The Best Backup Procedure, Method, Software in Windows Based on the *XCOPY* Command

• BackupXCopy.exe ~ version 2.01 ~ October 16, 2012 ~ free-to-run administrative software for free and easy backup in Windows
• BackupXCopy.bas ~ source code of the above compiled program; PowerBasic Console Compiler (PBCC) 4.04
• BackupXCopy.BAT ~ the batch file similar to the above compiled program; easy to create or edit backup for non-programmers.

• Here is the situation. You install or uninstall a piece of terrible software. Next thing you know, your computer is no longer functional! It happened to me after installing and finally uninstalling a bad piece of software from a terrible software company: PC Tools. I wrote extensively about my headaches:

Class-Action Lawsuit against PC Tools.

Mildly put it, I faced the daunting task of reinstalling Windows! What a nightmare — for I also had to reinstall plenty of software applications! You don't want to hear from me the choice of words of that time...

I learned the lesson that I had neglected. I went to Walmart and bought an external hard drive to serve me as a backup device. Just US$50-80 for ingenious peace of mind!

Windows has a very good feature: *Create a system image* (in *Control Panel*, *System and Security*, **Backup and Restore**). It will be much easier to deal with a nightmarish situation like the one I had with PC Tools. I just restore the most recent system image. I don't have to reinstall Windows and software (except for programs not included in the latest system image backup). I always create a system image soon after I installed new software or updated software on my PC.

• • Here is another situation. Like many, I create, add, edit, modify plenty of files. I swear, we must backup the most dynamic directories (folders) on our computers. Many invoke the need to

backup in a religious-like manner! The Ancient Greeks had a god for everything. If they still had been around, they would have designated a god of computers as well.

But that's one of my biggest complaints about Windows — **Backup**. The backup facility in Windows has been a source of complaining from the very beginning. For starters, it is not flexible. I have to accept what Windows decides to backup. Then, if I need just one file in the backup, I have to do a full restore. Then, hunt for the file I need!

That was the second situation I was referring to. I dramatically upgraded my Bright*.exe software. No surprise, the overhaul was accompanied by quite a few errors. Fortunately, I did the backup my way. I had older source code files on various media. I knew exactly what BAS files I needed and where they were located. It was as easy as opening in the compiler both program versions ... then copy-and-paste.

Last time I used *Windows Backup* was in 1995. After that, I have always used my backup methods. All had in common the **XCOPY** command, which lies at the foundation of the Command Prompt. Windows Explorer uses a water-down version of **XCOPY**. You'll never be able to do in Windows Explorer what you can do with **XCOPY** at the **Command Prompt**.

