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Roku, Google Chromecast, Amazon Fire TV, Apple TV, and More Video Streaming!

Quick, Easy, Cheap Ways to Stream Internet Video

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by Digital Dave

Digital Dave answers your tech questions.

Microsoft SkyDrive to OneDrive Problem; Remove Annoying Savingsbullfighter from Computer; Viewing photos in Windows 8.1 File Explorer.

[A Look at Internet Video Streaming Boxes](#)

by Jack Dunning

Video Streaming Boxes Make It Easy to Watch Your Favorite Video from the Internet

You could attach your computer to your HDTV for streaming video or buy an Internet DVD drive, but using a video streaming box may be easier and cheaper.

[Instantly Make a Window Transparent and Click Through It!](#)

by Jack Dunning

Anyone Can Use This Cool Little App to Look Underneath the Current Window, Then Click Through It

Here's a cool little AutoHotkey script which instantly makes the active windows transparent. Or you can turn it into a ghost and click other windows underneath it.

[Wally Wang's Apple Farm](#)

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Editor's Letters: Tips and Thoughts from Readers

by ComputerEdge Staff

Computer and Internet tips, plus comments on the articles and columns.

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Digital Dave

“Digital Dave answers your tech questions.” by *Digital Dave*

Microsoft SkyDrive to OneDrive Problem; Remove Annoying Savingsbullfighter from Computer; Viewing photos in Windows 8.1 File Explorer.

Microsoft SkyDrive to OneDrive Problem

Dear Digital Dave

I have several files on SkyDrive (which is now called OneDrive). I can open all files on my laptop using SkyDrive, however when I try to open them using OneDrive only some of the files open. The error message is that there is no app available to open some of the One Drive files. Also not all of my files transferred to One Drive. Any help here? I always appreciate the tech support you provide in every issue.

John Rishavy

Colorado Springs, Colorado

Dear John,

Unfortunately, I haven't done much with the OneDrive Cloud service which Microsoft has made an integral part of Windows 8.1. There are a number of pages devoted to OneDrive which may help: [OneDrive: FAQ](#), [Troubleshoot problems uploading files on the OneDrive Web site](#), and [OneDrive desktop app sync problems](#).

I'm guessing that OneDrive is looking for specific apps for certain file types and some type of file association needs to be set to resolve the missing app problem.

There are reasons that some files may not have transferred to OneDrive, but you would need to look at the type and size of the file to get a clue as to the problem. Checking some of the linked information may be helpful.

If there is anyone out there with more OneDrive experience who can provide more insight, help would be appreciated.

Digital Dave

Remove Savingsbullfighter from Computer

Dear Digital Dave,

I recently downloaded a program and a "hitchhiker" program was installed. The hitchhiker program was called Savingsbullfilter. It caused many pop-up ads to appear whenever I would go on the Internet.

I uninstalled the original program, but as far as Savingsbullfilter, no luck. I have tried repeatedly to uninstall it, but it won't go away. I would like it gone for good. I have even tried to uninstall it in safe mode with no luck.

Why would anyone write a program like this?

Any help would be appreciated.

Mark Kowal

Denver, CO

Dear Mark,

I've written about similar problems in [earlier columns](#), but sometimes the best advice comes in the comments from readers. Most often [Revo Uninstaller](#) is recommended for hard to remove malware. There is a free version which may do the job.

The key is that you must remove the problem software from everywhere: the Web browsers, installed programs, and any residue programs which may reinstall it. If Revo Uninstaller doesn't do the trick, I found a site for "[How to Remove Savings Bull Filter, Remove Pesky Adware](#)" which looks pretty comprehensive. If you follow all of these steps it should work for you.

As to why people do this type of thing it's usually all about money. It looks like this program is trying to direct you to sites which will earn them per click revenue. However, there are many other reasons that people produce crapware. High on the list is that they are jerks and like to annoy people.

Digital Dave

Viewing photos in Windows 8.1 File Explorer

Dear Digital Dave,

If I use the "This PC" icon to view the photos on my PC they appear in random order. I'd like to sort them in a folder with those I know to be the earliest taken shown first and most recent, shown last. Most of the photos were scanned from paper prints and don't have date information attached. Is there a way for me to manually sort their order with WIN 8.1?

Mike

Cardiff, CA

Dear Mike,

Most likely the files do contain some type of date information, although it is probably the date they were scanned.

The "This PC" program in Windows 8 is actually File Explorer which was called Windows Explorer in earlier versions of Windows. Sometimes it's a little harder to figure out how to do things in Windows 8 until you see it done.

In File Explorer select the View tab at the top of the window and locate the Current View => Sort by menu (see Figure 1). You will see a number of options and Date created is probably your best bet for holding data. However, you may want to see them in Date Taken order (which may not be available yet).

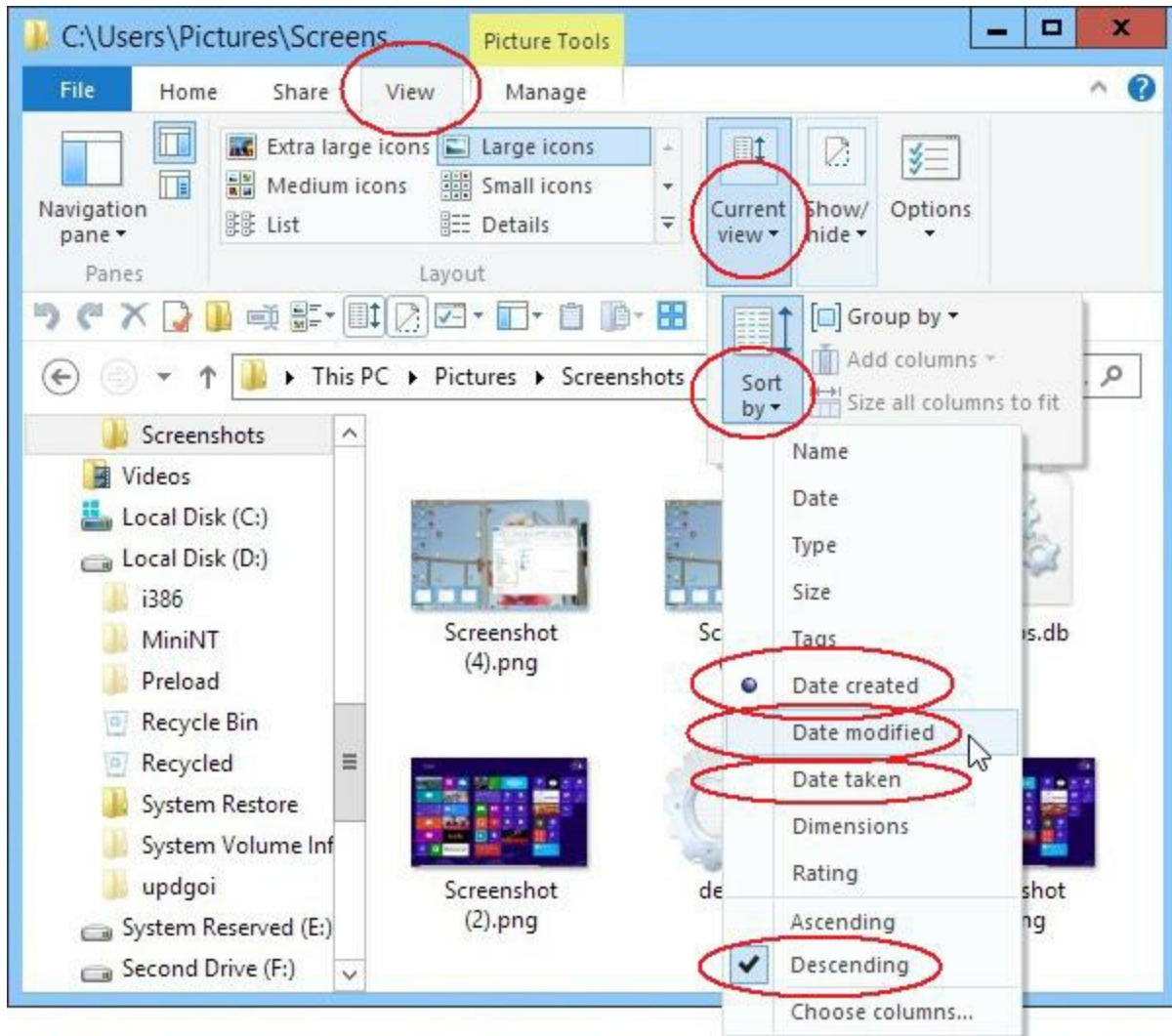


Figure 1. In Windows 8 File Explorer files can be sorted by many different categories by accessing View => Current View => Sort by.

You can add metadata to files by right-clicking on a filename (or a group of selected files) and selecting Properties from the bottom of the menu. Select the Details tab and you'll find that you can enter the Date taken data at the top of the window (see Figure 2). If you know the date of origin then you can use this data field to record it.

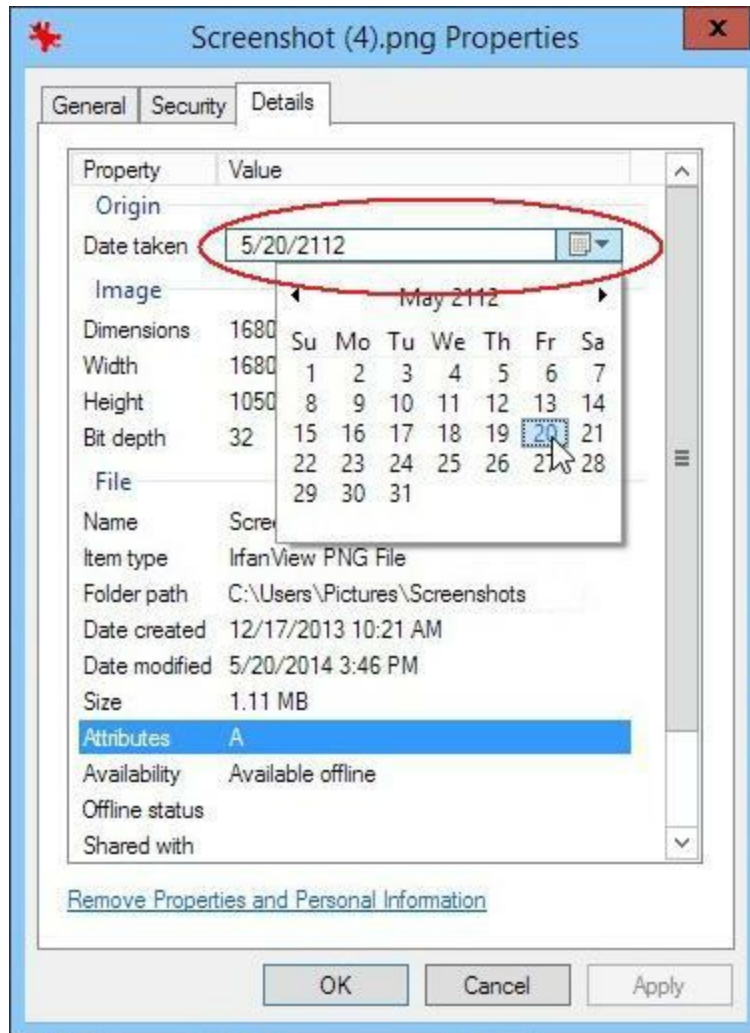


Figure 2. Right-click on the filename and select Properties to edit Date taken.

