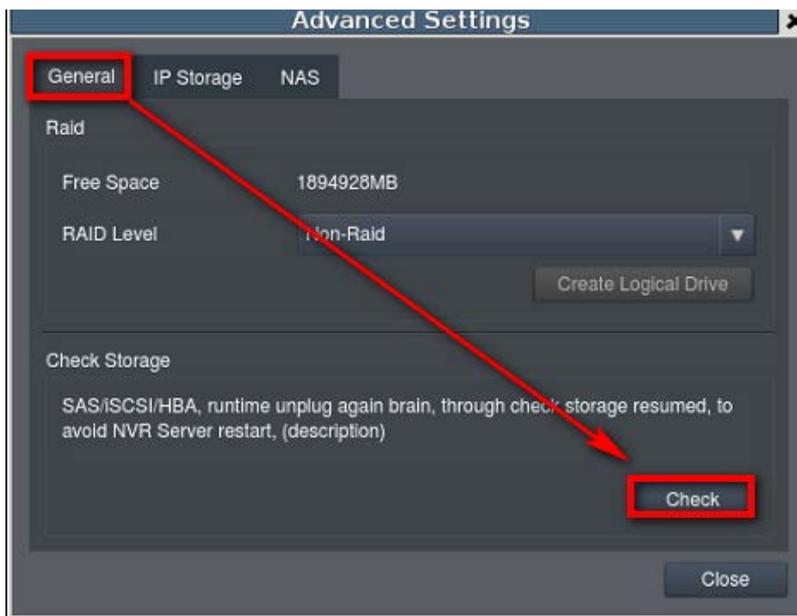
6. All Complete



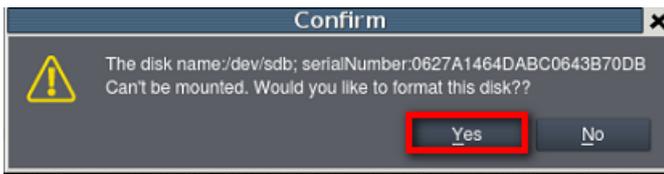
7. Press "Record" and "Storage" and "Setting"



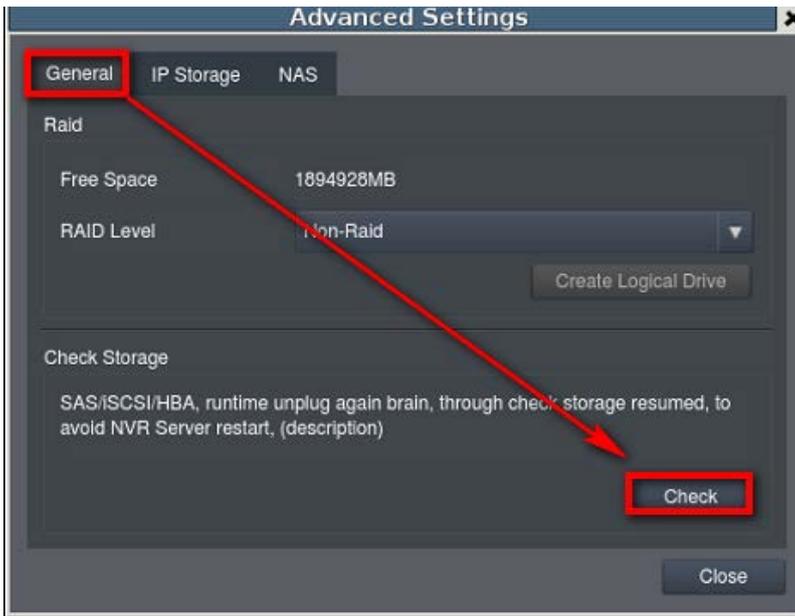
8. Press "General" and "Check"



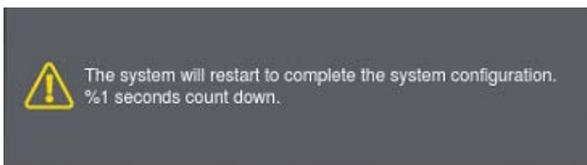
9. Press “Yes”.



10. Press “Check”.

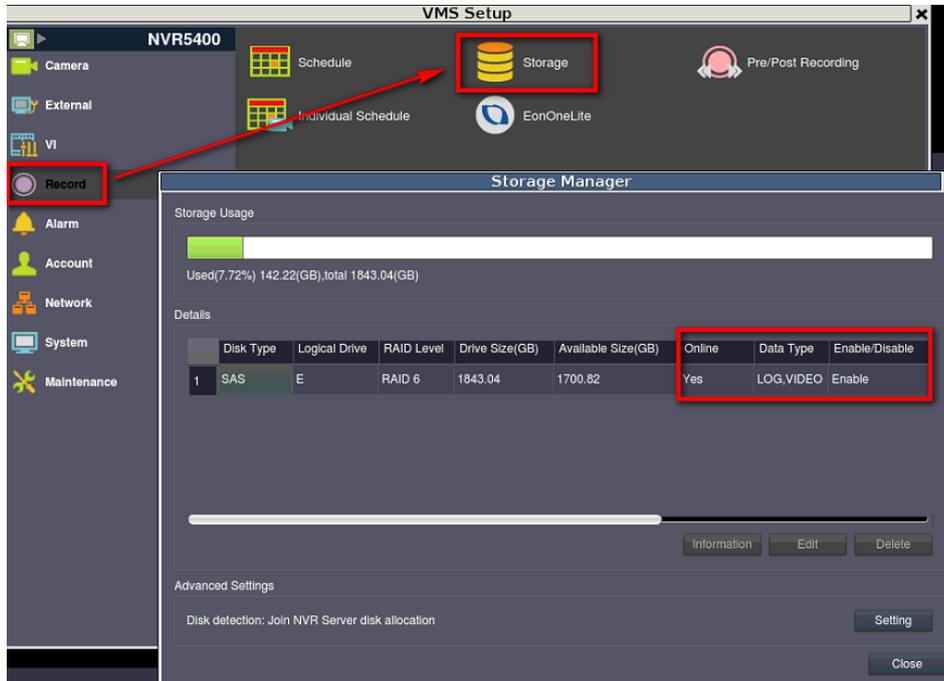


11. The system will restart to complete the system configuration.



12. Confirm the storage

- (1) Press “Record” and “Storage”
- (2) Check “Online” is Yes
- (3) Check “Data Type” is LOG , VIDEO
- (4) Check “Enable/Disable” is Enable



13. If “Data Type” or “Enable/Disable” is disabled

Please press “Edit” and choose “Enable”
Choose “NVR_video” and press “OK”