Thus, I created a special program to back up everything that's important on a power-user's PC. I created also a batch file to do the same. This is the best and easiest procedure of backing up files: **XCOPY**. The command has a plethora of options (via switches on the command line). I only applied a few switches; e.g.:
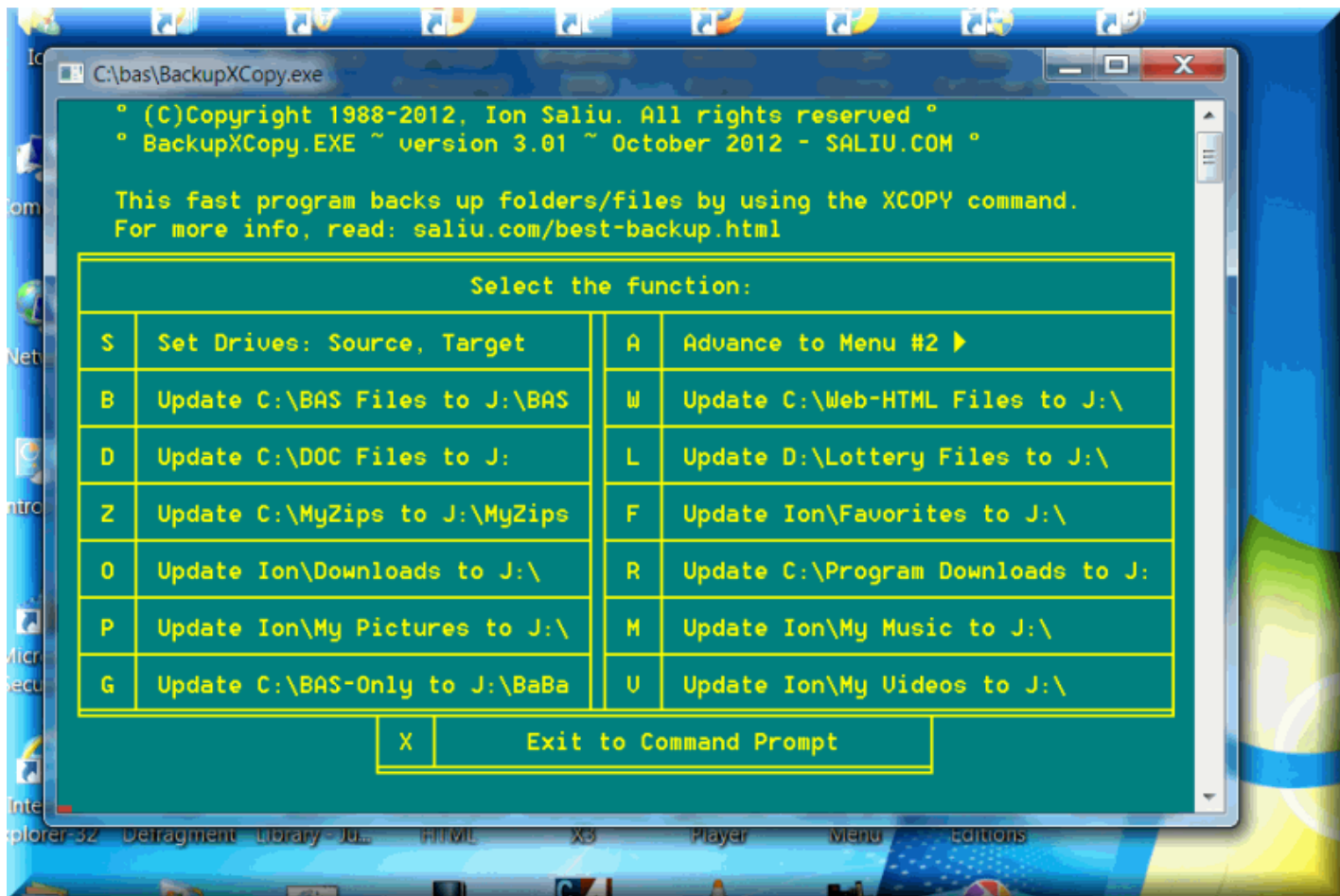
XCOPY C:\BAS*.bas J:\BAS*.bas /S /D /I /Y
XCOPY "C:\My Web Pages*.*" "J:\My Web Pages*.*" /S /D /I /Y
XCOPY "C:\DOCUMENTS" "J:\DOCUMENTS" /S /D /I /Y
...
PAUSE

The **/D** option (switch) is the keystone of easy backup via the **XCOPY** command. If the files do not exist, they are copied to the *Destination*. If the files are modified on the *Source*, they will replace the older files on the *Destination*. If no files were modified on the Source, **XCOPY** fires this benign message: *0 files copied*.

Just be sure to surround by *" "* all directories with blank spaces in their names; e.g.