For different types of files, you will find different sets of metadata available for saving and editing. For example, JPG files can save a ton of information (see Figure 3).

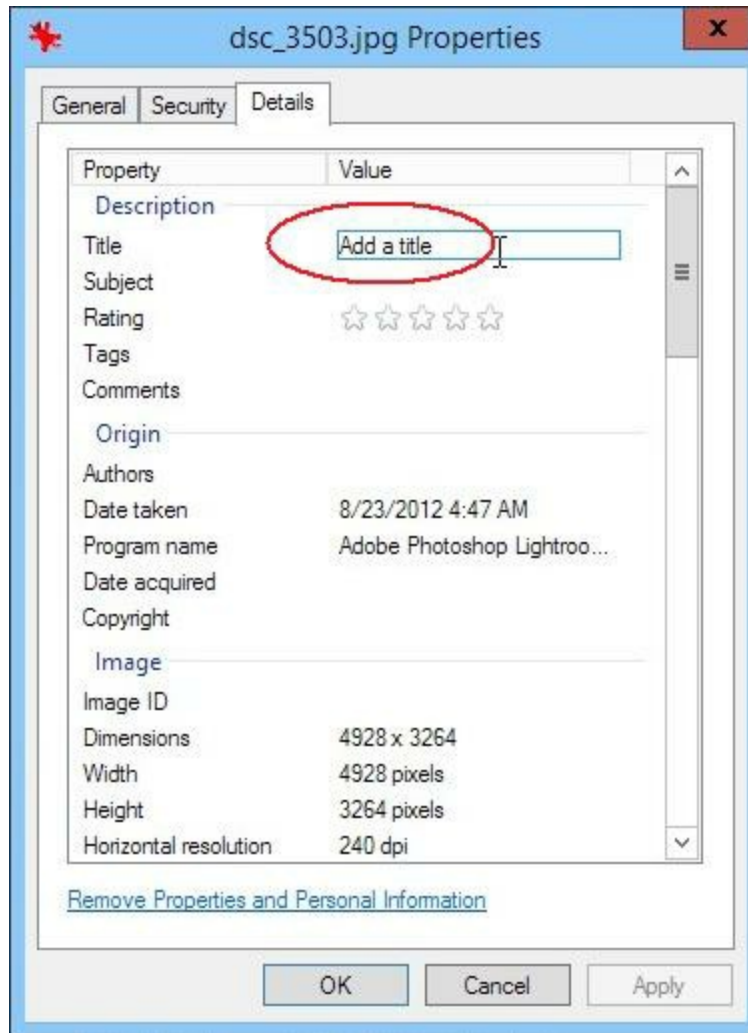


Figure 3. There is quite a bit of metadata saved when a picture is taken with a digital camera.

You can also edit selected metadata when the Details Pane is turned on in View => Panes in File Explorer.

These tips should give you the control that you want over your scanned images.

Digital Dave

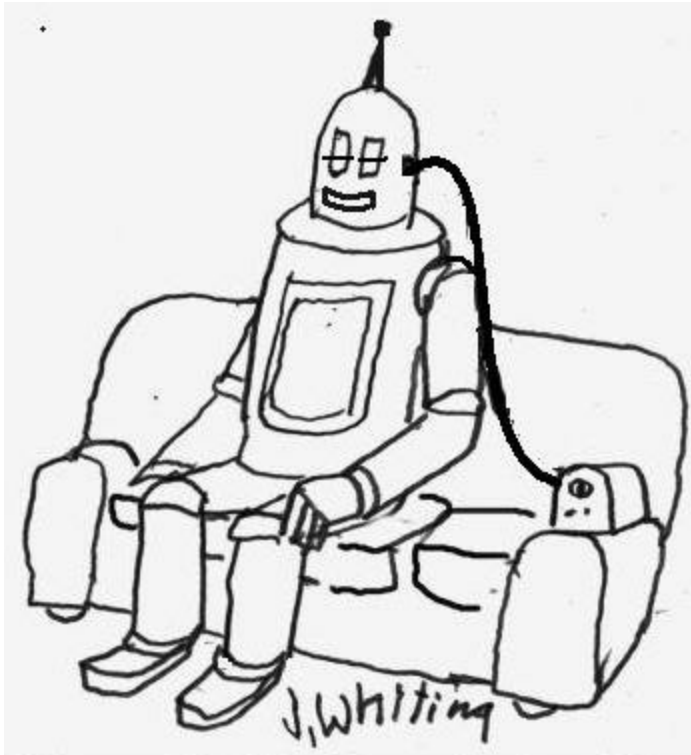


A Look at Internet Video Streaming Boxes

“Video Streaming Boxes Make It Easy to Watch Your Favorite Video from the Internet” by Jack Dunning

You could attach your computer to your HDTV for streaming video or buy an Internet DVD drive, but using a video streaming box may be easier and cheaper.

Streaming video services such as Netflix have become a dominant force in television entertainment. Many people have dumped their cable television service in favor of Internet streaming. By far the biggest provider of the service is Netflix with 34.4 subscribers million in the United States (11 million more overseas). Amazon Prime has more than 10 million members (\$99 annually—recently increased from \$79), but most of them originally signed up for the free two-day shipping. The number of members actually using the Amazon Instant Video service appears to be much smaller. Amazon is pushing hard in the video streaming market by signing a deal with HBO for content which is over three years old—although not *Game of Thrones*. Hulu Plus has six million paying members at the same \$7.99 per month that Netflix charges, but Hulu also has a free service of recent programming that generates ad revenues.



Internet Video Box Instruction Manual:
 "To watch Netflix videos, plug the cable
 into your HDMI port."

While Netflix and Amazon Prime are squarely in the same market competing for the same content, Hulu has carved out its own niche in recent television shows. Both Netflix and Amazon would love to get access to some of Hulu's recent TV programming, but Hulu is owned by major content producers such as NBCUniversal Television Group (Comcast), Fox Broadcasting Company (21st Century Fox) and Disney-ABC Television Group who are unlikely to make outside deals.

I use Netflix and have tried free subscriptions to Amazon Prime. With a few exceptions, there is a great deal of redundancy between the two services. I have over 100 movies and/or TV shows in my Netflix queue (most of which I will probably never actually view) and each time I think that they've run out of things that we really want to watch, a few more pop up. Every once in a while we give an outlying

film a shot and find a hidden gem. Netflix has become a mainstay in our evening entertainment. With a few notable exceptions, most of the new programming on television is mundane pap only suitable for the comatose. I prefer to see a decently written and acted program—even if it's ten years old.

One of the great things about Netflix is if a TV, DVD player, game player, Internet video device, or computer supports any kind of video streaming, it supports Netflix. My problem with Amazon Prime Instant Video is that I can only get it on one television. The DVD player I use to stream to the main HDTV doesn't support it. Plus, on the TV that does support it, the interface is horrible. (If I try to rewind an Amazon Prime video just a little bit the entire TV resets.) That TV needs a new Amazon interface, but I fear that there will be none forthcoming.

When an Internet TV or DVD player is first purchased, it may receive regular firmware updates fixing bugs and improving service. However, after about a year (or less) the equipment is added to the too-old-to-update list. You're stuck with whatever you have at that time. With what I own now I would not continue an Amazon Prime subscription. If I did want to continue with it, I would need another connection. (I tried a Vista laptop, but, while it worked, it was too slow. The picture was jerky and continually rebuffering. Plus, I didn't really want to leave a computer sitting next to my television.) There are other options available that don't require the purchase of a new Internet TV or DVD player.

Video Streaming Boxes

Video streaming boxes are devices that plug directly into the television—Roku being the best known. They usually attach to the Internet through a Wi-Fi connection and plug into the TV through an HDMI port. Compared to other equipment, streaming boxes are much less expensive—most less than \$100. They are easy to hook up and use, as long as you have Wi-Fi Internet, an HDMI port and a cable.

Video streaming devices such as the Roku offer many more possible services than generally found in Internet capable TVs or DVDs. They all include Netflix, but when looking at streaming boxes be sure they support the services you need. They are not all the same. Some even offer games. (When I say "include" I mean that the service is accessible. You still need to pay for the subscription.)

The streaming boxes are small and easy to plug in which make them more portable and flexible than a laptop computer or DVD player. As long as the television offers the proper connection (HDMI is the best), the box can be quickly moved from one TV to another. This capability alone can make the low price of a streaming box well worth it. It's even easy to take to another person's house for an evening of entertainment.

Although most of the boxes come with remote controllers, many of the video streaming boxes have smartphone and tablet apps available for remote control from the mobile device. Plus, many of them are now starting to support apps on smartphones, tablets and computers which stream content directly from the mobile device to the television. That means it will become increasingly more common to view movies and programming on the larger television rather than being confined to the smaller screens of mobile devices—which are often inadequate.

Since the boxes are built for streaming and generally have access to regular updates, unlike many Internet TVs and DVD players, it usually easier to keep them up-to-date and add new programs and features as they become available. Many of the boxes have online stores for adding more channels and apps. There are many different video streaming boxes on the market, but what follows are some of the most popular:

Roku 3 Streaming Media Player

The [Roku 3 Streaming Media Player](#) is the highest end Roku box (see Figure 1). With a dual core processor, it is one of the more powerful streaming boxes at \$88.92.



Figure 1. Roku 3 Streaming Media Player with Roku 3 includes headphones and a motion control remote for playing games.

This was the only model I saw that included a remote with a headphone jack. The remote also features motion control for games (Angry Birds Space included free). As well as Wi-Fi, the Roku 3 has connections for Ethernet, USB and a microSD slot.

There is an app for [streaming video, music, and photos](#) from iOS and Android devices.

Roku 1 Streaming Player (Black) (Roku 2710R)

On the lower end, the [Roku 1 Streaming Player \(Black\) \(Roku 2710R\)](#) is available for \$49.00. It plays 1080p video without all the other bells and whistles (headphone jack and motion control), and the faster processor.

Roku 3500R Streaming Stick (HDMI)

If you don't want the box sitting next to the TV, then the [Roku 3500R Streaming Stick \(HDMI\)](#) at \$49.00 might do the job (see Figure 2).



