



## How to installation OS for NVR7800

Application Notes

Version <1.0>



## Preface

This application note guide users step by step to install OS for NVR7800

**Note:** In this case we use WIN10 enterprise as an make an example.

## Scope

Product model	Firmware version
NVR7800	EV version:5.11I.02 or above Boot record version:1.29D or above

Here we have 5 steps in total; you can find each step in the following pages.

Step 1. Boot up WIN10 drive.

Step 2. Enter BIOS and change ACPI to RAID mode.

Step 3. Create GhostOS RAID.

Step 4. Re-Clone OS image and install driver.

Step 5. Install EonOneLite

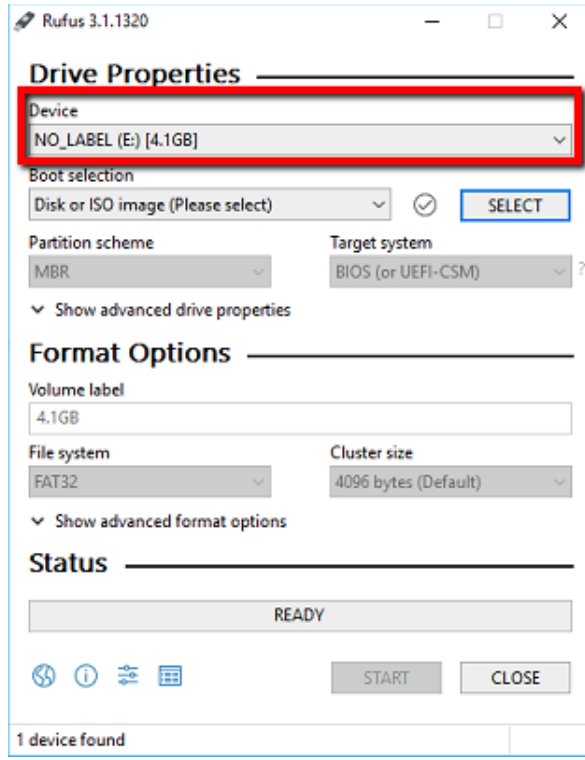
## Step 1. Boot up WIN10 drive.

Please download the Rufus first.

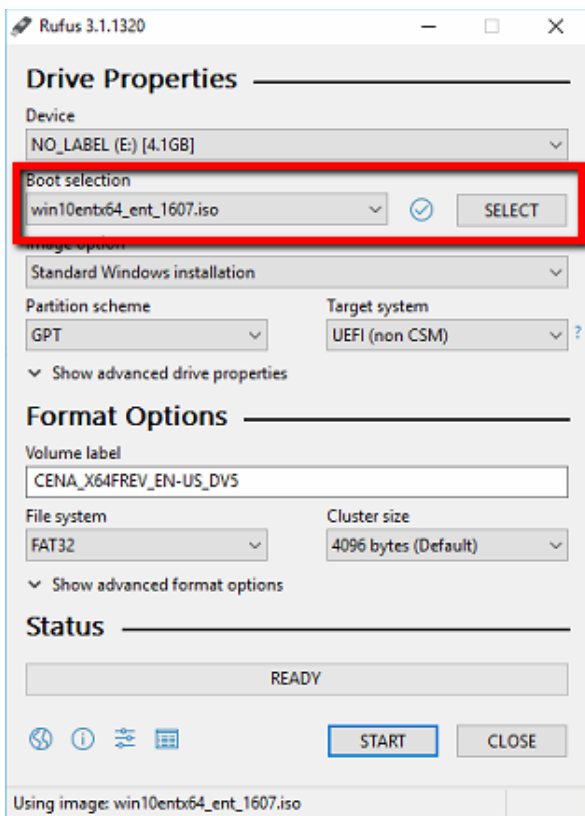
**Note:** Rufus is a utility that helps format and create bootable USB flash drives, such as USB keys/pen drives, memory sticks, etc..

[https://rufus.akeo.ie/?locale=en\\_US](https://rufus.akeo.ie/?locale=en_US)

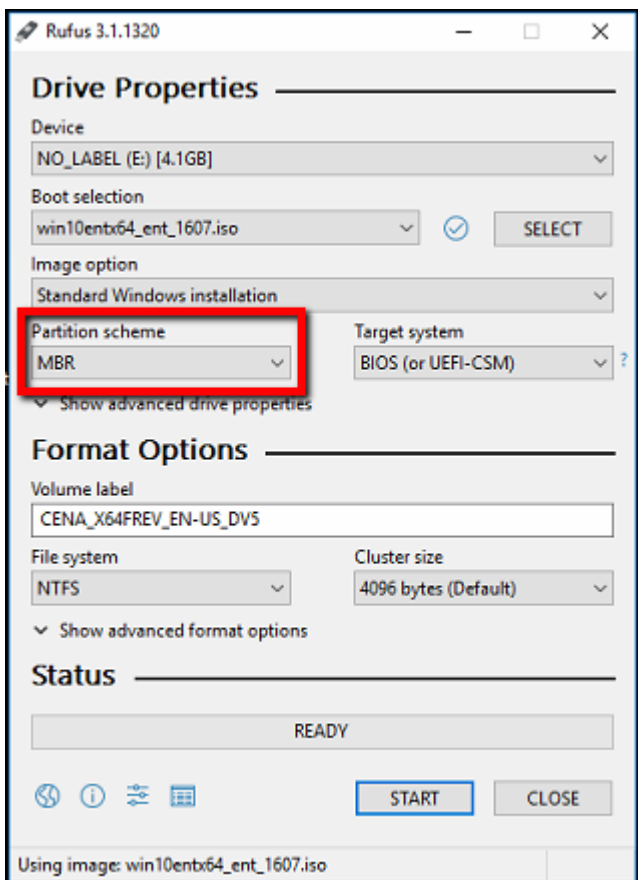
1.1 Please select the bootable USB flash drives.



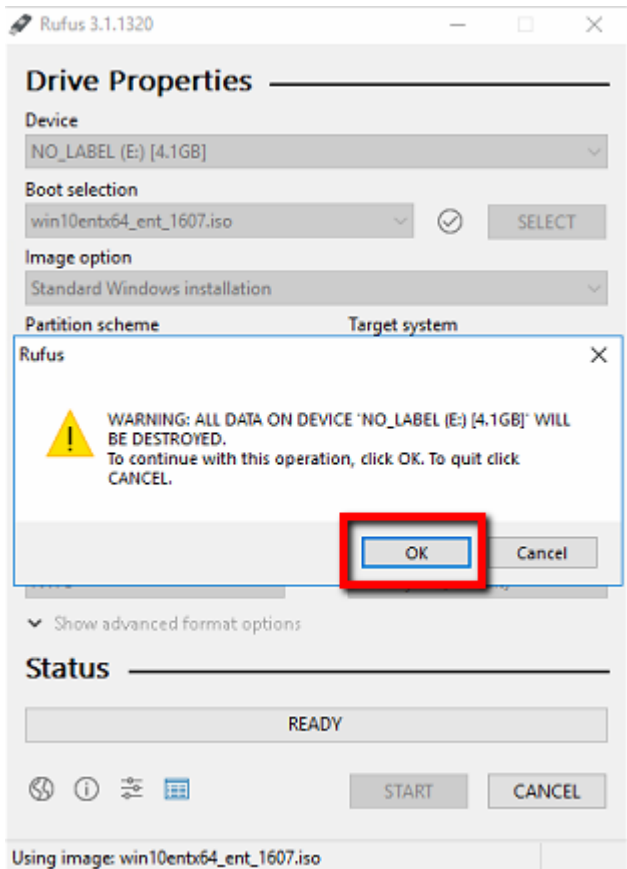
1.2 Select and prepare to install the media from ISOs file.



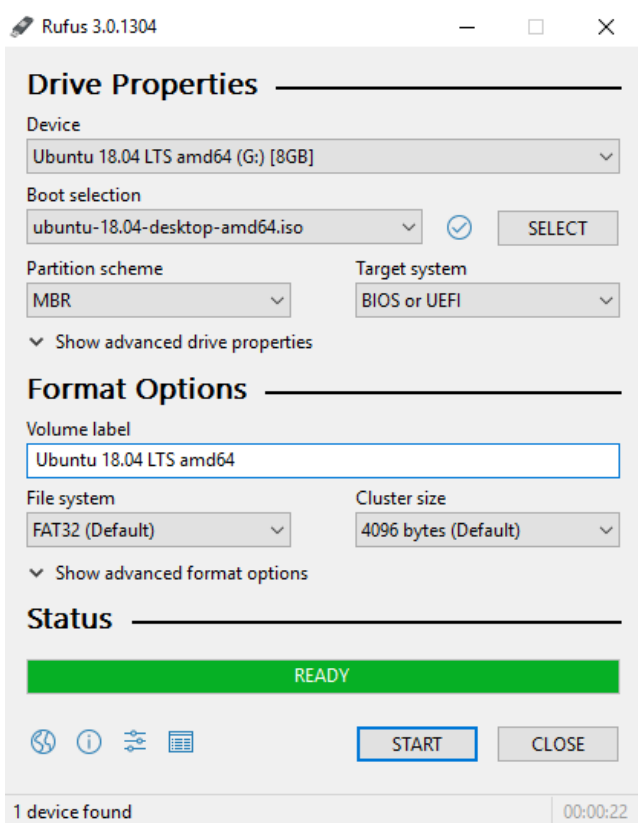
1.3 Select MBR then press Enter.



