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# ACCESSING LARGE HARD DISK DRIVES IN WINDOWS XP

CASE STUDY

## ACCESSING LARGE HDD IN WINDOWS XP – NOT A PROBLEM WITH PARAGON GPT LOADER

Hardware manufacturers are producing disk drives with geometric increases in disk capacity compared to a few years ago, broadening their appeal and functionality for a wide spectrum of end users. The new 3TB drives are ideal for storing large files such as HD-video, archived images and music in lossless compression format. They can be used as external storage devices alongside desktops and laptops, or inserted inside workstations and home computers.

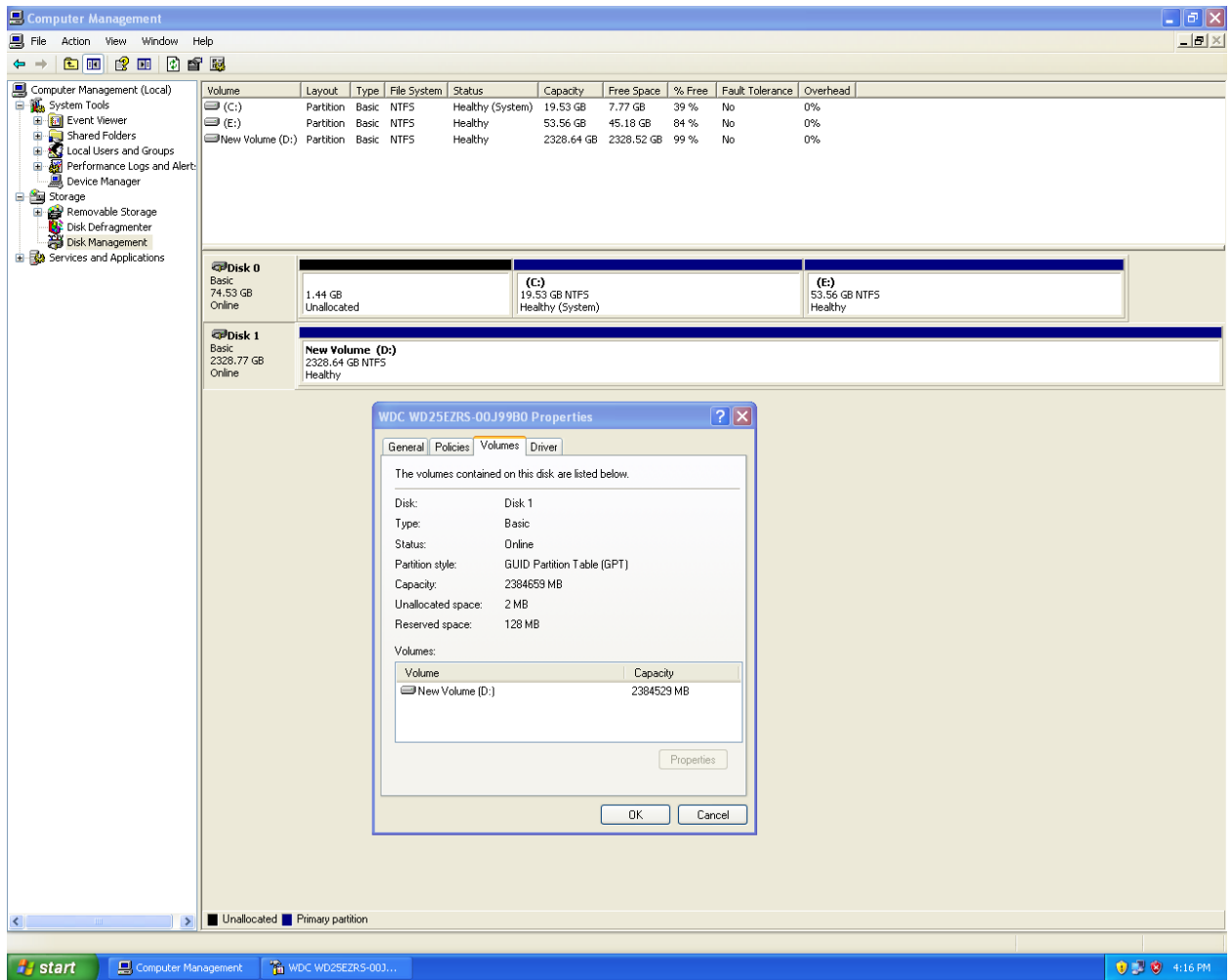
When technology improves as quickly as it has with storage capacity on HDDs, the surrounding software technology often has to catch up. There may be compatibility issues with older hardware or legacy systems that cannot be easily updated or left behind. If the new hardware is incompatible with existing systems it may not be in your budget to simply purchase hardware upgrades, moreover, why alter a well-tuned and familiar software environment if there are alternatives to new hardware integration?