Figure 2. Roku 3500R Streaming Stick (HDMI)

Rather than a box taking up space, the streaming stick is a dongle which plugs directly into the HDMI port. A USB power cable is provided. As with many of the boxes this streaming stick can be controlled with the included remote, a smartphone or tablet. Plus, you can play certain apps from your smartphone or tablet on the Roku stick.

Google Chromecast HDMI Streaming Media Player

The [Google Chromecast HDMI Streaming Media Player](#) at \$35.00 is another dongle style connection (see Figure 3). It comes with an HDMI extender, USB power cable, and power adapter, but no remote. It's designed to work with your smartphone, tablet, or laptop. If you don't have a smartphone or tablet you may want to avoid this one. Laptops can be awkward as controllers. (Kindle, Windows Phone and Microsoft Surface RT are currently not supported.)



Figure 3. Google Chromecast HDMI Streaming Media Player.

Also, if you don't have at least iOS 6 (like the original iPads which Apple quickly dumped support for), then you're out of luck. As with any of the streaming boxes, be sure to carefully check the specifications and comments to make sure it supports the feature you want. (By the way, Amazon Instant Video is not currently supported.)

Streaming online video and music to your TV using your smartphone, tablet, or laptop is supported by Google Chromecast, but I noted that there may be problems streaming personal video content directly from your computer. It seems that Google instituted some changes in the name of protection against piracy. If this is something you need, then it warrants more investigation.

Amazon Fire TV

A fairly recent entry into the market the quad-core [Amazon Fire TV](#) is the most powerful of all the boxes I viewed (see Figure 4). At \$99.00, it includes 2GB of memory (most others are 512MB) and includes voice search and games.



Figure 4. Amazon Fire TV.

On the downside, the voice commands only search the Amazon Prime Video content, not Netflix or other services. In Amazon Prime there is also the problem of finding the free offerings. It seems that there is no way to search for only the free content included with Prime. (This is also one of my complaints.) Since it offers both paid and free content, you must look carefully to be sure you are getting only the free stuff.

You can stream video from a tablet computer (mirror the screen), but it looks like it may only be from the Kindle Fire HDX. If streaming from a mobile is a capability you want, then you will want to check the details carefully. Many are limited to only those in the same family (i.e. Apple TV supports iOS, Macs and PCs).

At \$39.99 [Game controllers](#) are separately available.

It's funny how the Amazon Fire TV is the only streaming box that Amazon doesn't discount.

Apple TV MD199LL/A

The [Apple TV MD199LL/A](#) at \$99 is comparable to most other boxes (see Figure 5), although it doesn't currently offer Amazon Instant Video. The box will stream from iOS devices using AirPlay, but you'd better have at least iOS 7 running. It will also mirror Mac and PC screens.



Figure 5. Apple TV MD199LL/A.

Apple TV's claim to fame is borrowing [HBO GO](#) from the cable accounts of family or friends. To get HBO GO, which streams virtually everything on HBO from the moment it appears on cable, you must be a cable subscriber with HBO added at an extra charge. If you happen to know someone who is willing to let you use their cable account information, then you can piggyback free HBO GO with Apple TV. (It appears that both the Roku 3 and Google Chromecast offer HBO GO as well.) I don't know how long it will be before steps are taken to stop the borrowing of HBO GO accounts—although I'm not sure how they will do it.

HBO has itself in a box by being tied to the cable companies. With their powerful content, HBO could be a force to reckon with in the Internet streaming market if they were free to expand without the chains of cable TV. I have no doubt that many people would subscribe to HBO GO if they weren't forced to buy a complete cable package first.

D-Link MovieNite Plus Streaming Media Player

The router companies, both D-Link and Netgear, have jumped into the market, but be sure to read the reviews and comments before you decide to buy one—even at these low prices.

The [D-Link MovieNite Plus Streaming Media Player](#) sells for \$39.99 (see Figure 6).



Figure 6. D-Link MovieNite Plus Streaming Media Player.

While it doesn't look like the D-Link will stream from mobile devices, it does hook into other D-Link devices such as Webcams. If you need to monitor cameras (possibly at other locations) than this streaming box may be worth a look.

For the longest time D-Link advertised Hulu as a feature. Apparently, that was never worked out.

Netgear NeoTV Streaming Player NTV300

The [Netgear NeoTV Streaming Player NTV300](#) at \$44.99 sells for a little more than the D-Link box, but seems like one to avoid (see Figure 7).



Figure 7. Netgear NeoTV Streaming Player NTV300.

This is one of the few products I've seen on Amazon with more one-star reviews than any other rating. "I'd hold my breath for a firmware update to fix the issues, but every review here seems to point to the fact that Netgear has given up on the product." I've included it here as a warning when shopping for any type of electronic device. Read what other people say. Virtually all products will receive an occasional one-star review, but they should be a minority report.

Internet video streaming boxes are so inexpensive that they are almost an impulse item. It's certainly less expensive than dedicating a computer to your TV or looking for an Internet TV with just the right capabilities. It is definitely easier to move a streaming box for use at a new location. The primary caution is making sure that it includes the features that you need. If all you want is Netflix, they all include that.

Jack is the publisher of ComputerEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is www.computoredge.com. He can be reached at ceeditor@computoredge.com. Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

The latest ComputerEdge E-books offering is his [AutoHotkey Applications](#), an idea-generating intermediate level e-book about using the AutoHotkey Graphical User Interface (GUI) command to write practical pop-up apps for your Windows computer. (It's not as hard as it sounds.)

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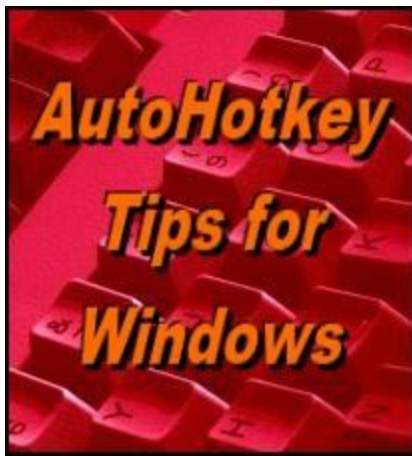
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**Yet, One More
Reason to Use
AutoHotkey
Free Software!**

**Instantly
Make a
Window
Transparent
and Click**

Through It!

“Anyone Can Use This Cool Little App to Look Underneath the Current Window, Then Click Through It” by Jack Dunning

Here's a cool little AutoHotkey script which instantly makes the active windows transparent. Or you can turn it into a ghost and click other windows underneath it.

I've spent the last couple of years writing beginning and intermediate AutoHotkey columns which I've turned into e-books. It's time to shift gears to highlighting the AutoHotkey contributions of people who are way smarter than me. I've started digging through the AutoHotkey sites looking for scripts that are either cool, of practical value, or both. There are a ton of them and each week I plan to present one that I like. I won't necessarily explain how they work, but I will show how anyone (even people with very limited AutoHotkey knowledge) can get it working on their Windows computers.

Each script can be copied from the original source and run directly as long as you have AutoHotkey installed on your Windows computer (see "[Installing AutoHotkey and Writing Your First Scriptr_first_script.html](#)"). I do test each script and look over the code. (I may or may not understand everything in the script, but I do make sure it works.)

This week I highlight a cool little script which will make any active [window transparent](#) and optionally allow clicking through that window to another one underneath it. It was posted in 2010 by an AutoHotkey user who goes by the handle "System Monitor" on the AutoHotkey Forum.

Making Windows Transparent and Penetrable

There are times that you may want to see what's underneath the current active window and possibly even click something in that covered window. With the AutoHotkey script [Transparent and/or Always On Top](#) these features can quickly be added to any Windows

computer.

For example, suppose a script is open in a Notepad window and covering a File Explorer window (see Figure 1). You could click upon the File Explorer window to bring it on top, but with the Transparent AutoHotkey script, you can quickly make the current active windows see-through.

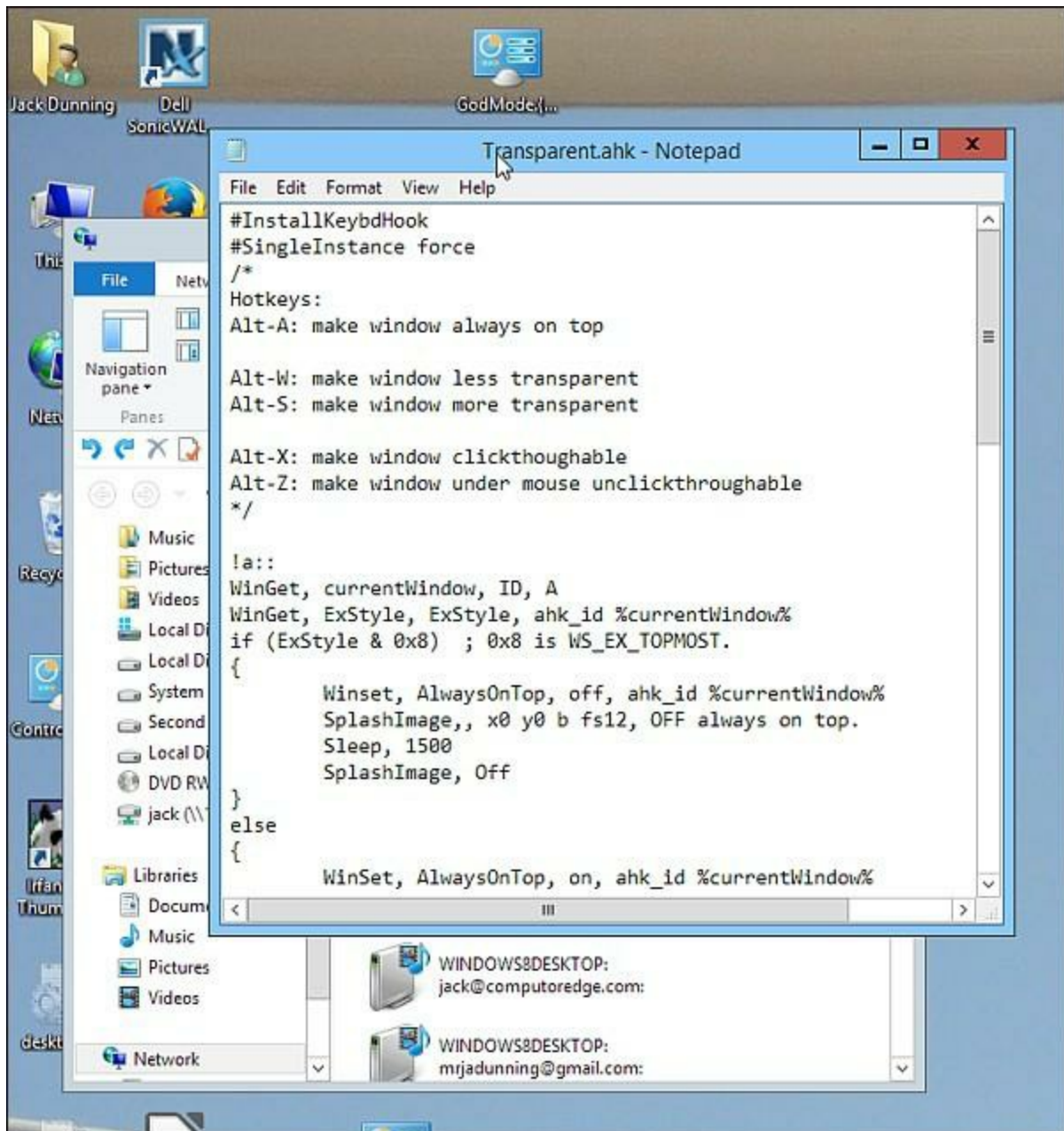


Figure 1. The Notepad window is partially covering a File Explorer window.