1.4 This process will format data in USB drive, press OK to continue.

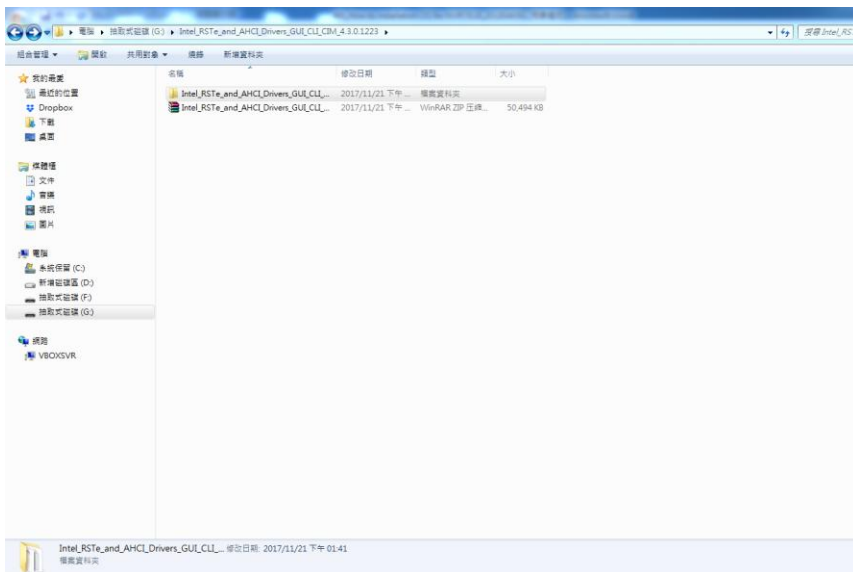


1.5 All process will takes about 10 minutes, when process is done it will show “Ready” then please plug out the USB boot up drive.



1.6 Find another USB and put Intel driver to prepare for install process.

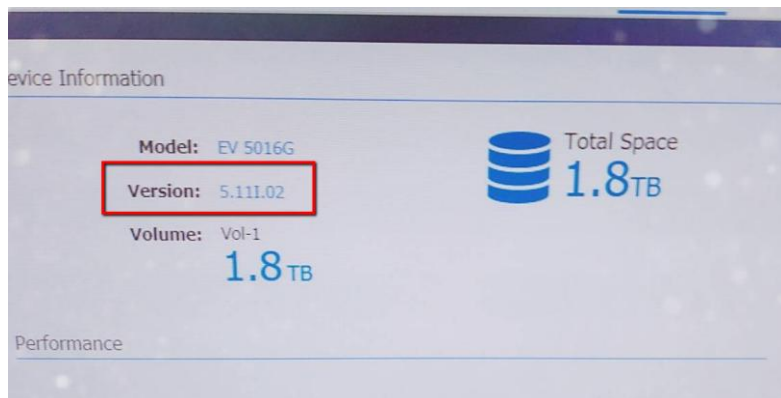
**Note:** Different OS system uses different driver.



## Step 2. Enter BIOS and change ACPI to RAID mode.

**Note:** Before we start please confirm EV version is 5.11L.02 or above and Boot record version is 1.29D or above.

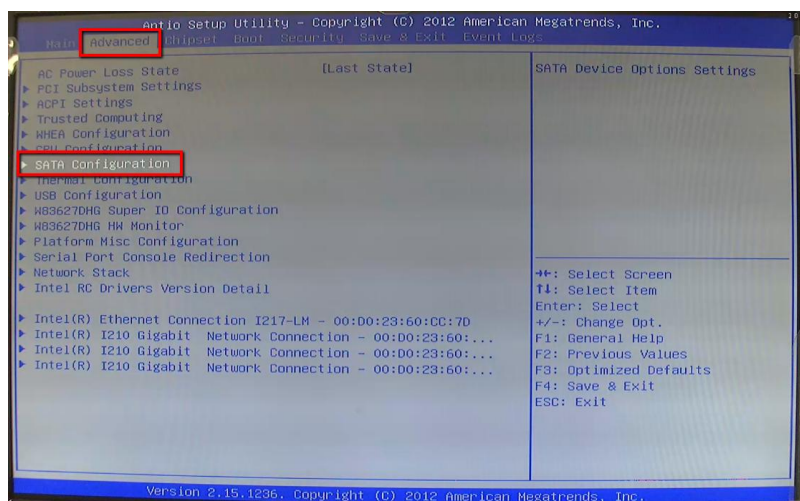
If customer is not sure about what's the current NVR7800's EV and Boot version please contact with Surveon Support team first.



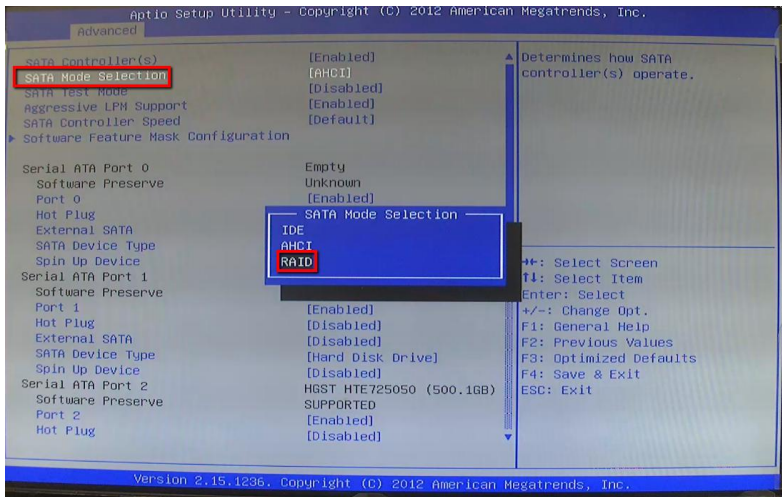
Item	Value
+5V Value	4.84 V
+12V Value	11.68 V
Backplane Temperature	25.0 C
Boot Record Version	1.29D
Cache Backup Module	
ControllerTemperature(1)	31.0 C
ControllerTemperature(2)	31.0 C
Cooling Fan0	2057.0 RPM
Cooling fan0	
Cooling fan1	

2.1 Please shutdown the NVR7800, plug-in Win10 boot up drive and Intel driver then boot up NVR7800 again.

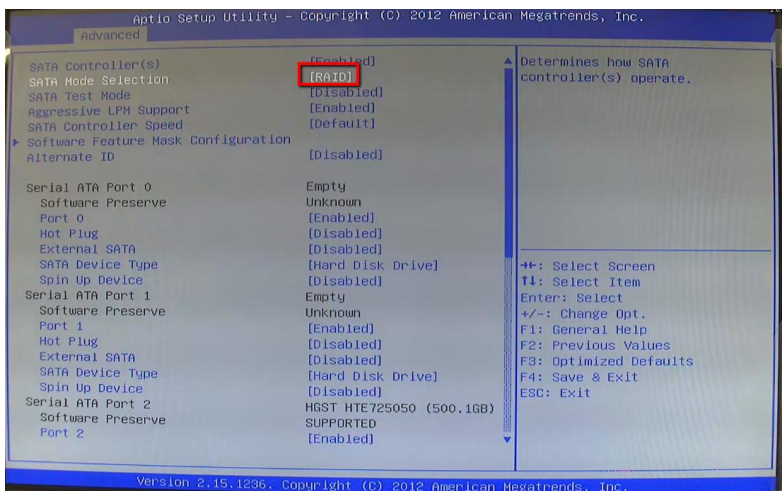
Keeping press **F2** Enter BIOS, Advance / SATA Configuration



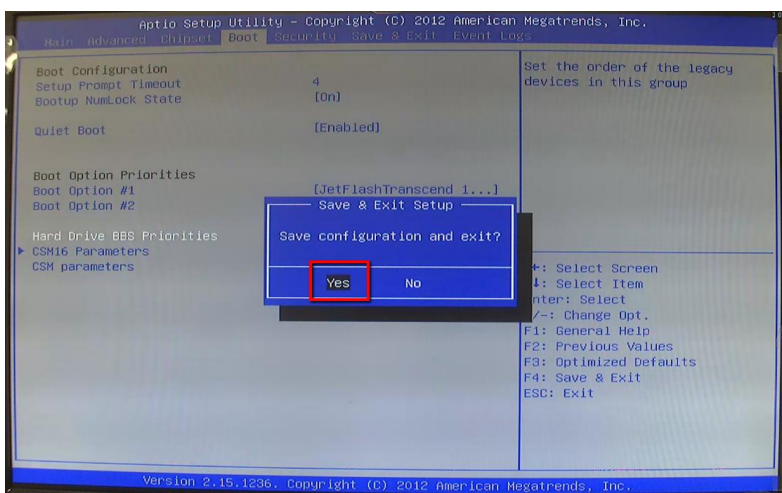
2.2 Select SATA Mode Selection then press Enter, select RAID and press enter.



