

COMPUTER NEWS from the



APRIL 2013

Volume 1 NO. 4

As found on the web and other sources

Is This the Future of Hard Drives?

From "askbobrankin.com"

Category: [Hard-Drives](#)

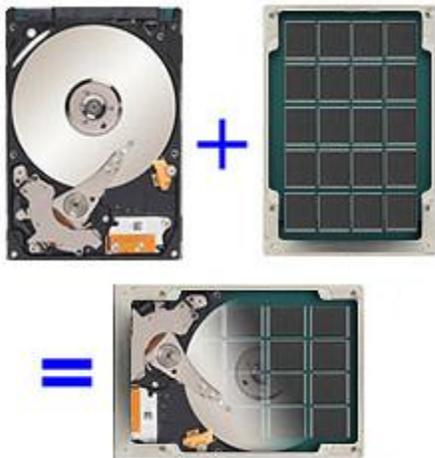
Solid-state hybrid drives (SSHD) are emerging as the future of mass storage. Combining the blazing speed of flash memory with the low cost of traditional magnetic media, SSHDs provide significant performance improvements that ordinary laptop and desktop users can afford. Here's what you should know about this new tech that can rev up your old computer...

What is a Solid-State Hybrid Hard Drive?

I've written before about solid-state hard drives, also known as SSDs. Unlike a traditional hard drive which uses spinning magnetic platters, an SSD drive has no moving parts. And they're fast. See my related article [SSD Hard Drives Offer Blazing Speed](#) for some facts and figures on SSD drives.

The "problem" with SSD technology is that it's more expensive per gigabyte than a standard hard drive. So enter the hybrid. Solid-state [hybrid drives](#) combine magnetic mass storage with the speed of solid-state memory, plus a little software magic, to strike a beautiful compromise. A case in point is Seagate's recent overhaul of its hybrid drive product line.

Seagate's [Momentus](#) series of 2.5-inch SSHDs for laptops has been rebranded; it's now called simply [Seagate SSHD](#). A 3.5-inch form factor for desktops has also been added. Both versions come with 8GB of flash memory. The laptop version offers capacities of 500GB or 1TB, while the desktop version holds 1TB or [2TB](#). The laptop version is a slim 7mm thick, while the desktop version is a standard 9.75mm.



[AskBobRankin.com](#) [Type a quote from the document or the summary

of an interesting point. You can position the text box anywhere in the document. Use the Text Box Tools tab to change the formatting of the pull quote text box.]

Neither requires any special software drivers. Simply put, that means they appear just like any other hard drive, in terms of installation and usage. And they'll work in both PC and Mac computers.

Both drives support the latest SATA 3 (6Gbps) standard and are compatible with earlier SATA standards. Seagate's SSHD technology automatically moves frequently-accessed ("hot") data from magnetic (platter) storage to the [flash memory](#) portion, to optimize performance. Seagate has eliminated 7200 rpm spin rates in its laptop drives, which now spin at 5400 rpm. The desktop SSHD spins at 7200 rpm. The company claims a five-fold performance advantage versus standard [HDD](#) technology for its laptop SSHD and a four-fold boost for the desktop version.

SSHD Advantage: Speed and Price

How fast is that? Windows 8 boots in less than 10 seconds, reportedly, with an SSHD under the hood. The secret sauce is in Seagate's Adaptive Memory software, that's baked into the SSHD. It identifies the most frequently-used files and moves them to the flash memory. This translates to

quicker boot times, faster loading of applications, and makes the entire system feel more responsive.

The pricing of the new SSHDs is attractive. A 500GB pure SSD drive will carry a price tag of about \$400. But laptop SSHD versions cost just \$79 and \$99 for 500GB and 1TB, respectively. The desktop version costs \$99 and \$149 for 1TB or 2TB, respectively. That's just a shade more than standard (non-hybrid) drives. All SSHDs come with a three-year warranty.