After the script is loaded holding down the ALT+S hotkey combination will start making the current active window more transparent (see Figure 2). (If you have a little bit of AutoHotkey experience, you can change the hotkey combination to anything that works for you.) As you hold down ALT+S the transparency level will continue to increase. A number will appear in

the upper left-hand corner showing the level. The window is opaque at 255 and counts down from there. At zero the window will be invisible, but it's still there and active.

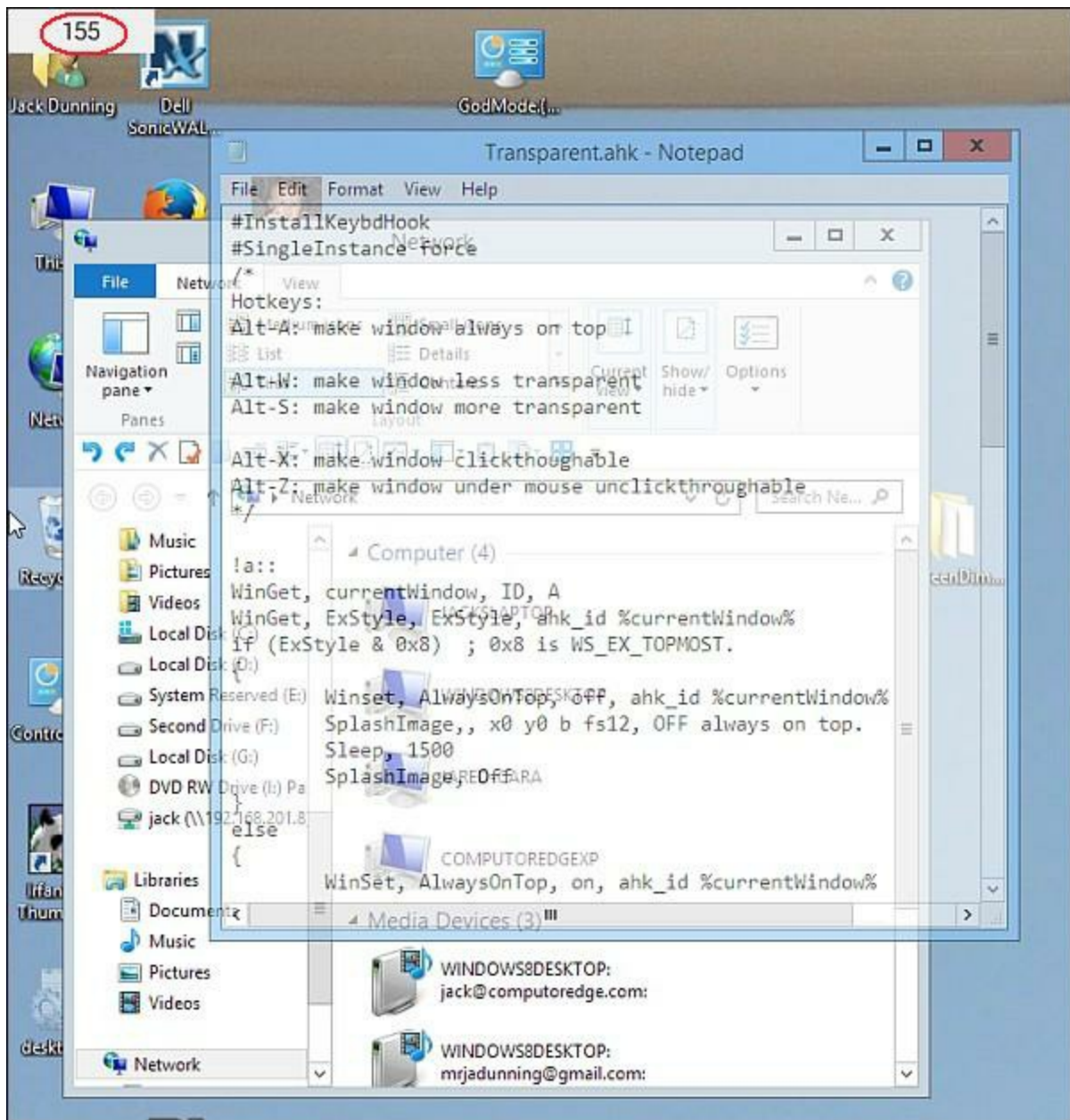


Figure 2. Use ALT+S to make the active window more transparent and ALT+W to make it less transparent. The transparency level appears in the upper left-hand corner (circled in red) while the hotkey combinations are being used.

You can reverse the process by using the ALT+W hotkey combination which decreases the window transparency until it is fully opaque (255). Holding down the combinations make the adjustments continuous until the window is either invisible (ALT+S) or opaque (ALT+W).

That's pretty cool and it may be all you want, if you only need to peek under active windows, but the same script can allow you to click right through that window. By using the hotkey combination ALT+X the active window becomes a ghost. The image remains, but any clicks

will go straight through to whatever is under the mouse (see Figure 3).

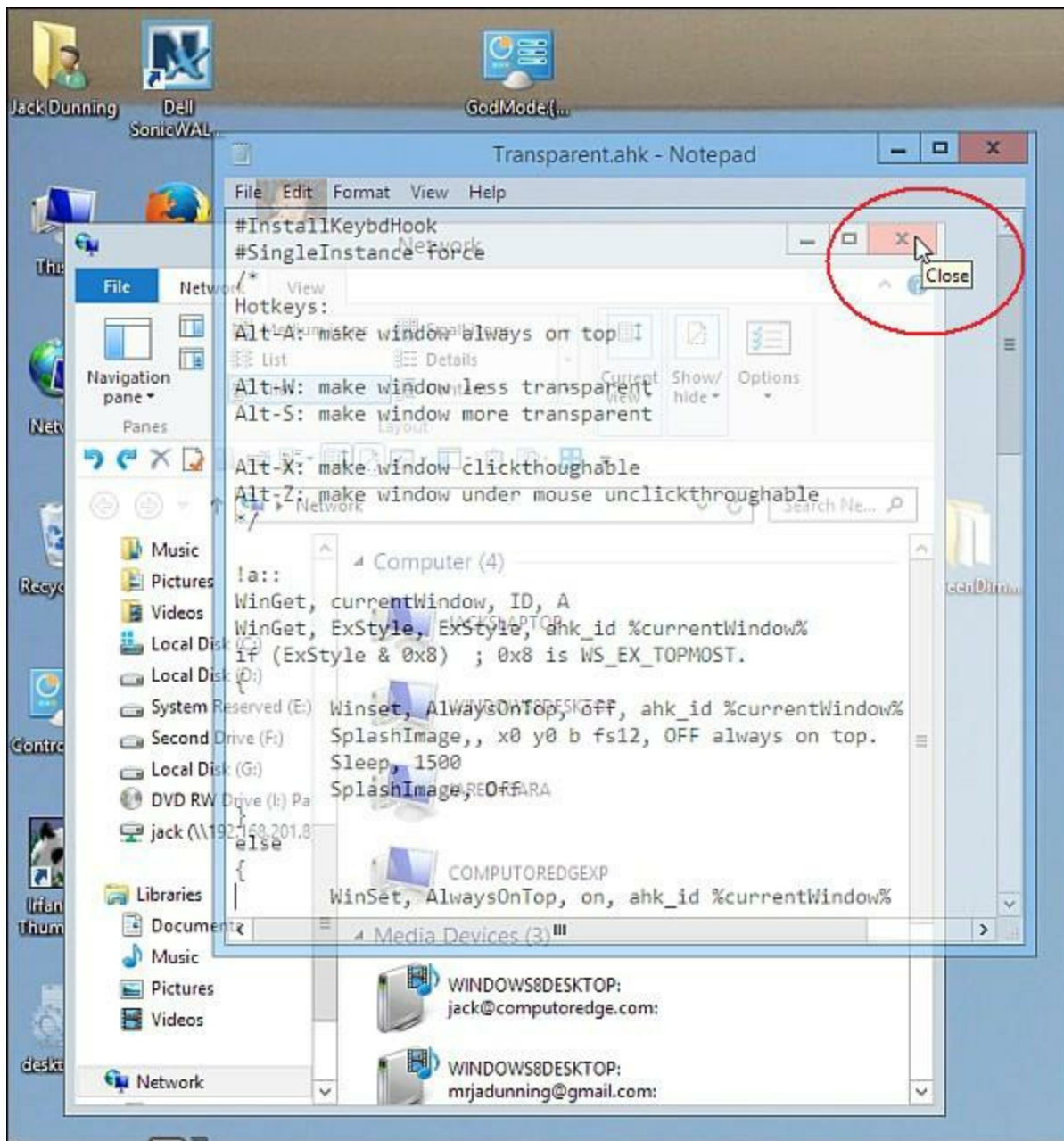


Figure 3. After using the ALT+X hotkey combination the Close button on File Explorer underneath the Notepad window responds when the mouse cursor hovers over it.

It is probably a good idea to use the ALT+A combination (an on/off toggle) to make the window always-on-top first. Otherwise, the ghost window, which now responds to nothing, will drop below the other windows on the first click-through. Clicking on it will not bring it back because it is now unresponsive to almost all input. (If you try to do too many things with too many windows it can get a little confusing.) In any case, ALT+Z will change any window under the mouse cursor back to a clickable window.

I did find that if you exit the script by right-clicking on the System Tray icon and selecting

Exit, all windows are left in their current state—no reset to defaults. Even restarting the script will not recover a ghost window. The only option was to close the ghost window and reopen it.

