May 2003 - Tech Talk

Nobody enjoys backing up data. It just seems so pointless, right? "After all," we've all mut-tered, "hard drives today are so solid and reli-able that they just don't fail." We sing that song, of course, until the day our hard drive crashes. It's happened to me twice in all the years I've been using these crazy things and neither time was fun. But they were survivable because I had backups (at least partial, but that's another long, boring story).

There's another song we sing, however, which is based on the other side of backup—*it's just so cotton-pickin' tedious*. The song goes something like this: "It's the end of the day and time to go home, / To have some supper and catch the news. / But before I go, I gotta backup my files, / I'm just singin' those Backup Blues."

I haven't dealt with this issue in a long time, so it's overdue. Plus, I've got a tip or two that might prevent the Blues (and the need to ever again read that awful poem above—sorry, I just couldn't help myself).

Backup Basics

As already implied, regular backup is a must—*ignore it at your peril*. I really no longer advocate total hard drive backup for most users, rather just their own data. What data should you backup? Simple: the data that you care about. While you probably won't need that letter to Aunt Millie you wrote two years ago, you will want current backups of your *Quicken* data, church databases, templates, sermon notes, etc.

There are two general *methods* of backup. One is simply manually copying files to a different media using Windows Explorer or DOS. The advantage is that files remain in their normal readable form, but the downside is that this is virtually root-canal painful, and you'll never be consistent. You can improve on this by using a batch file and the DOS XCOPY command (which I've written about before), but there is a better method, namely, using a specialized program, two of which we'll get to later.

There are also two common *types* of backup, both of which any backup program performs: *Full* (or Normal) and *Incremental* (some programs support other types, such as *Differential*). A *Full Backup* backs up all the specified files and clears (turns off) the "archive bit" for each file. The "bit" tells the program that that file has been backed up and will be ignored on any subsequent Incremental backups. If a file is changed, the "bit" is turned on again (like raising a flag) to indicate it hasn't been backed up. An *Incremental Backup*, therefore,

backups up only new or changed files since the last backup (Full *or* Normal), and again turns the archive bit off.

For most users, the most efficient backup routine is to do a Full Backup every couple of weeks or so (okay, maybe a month), and then do an Incremental each day. An Incremental (especially using the *Backup4All* utility below) usually takes only seconds (so there can be no excuses). Many users use a different medium for the Full and the Incrementals, as well as alternating two media for every other Full backup. This is for the really paranoid user who never wants to be without a backup (but there is something to be said for paranoia).

Microsoft Backup

This is Windows' own built-in backup program. If it's installed, you can launch it by selecting "Start > Programs > Accessories > System Tools > Backup." If it isn't, I personally wouldn't bother. I have never liked this program, even though it's better now than it used to be. It has (IMHO) no less than four shortcomings.

First, it won't backup a file that is presently open (*Backup4All* will). If you schedule an automatic backup, for example, but a file that needs backing up is open, it won't get backed up. Second, it slightly increases the overall file size since it also saves data required for the final restore. Third, the files are not only in an unreadable format, they can only be read (i.e., opened and restored) by *MS Backup*. I've just never been comfortable with proprietary formats when it comes to my data. Fourth—and this extends the third—the files can be read only by the same *version* of *MS Backup*. In other words, there's no interchangeability with other operating systems or different versions of Windows (e.g., between Windows 98 and XP, or with a Mac). There's a better alternative, *and it's still free*.

Backup4All

I was recently toddling around the Net and found this little gem. It's a wizard-driven backup utility that uses standard Zip compression to store files and is compatible with *all* versions of Windows (95/98/ME/NT4/2000/XP). I liked it within minutes of downloading it, and it has become my new backup tool. It performs Full and Incremental backups and enables you to restore any version of files. You can also use the powerful "File Filter" to filter the files you want to restore (even one, in fact).

Backup4All also works directly with any drive letter, including mapped network drives and even a CD if it's formatted in UDF format. (Universal Disk Format is a file system standard that enables a CD-Recordable drive to be used as a normal logical drive; this is commonly called CD-RW, or CD-Rewritable.) If you don't have a CD-

RW, you can backup to a local or network drive and then burn the resulting files onto a CD-R. One caveat: the current version does not support DVD or tape drives (but in the case of the former, neither does *MS Backup*).

Even though a big plus is how easy it is to use, the main reason I love this program is that it uses standard Zip compression. This means that *your data is not at the mercy of the utility itself*; you can access it with any Zip compatible utility. After doing a backup, for example, I opened the resulting 430-meg Zip file in *PkZip for Windows* and restored a couple of files with it just for fun. Another aspect of this is that the compression is way better than *MS Backup*. Using just the default *Medium* setting, it compressed 680 megs to 430 (about a 34% average), which still left me 141 on a 571-meg CD-RW. I could improve this even more by using the Full compression setting (which I will do when needed), although it slows down the process.

There are several other features. An Explorer-like file tree enables you to point and click on folders and files you want to backup. You can define multiple backup configurations and save them for future use (notice "My Stuff" in Fig. 1). The program is also "multi-threaded," which means you can run multiple backups at the same time. The "Scheduler" enables you to setup automatic backups, such as at the end of the day, for example. There's also a "Statistics" feature with which you can actually see the number of files that will be processed at the next backup (very useful when you have a large number of files), and a "Summary" feature, which is a textual description of all configurations made for a backup. A couple of bells and whistles are the ability to minimize the program to the System Tray and an option to launch the program at Windows startup.

Is *Backup4All* perfect? Don't be silly. Remember: nothing is perfect. The major shortcoming is that this free version does not support multiple disk spanning (*MS Backup* does), so all your files have to fit onto one backup disk. This *is* supported, however, in the commercial version (which might be out at press time). But realistically, if you use Full compression, you can still put a lot of data on a CD (or even a 250-meg Zip disk). Another (minor) problem is that a backup file can only be 2 gigs in size because this is the limit of Zip technology. A bigger job would require you to break up the job into two or more smaller jobs, but that's really no big deal.

Even if you are using some other backup regimen (especially *MS Backup*), I encourage you to take a look at *Backup4All*. Download it from my website (**www.TheScriptureAlone.com**; go to the "Downloads and Links" page) or directly from **www.backup4all.com**.

Booklets and Utilities CD

Orders for my booklets and CD continue to arrive and it's greatly appreciated. A single copy of each booklet title (*Windows Hot Tips*, *PowerPoint for the PowerUser*, *The Wonder of Word*) is $5.00 ($4.50 for 2-9 copies and $4.00 for 10 or more copies). If you'd like to help with costs (*not required*), add 50 cents for *any* number of booklets you order.*Doc's Giant Utility Collection* on CD is postage paid at $14 (2-5 copies $13 each, and 6 or more copies $12 each). Send orders to: *MicroManuals*; 1041 Cleveland Street; Meeker, CO; 81641. Thanks again, and God bless.

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