2.3 Press Esc to back to last page, SATA mode Selection will change to RAID.



2.4 Press F4 to Save & Exit, NVR7800 will reboot again.





## Step 3. Create GhostOS RAID

### 3.1 Keep pressing Ctrl+I into SATA RAID Configuration Utility

```
Intel(R) Rapid Storage Technology enterprise - SATA Option ROM - 3.7.0
Copyright(C) 2003-12 Intel Corporation. All Rights Reserved.

RAID Volumes:
None defined.

Physical Devices:
ID Device Model Serial # Size Type/Status
2 HGST HCC545050A7 RB650A1C398N9J 465.7GB Non-RAID Di
3 HGST HCC545050A7 RB650A1C39Y5PJ 465.7GB Non-RAID Di
Press <CTRL-I> to enter Configuration Utility...
```

### 3.2 Select 1 to Create RAID Volume

```
[ MAIN MENU ]
1. Create RAID Volume 3. Reset Disks to M
2. Delete RAID Volume 4. Exit
[ DISK/VOLUME INFORMATION ]

RAID Volumes:
None defined.

Physical Devices:
ID Device Model Serial # Size Type/Status
2 HGST HCC545050A7 RB650A1C398N9J 465.7GB Non-RAID Di
3 HGST HCC545050A7 RB650A1C39Y5PJ 465.7GB Non-RAID Di
```

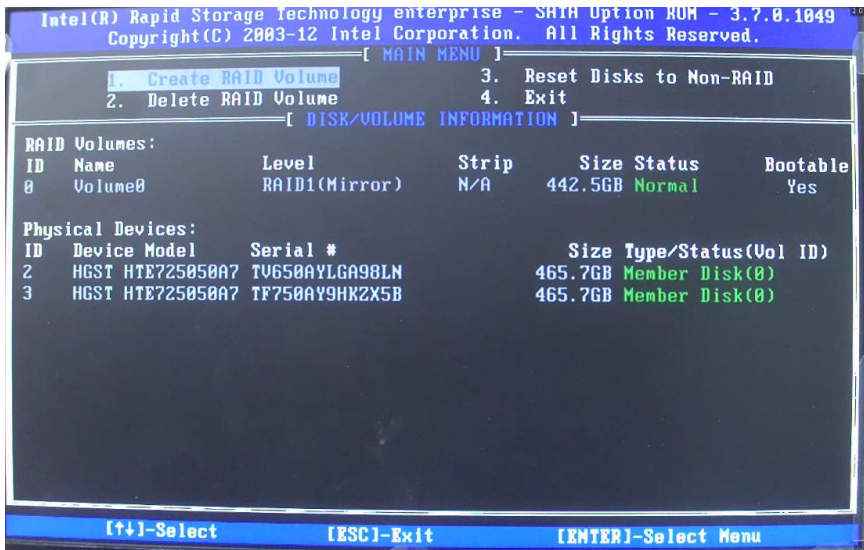
### 3.3 Setup the RAID Level to RIAD1 (Mirror) and modify the capacity size to full size.

```
Name: Volume0
RAID Level: RAID1(Mirror)
Disks: Select Disks
Strip Size: N/A
Capacity: 42.5 GB
Create Volume

[ HELP ]

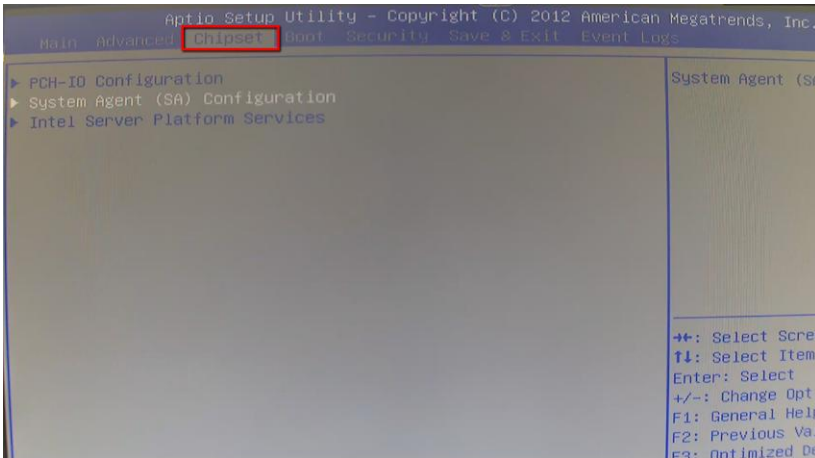
The default value indicates the maximum capacity using the
disks. Entering a lower capacity allows you to create a
volume on these disks.
```

### 3.4 Press Exit

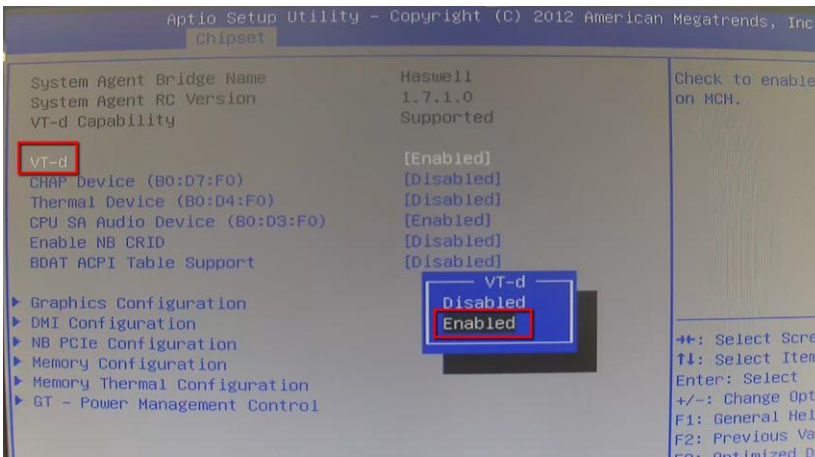


## Step 4. Re-Clone OS image and install driver.

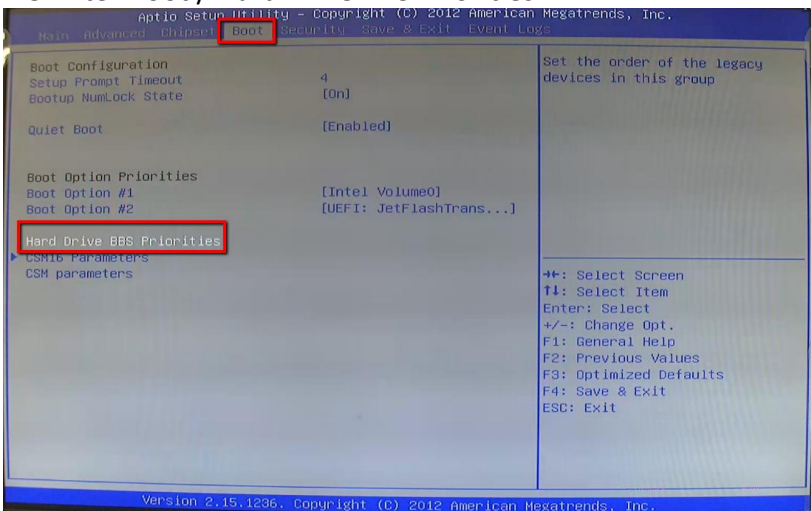
4.1 Keep pressing F2 to enter Bios, select Chipset / System Agent (SA) Configuration.



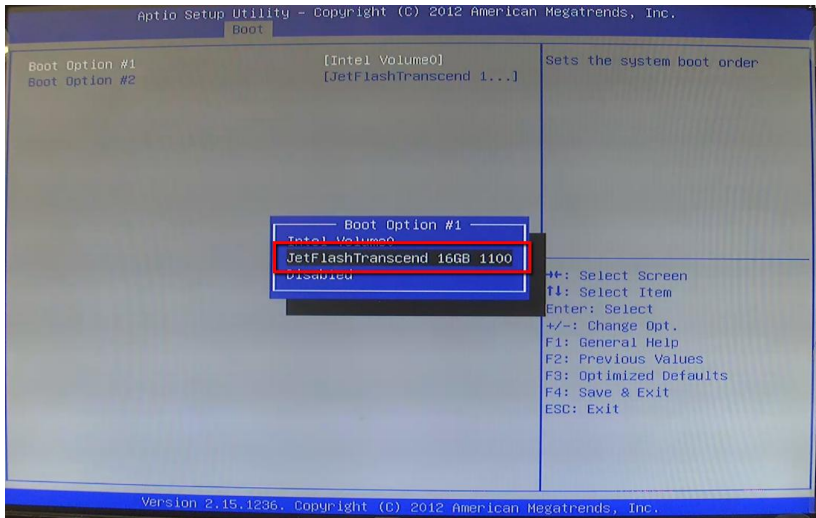
4.2 Select VT-d and switch to Enable then press Enter.