The Transparent Script

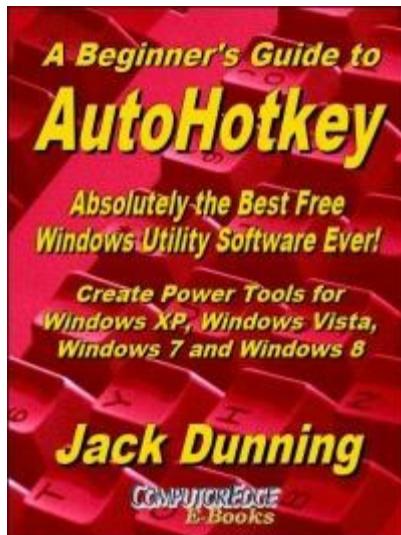
The Transparent script primarily uses the [WinSet command](#) with the *ExStyle* attribute. It's a short script and fairly straight forward. Since it is entirely composed of hotkey subroutines and labels, it can be added to the end of any other AutoHotkey script without modification (unless there are hotkey conflicts). The [SplashImage command](#) is used only for the messages in the upper left-hand corner of the screen.

Note: There are many more window features which can be controlled with the [WinSet, Style \(or ExStyle\) command](#), such as removing the window's title bar. If you want to instantly control some of these window features, then similar routines as those in the Transparent script can be written by modifying the code with the appropriate values from the *Styles* page.

To implement the script on your Windows computer, copy the AutoHotkey code found in the inset box from the [Transparent and/or Always On Top](#) page. (Highlight the text in the code box by clicking just before the first character in the box and dragging down until the code scrolls up and completely selects all of the script, then CTRL+C.) Next, paste the code into a new AHK file. Save the file, right-click on the filename in Windows Explorer (File Explorer for Windows 8) and select Run Script. (This assumes that you have already installed AutoHotkey on your Windows computer.)

If you want to run the script on a Windows computer without AutoHotkey installed, first compile the script on the AutoHotkey installed computer into an EXE file (right-click on the filename and select Compile Script) and copy that file to the other computer (or run from a flash drive). Double-click on the filename to run the compiled EXE file.

* * *



The second edition with more chapters and an index to the AutoHotkey commands found in the book is available in e-book format from Amazon (and other formats—EPUB and PDF— at the ComputerEdgeBooks Web site linked below). Jack's [*A Beginner's Guide to AutoHotkey. Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8*](#) offers a gentle approach to learning AutoHotkey.

Building Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8, AutoHotkey is the most powerful, flexible, *free* Windows utility software available. Anyone can instantly add more of the functions that they want in all of their

Windows programs, whether installed on their computer or while working on the Web. AutoHotkey has a universality not found in any other Windows utility—free or paid.

Based upon the series of articles in *ComputerEdge*, Jack takes you through his learning experience as he explores writing simple AutoHotkey scripts for adding repetitive text in any program or on the Web, running programs with special hotkeys or gadgets, manipulating the size and screen location of windows, making any window always-on-top, copying and moving files, and much more. Each chapter builds on the previous chapters.

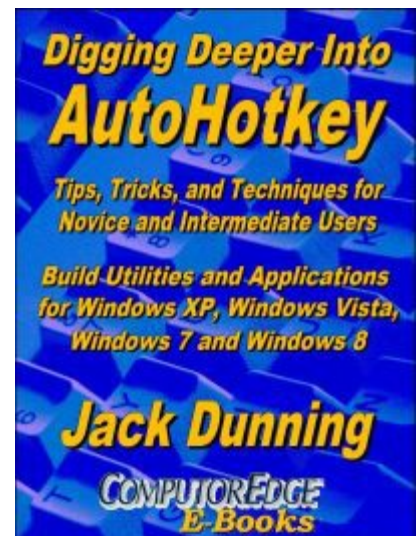
[For an EPUB \(iPad, NOOK, etc.\) version of A Beginner's Guide to AutoHotkey click here!](#)

[For a PDF version for printing on letter size paper for inclusion in a standard notebook of A Beginner's Guide to AutoHotkey click here!](#)

* * *

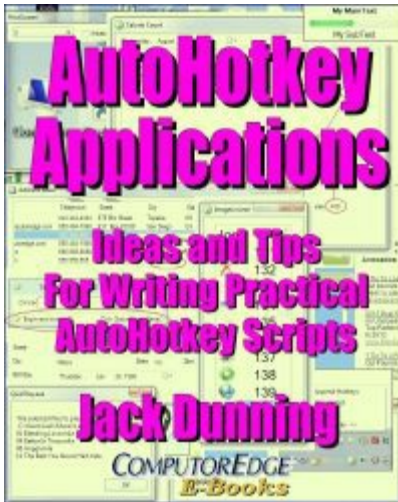
Jack's second AutoHotkey book which is comprised of updated, reorganized and indexed columns from *ComputerEdge* is now available at [Amazon for Kindle hardware](#) (or free software) users. Since the columns were not all written in a linear fashion, the book has been reorganized and broken up into parts by topic. The book is not for the complete beginner since it builds on the information in [*A Beginner's Guide to AutoHotkey*](#). However, if a person is reasonably computer literate, they could go directly to this book for ideas and techniques without the first book.

[For an EPUB \(iPad, NOOK, etc.\) version of Digging Deeper into AutoHotkey click here!](#)



[For a PDF version for printing on letter size paper for inclusion in a standard notebook of Digging Deeper into AutoHotkey click here!](#)

* * *



Jack's third AutoHotkey book is an intermediate level book of ideas and applications based primarily on the AutoHotkey GUI command and is available at [Amazon for Kindle hardware](#) (or free software) users. The book emphasizes practical applications. The book is not for the complete beginner since it builds on the information in the other two books. However, if a person is reasonably computer literate, they could go directly to this book for ideas and techniques without the other books. There is an extension index to the ideas and techniques covered in the back of the book.

[For an EPUB \(iPad, NOOK, etc.\) version of AutoHotkey Applications click here!](#)

[For a PDF version for printing on letter size paper for inclusion in a standard notebook of AutoHotkey Applications click here!](#)

Jack is the publisher of ComputerEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is www.computoregge.com. He can be reached at ceeditor@computoregge.com. Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

The latest ComputerEdge E-books offering is his [AutoHotkey Applications](#), an idea-generating intermediate level e-book about using the AutoHotkey Graphical User Interface (GUI) command to write practical pop-up apps for your Windows computer. (It's not as hard as it sounds.)

[Hidden Windows Tools for Protecting, Problem Solving and Troubleshooting Windows 8, Windows 7, Windows Vista, and Windows XP Computers.](#)

Jack's [A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8 and Digging Deeper Into AutoHotkey.](#)

Our second compilation of stupid *ComputerEdge* cartoons from 2011 and 2012 is now available at Amazon! [That Does Not Compute, Too! ComputerEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"](#)

Special Free Offer at ComputerEdge E-Books! [Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!](#)

[Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8 \(Seventh Edition\)!](#)

[Windows 7 Secrets Four-in-One E-Book Bundle,](#)

[Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7,](#)

[Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7,](#)

and [That Does Not Compute!](#), brilliantly drawn cartoons by Jim Whiting for really stupid gags by Jack about computers and the people who use them.



Wally Wang's Apple Farm

“Making Learning Interesting” by Wally Wang

Wally Wang's Apple Farm

Making Learning Interesting; More Examples of Content Creation; Mapping Indoors; Apple and 3D Printers; The Latest OS X 10.9.3. Update; Cash Registers Are Disappearing; Solar Panels in Touchscreens; Microsoft Surface Pro 3; A Faster Way to Type a Search Query in Safari.

One huge problem with school is that it often feels divorced from reality. What you learn in the classroom too often seems to have no relevance outside in the real world. That's why New York University's [Music Experience Design Lab](#) will teach the basics of audio mixing, editing, and effects, using the music of Peter Gabriel, the former lead singer of Genesis and the man who had several hit albums including "So" that spawned songs like "Sledgehammer" and "In Your Eyes."



Figure 1.

Peter Gabriel has donated unreleased tracks of his hit songs so students can practice mixing the song through an online mixing board. By using real songs, students can have a better feel for how professionals in the music business really work. Best of all, the class is free.

The current educational system has always been expensive and unreliable. While some people benefit from promoting expensive and unreliable solutions, the end result hurts more people than it helps. By making education free, easily accessible to anyone with an Internet connection, and applicable to real life, courses like New York University's Music Experience Design Lab can give students practical experience that they'll be far more likely to retain rather than cramming just to pass a test.

For more information about free educational resources, visit OpenSource.com. By taking the time to access free courses, you can master any school subject and get a head start on other topics.

Too often the fear of grades and tests keep people from learning subjects because they're too afraid of feeling lost and confused. By accessing open source courses, you can learn at your own pace, review the material as often as necessary, and focus on real learning as opposed to achieving artificial test scores.

If you're an instructor, consider putting your lessons on the Internet for others to learn from. For many teachers, the Internet can be inspiring as they can truly teach. For other teachers, the Internet can expose their own flaws and frighten them to retreat back to the classroom where it's harder for anyone to realize what mediocre or outright awful teachers they might really be.

To put your courses online, you just need to record them. For maximum exposure, consider putting them on Apple's iTunes University. With so many free resources to learn from, there's no reason for anyone to remain ignorant unless they deliberately choose to do so, which unfortunately many people will do eagerly.

More Examples of Content Creation

For those people who prefer to remain ignorant while avoiding reality, they can continue chanting the mantra that the iPad is only for content consumption and not content creation. For the rest of us, we can look at a short film that Bentley shot to promote their luxury automobiles. To make [this short film](#), Bentley shot it entirely [on an iPhone 5S](#) and edited it using iMovie on an iPad Air.



Figure 2. One of the latest features of the Bentley are drop-down tables to allow back seat passengers to use an iPad comfortably.

When you watch this short film, you can't even tell that it was captured using an iPhone 5S camera. Normally people might think smartphone cameras should capture inferior images from a dedicated video camera, but as you can see, there's no glaring flaws that scream out that the film was shot with an inferior camera.

If Bentley can make a decent video using the iPhone 5S and iPad Air, then there's no reason why individuals can't also capture decent video on their iPhone and edit it either directly on the iPhone or on an iPad that critics still insist can't do anything more than view content.

The next time you're busy capturing and editing film on an iPhone or iPad, you can show others your final result and challenge them to guess if you shot the video using a dedicated camera or not. Chances are good most people won't be able to tell the difference, which shows just one more way mobile computing has improved over the years. If you still doubt the iPhone's and iPad's capabilities, try to capture and edit a decent video using a netbook and tell us how easy that process might be.

Mapping Indoors

To create accurate maps, Google pays for cars to drive around every major street on the planet. While this helps capture actual photographs of surrounding areas, those images need frequent updating as people tear down old buildings and put up new ones.

