How to change/add HDD

This document will show how to add or replace a Hard Disk Drive (HDD) in the EDNS4000 - 7000.

All EDNS4000-7000 are set-up to boot from the master HDD. If this master HDD needs to be replaced, a recovery of the system is required using a Recovery CD. All other HDD can be replaced eg. due to a failure.

Today Ernitec only uses Western Digital HDD. These drives has proven to be stable, low noise and have low heat dissipation.

Step one in exchanging a HDD is the physical part.

The HDD is connected to the DVR via a parallel flat ribbon cable (PATA). There can be two HDD on each cable, in this case there needs to be a master and a slave drive (All HDD's can be configured to be either master or slave). On the back of the Western Digital HDD there are a jumper which can be set accordingly.

Default (Cable Select)

Master
Slave   For two drives

or Single   For one drive

System   Secondary Drive   Primary Drive
              (Slave)   (Master or Single)

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In the near future more and more HDD's will be replaced by the new Serial HDD's (SATA)

The SATA gives higher data performance and are using a new type of cables.

With SATA there is no "Master/Slave" drives or other settings. Each SATA HDD is requering it's own SATA cable, so replacement is much easier.

PATA HDD   SATA HDD

In some EDNS6000/7000 there might be a combination of PATA and SATA HDD's. In this case the PATA drive is the boot/system drive.

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Step two in exchanging a HDD is the BIOS/Software part.

Once the HDD is installed in the DVR it needs to be recognized by the system once it powers up. The BIOS in all Ernitec DVR's is set to automatically detect the available HDD's. If you need to change the settings in BIOS, the default password is "PSS" or "PSSPSS"

If the Master HDD is replaced please read the procedure for the recovery CD.

If one of the slave drives is replaced it just needs to be formatted after the unit is started.

Procedure how to exit to windows:

Exit the DigiOp Application

Right click on the NetBackup Agent icon (found in the lower right cornet next to the watch) and select Exit.

Access Disk Management in Windows XP by right-clicking on My Computer, left-clicking on Manage, and then left-clicking on Disk Management. (or use Start/Programs/Acceries/Disk management)

When Disk Management opens, a wizard may appear entitled: Initialize and Convert Disk Wizard.

Note: You must use this wizard to write a Signature to the drive otherwise, the drive will not work with Windows XP. If the wizard does not appear, you may need to manually complete this process following the steps below:

- Right-click on the name of the drive to be initialized. (Drives are numbered as follows: drive 0 being the boot drive and drive 1, 2, 3 etc. are all data drives. For CDs, the first CD is CD 0 the second CD 1 and so forth.)

- Left-click on Initialize from the menu that appears.

- The next screen shows the drive you selected to initialize. Make sure the drive is checked and left-click on Next.

- You will have the option to convert the drive from basic to dynamic storage. Leave this unchecked and left-click on Next.

- Left-click on Finish.

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Partitioning/Formatting:

Note: In two separate windows, on the right side of the screen, a graphical representation of the partitions on the installed drives will be displayed. The top window is for viewing a drive's status, capacity, and file system. In the bottom window, you will see a representation of the drives in the system starting with the boot drive (drive 0). In almost all cases, you will want to work with the bottom window.

- Once the disk is initialized, right-click in the unallocated space.

- Left-click on Create Partition from the menu.

- A new wizard will appear: Create Partition Wizard. Left-click on Next to continue.

- On the next screen select Primary Partition and left-click on Next to continue.

- Enter the desired partition size. (Use Max). Left-click on Next to continue.

- You may assign a drive letter that is not in use by other devices if you wish, then left-click on Next to continue.

- Select the type of format (NTFS). Leave the allocation unit size at default and label the drive "DISSTECH". Select the checkbox labeled Perform a quick format and then left-click on Next to continue.

- Left-click on Finish when done.