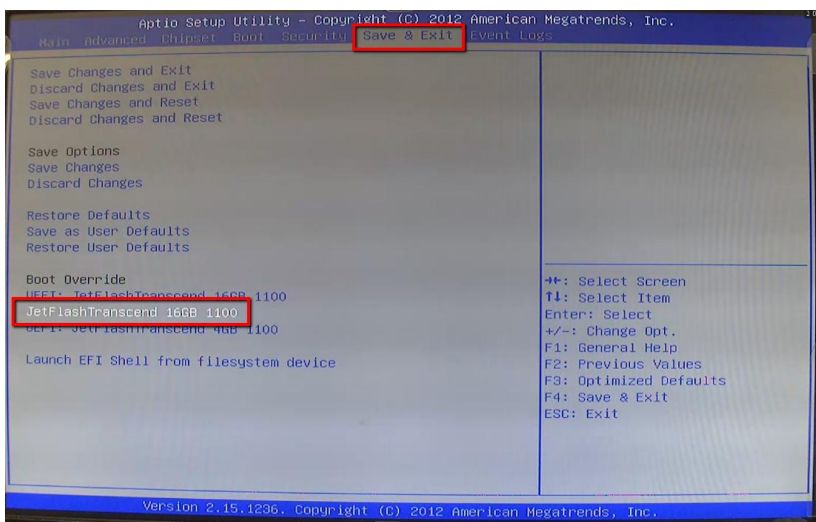
4.3 Enter Boot / Hard Drive BBS Priorities



4.4 Switch Boot Option #1 to the boot up drive we created in step1 then press Esc to exit.



4.5 Choose Save & Exit / Boot Override and select boot up drive, NVR will directly run boot up drive.

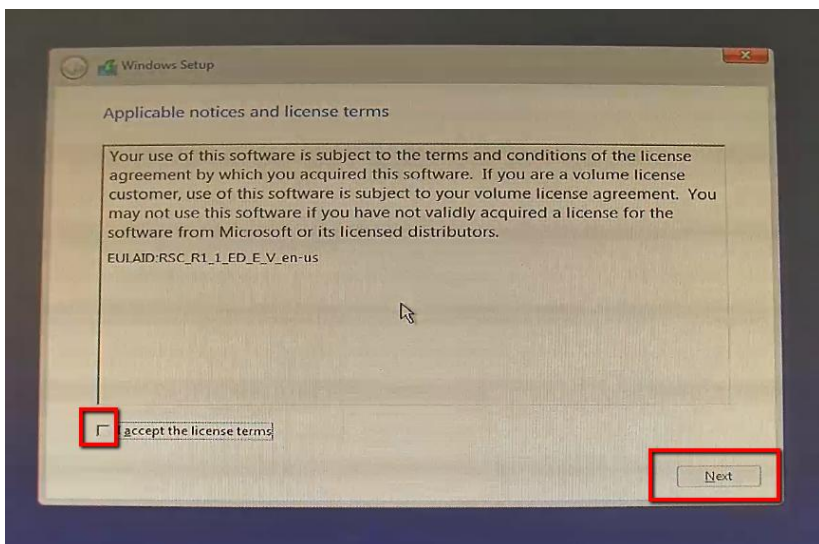
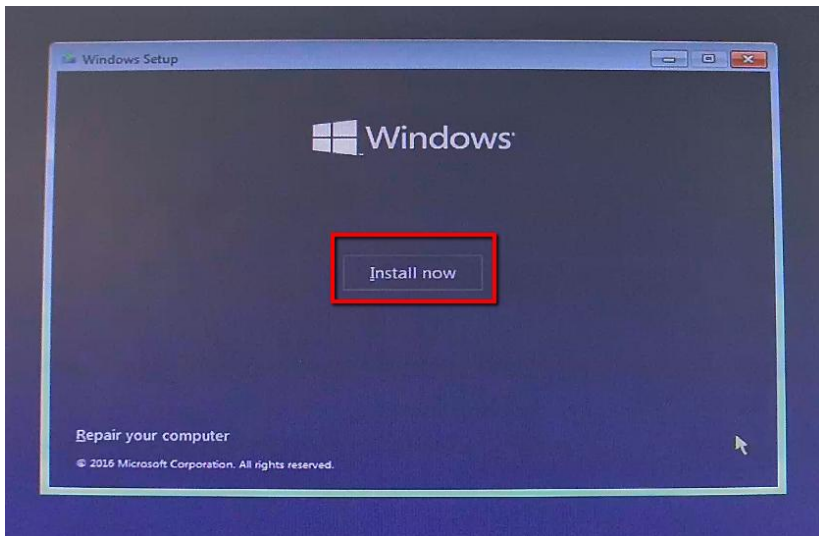
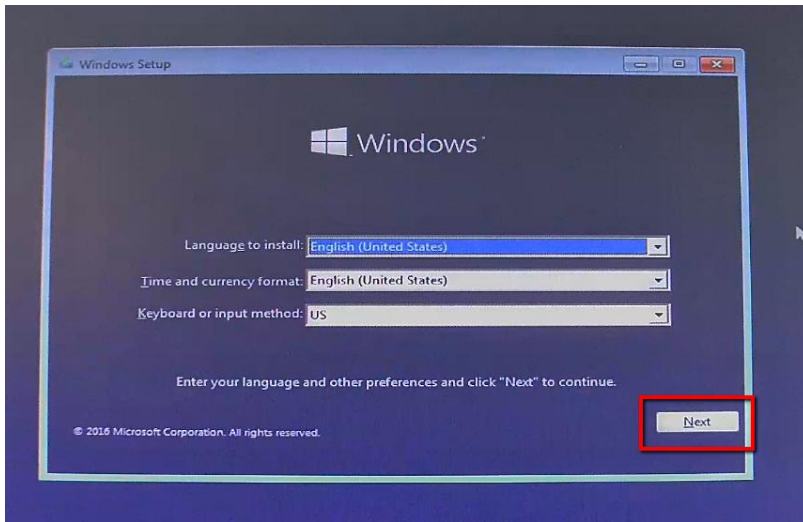


4.6 After pressing Enter NVR, it will show Window start page please wait around 2 minutes for install process.

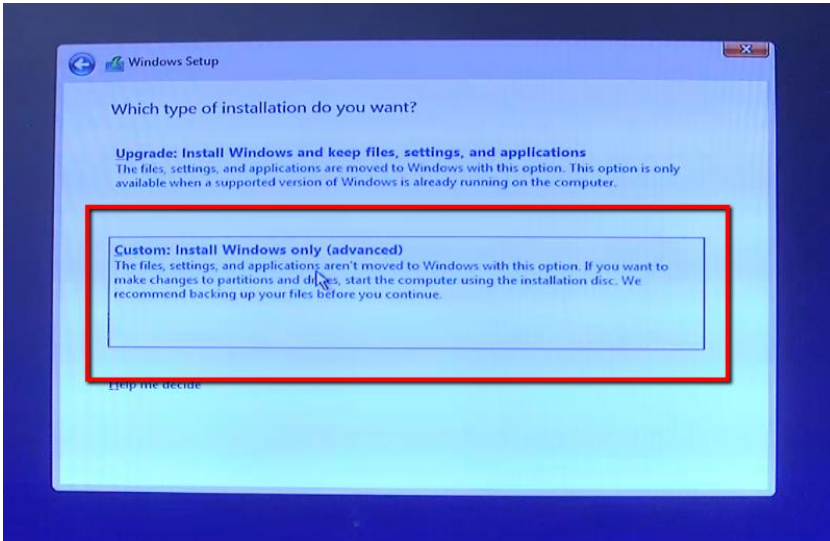




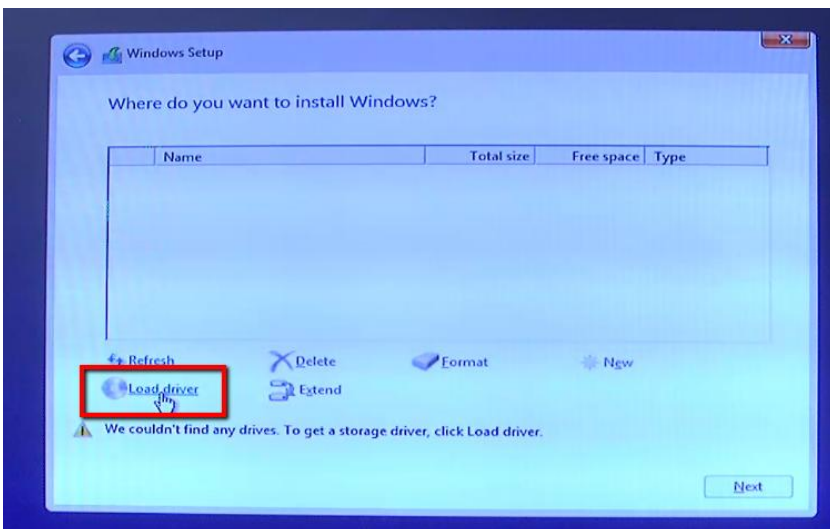
4.7 Follow installation process and press Next to setup and follow step by step to setup the OS information.



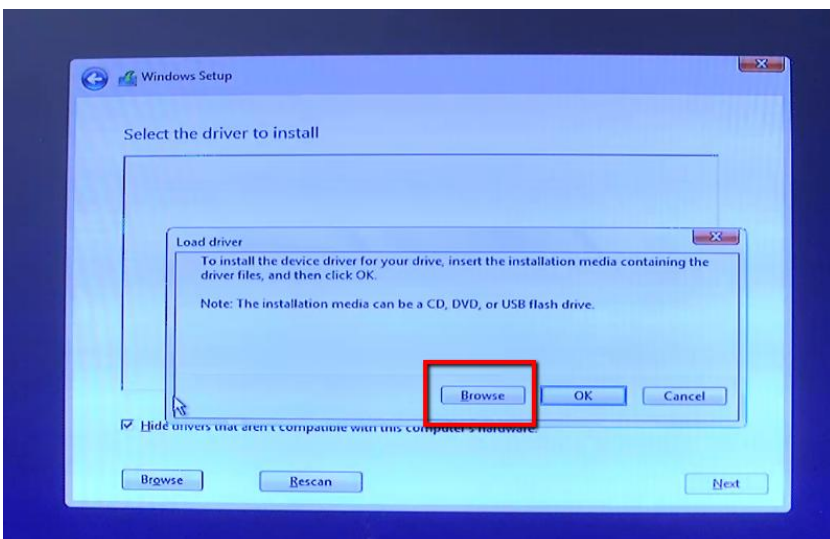
#### 4.8 Choose Custom: Install Windows only (advanced).



