Windows 8's goal: No-effort system backups

For Windows 8, Microsoft rethought the concepts of PC backups and created **File History**, a highly automated, set-and-forget archiving system. The goal was to make backing up a PC so easy and unobtrusive that most Windows users would actually do it.

Former president of Microsoft's Windows division Steven Sinofsky described the File History design goals in a July 10, 2012, "Building Windows 8" <u>blog</u>.

"In Windows 8, Microsoft is actively trying to accomplish the following:

- 1. Make data protection so easy that any Windows user can turn it on and feel confident that their personal files are protected.
- 2. Eliminate the complexity of setting up and using backup.
- 3. Turn backup into an automatic, silent service that does the hard work of protecting user files in the background without any user interaction.
- 4. Offer a very simple, engaging restore experience that makes finding, previewing and restoring versions of personal files much easier."

In the same blog, Sinofsky describes File History as follows. (I've emphasized some key words and phrases.)

"File History is a backup application that **continuously** protects your personal files stored in **Libraries**, **Desktop**, **Favorites**, **and Contacts folders**. It periodically (by default **every hour**) scans the file system for changes and copies changed files to another location. Every time any of your personal files has changed, its copy will be stored on a **dedicated**, **external storage device** selected by you. Over time, File History builds a complete history of changes made to any personal file."

In practice, File History does meet most of Sinofsky's stated goals: it works, and it's undeniably easy to use. Its all-but-invisible, automatic backups will be a boon to the majority of users who never before bothered to make backups.

But for those of us who are used to making, saving, and using traditional backups, File History requires some serious re-thinking. For example, as Sinofsky stated, File History processes **only** the files in "Libraries, Desktop, Favorites, and Contacts." So unless you tweak it, File History might fail to back up some files that you want archived.

File History also does **not** write backups to CDs or DVDs; it requires some form of external storage device (such as a USB drive or networked drive) to store its nearly continuous backups.

Those are big changes.

The best way to understand these changes is to see File History in action. In the rest of this article, I'll walk you through the process of setting up Win8's File History, including all its optional settings. Along the way, I'll point out the strengths, weaknesses, gotchas — and suggest a few tweaks!

Required: A separate, secondary hard drive

As mentioned earlier, File History **requires** use of an external or secondary drive to store its backups. (There's one exception to this rule, which I'll cover later.)

This two-drive approach is obviously a good thing. A drive failure won't take out both your original files and your backups. But it also means that unless your system has a second, physical hard drive available (such as a USB drive or a networked drive), you won't be able to properly set up File History.

So that's the first step. Before enabling File History, ensure that your Win8 system recognizes a second drive (not just a second partition on the main drive) that is healthy and has sufficient capacity for multiple backups. Ideally, the drive is used only for backups and has a large amount of storage space.

Once that's done, you're ready to roll.

A few clicks sets up File History's default mode

There are multiple ways to open the File History applet, but the simplest is to open Control Panel by whatever means you prefer (such as the **Win+X** menu) and click System and Security/File History.

When File History first opens, it looks for and lists suitable locations for your backup files, as shown in Figure 1.

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Control Panel Home	Keep a history of your files			
Restore personal files	File History saves copies of your files so you can get them back they're lost or damaged.			
Exclude folders	File History is off			
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Figure 1. If it can, File History will suggest a location for your backup files (in this example, the D: drive).

If File History can't identify a suitable local drive, it will prompt you to either add one or use a networked drive.



Figure 2. If it can't find a suitable local backup drive, File History displays this warning.

Alternatively, you can use the **Select drive** option (on the left side of the File History dialog box as shown in Figure 1) to manually choose a different location for your backup files. (For more information, see the Win8 Support <u>article</u>, "Set up a drive for File History.")

Once you've selected a File History–compatible drive, click the **Turn on** button at the lower-right corner of the dialog box, and you're done. It's really that easy to get File History up and running in its default mode! (See Figure 3.)



Figure 3. Getting File History running usually takes just a few clicks.

Customizing your File History configuration

File History's default settings might not suit you (they don't suit me). So let's take a look at the available options, advanced features, and alterations.

Include additional folders: As noted above, File History, by default, backs up only your libraries, desktop, favorites, and contacts — plus your local SkyDrive folder, if you have one. That, to my mind, is File History's biggest drawback.

You can, however, force File History to back up **any** folder — including Program folders — by adding those folders to an existing or new library.

If you need a quick refresher on Windows' Libraries, see the Microsoft <u>Support article</u>, "Working with libraries," or the Windows Libraries <u>tutorial</u>. Or check out the March 10, 2011, <u>Top Story</u>, "Make the most of Windows 7's Libraries." (All three articles are for Win7, but Win8's libraries work the same way.)