Now imagine the logistical nightmare of trying to map the insides of every major building in the world. Even Google probably doesn't have enough money to pay people to walk around every building on the planet to create an accurate map. Yet indoor mapping may be the next logical leap for Apple.

There's a technology known as SLAM, which stands for "Simultaneous Localization And Mapping." Basically it means figuring out where you are by walking around. Since [indoor mapping](#) can be so difficult, one rumor hints that Apple could simply use the iPhone to map the insides of buildings as iPhone users walk around.

With millions of iPhone users on the planet, Apple could quickly map the insides of every major building on the planet (even top secret places like the Pentagon and the Kremlin) using the collective data from iPhone users. Now Apple could offer accurate indoor maps that constantly get updated without Apple having to pay for anything like Google's StreetView cars. When people can do your mapping for you automatically at no cost, it's not hard to imagine how quickly Apple could develop indoor maps that competitors will have a hard time duplicating.

Google could do this with Android, but Microsoft will have a much harder time with Windows Phone since there are far fewer Windows Phone users than Android or iPhone users.

Indoor location mapping will be the next step in mobile mapping technology. In the old days, people used to rely on paper maps that were often out of date and could never show your current location. Now that everyone has gotten used to using maps on their smartphones (that aren't always 100 percent accurate), people will next rely on indoor mapping to help them navigate around malls, skyscrapers, museums, and stadiums.

With indoor mapping technology, finding the nearest rest room could be as easy as using your smartphone. Then you can use your smartphone to get the best directions to go somewhere else. In the future, someone without a smartphone will be as limited as someone without a car. Smartphones have gone from luxury items to necessities.

Apple and 3D Printers

One interesting rumor suggests that Apple could be developing their own [3D printer](#). This idea actually makes sense because today's 3D printers are meant more for tech-savvy users than average people. Right now, 3D printers have plenty of uses for tech-savvy users but few advantages for ordinary individuals.

This situation looks remarkably similar to the days before desktop publishing when laser printers cost thousands of dollars and nobody quite knew what to do with them other than use them as faster and quieter daisy wheel printers. Then Apple introduced their own laser printer and Aldus introduced PageMaker, one of the first desktop publishing programs that helped

revolutionize the desktop publishing industry.

Suddenly ordinary people could use laser printers and programs like PageMaker to make fancy signs, newsletters, and flyers. While making your own For Sale sign might not seem like a revolutionary advantage, desktop publishing freed people from expensive printing companies. Restaurants could print their own menus at low cost and replace them with updated ones cheaply. Before desktop publishing, printing menus were expensive, which made updating them too expensive to do as well.

What will ordinary people do with an inexpensive 3D printer? Like all good technology, it depends on the software. The world of 3D printers has been around for tech-savvy users for years. Now it's time for 3D printers to come down to the average user. Which company do you trust that has a history of making technology easier to use?

The Latest OS X 10.9.3. Update

In case you haven't seen a notice on your Macintosh yet, Apple has released the 10.9.3 update to OS X so you might as well upgrade your computer. As usual, each minor update makes OS X a little more stable and reliable until the next major leap forward occurs when OS X 10.10 arrives.

In June we'll all learn more about what the next versions of OS X and iOS 8 will offer. The only sure thing is that with new updates to operating systems occurring faster and faster, the book market for operating systems is pretty much dead.

In the old days, you could write a book about OS X or Windows and it would have a shelf life of several years. Nowadays that same book only has a shelf life of less than a year before the next version makes the current book obsolete.

As a general rule, you may want to shy away from any new operating system until the second or third update. Then you can be certain that all the major bugs have been ironed out and it should be stable enough to rely on for critical work.

Cash Registers Are Disappearing

When was the last time you saw any store using a dedicated cash register? Most cash registers disappeared when Windows PCs replaced them. Now visit many stores and you'll see that iPads have replaced many traditional Windows PCs as cash registers.

Groupon has created an iPad cash register known as [Gnome](#), which essentially lets people use a credit card to pay for items. While Gnome basically functions the same as Square, another credit card processing device, the idea is the same. Make it easy for people to pay by credit

card and make it easy for merchants to accept credit cards.



Figure 3. Gnome uses an iPad as a portable cash register.

While Windows PCs work competently as cash registers, they require additional equipment for people to write their signature. With an iPad, people can sign the screen with their finger. Plus it's easy for clerks to carry an iPad to customers so it maximizes convenience for the customer.

If you think that making computing mobile was a revolution, wait until wearable computing becomes commonplace. A company called Cue has [developed a device](#) to monitor health on a molecular level and then transmit that information to a smartphone.

When Apple's rumored iWatch arrived, Cue's device can monitor a person's health in real-time while transmitting that information to doctors in case of an emergency. Computing is no longer limited to desktops and laptops. With mobile computing, computers are going to be everywhere we want to go and provide us benefits that ordinary PCs could never do due to their bulk.

When you look back at early [criticism of the iPad](#), you can see how the critics focused on trivial details (inability to run Flash and lack of an HDMI port) and overlooked the larger potential advantages of mobility. When you use an iPad as a portable cash register, how many people still care about the lack of an HDMI port or the inability to run Flash?

Essentially most critics saw the iPad as a crippled netbook, which blinded them to the iPad's advantages. Gulf Air is the latest airline to replace flight bags [with iPads](#) to save weight. How come airlines never considered netbooks to replace flight bags because netbooks could run Flash and offer an HDMI port? When you only want new technology to duplicate existing technology, you'll never recognize any innovation until years after the fact.

Solar Panels in Touchscreens

One problem with any mobile device is battery life. Although the iPhone and iPad can last almost all day on a full charge, you'll eventually need to plug it into a power source. However with Apple's latest patent, that may no longer be necessary.

Apple recently [patented a solar panel](#) designed as a touchscreen. That would allow Apple to make the iPhone and iPad screen convert light into power that could boost battery life, especially if you use your iPhone or iPad outdoors. As solar panels get more efficient, it may be possible to use an iPhone or iPad for days without charging.

Of course, the idea of solar panels in touchscreens will likely be a few years off, but you can already see where the future will be heading. Hopefully as solar panels get more efficient, they'll be able to run mobile computers, electric cars, and even power our homes completely from the sun. Solar power is definitely the future for increasing battery life. It's just a matter of when it will finally arrive.

Microsoft Surface Pro 3

Microsoft recently revealed their new Surface Pro 3 tablets. Besides more power and a more adjustable kickstand, the Surface Pro 3 offers a 12-inch screen (compared to the previous size of 10.6 inches). This larger size more closely mimics a notepad. By using a stylus, you can jot down notes just like writing on a piece of paper.

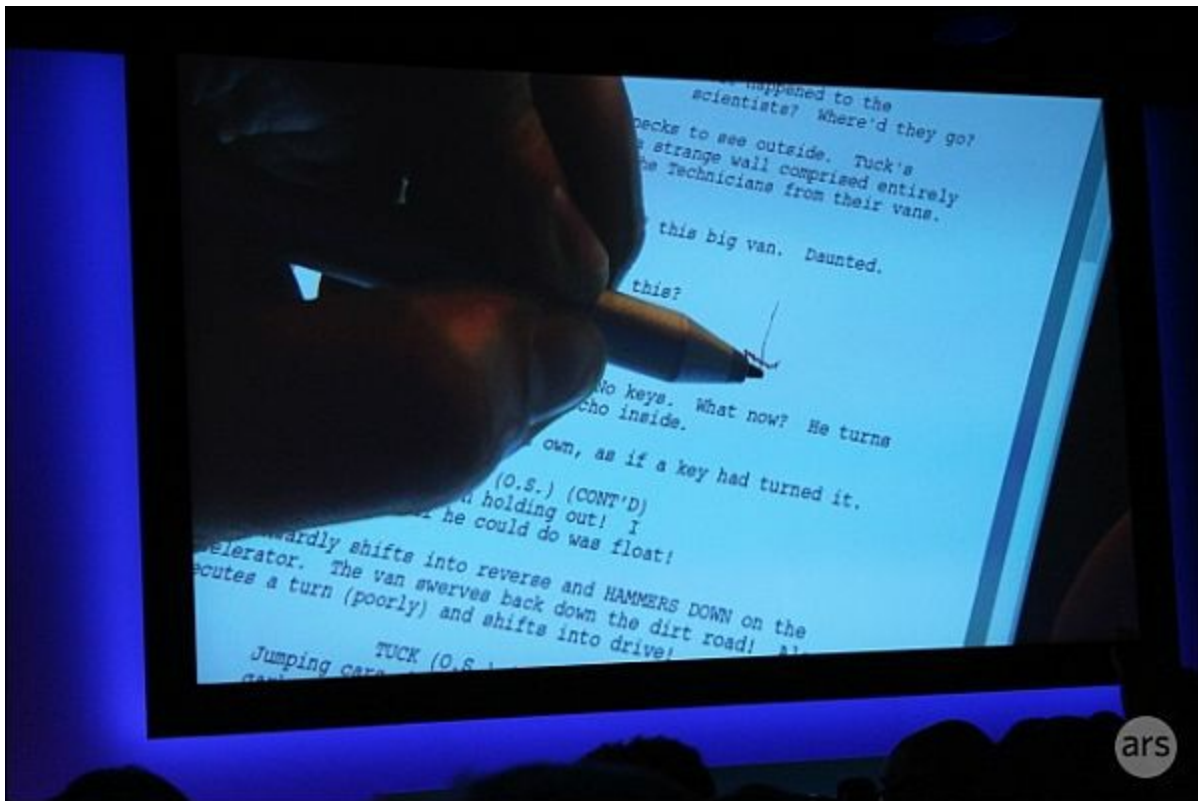


Figure 4. The new Surface Pro 3 lets you write directly on the screen using a stylus.

Microsoft's basic goal is to combine the features of a laptop with a tablet in one device. By offering a larger screen, the Surface Pro 3 can be easier to use as a laptop. By cutting the weight, the Surface Pro 3 can also be a decent tablet. By running regular Windows 8 (as opposed to Windows RT), the Surface Pro 3 aims to replace both your laptop and tablet with prices starting at \$799. (The additional cost for a keyboard and a pen which will likely boost the final price closer to \$1,000.)

While the Surface Pro 3 is much more advanced than the previous versions of the Surface tablet, you're still paying more for the convenience of portability, especially compared to traditional laptops and desktops. For people who need maximum mobility and like the idea of buying one device instead of a separate laptop and tablet, the Surface Pro 3 might be interesting. Just be aware that you'll need to pay more for extra storage.

Early Surface Pro tablets started with 64GB of storage, which is nowhere near the typical 500GB storage you get in a traditional laptop or desktop. To take full advantage of the stylus, you'll need to get updated versions of your favorite software. Given the cost of the Surface Pro 3, it's likely to remain a high-end luxury option rather than a mass consumer product that people will buy to replace their computer and tablet all at once.

