

Re: I'm trying to configure boot.ini in a basic HDD Upgrade. Any help is Appreciated

Source:

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"tmt" <john_toliver@hotmail.com> wrote:

- > My HDD is a 20GB partitioned 4 different ways:
- > FAT32 I: 3GB – This is where I keep my installation files
- > NTFS J: 7GB – This is what XP boots off of and where I keep
- > everything.
- > NTFS K: 8GB – This is basically a mirror via ghost 2002 partition copy
- > of "j:\"
- > FAT32 L: 1.5GB – This was used for storing emails and documents in case
- > XP suffered a crash that I could not recover from. at one time but then
- > I no longer needed it. It saved my files I wanted and emails and some
- > music etc.
- >
- >
- > The fat32 drives were done deliberately so that I could access them
- > from dos in a crunch. Incidentally this was an upgrade from 2000
- > Professional.
- >
- > I wish to ghost my J: Drive to the new partition and make the OS "see"
- > the new space it will have. I can do a simple file copy of everything
- > else. I want the two drive to be able to reside together so that I can
- > continue ghosting to the old drive.
- >
- > I tried accomplishing this by using ghost 2002 to ghost "j:\" to my new
- > drive and play with the boot.ini settings to make it see the new drive.
- > This did not work even after I made the disk active in fdisk from DOS.
- > It would get to the screen I described last time and then stop
- > loading. I still had use of my mouse and there was no HDD activity
- > indicating it was doing something for which I should wait.
- >
- > My next hypothesis is that I have to change my path statements and any
- > other environment variables that point to old "j:\" to "c:\". I would
- > like to try this manually. The way in windows is to right click on my
- > computer –>properties–>advanced–> "Environment variables and change
- > everything that makes a reference to "j:\" to "C:\". I'm thinking it

- > *stops loading now either because the OS can't find a file(s) it needs*
- > *and won't check elsewhere, or this is one of those annoying security /*
- > *anti pirating techniques XP has.*
- >
- > *At anyrate, if my assumption is at least in the ballpark for the*
- > *environment variable hypothesis, then I would like to know the names of*
- > *the files that hold this information so I can edit them manually from*
- > *DOS.*
- >
- >
- > *Any thoughts you have would be appreciated.*

It's not clear from your description where the "new drive" is – whether it's on the same hard disk drive or on a new one.

In any event, to be independently bootable (i.e. control doesn't involve any other partition), the new OS should be on a primary partition, and that partition should be marked "active". The primary partition enables it to have a boot sector, and "active" means that its own boot.ini and ntldr will be used.

In the boot procedure, the BIOS will take the 1st HD in its boot sequence that has a Master Boot Record and it will pass control to the boot sector in that HD's "active" partition. The boot sector there will pass control to ntldr in that partition, and ntldr will consult the boot.ini file for the boot menu.

To understand boot.ini syntax, you must understand the concept of a "boot sequence" in the BIOS as rdisk() in the boot.ini syntax refers to the relative position of the HD within that boot sequence – the first in the list having position 0. Thus "rdisk(0)" in the boot menu refers to the 1st HD in the boot sequence, "rdisk(1)" refers to the 2nd HD, etc. By default, the Master HD on IDE channel 0 is rdisk(0), and the Slave HD on that channel is rdisk(1). If there are no HDs on channel 0, the BIOS starts the boot sequence with the Master HD on channel 1, etc. If there is only one HD on an IDE channel, the Master/Slave setting has no meaning. By manual input from the keyboard, however, you can alter the BIOS's boot sequence, so these assignments of "relative" disk positions in the boot sequence are not permanent.

In the boot.ini syntax, the partitions are numbered from 1 to n, where the first partition on a HD is "partition(1)", the 2nd partition is "partition(2)", etc. There can be a maximum of 4 primary partitions on a HD.

The characters within the quotes in each boot.ini menu option are arbitrary, and you can set them to be whatever makes sense to you – perhaps a description of the contents of that partition or a display of the disk position and partition number that the entry refers to.

The "timeout" value is given in seconds, and it represents the amount of time that the boot menu will be displayed before reverting to the partition given in the "default" parameter. If timeout=0, control will immediately pass to the default partition.

You can edit the boot.ini file using Notepad that runs under an OS running from another partition or its own partition, or you can use Start/run/msconfig/boot.ini from its own partition.

One thing that *might* bite you if you produce a Ghost'd clone on the same HD as the "parent" is that the "parent" won't be hidden from view of the clone when it's started for the 1st time. Normally, in cloning to another HD, you would disconnect the "parent" HD during the 1st startup of the clone to prevent the clone from setting pointers that point to files in its "parent" – which would permanently make the clone dependent on its "parent" to run. (After the 1st start-up in isolation, the clone is forever after independent and can see its "parent" upon subsequent startups.) Whether this binding problem would occur between a clone and its "parent" on the same HD, I don't know. You might be able to use Partition Magic to "hide" the "parent" partition temporarily, but I've not tried that.

Any questions?

~Tim R. Daniels~