#### 4.9 Please insert another USB drive with Intel driver we prepared in step 1.6 then choose the load driver.

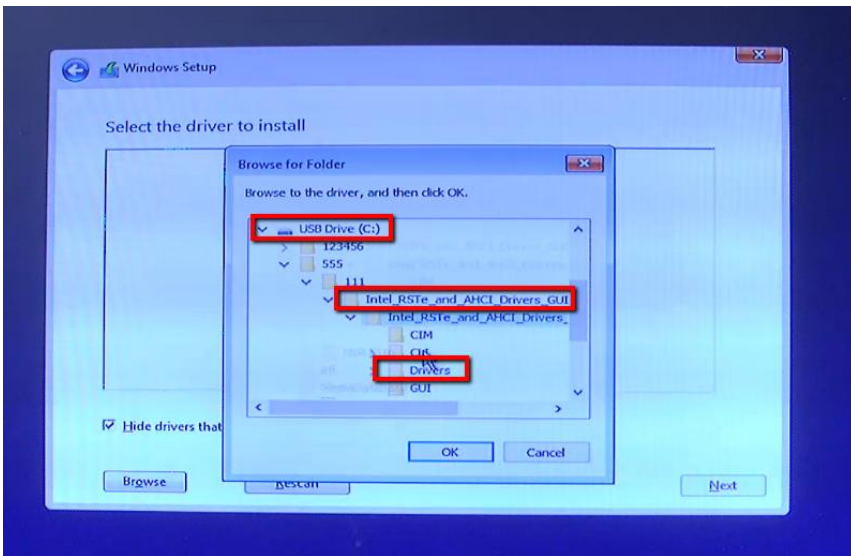


#### 4.10 Select Browse

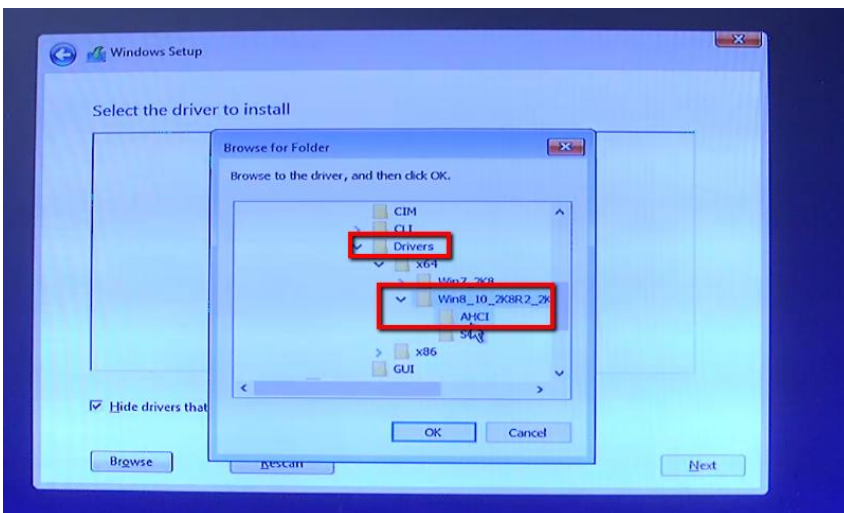


#### 4.11 Select driver location.

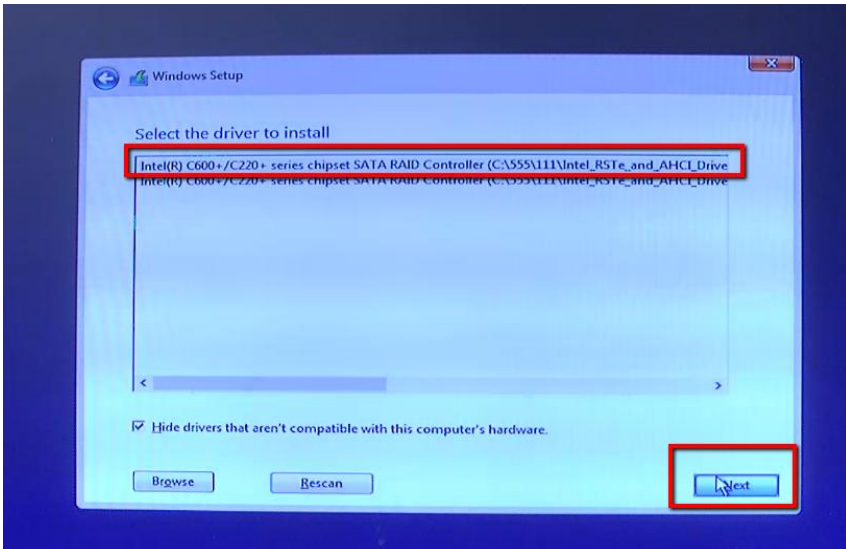
**Note:** In this case we use WIN10 Enterprise to make example driver location is USB Device \Intel\_RSTe... \ Drivers \ x64 \ Win8\_10... \ AHCI



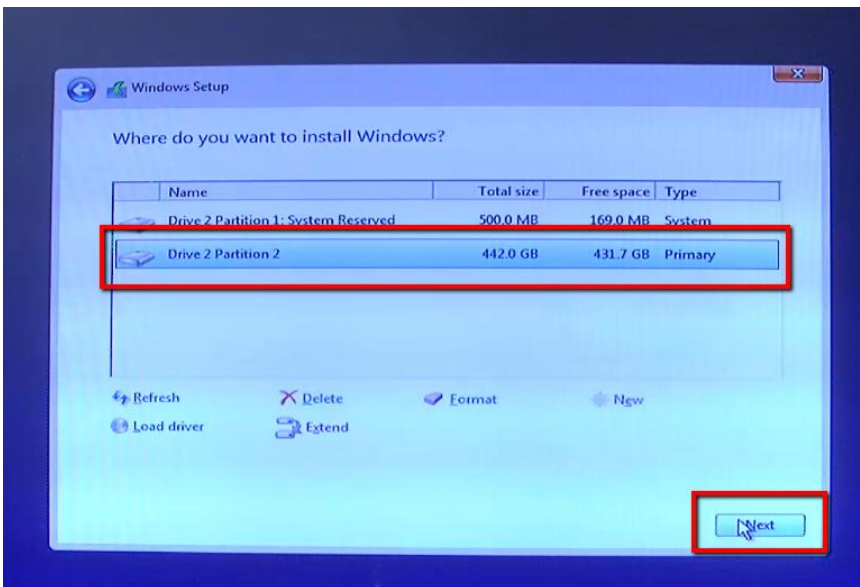
#### 4.12 Enter 64 \Win8\_10... \ AHCI then press OK.



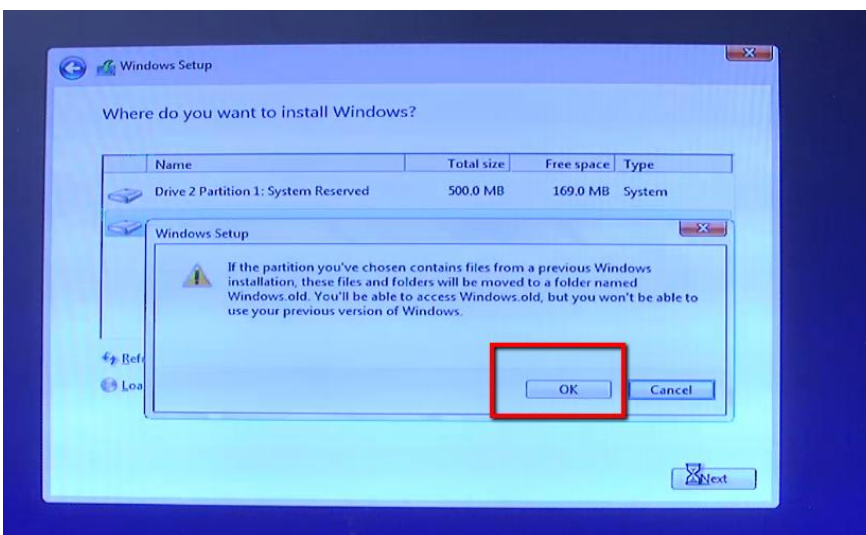
#### 4.13 Select first item then press Next