Future SSHDs will feature larger flash memory components. Seagate and Western Digital were demonstrating SSHDs with 36GB and 64GB of flash memory in January, 2013. Expanded flash memory SSHDs may appear later this year.

SSHDs are a compromise between cost and performance. But they are a very good compromise, delivering nearly the performance of pure-solid-state drives at a fraction of the cost. As the cost of flash memory falls, the edge enjoyed by SSHDs will shrink. But for the next few years, a SSHD should remain one of the best values around, and a compelling reason to upgrade your old-school HDD. Aside from adding more RAM memory, swapping in an SSHD is one of the more cost-effective ways to increase the performance of an older system.

Read more: http://askbobrankin.com/is_this_the_future_of_hard_drives.html#ixzz2NRCeWWJt

Forget wireless charging

By Peter Clarke in Eetimes.com

There seems to be some excitement growing around the subject of wireless charging, with the various industry associations, standards setting bodies and companies jostling for position. The names and groups include the Wireless Power Consortium, Alliance for Wireless Power (A4WP), Qualcomm, Samsung and Intel.

I remember getting a little excited about the topic myself a few years ago when a company called Splashpower Ltd. emerged out of Cambridge England. But the company and I were a bit ahead of the market and the company has disappeared. However, the more I study the topic the more I am inclined to say forget it. Do the right thing and use a wired charger for reasons of ecology. That's because wireless charging is not as energy efficient as wired charging. Last I heard a typical wireless energy transfer efficiencies are about 70 percent going up to 80 to 85 percent with careful design, more copper and better shielding. But it is hard to imagine it ever being as efficient – or as green – as wired charging.

There is a counter argument that runs thus: If users of multiple separate chargers leave them plugged in 24 hours a day and 7 days a week, even when they are not charging an appliance they will each consume power. A single wireless charging platter that copes with multiple pieces of equipment, switched on and off appropriately could represent a power saving. I don't buy it.

Instead I would say do the right thing and plug in a wired charger for the time it is needed and then disconnect it.

There are parallels with the invention the standby button. Philips –which has now got out of consumer electronics – used to claim this invention and that it was a great boon to mankind because of the power it saved.

I reckon the opposite is true. Until the standby button was invented people turned off appliances that were not in use and I even unplugged them. Once the standby switch was invented televisions were left on overnight and sometimes are not switched off for months or years at a time, all the time drawing some power. Finding enough energy to do all the things a global population of 7 billion wants to do at a cost it can afford is a major challenge to humanity so "wasting" energy should become one of the big sins of our era.

Of course, one person's waste is another person's convenience and yet another's necessity. But in general I would say do the right thing, and don't use an inherently inefficient technology when there is a more efficient established alternative.

- How to pin Web sites to the Windows 8 Start screen

Don't waste the precious space on the Windows 8 Start screen with tiles you don't use. Pin your favorite Web sites to the Start screen instead.



by [Ed Rhee](#) in "CNET.COM".

