## Win7's least-known data-protection system



By Fred Langa

You deleted a file yesterday; now you *really* need it back. Your Windows recycle bin is empty — what now?

Your next-best option is the **Restore Previous Versions** tool — a truly great, automatic data-protection feature buried in Win7.

I say "buried" advisedly; most people have never even heard of it. You've heard of it, of course — you read Windows Secrets! But I'll still bet you rarely, if ever, use it. And if you *have* used it, I'll bet your initial explorations were probably like mine — a click here, a poke there, some head-scratching, and then mostly ignoring it.

But it's a mistake to ignore or underuse this feature, because it really is a hidden gem.

#### What is Restore Previous Versions, exactly?

Introduced in Vista and now present in all editions of Windows 7, *previous versions* are local backups of *every data file and folder* that changes on your system. The backups are created automatically and are instantly accessible. Previous versions do for your standard documents (text files, spreadsheets, photos, whatever) what Windows System Restore does for system files.

The function that creates previous versions is enabled by default and is probably working *right now* on your PC, whether you've ever used the previous-versions feature or not.

As Microsoft's FAQ puts it:

"You can use previous versions to restore files and folders that you accidentally modified or deleted, or that were damaged. Depending on the type of file or folder, you can open, save to a different location, or restore a previous version."

In the next section, I'll walk you through the **Restore previous versions** command, using my PC as an example. Follow along on yours — it's quite safe; no files will be changed unless you specifically command it — and it'll only take a few minutes.

If you don't know about **Restore previous versions** — and maybe even if you think you **do** know — you just might find it eye-opening.

#### **Exploring your previous-version files**

By default, Vista and Win7 make copies of changed folders and files at least once a day. But you can adjust the schedule at will. (I'll discuss previous-version scheduling options later.)

Because this backup system stores only files that have changed, the best place to see it in action is in a folder that you use a lot — one where you frequently alter the folder's contents. The **My Documents** folder is usually a good example, so that's what I'll use in this demo.

To start, open Windows Explorer, right-click My Documents, and select **Restore previous versions**, as shown in Figure 1.

Figure 1. Restore previous versions is enabled by default in all editions of Win7. It lets you recover recently lost or altered documents, spreadsheets, pictures, etc.

A dialog box similar to the one shown in Figure 2 will open, revealing the available previous versions. (Of course, your list will differ from mine.)

## Figure 2. On my test system, the Previous Versions tab had six backups of my Documents folder available for restoration.

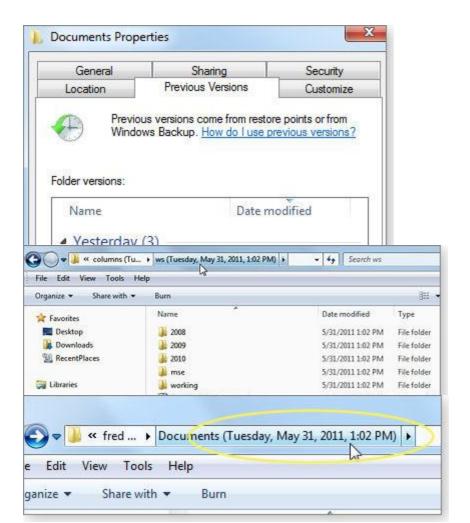
Select any folder in the Previous Versions list you wish to explore, and click Open; you can then navigate files and subfolders as you would in any Explorer window. Go ahead, poke around and see what's in there. You may be surprised. I was, the first time I looked inside a previous-version folder!

On the system shown in Figure 3, I've opened a previous version of the My Documents folder and then drilled down further to the "ws" folder, where I keep my Windows Secrets columns. As you can see, Windows has squirreled away copies of many "ws" files. These previous versions were made automatically, with no intervention on my part, and exist independently of any other backups or system images I've made.

#### Figure 3. You may be surprised to see how many archived files Previous Versions has available.

(If the **Restore previous versions** command isn't available on your system, see the subsection titled "Why can't I find previous versions of some files?" on this Microsoft help page.)