For most people, the less expensive Surface Pro 3 will be a mobile supplement and not a complete replacement of your current PC. For people willing to spend the most, the Surface Pro 3 could replace your current PC as long as you're willing to pay the price.

* * *

When you're using Safari, you may want to type a search query or Web site address. Normally you can just click in the Safari search field, but a faster way to move the cursor to the search field in Safari is to press Command+L.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

[*Microsoft Office 2013 For Dummies*](#)

[*Beginning Programming for Dummies*](#)

[*Beginning Programming All-in-One Reference for Dummies*](#)

[*Breaking Into Acting for Dummies with Larry Garrison*](#)

[*Strategic Entrepreneurism with Jon and Gerald Fisher*](#)

[*How to Live with a Cat \(When You Really Don't Want To\)*](#)

[*The Secrets of the Wall Street Stock Traders*](#)

[*Mac Programming For Absolute Beginners*](#)

[*Republican Fairy Tales \(Children's Stories the 1% Tell About the Rest of Us\)*](#)

[*The Zen of Effortless Selling with Moe Abdou*](#)

[*The 15-Minute Movie Method*](#)

[*Erotophobia \(A novel\)*](#)

[*Math for the Zombie Apocalypse*](#)

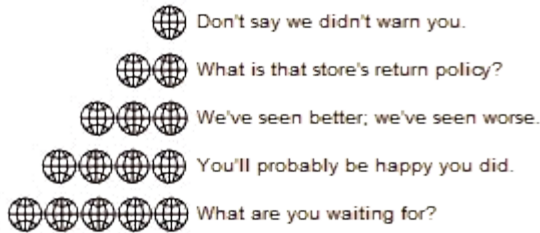
[*How to Write a Great Script with Final Draft 9*](#)

[*How to Write a Great Script with Fade In*](#)

[*The Elements of a Great Script: Star Wars*](#)

The Elements of a Great Script: Die Hard

In his spare time, Wally likes blogging about movies and writing screenplays at his site "[The 15 Minute Movie Method](#)," finding interesting news stories about cats at his site "[Cat Daily News](#)," giving advice to authors who want to self-publish e-books at his site "[The Electronic Author](#)," and providing the type of advice he wishes someone would have told him when he was much younger at his [personal Web site](#). Wally can be reached at wally@computoredge.com or you can follow him on Twitter [@wallacewang_com](#).



Worldwide News & Product Reviews

“The latest in tech news and hot product reviews.” by Charles Carr

Third Ransomware Strain CryptorBit Attacks; NRDC: New Game Consoles Guzzle Massive Amounts of Electricity Nationwide When No One's Using Them; Ovum comments: The FCC Moves a Step Closer to Regulating the Internet; Linksys (Belkin) EA6300 AC1200 Smart Wi-Fi Wireless Router.

Third Ransomware Strain CryptorBit Attacks

The Security awareness firm [KnowBe4](#) warns of a new strain of malicious software that encrypts a person's data and documents until a fee is paid (ransomware):

This strain has been evolving to widen the sphere of data it can capture or encrypt. Since Symantec announced Monday to the *Wall Street Journal* that antivirus is dead, this is something your readers may want to be informed of so they do not think they are protected when they are not, and can take necessary precautions.



- The Crypto Malware Evolution Moves on Full Speed Ahead with New Variant—Adding a Third Cyber Gang Effort to Rake in High Stakes

A third criminal ransomware gang has recently ramped up their attacks. The malware is called CryptorBit (also known as HowDecrypt), and follows a very similar attack process as CryptoLocker and CryptoDefense, but the malware corrupts the first 512 or 1024 bytes of—any—data file it finds, regardless of extension increasing its potential to wreak havoc. The cyber gang uses social engineering to get the end-user to install the ransomware using a fake Flash update, or install a rogue antivirus product.

"Infections with this recent CryptorBit strain are on the rise, and once a user's files are encrypted, the fees are up to \$500 ransom in bitcoin to decrypt the files," said Stu Sjouwerman, CEO of KnowBe4. "It was initially released December 2013, and after debugging their criminal infrastructure, attacks are now increasing. Moreover, users can't rely on antivirus since it catches less than 50% and antivirus is dead," according to Symantec.

The CryptorBit ransomware comes with extra features. It appears to bypass Group Policy settings that were put in place to defend against this type of ransomware infection. The cybercriminals are also installing so-called cryptocurrency miner software which utilizes the victim's computer to mine digital coins such as Bitcoin, which will get deposited in the malware developer's digital wallet, making them even more money.

When a workstation is infected, the bad guys want you to install the Tor Browser, enter your address, and follow instructions on their Web site for how to pay. They leave a friendly

NRDC: New Game Consoles Guzzle Massive Amounts of Electricity Nationwide When No One's Using Them
reminder that the sooner you pay, the more chance you have to "recover the files." Once you pay, supposedly you get their CryptorBit Decryptor program. Based on the payments sent to known CryptorBit Bitcoin addresses, quite a few people appear to have paid the ransom. The price can double after the first 96 hours (4 days).

Sjouwerman gives these tips to prevent the loss of data:

- 1) Backup, backup, backup and test your restore procedure on a very regular basis.
- 2) Don't rely on just antivirus as they normally run 6 hours behind attacks like this, enough for the bad guys to get in and wreak havoc. See Virus Bulletin's testing info.
- 3) Don't open anything suspicious. Use extra care to avoid phishing links and attachments. If you didn't request it, don't open it.
- 4) If you do fall prey to CryptorBit, wipe the infected machine(s), rebuild from the ground up, and restore the files from the most recent backup. If there are no backups, try to restore the files from Shadow Volume Copies. If these are not available, you can try a utility called DecrypterFixer written by Nathan Scott.

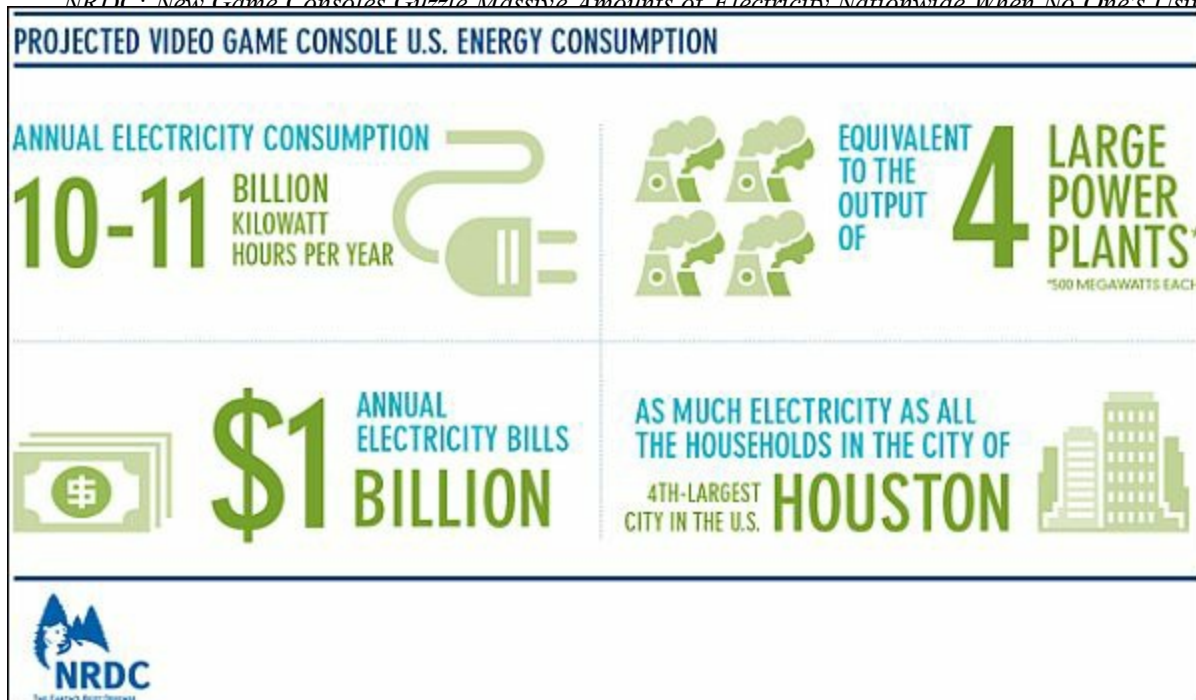
With malware like this out there, security education and behavior management is a must for any organization where users have access to e-mail and the Web.

NRDC: New Game Consoles Guzzle Massive Amounts of Electricity Nationwide When No One's Using Them

The folks at the Natural Resources Defense Council (NRDC) have calculated some rather unpleasant statistics:

The latest-generation game consoles are on track to cost American consumers \$1 billion annually in utility bills—\$400 million of that in standby mode when no one is using them—and devour enough electricity to power all the homes in the nation's fourth-largest city of Houston, according to a report released today by the Natural Resources Defense Council.

NRDC's extensive testing and analysis shows the new Microsoft Xbox One is the biggest energy user of the three most popular consoles, largely due to its voice command feature in standby mode, followed by the Sony PlayStation 4 with its inefficient controller charging. Although these consoles have incorporated important energy-saving features, in large part at NRDC's urging, their expanded capabilities result in annual electricity consumption two to three times higher than the most recent models of their predecessors. In comparison, the Nintendo Wii U is an energy sipper.



"Gamers shouldn't be locked into higher electric bills for the lifetime of their consoles just because manufacturers haven't optimized the performance of their products," said Pierre Delforge, NRDC director of high-tech energy efficiency, whose team performed the testing. "This wastes energy and money, and causes unnecessary pollution from power plants.

"But if Microsoft and Sony follow NRDC's recommendations, they could cut the new consoles' electricity use by one-fourth beyond current projections through software and hardware optimizations, saving U.S. consumers \$250 million on their annual utility bills and enough energy to power all the households in San Jose, America's 10th-largest city," he said.

An estimated 110 million game consoles have been sold in the United States since 2005—almost enough to have one in every home—and they consume several power plants' worth of electricity every year. Once all prior generation consoles are replaced, the new models collectively will use approximately 10 billion kilowatt-hours of electricity annually, enough to power all of Houston's homes.