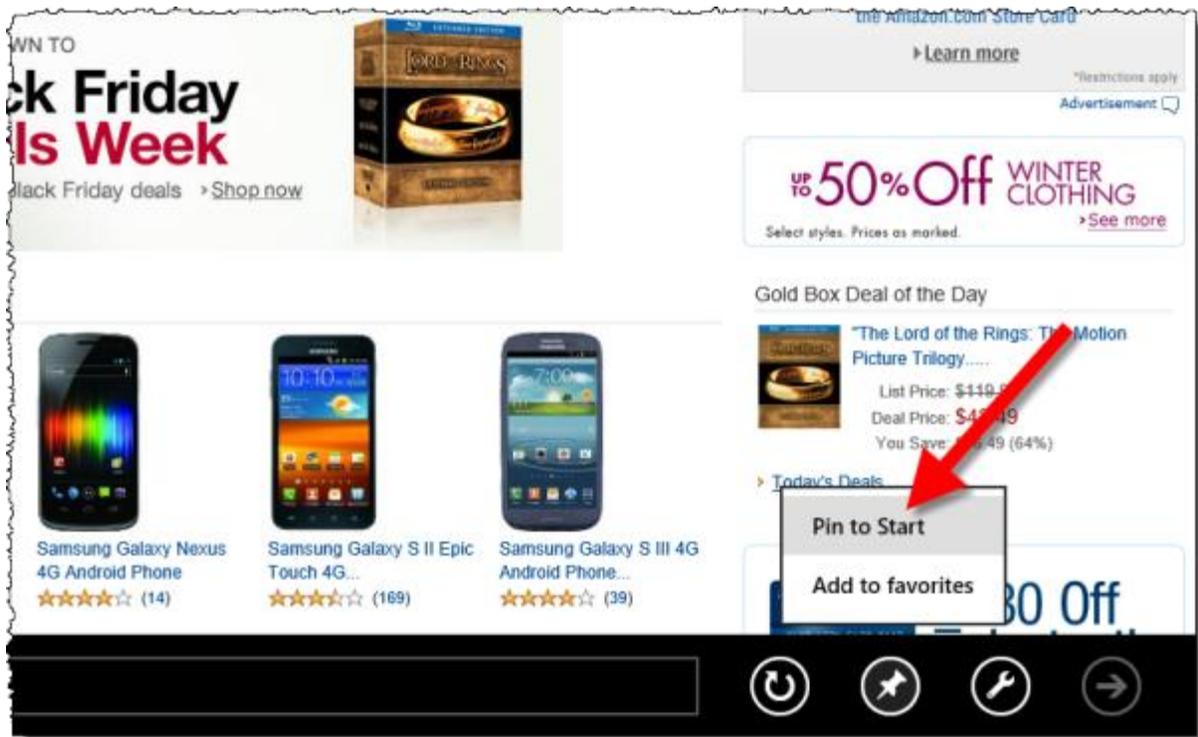


(Credit: Screenshot by Ed Rhee/CNET)

The [Windows 8](#) Start screen comes prepopulated with lots of tiles, some of which you won't ever use. Instead of wasting that precious space, you can remove the tiles you don't use and pin your favorite Web sites to the Start screen for quick and easy access. Here's how:

Step 1: Open Internet Explorer from the Start screen and go to the Web site you want to pin.

Step 2: Click the pin icon in the lower right-hand corner of the address bar, then select Pin to Start.



(Credit: Screenshot by Ed Rhee/CNET)

Step 3: Change the description to something shorter, so it's not cut off at the end of the tile, then click the Pin to Start button.



(Credit: Screenshot by Ed Rhee/CNET)

If your primary browser isn't Internet Explorer, you can also pin sites using Chrome, though, the tiles won't look as nice. Go to Settings > Tools > Create application shortcuts. Create a desktop shortcut, then right-click on it and select Pin to Start. A drawback to using Chrome to pin sites is that they're application shortcuts. This means that you won't be able to access any of Chrome's settings, bookmarks, or the toolbar when you launch the tile this way. Unfortunately, there's no way to pin sites with [Firefox](#) at the moment.

That's it. By default, new tiles will be added to the far right side of the Start screen. If you want to move it, just click on the tile and drag it over to your preferred location.

If you don't like the above, try this way.

Pinning Made Simple

From "infopackets.com".

Pinning preferred websites to your Start screen is a relatively simple process.

You begin by opening up Internet Explorer from the Start screen and typing in your desired website. Next, click on the pin icon in the lower right-hand corner of the address bar and select "Pin to Start".

Finally, we suggest that you change the description to something shorter, so that you can recognize your pinned site by a name you have chosen (and not its URL). Once again, confirm your changes by clicking "Pin to Start". (Source: businessinsider.com)

When first using the Windows 8 operating system, many people have been overwhelmed with the pre-populated tiles Microsoft has selected for their Start screen. These people likely do not delete any of them out of fear of removing a tile that might be considered important later on.

