Backup Data and Program Files Separately

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Every computer user needs to do regular backups of their computer's hard drive. This is the most important service that needs to be done on your computer. If you are not doing regular backups, then you need to watch my tutorial on the *Perfect Backup Approach* (http://www.ugr.com/tutorials.html) and get started doing backups today. Users that are doing regular backups should consider ways to improve on how they do their backups. This paper describes a better way to do backups that will give you flexibility in how often you do backups and how long you keep your backup files.

Separating Your Data Files from Your Program Files

Your computer's hard drive contains two general types of files. One type is computer programs that make your computer run, including your Windows operating system and your application programs. The other type is data files that you create in running your program files, including your spreadsheets, documents, email messages, digital photographs, etc. Both types of files are important to the proper running of your computer, but each type has different backup needs.

When you got your computer, it probably came with one hard drive and on this hard drive was one large c: partition. This is not the best way to organize your hard drive, but it was the easiest way for the manufacturer to set it up. This places all of your program files and data files together in a single partition making it difficult to back them up on a different schedule. So, you are forced to backup all of your files at the same time.

Most users do not know that they can change the way their hard drives are setup. This is easy to do using a partitioning utility, like ***Acronis Disk Director Suite 10***. The best way to organize your main hard drive is to divide it into two partitions – one for your program files and one for your data files. This excellent program will let you reduce the size of your c: drive so that it does not take all of the space on your main hard drive. Then you can use this program to create a new data partition in the space freed up by resizing your c: drive. Once you commit these two steps to your hard drive, then you can start to find and move all of your data files from the c: partition to your new data partition. Finally, you can change the settings in each of your applications to point to the new data partition as the default location of your data files.

Creating a Data Partition with Disk Director Suite

To begin with, I assume that your main partition on your computer is your c: partition. You may have a hidden partition or two in addition to your main c: partition. These typically contain utility software for your computer or a system restore to use to put your hard drive back the way it was when you purchased the computer. Most of your hard

drive should be dedicated to the main c: partitions which we will focus on. You will leave the other partitions untouched in the following steps.

1- Make sure you have a full main hard drive backup image taken immediately before you start the partitioning process. Then if anything unexpected happens, you will be able to return your hard drive to the stage it was when you started. The best backup utility to do this is ***Acronis True Image 11 Home*** and an external hard drive to backup to. (See my paper at www.ugr.com/nl0907b.html for details on how to do this.) When you do a full disk image backup, make sure you backup the entire hard drive (Disk 1) and not backup just your c: partition.

2- Install ***Acronis Disk Director Suite 10*** on your system. During the install process, you should create the Acronis bootable rescue CD to use in case you can't boot Windows from your hard drive. You should not need to use this CD, but having it is extra protection just in case.

3- Run ***Acronis Disk Director Suite 10*** and select Manual View, not Automatic View. To do this, click on the View menu item at the top of the screen and then select Manual in the drop down menu.

4- The first thing you need to do in creating a separate data partition is to reduce the size of your c: partition to make room to create your new data partition on the drive. To do this, right click on the c: partition box in *Disk Director Suite* and click on resize in the menu list that appears. This will bring up a box that you will use to resize the c: partition.

5- Place your cursor on the right edge of the partition block in the pop-up window. The cursor should change to two parallel lines instead of the normal four arrows. At this point drag the right edge of the partition to the left until the space after the partition block is big enough to contain your data partition. I would make this new data partition about a third of the size of your original c: partition. When you get it to the size that you want, click on OK to lock in that size. Note -- this is not too critical at this point as you can use *Disk Director Suite* to adjust your partition sizes later if you want to.

6- You should now see that your c: partition on the main screen of *Disk Director Suite* is smaller and that you have an unallocated space after the c: partition. This is the space we will make into a data partition. To do this, click on the unallocated block to select it. You will see a red line at the bottom of the block showing you that this space is selected. Then right click on the unallocated space and click on Create Partition in the menu that pops up.

7- A Create Partition box will appear on your screen that you will use to create the new data partition. The first thing you will do is to give the new partition a name. I would suggest you key in DATA in the name field as that will identify what the partition is used for. Then pick the partition file system to use. I would suggest NTFS for your Windows system. Then select the partition type. For a data partition, you should select Logical and not Primary. When done, select OK to make these selections for your new data partition.

8- This next step is not real important, but would make your system a bit easier to understand, so I suggest you follow it. Click on the c: partition to get the red selection line at the bottom of the box. Then right click on the c: partition box to show the menu items you can use on this partition. Click on Label and a box will pop up containing the name of your c: partition. I would suggest you change this to either WinXP or VISTA, depending on which operating system you are currently using. Click on OK to make that change to your hard drive. Now you have two partitions on the drive where the old c: partition was. The c: partition is now named WinXP or VISTA and the other partition that follows it is named DATA.

9- At this point, you need to click on the Commit checkered flag button at the top of your screen to commit these changes to your hard drive. When you click on the Commit button, you will see a box with a list of three operations that will be performed on your drive. These are to resize your c: partition, then to create a new data partition, and finally to name your c: drive. Click on OK to do this and then step back from your computer and let it run untouched. These steps should only take a few minutes to complete (maybe less than a minute). Your system will reboot in the process, so let it do this. When the Operation Completed Successfully message appears, you are done.