"C:\My Web Pages*.*"

Let's take a look at the menus of my backup software:

```
C:\bas\BackupXCopy.exe

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° BackupXCopy.EXE ~ version 3.01 ~ October 2012 - SALIU.COM °

This fast program backs up folders/files by using the XCOPY command.
For more info, read: saliu.com/best-backup.html

                    Select the function:

 S │ Set Drives: Source, Target   │ A │ Advance to Menu #2 ▶

 B │ Update C:\BAS Files to J:\BAS │ W │ Update C:\Web-HTML Files to J:\

 D │ Update C:\DOC Files to J:     │ L │ Update D:\Lottery Files to J:\

 Z │ Update C:\MyZips to J:\MyZips │ F │ Update Ion\Favorites to J:\

 O │ Update Ion\Downloads to J:\   │ R │ Update C:\Program Downloads to J:

 P │ Update Ion\My Pictures to J:\ │ M │ Update Ion\My Music to J:\

 G │ Update C:\BAS-Only to J:\BaBa │ V │ Update Ion\My Videos to J:\

            X │   Exit to Command Prompt
```
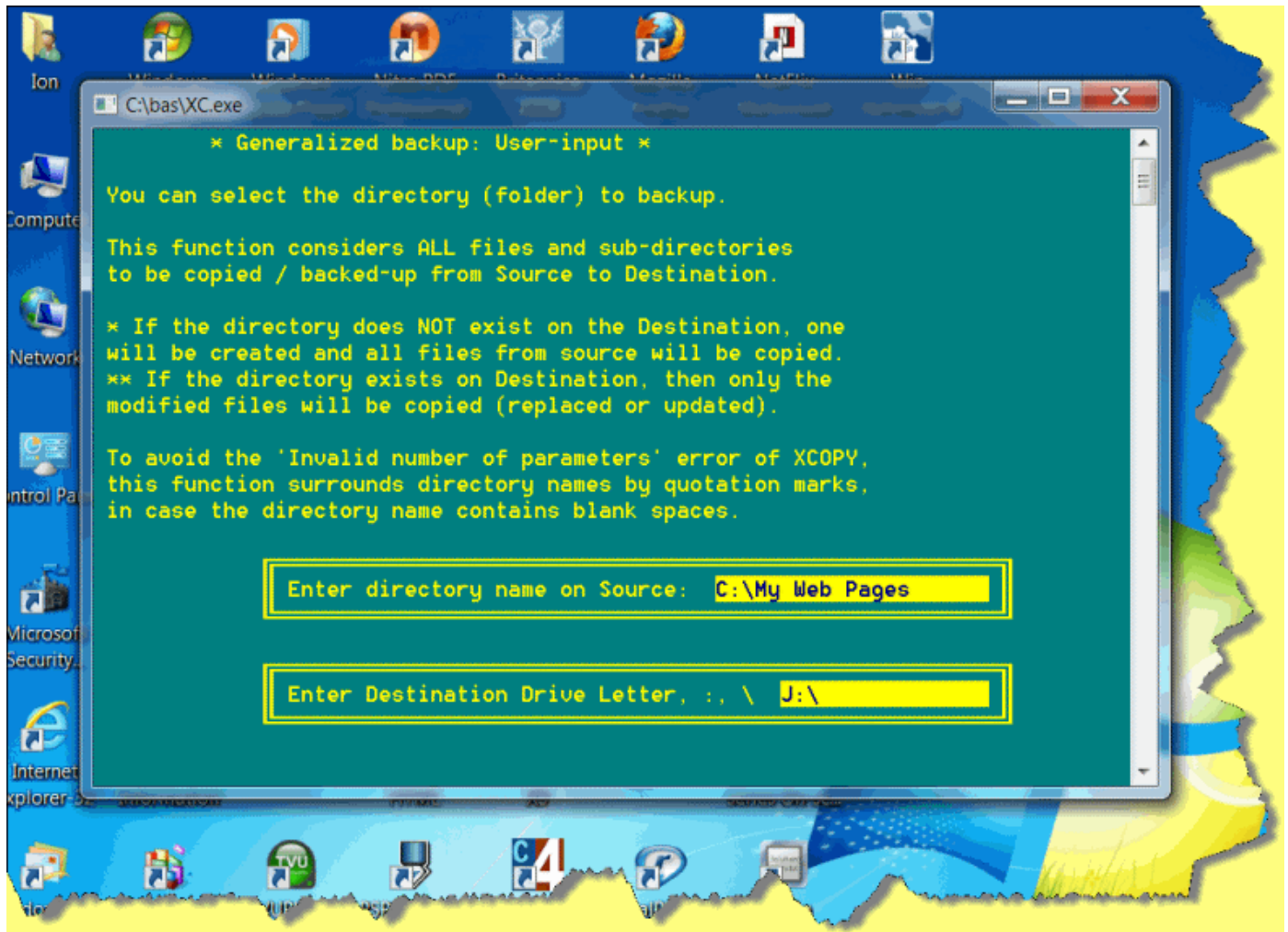
The menu suits my needs. That's how I backup the most important folders and files. If a folder did not exist on the *Destination* (the drive that hosts the backup), then one is created; all the files on *Source* are copied to the *Destination*. If the folder exists on the *Destination*, then only the modified files will be copied (replaced or updated). To avoid the *Invalid number of parameters* error of **XCOPY**, the **software surrounds directory names by quotation marks, in case the directory name contains blank spaces**.