The fact of the matter is that some tiles are really not necessary. Taking a few minutes to replace them with pinned websites will save you time by allowing you to access your desired websites a lot quicker.

COOKIES ANYONE?

Mozilla Firefox: No More Third-Party Cookies

By John Lister on 20130226 in "infopackets.com".

Mozilla says it will take steps to stop advertisers from violating Firefox user privacy. But advertisers have labeled the move an act of war. Mozilla has announced that it will change the Firefox browser so that third-party cookies -- such as those from advertisers -- are blocked by default.

Cookies are small text files created by websites and stored on your computer.

Cookies Key to Website Advertising

In many cases cookies help the website visitor. For example, a cookie might store your username to make logging in faster, or it could store your ZIP code so you can instantly get customized movie listings or weather forecasts from a site without having to type your details in every time you visit. However, storing and viewing cookies can allow sites to track your Internet activity. Many sites use cookies to choose suitable advertisements for the website visitor. Such tracking cookies are particularly controversial when they are issued by third-party advertisers rather than the actual website you visit. (Source: zdnet.com)

'Do Not Track' Cookie Solution Limited

Both website creators and browser developers have worked on ways to deal with this issue. For example, they've developed a "do not track" signal that involves the browser telling sites the user doesn't want to be tracked by third-party cookies. The problem is that these solutions rely on advertisers agreeing to take heed of such signals.

Now, Mozilla has taken a more drastic measure. Starting this summer, Firefox's default setting will be to simply block any cookies that don't come directly from the website the user is visiting. Safari was the first browser to adopt this policy. However, Mozilla's move is causing bigger waves because Firefox has around four times as many users as Safari.

Advertisers are already protesting the move. A spokesman for the Interactive Advertising Bureau said that making the block a default setting represents "a nuclear first strike against [the] ad industry." (Source: computerworld.com)

One argument even goes that blocking cookies could make advertising less appealing and valuable, driving down rates and making it harder for some websites to stay in business.

Internet Speed Tests

:From "askbobrankin.com".

Category: [Networking](#)

How can I know my net speed is a common question. There are quite a few definitions of net speed and several free ways to test it. Here's the scoop on Internet speed tests, and why you definitely should check your speed every once in a while...



What is My Internet Speed?

By "net speed" most people mean, "how fast I can download things" like Web pages, music and movie files, shareware programs, etc. [Internet service](#) providers tune their connections so that most of their available bandwidth is devoted to downloading and far less to uploading (sending) things. ISPs do this because a) they know fast downloads are of greater importance to most consumers, and b) they want to discourage people from running high-traffic [business Web sites](#) from their consumer priced accounts.

Uploading or downloading, the Internet is "bursty." That means your file transfer will go very fast one instant and very slowly the next. "Net speed" is generally measured as an average, dividing the time it takes to transfer a file of a given size into the file size. If it takes 1 second to transfer a file of 1 MB, your Net speed is 1 MB/s - at that particular time, and between the two

particular points.



If you have a DSL connection, your max download speed will be 1.5 - 3 Mb/s. Most [cable internet](#) connections will be in the 3-6 Mb/s range, and a fiber optic connection will get you between 10 and 50 Mb/s. The higher speeds in each range usually correspond to a higher price point.

Note that in the two paragraphs above, I used both "MB" and "Mb". The distinction is important, because most downloads are measured in megabytes (MB), while [Internet service providers](#) offer plans with the speed listed in megabits (Mb) per second. A megabyte is equal to 8 megabits, so if you're cruising the Net at 30 Mb/s, that's about 3.75 MB/sec. Why do ISPs list their speeds in megaBITS and not megabytes? It's probably just a marketing gimmick - bigger numbers look better.

Net speed is not something you can measure and take for granted forever thereafter. Internet traffic may be heavier between different points and between the same points at different times. Local outages on [the Internet](#) may force traffic to take detours, lengthening their trips and slowing Net speed temporarily. It's just like a real road system.