That is all it takes to create an empty data partition on your main hard drive using ***Acronis Disk Director Suite 10***. You are finished using *Disk Director Suite*, so you can exit that program now. The new data partition is ready to use, but it is empty. In the following section, we will describe how to find and move your data files into the new partition.

Finding and Moving Data Files to Data Partition

Next, you need to find and move all of your data files from the c: partition to the new data partition. This step is not an automatic one since there is no way a program can determine what files are data files and should be in your new data partition. So, you will have to find these files and move them individually. You will use *Windows Explorer* or *My Computer* to do these moves.

If you have saved all of your data files in one location on your computer, like your *My Documents* folder, then you can move that entire folder to the new data partition. You should move all of your digital photos, music files, graphics files, Quicken financial records, and other data files that you create or save on your computer. You should also move your email folders and browser favorite list and address books at the same time. These special types of data files may be a bit more difficult to move, but when you do, your system will be better organized. Let me know if you have trouble find or moving any of these special files and I will try to help you get it done.

Take advantage of this step to get your data files better organized. You may want to save all files that are the same type in one folder together or you may want to organize your data files by what project they serve. For example, if you have a business that you run on

your computer, you may want to place all of your business files in one large business folder and all of your personal data files in another large folder. Then under each of these folders create other folders for each type of file that it contains.

Also, look for files on your computer that were not saved in the right place. Windows Vista lets you find files by type of file and you can take advantage of this Vista facility to find all of your spreadsheets, for example, and then move them to one spreadsheet folder on your new data partition.

Change Application Settings to New Data Partition

Once you get all of your data files organized in your new data partition, it is time to tell the applications that use these files where the new default data location is to be found. To do this, you will need to open up each application and look for its settings or properties or options. Then find the default data location entry and change that to point to the new data partition folder containing files used by this application. Again, this may take a bit of time to do, but once done it will make working with your new data partition much easier to do.

Backup Frequency of Program and Data Partitions

Once you separate your data files from your program files into two different partitions, then you can backup each partition on a different frequency that best suits the type of files in each partition.

Your data files are the most important type of files on your computer and need to be backed up more frequently than your program files. Fortunately, your data partition will typically be less than half the size of your program partition, so the backups will process quickly and take up less room on your backup hard drive. I recommend doing a full backup image of your data files in the data partition once a week. Then each day in the week you would do an incremental backup image of the changes to your data partition since the last backup. This gives you an excellent backup of these important data files.

You do not need to backup your program files as often as you need to backup your data files. I recommend doing a full backup image of your program files in your program partition once a month. Then each week in the month you would do an incremental backup image of the changes to your program partition since the last backup. This will give you adequate protection of your program files, but not eat up space on your backup hard drive or take lots of time to backup.

Backup Retention of Program and Data Partitions

Next, you should consider how long to keep your backup images depending on what types of files are in the backups.

Your important data files should be kept for a much longer period of time than your program files. I would keep many months of data backup images before considering

deleting any of the older backups. This will let you dig into your documents or email folders from months ago even if they are no longer on your main hard drive. It also gives you a historical archive of these important data files. Personally, when my data backup hard drive fills up, I buy a new one and save the old backup drive on the shelf.

Program files are less important to have many months worth of backups on them. Typically, three months worth of backups of your program files is enough to give you protection from corrupted programs. So, have a plan to delete any program partition backups after three months. Delete the oldest month first to make room for any new backups of your program partition.

Acronis Software Utilities to Use

Acronis Disk Director Suite 10 (list price $50) is the program you need to create a separate data partition from your program partition (c: drive). Use this program to set up your separate data partition on your computer. You can order this program from us at the user group discount price of just $29 as a download or $33 plus $5 shipping on a CD. Go to www.ugr.com/DiskDirector.html to order this partitioning software so that you can create your new data partition.

Acronis True Image 11 Home (list price $50) is the program that many of you use to backup your main hard drive to an external hard drive. This is what I recommend in the *Perfect Backup Approach* tutorial. You can order this excellent backup utility from us at the user group discount price of just $29 as a download or $33 plus $5 shipping on a CD. Go to www.ugr.com/TrueImage.html to order this backup software and get started doing backups today.

Special offer of both ***Acronis True Image 11 Home*** plus ***Acronis Disk Director Suite 10*** for just $49 as a download or $53 plus $5 shipping on two CDs. Go to either www.ugr.com/TrueImage.html or www.ugr.com/DiskDirector.html to order this Acronis Bundle package of these two outstanding hard drive utilities. This is an outstanding price for two excellent hard drive utilities from Acronis.

When ordering any of the products mentioned in this article, please use the special order code of UGNL0608 when submitting your order. This code will permit you to purchase at these special discount prices.

I hope this helps you discover a better way to do your backups of your computer system. If you have questions about this article or the products, send them to gene@ugr.com and I will try to assist you. I hope this article helps you improve how you backup your computer.