4.14 Select Driver 2 Partition 2 (Primary) and press "Next".

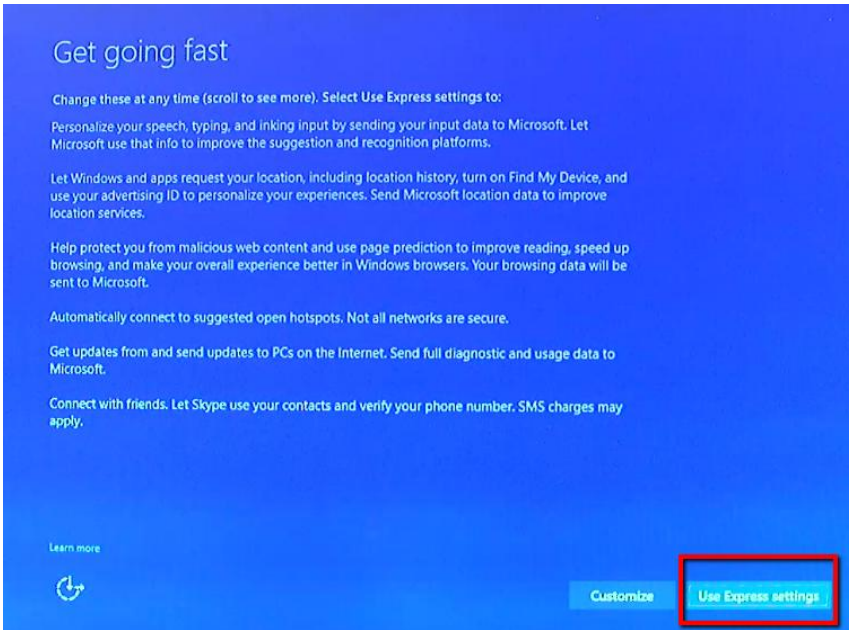


4.15 All installation process takes about 10 minutes when process is done, NVR will auto rebooted.

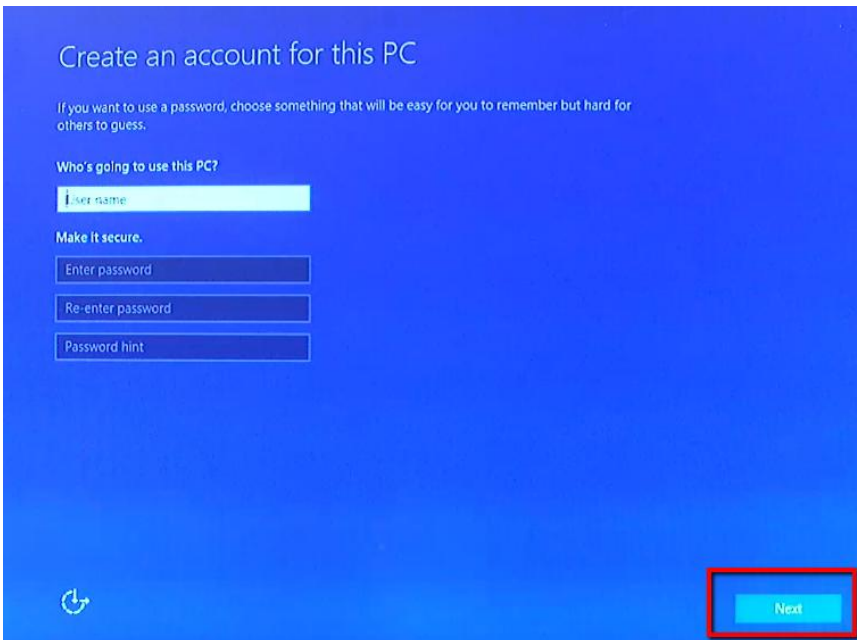




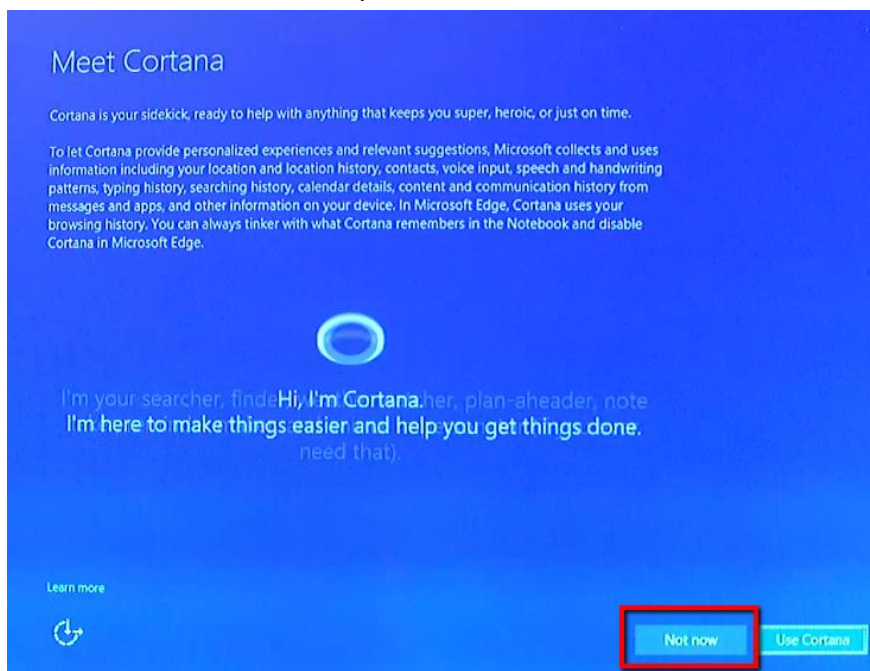
4.16 After rebooted NVR7800, it will show “Use Express settings”.



4.17 Assign PC name then press Next.



#### 4.18 Press “Not now” to skip the Meet Cortana.



4.19 Then it will enter Window page, it means all installation process is completed.

**Caution:** Before go to the next step please remove all external USB drive to avoid Windows error.



## **Step 5. Install EonOneLite**

5.1 Please find a USB, unzip the EonOneLite and RAID driver and put the file into USB  
Please plug-in USB to NVR7800 and copy all file to Window desktop.

RAID Driver Download link:

(This VRaid driver is for WIN10 Enterprise only, please contact with your Window provider for the RAID driver).

[https://www.dropbox.com/s/4khxvu1q6lr6ibz/VRaid\\_Win10\\_v1.1.1.4.zip?dl=0](https://www.dropbox.com/s/4khxvu1q6lr6ibz/VRaid_Win10_v1.1.1.4.zip?dl=0)

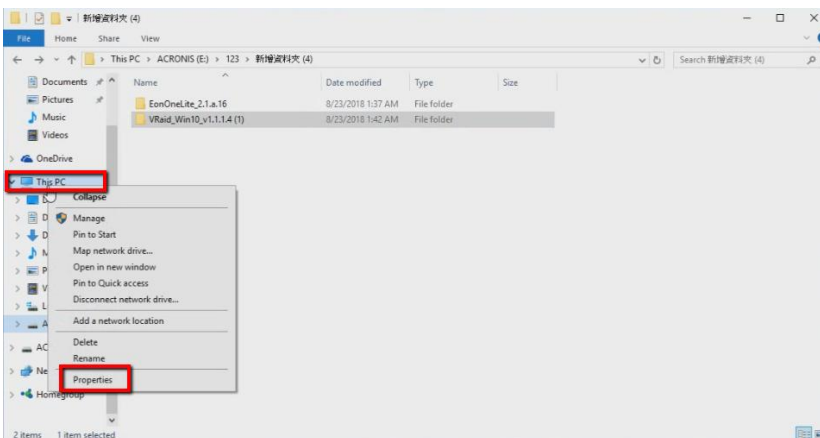
EonOneLite 2.1.A16 Download link:

(For newest EonOneLite version please contact with Infortend support team).

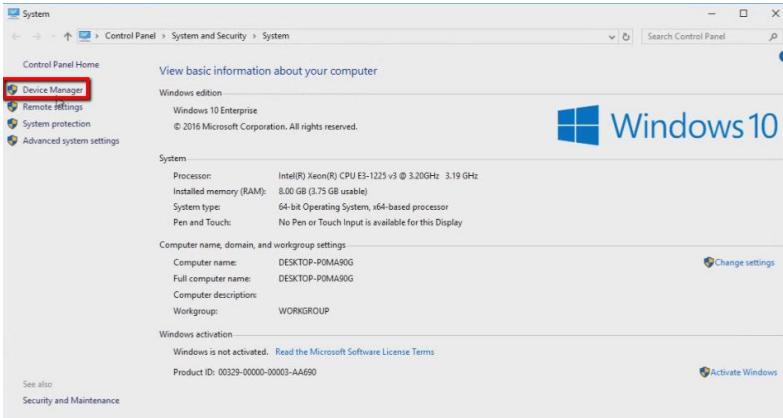
[https://www.dropbox.com/s/cu257ehribyt62y/EonOneLite\\_2.1.a.16.zip?dl=0](https://www.dropbox.com/s/cu257ehribyt62y/EonOneLite_2.1.a.16.zip?dl=0)



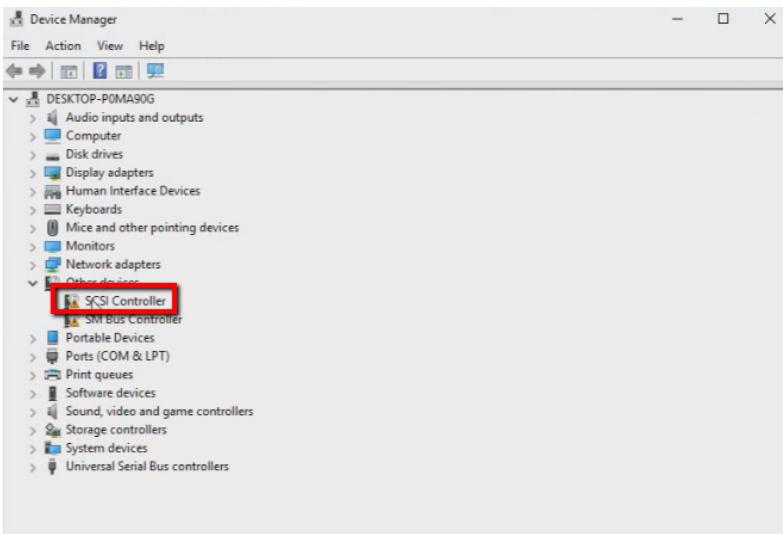
5.2 Insert USB to NVR7800, select PC then right click then choose Properties.