How To Test Your Internet Speed

Now that you understand that there is no cut-and-dried, final "knowing" of your Net speed, let's see how to measure it.

[Speakeasy](#) and [Speedtest.net](#) are two of the most popular Net speed testing sites online. Both have been around for over a decade, and have evolved with changing technology. But using either is simple: At SpeedTest, just click "Begin Test," select the recommended test site location, and watch the odometers spin up. Speedtest will give you several measurements to ponder.

"Download speed" is the rate at which a file of known size was transferred from the test site to your computer. It depends on the location of the test site selected; the amount of traffic on the route between you and the test site; the traffic load on the test site at the time of your test; and so on. But it's a number.

"**Upload speed**" is the same as download speed, in reverse. A file of known size is generated temporarily on your computer and transferred to the test site. The same caveats apply.

"**Latency**" is a significant number that most users don't understand. Latency is the delay between sending a request for data to a remote computer and receiving a reply. The latency reported by Speedtest.net is the sum of the latencies between all of the computers that relay your requests and data between you and the test site. To see how many intermediate "hops" there are and their individual latencies, do a traceroute report:

Click Start, Run, and enter "cmd" to open a [command](#)-line window. Type "tracert yahoo.com" and hit Enter. (You can use any domain name you like, instead of Yahoo.com.) Something like this will slowly appear:

Tracing route to yahoo.com [98.137.149.56] over a maximum of 30 hops:

```
1 <1 ms <1 ms <1 ms Wireless_Broadband_Router.home [192.168.1.1]
2 5 ms 4 ms 4 ms L100.NYCMNY-VFTTP-179.verizon-gni.net [173.52.217.1]
3 6 ms 7 ms 7 ms G1-0-3-1379.NYCMNY-LCR-13.verizon-gni.net [130.81.140.244]
4 23 ms 9 ms 9 ms so-6-3-0-0.BB-RTR1.SEA01.verizon-gni.net [130.81.28.52]
5 13 ms 14 ms 14 ms so-10-0-0-0.LCC1-RES-BB-RTR1-RE1.verizon-gni.net [130.81.19.111]
6 16 ms 17 ms 17 ms so-6-0-0-0.ASH-PEER-RTR1-re1.verizon-gni.net [130.81.10.90]
7 16 ms 17 ms 17 ms 130.81.15.174
8 13 ms 17 ms 17 ms ae-6.pat2.dce.yahoo.com [216.115.102.176]
9 64 ms 64 ms 72 ms as-0.pat2.dax.yahoo.com [216.115.96.21]
10 106 ms 112 ms 164 ms as-1.pat2.pao.yahoo.com [216.115.101.130]
11 108 ms 107 ms 107 ms ae-0-d151.msr2.sp1.yahoo.com [216.115.107.75]
12 106 ms 107 ms 107 ms te-8-1.bas1-1-prd.sp2.yahoo.com [67.195.128.247]
13 105 ms 107 ms 107 ms ir1.fp.vip.sp2.yahoo.com [98.137.149.56]
```

Here's another good reason to occasionally run an [internet speed test](#). Your ISP may throttle your internet speed without telling you. At my home, I have Verizon FIOS for Internet service, and I'm supposed to get a blazing 20Mb/s download speed. But twice in the last few years, I ran a speed test and found that it was mysteriously maxing out at 10Mb/s. When I contacted Support, they made some lame excuses, and set me back to the higher 20Mb/sec speed. So run a speed test every once in a while, and make sure you're getting the level of service you're paying for.

Read more: http://askbobrankin.com/internet_speed_tests.html#ixzz2IdlmW8Pm

Quote of the month:

"You give but little when you give of your possessions. It is when you give of yourself that you truly give."

Kahlil Gibran

HELP NEEDED!

In order to make this enews interesting to the greatest number of readers I am asking for your help in finding articles to be included. If you find something that you think the readers would be interested in all you need to do is send a copy to me as a DOC or TXT file and I will try and include it in one of the issues. Bob Murray, Editor
