

Re: Multiple Hard Drive Advice

Source:

<http://www.tech-archive.net/Archive/WinXP/microsoft.public.windowsxp.hardware/2007-11/msg00559.html>

- *From:* John <John@xxxxxxxxxxxxx>
 - *Date:* Mon, 26 Nov 2007 02:19:39 GMT
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Dermot wrote:

Hi John Thanks for the interesting reply....some I understand and some I don't.
Can you explain a few issues within your posting a little further?
Below I have quoted you and then asked relevant questions on each quote.....

To Quote You 1

Put the OS on the fastest drive. 25 to 30 GIG is plenty for XP now and most likely 5 years down the line, it does tend to grow. Putting your applications on another drive or partition doesn't do anything for you. That is where you're backups go.

Question 1

Please confirm....are you saying I am just as well to install all the Applications on the same drive and partition as XP Pro?

Yes, that is what I meant. Storing data produced by your applications (word processor files for example) on a separate drive or partition may be convenient for backup purposes but otherwise I see no real advantage. As you mentioned a re-install of Windows requires that all its apps be reinstalled anyway to repopulate the registry. If you ever step out of the Window's world you will quickly find that is a just a Windows' thing.

To Quote You 2

Personally I like to make C: just a bootstrap partition and install the OS(es) elsewhere, but that is just me, and if one OS will do for you then unnecessary. But I will say that a backup OS sure comes in handy if the one you normally use goes tits up and you don't have a spare comp about to Google for a fix or download a replacement for a corrupt file.

Question 2

Can you explain a "Bootstrap Partition a little further" and where you might install your OS's?

A bootstrap partition is one that contains boot loader code. Most any preloaded Window's machine ever

Re: Multiple Hard Drive Advice

shipped had/has a bootstrap partition called C: drive. NT4, W2K and XP for example need three files (boot.ini, ntldr and NTDETECT.COM) to bootstrap (initial load of) the OS. The rest of XP (the Windows folder or whatever you chose to call it) can be located on any other drive or partition, primary or logical. The bootstrap partition, for Window's OSES at least, must be an active primary partition. I just use the the C: drive for that purpose because the various Window's installers want to do it like that anyway.

That is not to say that an OS can't be installed on the bootstrap partition, I just prefer keeping that partition a dedicated small one. Just my choice and certainly not the choice of most Window's users. A 500 MB (not GIG) is plenty large enough for that purpose and if you ever get the itch to tinker with multi-booting it just makes things easier. Hey you could even install old DOS there if its formatted FAT16 to reminisce – hehe.

Obviously to accomplish this type of setup you must have a real XP CD, not a recovery partition or PC vendor supplied proprietary CD.

By the way, with the release of XP, MS in their infinite wisdom, decided to start calling the bootstrap partition the system partition and the partition where the bulk of the OS is stored the boot partition. I have no idea why they would go against long standing convention.

Where to install the OSES? Anywhere you want.

To Quote You 3

Since you have more than one drive I would recommend using a dedicated swap file (pagefile) on a drive that does not contain an OS and is otherwise only used occasionally for backup. And in fact prefer a dedicated smallish partition for the swap file so that it doesn't intermingle with other data and get fragmented who knows where on the drive. The reduced head movement to access a swap file guaranteed to be in a limited area and two drives running in parallel may only speed things up a small amount, but every little bit helps. And since you have the resources you may as well use them to you're advantage.

Questions 3

Can you explain a swap file a little further and how I would create it?

I assume when you say create the swap file on a drive that does not contain an OS....would it be okay to create the swap file on the backup drive on a dedicated partition.?

What type of partion should be used for the swap file..Primary or logical?

A swap file is just a generic term for a file usually located on a hard drive that the OS uses to swap out memory resident code or data that hasn't been recently accessed. Windows' calls this the 'pagefile', which by the way gets re-written every time you re-boot. MS claims that XP's pagefile doesn't fragment but I don't always trust what MS says and if you have any idea how a file system works I question how that is even possible without restricting the file to a specific area. This also has the advantage that all the OSES on your comp can use the same partition – assuming all of them can read the given file system. I have two Xp's and a W2K currently on this comp that use the same partition for their pagefile. Obviously, Linux that I occasionally tinker with, is better served to use its native file system on a different partition.

If you use a dedicated partition for the swap file, the partition doesn't need to be any larger than the swap file itself. Two to three times the RAM you have installed should be way more than enough for any Windows OS.

Re: Multiple Hard Drive Advice

It can be primary or logical, it doesn't matter.

If you could recommend any further links /reading material that would be appreciated.

Google – just ask for what you want.

"John" wrote:

Dermot wrote:

I am trying to gain a better understanding of all the practical options available to me and the inter-relationship between O/S and Applications.

I would appreciate suggestion regarding the practical advantages / disadvantages of any configuration of the hard drives that would be worth considering with respect to sensible use of my drives as I wrongly thought I could install OS on one drive Applications on the second and data in the third.....reinstalling the OS on one occasion meant the system could not see the Applications on the other drive...so I had to re install them all anyway.

Can anyone advise me what is the most practical way to configure a PC which has three hard drives installed on it. 20GB, 40GB and 80GB.

From the point of view of a fault and recovering from it, so am I best to

1. Install the OS (XP Pro) and all applications on one drive (Primary Partition)

2. Use the other two for data backup (Logical Partitions).

Any help / Linkswould be appreciated

Thanks in advance

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John