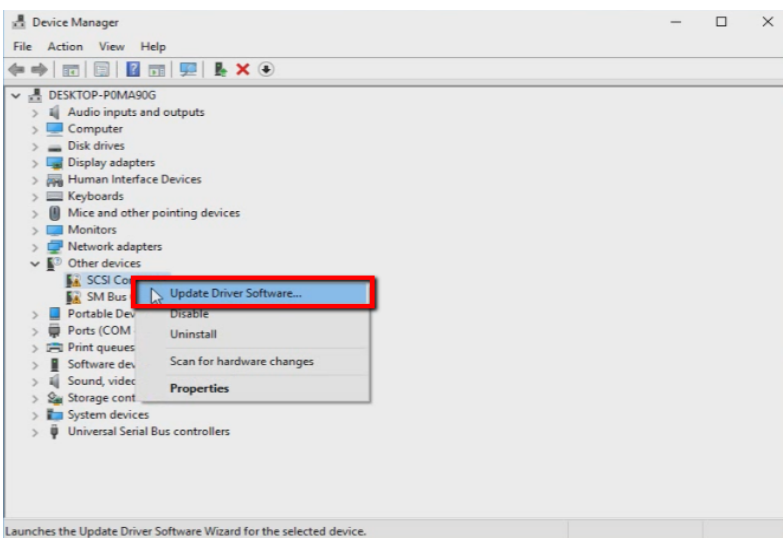
### 5.3 Choose Device Manager



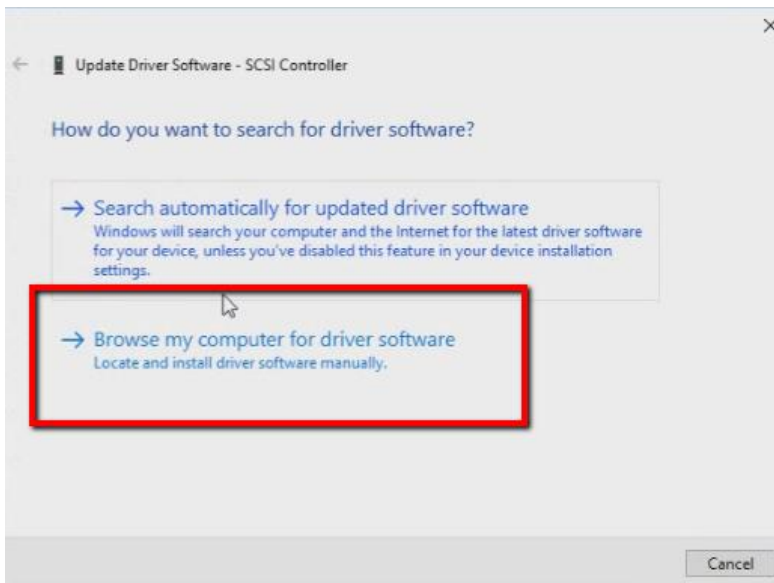
### 5.4 Select SCSI Controller



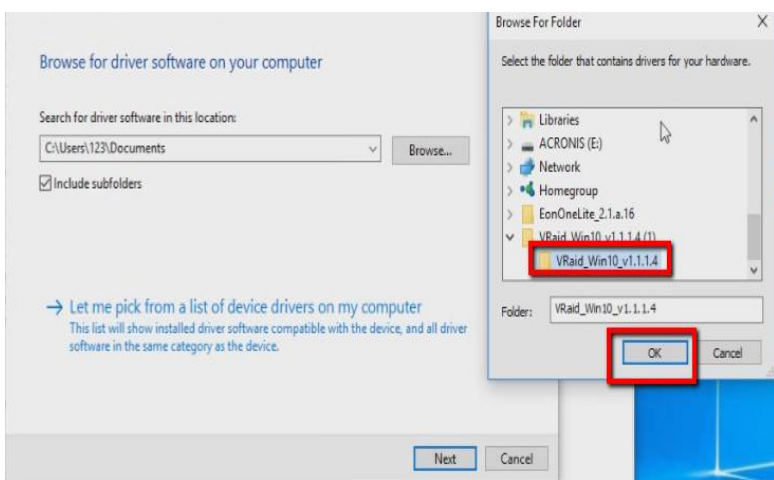
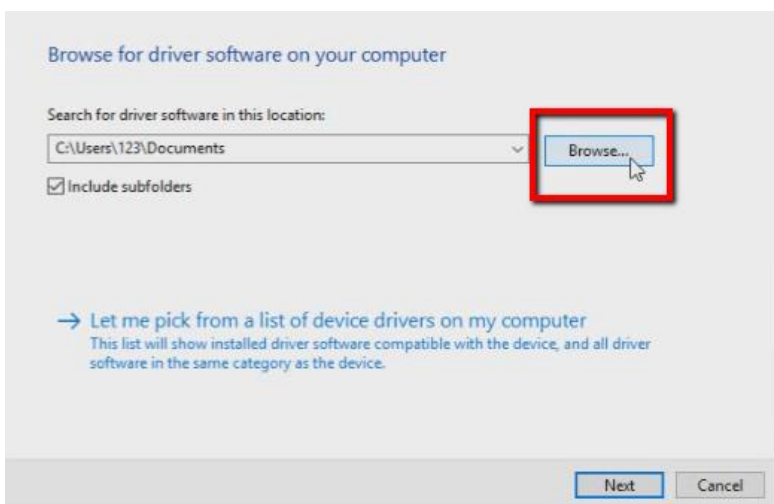
### 5.5 Press right key and click “Update Driver Software”.



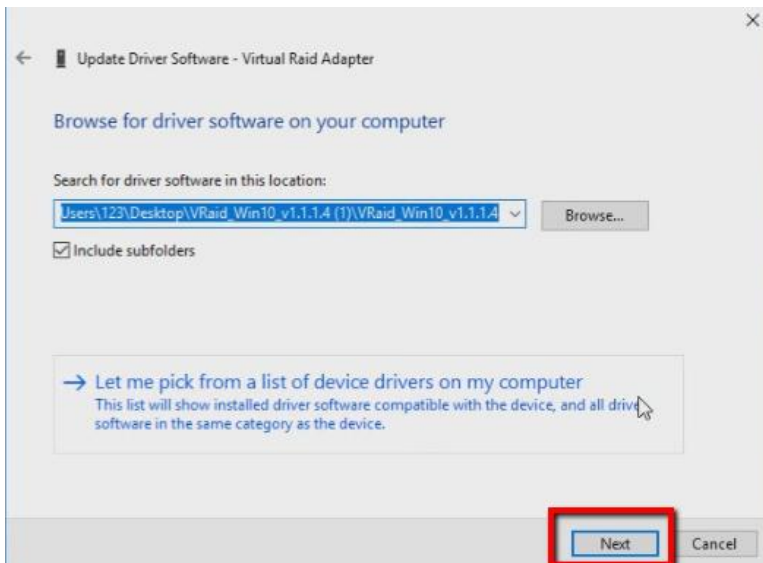
## 5.6 Choose "Browse my computer for driver software".



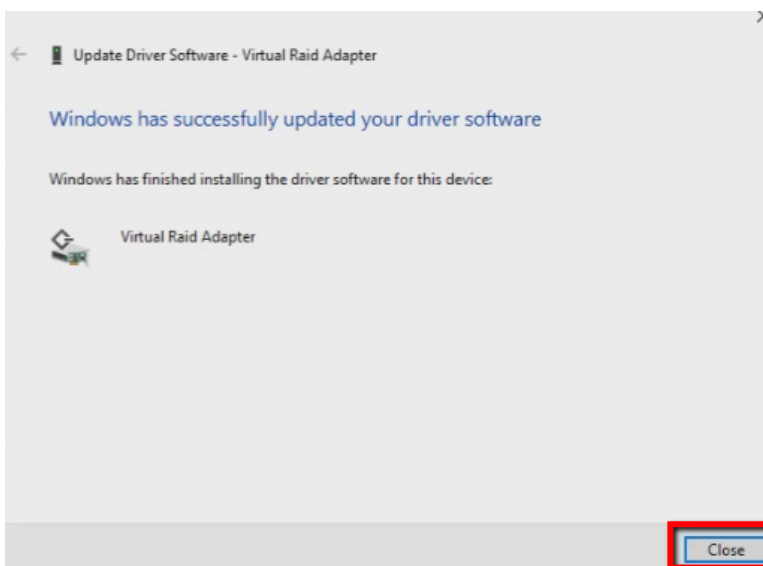
## 5.7 click Browse and select VRaid\_WIN10 driver.