As I said, this piece of backup software suits my needs. To suit other people's needs, I also make public the source code of the program: BackupXCopy.bas. Well, it can only serve the programmers! The BASIC source code can be converted to any language even by programming beginners. I even make public a batch file, which is much easier to edit even by non-programmers: BackupXCopy.BAT.

The advantage of BKUP.BAT is *scheduling*. You can schedule the automatic running of my backup batch file. You do that via the *Task Scheduler* in Windows. Choose a day and time when you don't really need to use your PC, while BackupXCopy.BAT backs up your files in the background.

I added one function to BackupXCopy.exe thinking of the bluntest non-programming computer users:

The user can select the folders to backup, one by one. Maximum attention is required! Windows file names or folder names are case-insensitive. But more than one blank space triggers errors — the program will terminate. The same is true regarding the BackupXCopy.BAT. As a non-programmer, take your time when adding backup folders. The good news is that you don't have to add files manually — the entire folder will be backed up.

You can download BackupXCopy.exe and BackupXCopy.BAT directly to the root directory (e.g. C:\). You don't even need to go to the **Command Prompt**. You can open Windows Explorer and (double-)click on BackupXCopy.exe (or BackupXCopy.BAT). Even easier: Create a shortcut on your desktop. Right-click BackupXCopy.exe (or BackupXCopy.BAT), then select *Send To*, then *Desktop (Create Shortcut)*. You might want to right-click the shortcut icon, then choose Rename. Rename it something like *MyBackup*.

There is a great advantage for programmers, of course. They can edit BackupXCopy.bas to their hearts' delight. There are three additional menu screens, and lots more can be easily created.

Windows 7 has a great feature. Even an average computer user can copy files and folders to a CD/DVD — without the cumbersome *Burn* step. Also, **XCOPY** copies files directly to CD/DVD from the command prompt.

I easily created a secondary backup to a DVD. It took around 15 minutes to transfer over 2 GB of data from my hard drive to the DVD. Compare that to the inflexible and slow built-in backup service of Windows!

Unfortunately, copying to a CD/DVD is not as complete as working with magnetic media (e.g. hard drives). This backup will *always copy all files and folders* to DVD — instead of only updating the modified/added files and folders.

I was appalled in the 1980s and 1990s. I saw advertising for expensive backup software. What for? **XCOPY** was there, since DOS, and well preserved in Windows. There were also the batch processor and capable programming platforms (GWBASIC, QBasic). Yet, millions of computer users paid serious money for backup software!

The most relevant pages at SALIU.COM –

[XCOPY Command: Best Backup Method, Software in Windows](#)

[Command Prompt in Windows XP, Vista, Windows 7 8](#)