The MSDN <u>blog</u>, "Backup your files using File History," contains additional instructions on how to include nonstandard folders in File History's backups. (Scroll down to the "Backup Other Folders" section.)

Exclude specific folders: If you have some folders that you don't want backed up, simply exclude them from File History by clicking the *Exclude folders* option (immediately below the aforementioned *Select drive* option). A new dialog will open, as shown in Figure 4.

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Figure 4. The *Exclude Folders* dialog box

Click the Add button and browse to the folders you wish to exclude.

Advanced Settings: The Advanced settings link (left side of the main File History dialog box) gives access to controls over how and when File History backs up your data. For example, the **Save copies of files** setting determines how often File History runs (see Figure 5). The default setting is once an hour, but you can choose run intervals from 10 minutes to 24 hours. I suggest you start with the default interval, and then adjust up or down as needed.

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As noted, File History typically requires a second drive or networked drive to store backup files. If that drive isn't available — say, you're on the go and you've disconnected your USB drive — File History will use a temporary **offline cache** located on your *C*: drive.

The *Size of offline cache* setting controls how much of your *C*: drive will be used to store temporary backups if the normal backup drive isn't available. The cache is normally set to 5 percent of the *C*: drive's space. But you can increase the cache size to as much as 20 percent (see Figure 6).

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Figure 6. File History's offline cache size can be set as low as 2 percent and as high as 20 percent of the *C:* drive's space.

With the **Keep saved versions** setting (see Figure 7), you can control how long Windows retains your backups — from one month to an optimistic "Forever."

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Figure 7. File History's Keep saved versions setting

A related **Clean up versions** setting lets you manually delete backups you no longer need (see Figures 8 and 9).

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Figure 8. Click the *Clean up versions* link to remove obsolete backups.

Figure 9. Removing old backup versions is easy — just select a cutoff age.

The two remaining advanced settings are relatively minor. The **HomeGroup** link makes it easy for several different PCs to share the same homegroup-networked drive for storing backup files. The **Event logs** link lets you examine File History's operational records to ensure it's working correctly — or to troubleshoot problems, if it isn't.

Recovering files and folders with File History

Tucked down in lower-left corner of File History's main dialog box (see Figure 1) are two additional links: **Recovery** and **Windows 7 File Recovery**.

The **Recovery** link opens the Advanced recovery tools (see Figure 10), where you (among other things) configure and open System Restore. Another tool — Create a recovery drive — lets you create a bootable USB recovery drive. It's nicely explained in the Win8 Support <u>article</u>, "Create a USB recovery drive."



Figure 10. File History includes advanced system-recovery tools.

The **Open System Restore** and **Configure System Restore** items are largely self-explanatory, but for more info, see the Win8 Support <u>article</u>, "How to restore, refresh, or reset your PC."

The final link in File History's main dialog is **Windows 7 File Recovery**, which links to the full copy of the Win7 backup system that's included inside Win8. (See the March 28 <u>LangaList Plus article</u>, "Win8's built-in, hidden, image/backup tool.")

Important note: Win8's Windows 7 File Recovery works for now, but don't count on using this feature in the future. An <u>MSDN article</u> states that Win8's Windows 7 File Recovery "is being deprecated and will not be updated." In fact, it's absent from the current beta Windows 8.1 Preview. Clearly, traditional backups are not part of Windows' future!

Using File History to restore files and folders

Just as it's easy to get File History started, it's also easy to recover your data from File History, as demonstrated in a one-minute, MS Support <u>video</u>. Also, I wrote about File History recovery options in the April 11 LangaList Plus <u>column</u>, "Assessing Win8 File History — and its weaknesses."

Here's the short-form how-to: Click the **Restore Personal Files** option from the left side of the main File History dialog box. A new window opens showing the most recently backed up files and folders (see Figure 11).



Figure 11. By default, Restore Personal Files opens the most recent backup.

Note the arrows on the bottom of the window. The blue arrows let you scroll through backup sets by date and time — older backups to the left, newer ones to the right. The round green button will restore any file or folder you've selected.

You navigate within your backup sets much as you would in File Explorer — simply select a library or folder to see whatever's inside. The File History applet will even let you preview the contents of any backed-up document. Click the document and it opens, right within the File History applet.

When you've found and selected the file or folder you wish to restore, click the round green button; File History will then guide you through the process of restoring the selected item to the location of your choice.

The bottom line — and the future

I've been using File History for several months now, and have found it to be unobtrusive and reliable. I also like its nearly continuous operation; new and altered files are automatically backed up, often within minutes of their creation. It's hard to imagine a much safer system.

But having so many backups can actually make it harder to locate and select one specific file, or a specific version of a file. As with Win8's main interface itself, File History's Restore interface requires a lot of inefficient horizontal scrolling, which can be a pain in the arm to use. With luck, a simpler alternative will emerge.

And it might — Win8x is clearly a work in progress.