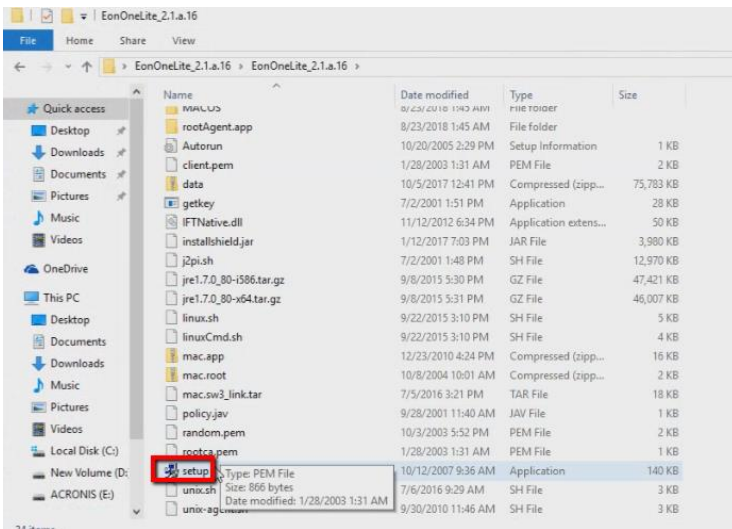
### 5.8 Press Next to start installation process



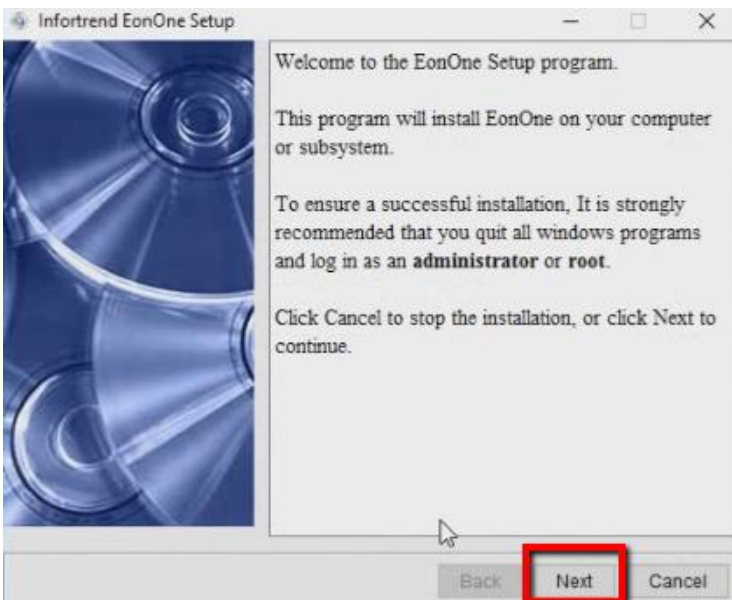
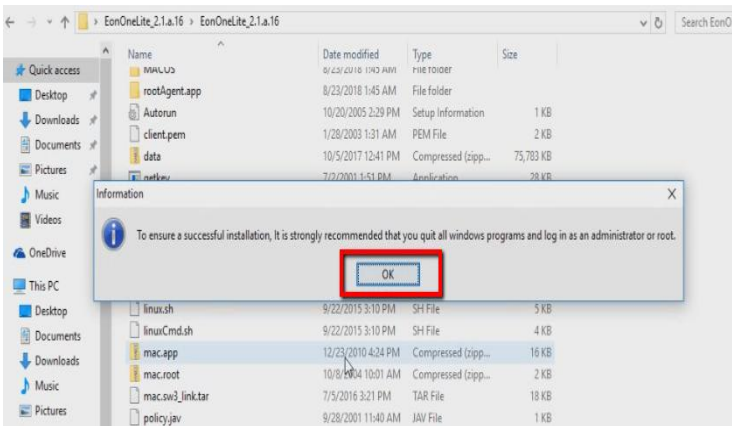
5.9 All process takes about 10 seconds when NVR shows the following message it means upgrading process is done, please choose Close.



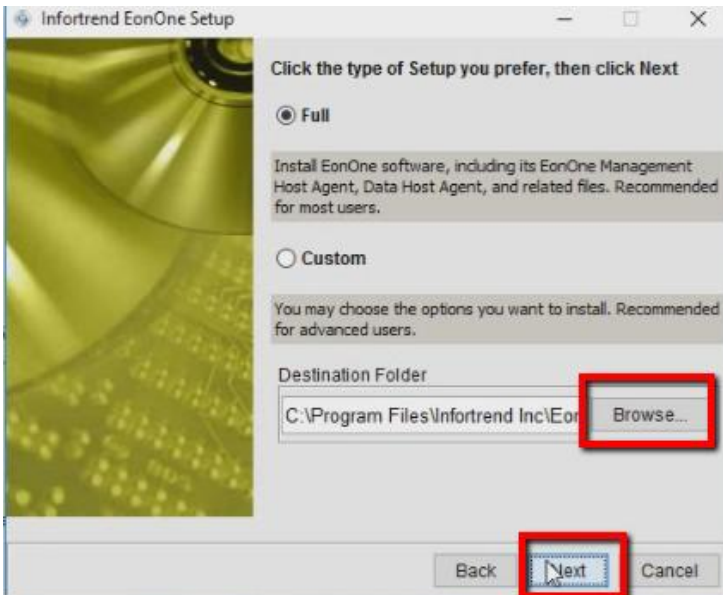
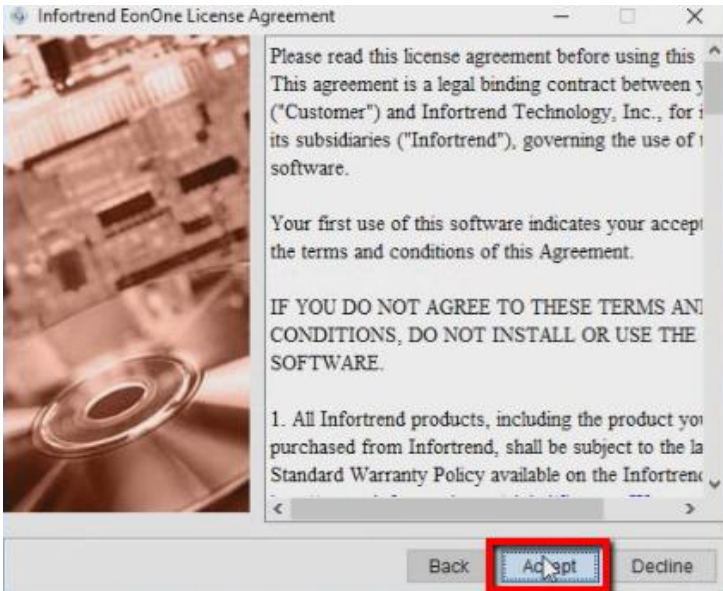
5.10 Please select EonOneLite "setup" file to start EonOneLite installation process.



5.11 Please follow all installation process, it takes about 1 minutes, when it is done please reboot NVR7800.

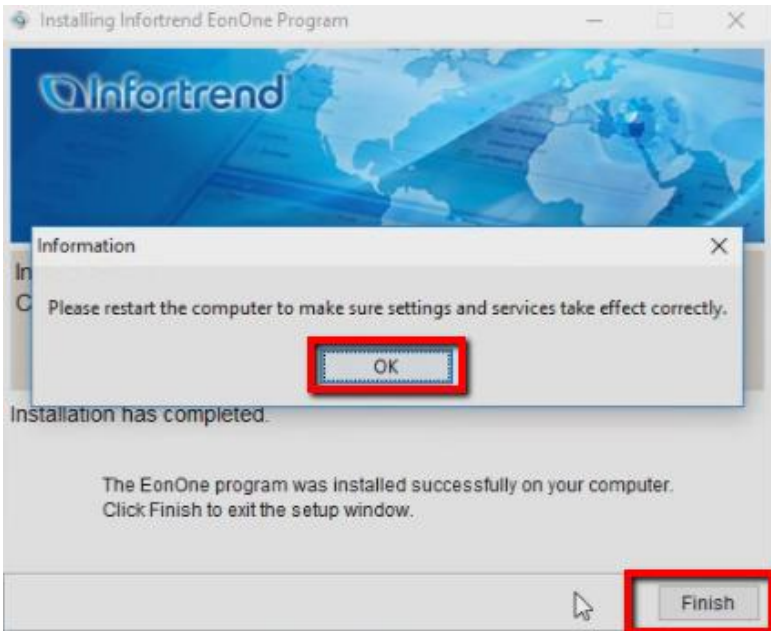






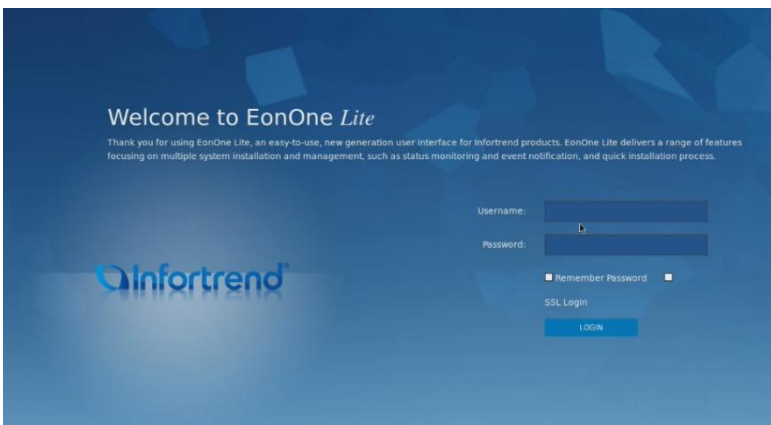
5.12 When it shows this message it means all installation process is done.





5.13 After NVR is rebooted, click EonOneLite default login user name and password are admin/admin.

**Note:** During NVR rebooting please also remove external USB drive if you don't need to use.



5.14 EonOneLite it takes around 1 minute to open software when login for the first time, then after login, the customer can start to build up the RAID for this NVR7800.