To help avoid any confusion between a previous version and the current file, Windows adds a *timestamp* to the copy's address bar. (See Figure 4.) In my example, the selected previous-version folder was created on May 31.



# Figure 4. If a folder or file has a date and time (as shown here, circled in yellow) following its name, it's a previous version.

Now comes the best part: you can open any file's previous version instantly and directly — in just **one step.** This is quite unlike most standard backups and system images, where digging out a file can take several different tools and some effort.

Go ahead. Double-click any individual previous-version file; it will open in the application normally associated with that type of file (e.g., Word for **.docx** files). Couldn't be easier! You can now edit, alter, copy, re-save, or abandon the recovered file, as you wish.

Note: The one thing you *can't* do is save a recovered file back inside the previous-version folder you pulled it from. (PV contents are read-only.) This makes perfect sense — if you've altered the file, it's no longer a previous version; it's a brand-new version. Instead, save the file as you would any current document, with whatever name you wish.

This extreme simplicity of use — instant access, easy to open, easy to save — is what makes previous versions so valuable.

#### The catch: previous-version files are temporary

Now that you know how PV works, you're likely asking yourself: if the previous-versions feature is so great, do I still need regular backups and system images?

Absolutely! Previous versions are not intended to replace permanent backups of your files and folders. That's because PV folders and files have a limited lifespan. Here's why:

The previous-version feature is part of Win7's on-by-default **System Protection** service, which includes System Restore. Whenever **System Restore** creates a **restore point** for your system files, it simultaneously creates previous-version copies of changed data files. (Unfamiliar with System Protection and System Restore? See Microsoft's <u>Help & How-to</u>, "What is system protection?" and its System Restore <u>FAQ</u>.)

By default, Win7's System Protection creates a restore point (and PV files) at least once a day. You can create more or fewer restore points (and thus more or fewer previous versions) if you wish.

For example, you can create a restore point on demand, anytime you want. (Find more on this on an MS <u>help page</u>.) Or you can adjust Win7's Task Scheduler to make restore points on the schedule you choose. (Need Task Scheduler help? See How-to Geek's <u>article</u>, "Change schedule for automatic system restore points.")

The key point to remember is that previous-version backups are always created at the same time as restore points. You can't schedule them separately.

PV files reside in the same disk space set aside for restore points. When System Restore's space gets filled, the oldest restore points and their associated previous versions are automatically deleted to make space for new ones.

Of course, you can change the amount of space available for restore points, if you wish. (See Microsoft's <u>help page</u>, "How much disk space does System Restore require?") The larger the space set aside for System Restore, the more previous-version files your system can store.

But sooner or later, your old restore points and previous versions are going to get overwritten and that data will be gone. And that's the main reason why the previous-versions system shouldn't be used in place of regular backups.

The other weakness of previous versions is that they live on the same hard drive or partition as the rest of your operating system. Anything that corrupts or crashes your system may also ruin your restore points and PV files.

Traditional backups are almost never stored in the same space as the original files, which makes them safer for long-term data storage.

### Where previous versions fit in with PC security

Windows 7 actually offers four levels of data protection. It's a continuum, with each step offering additional depth in recovering previous data.

- 1. If you need to recover a file that was recently deleted within hours or maybe days you can
  probably retrieve it from the Windows recycle bin. (See the Microsoft <u>article</u>, "Recover files from the
  Recycle Bin.")
- 2. If the file was deleted or altered days or weeks ago, use Restore Previous Versions.
- 3. If the file is no longer under the Previous Versions tab, you should have it in your regular, full backups assuming you made them. (See the May 12 <u>Top Story</u>, "Build a complete Windows 7 safety net.")
- 4. If the file was deleted a long time ago and is not in your backups, it may be in an old system image. (See the Top Story referenced in point 3.)

Imagine never losing an important file ever again, never having one of those "Oh, no!" moments when you realize an important file has been incorrectly altered or deleted.

These four built-in elements of Windows 7 can be your key to making data loss a thing of the past!