3TB drives are out of the supported size range for the popular Windows XP 32-bit system. Though two new Windows versions have been released since XP, it still utilized on 51% of computers worldwide. Meaning, roughly half of PC users simply cannot use the new hard disk drives.

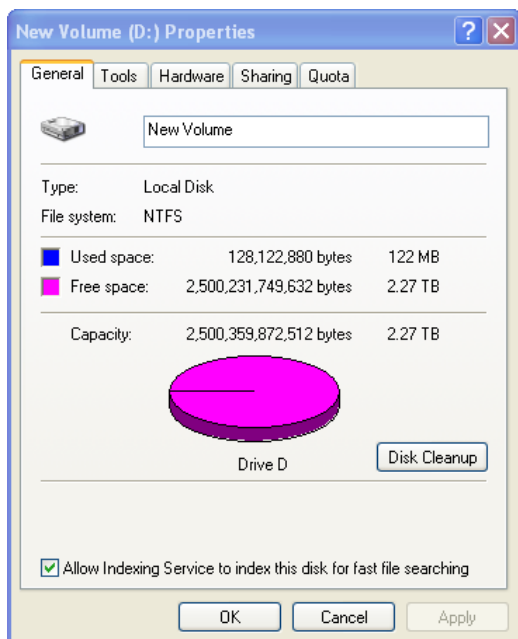
The problem is caused by the fact that Windows XP 32-bit cannot address disk space beyond 2TiB limit, recognizing only  $2^{32}$  sectors of the disk, or 2TiB (2048GiB) of data. Most part of the disk is not accessible if partitioned using a Master Boot Record (MBR). MBR is an old disk partitioning scheme, though still widely supported by most all computers since the 3.5 inch floppy disk era. An alternative, advanced partitioning scheme exists, GUID Partition Table (GPT), which has none of the drawbacks of MBR, and supports large enough volumes for 3TB drives. However, GPT support is not as widespread as MBR and it's not supported by Windows XP.

If you are running Windows XP and want a new 3TB drive, you have three options. First, you can use it as a small (1TB or lesser) drive, just plug it into the computer (though why pay for storage you cannot use). Second, you can upgrade your OS to Windows 7, and make GPT partitions on the 3TB drive. But if your computer does not have the performance level for the new OS, will you want to upgrade hardware also? It is well known that Windows XP is faster and uses fewer resources than new operating systems from Microsoft. It also well-tuned and still receives major updates, so there is no absolute need to change a well-functioning OS. There is, however, a third option: the use of a specially designed driver, which augments Windows XP and adds the functionality of supporting the GPT partitioning scheme.

You can achieve full access to 3TB drives under Windows XP by installing Paragons GPT Loader driver. If you do not have a solution for creating GPT volumes, you can use a special utility, shipped with the driver.



The graphic above shows a 2.5TB hard disk drive attached to a Windows XP system using the Paragon GPT Loader. The Windows Disk Management console window shows a partition spread across the GPT formatted Hard Disk Drive.



The volume is seen natively and is accessible in Windows XP. It does not have any differences with ordinary partitions.