Key findings from NRDC's analysis include:

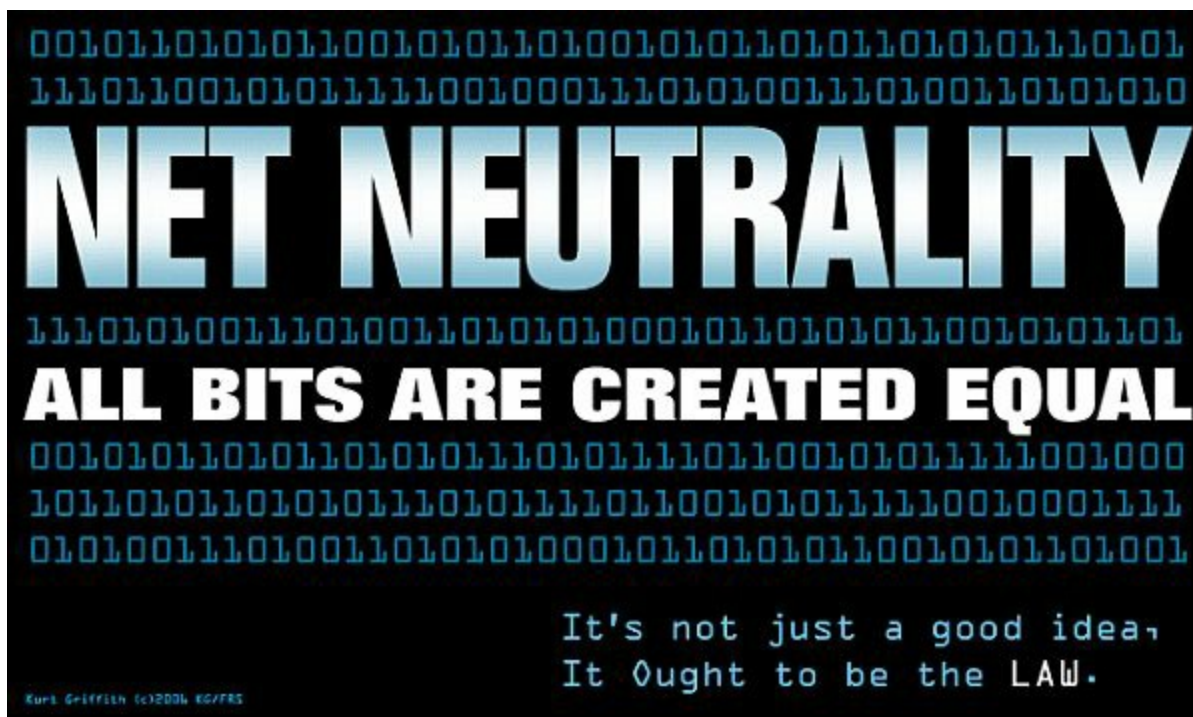
- The newest consoles gobble more energy in standby mode and when showing videos than playing games, over a year.
- Almost half of the Xbox One's annual energy consumption occurs when no one is using it, but it's listening for users to say "Xbox on" even in the middle of the night or when no one's home.
- If all U.S. Xbox One owners use their consoles for TV watching, it would add \$300 million to their yearly energy bills.

- The PS4 and Xbox One use 30 to 45 times more power to stream a movie than dedicated media players (such as Apple TV or Google Chromecast).

Read the entire report [here](#).

Ovum comments: The FCC Moves a Step Closer to Regulating the Internet

On May 15, 2014, with a vote of 3-2, the FCC adopted proposed rules for the Open Internet. The public now has until July 15, 2014 to give feedback on the rules (there will be a further 60 days for responses—making 120 days in total), after which it must adopt something permanent.



Matthew Howett, Practice Leader of Ovum's Telecoms Regulation team, notes:

"Go back a year, and it's almost inconceivable we would be in a position where effectively both Europe and the US appear to have swapped sides. Before Europe's Connected Continent package was unveiled last September, most national regulator's appeared comfortable with allowing carriers to experiment with new business models on the assumption that strong competition at the retail level between ISPs would prevent more serious forms of discrimination and blocking from taking place. Whereas in the US, the FCC has fought hard for over a decade to enshrine the principle of treating all traffic equally, with little room for manoeuvre.

"Following both today's vote in the US, and a recent vote in Europe, on the face of it things

couldn't appear more different. The EC's Open Internet proposals, as they stand, come down heavily on the side of treating everything equally, to the extent that in their current form may actually be unworkable, and in the US the possibility of 'fast lanes' remains a distinct possibility, despite the proposals having evolved from a more controversial stance leaked in the days prior. In reality the truth is somewhere in between. Both legislative attempts leave open the possibility of prioritization, but on the assumption that the 'basic lane' remains unaffected in an attempt to avoid a situation of 'haves' and 'have-nots.'

"Over the next few months on both sides of the pond, the devil will be in the detail. In the US, it's about what can be considered "commercially reasonable," similarly in Europe, it's about what can be considered a "specialized service." While lobbying efforts this week have been extensive and well publicized, in many ways today marks only the beginning of a much more intense period of public persuasion."

Linksys (Belkin) EA6300 AC1200 Smart Wi-Fi Wireless Router

Product category: Wireless router

Manufacturer: Belkin (Belkin purchased Linksys from Cisco)

Model: EA6300 AC1200

Web site: www.linksys.com

Price: \$149 list

For a lot of people, the speed of their connection to the Internet is determined by their crummy DSL or other service, rather than their wireless router. As a result, they conclude that they don't need a faster router. But that doesn't mean their router isn't doing plenty of other work; things like streaming video and music files, syncing data, printing, and downloading and playing games, just to name a few—especially when lots of family members or colleagues are competing for data access at the same time.

Up to now so-called wireless-N has been the speed leader, but a new breed of routers—including the Linksys EA6300—can deliver much faster throughput—about three times as fast.

A feature called beamforming optimizes the wireless signal letting the router connect directly to other devices, rather than shotgunning signals out into the air until something grabs it. An added bonus is that the battery life of devices like smartphones, tablets, and laptops is extended because data is sent more quickly and has fewer connection hiccups.

Another feature the Linksys EA6300 employs, called Smart Wi-Fi, gives you a surprising amount of control over your network when you're not there. A parent, for example, can set up controls and passwords and keep an eye on network usage and activity. You can even prioritize which device gets more access: Less for Jimmy's Xbox and more for Johnny's connection to the Internet at homework time.

There are also gradient levels of filtering you can set to help protect your network from suspicious Web sites.



The USB 3.0 port, located on the rear of the unit (see picture), allows users add an external storage device directly to the router for sharing speeds ten times faster than USB 2.0.



Installation of the Linksys EA6300 is a snap. You don't even need a disc. After set up, it's easy to add any NFC-enabled smartphone or tablet by simply touching the included SimpleTap card to the unit and it's connected to your network in about two seconds.

A nice cosmetic touch: The EA6300 has four antennas mounted internally. It operates flat on your desk or wall rather than edgewise with antennas sticking up in the air. I keep the Bugs Bunny doll I won at the county fair on it.



Review contributed by Renetta Glenhower

At a Glance (from Linksys/Belkin):

Dual Band N300 + AC867

Approximately 3x speed of Wireless-N

Smart Wi-Fi Apps, tools and mobility

1 USB 3.0 port

4 Gigabit Ethernet ports

Wireless AC

Built with the latest Draft 802.11ac technology for the highest quality performance and range

Broad Compatibility

Works seamlessly with all a/b/g/n devices

Simultaneous Dual-Band 2.4 + 5GHz

Double the network bandwidth to avoid interference and maximize throughput

Ultimate Speed, Up to N300 + AC867

Experience speeds approximately 3x faster than Wireless-N

Gigabit Ethernet ports

Four 10/100/1000 ports to connect wired devices at speeds 10X faster than Fast Ethernet

Easy setup

Simple installation, no CD required

Superior Range

High-powered signal amplifiers deliver ultimate range and performance

USB 3.0 Port

Allows you to share a variety of devices across your network, such as external hard drives and printers

Beamforming Technology

Focuses the wireless signal to reduce interference and improve speed and range

Advanced Security

Safeguard your network with WPA2 encryption and SPI firewall

Parental Controls

Easily manage access to content at home or while away with Smart Wi-Fi

Guest Network

Easily secure your network while providing guests with Wi-Fi access

Quality of Service (QoS)

Traffic prioritization technology delivers smooth performance for music, voice and video

IPv6 enabled

Supports the latest Internet Protocol technology to future-proof your network

DLNA CERTIFIED

DLNA Media server enables media streaming your TV, Xbox, PS3, and other DLNA compatible devices

Wall Mountable

Flexible placement for convenience and optimal performance

Specifications (from Linksys/Belkin):

Model: Linksys EA6300

Technology: Wireless-N & AC

Bands: 2.4 & 5 GHz

Transmit/Receive: 2x2 & 2x2

Antennas: 4 Internal

Ports:

4 x Gigabit LAN

1 x Gigabit WAN

1 x USB 3.0

Wi-Fi Protected Setup push button

Native IPv6 and 6rd support

Linksys Smart Wi-Fi:

Setup guest access

Manage parental controls

Advanced network settings

CD-Less Setup

Warranty: 2 year hardware limited warranty

OS Compatibility: Windows, Mac

Minimum System Requirements:

PC: WI-FI enabled with CD or DVD drive, Windows XP SP3, Windows Vista SP1 or later, Windows 7, or Windows 8

Mac: WI-FI enabled with CD or DVD drive, OS X Leopard 10.5.8 or later, Snow Leopard 10.6.1 or later, Lion 10.7 or Mountain Lion 10.8

Internet Browser Requirements:

Internet Explorer 8, Safari 5 (for Mac), Firefox 8, or Chrome configuration

Package Contents:

Linksys Smart Wi-Fi Router AC 1200, Advanced Multi Media, EA6300

CD-Rom with Documentation

Ethernet cable

Quick Start Guide

Power adapter

SimpleTap™ card

Multiple award-winning author Charles Carr has written more than two thousand newspaper articles, magazine stories, and columns for many publications including the San Diego Union Tribune, The Californian, The North County Times, Parent Magazine, ComputerScene, and ComputerEdge Magazine where he has been an editor for more than two decades. He is also a television producer/director with shows both currently airing and in production on Cox Cable and elsewhere.

In the 1990s, Charles wrote 3DHouse, a complete inside-and-out virtual reality tour of his family's log home in Southern California. One of the first virtual reality programs ever created, 3DHouse enjoyed tens of thousands of shareware downloads on all major portals. He also sold the rights to Radio Shack and Egghead Software. 3DHouse has since been featured in many books and articles about VR.

Carr has also been commissioned to write and/or directed many of his own stage plays. Several years ago, Carr and others looking for ways to help organizations struggling in difficult economic times, founded Art Animates Life (www.artanimateslife.org).

To date, Art Animates Life, a CA incorporated, federal non-profit, has raised tens-of-

thousands of dollars for San Diego area disaster relief, an arts non-profit and municipal gallery, a community outreach center, and several struggling community theaters.

Several years ago Carr was commissioned to adapt and direct the beloved Dickens classic, *A Christmas Carol*. The play, titled "Mr. Scrooge & Mr. Dickens," has sold out So Cal theaters for the past several years. Six shows will take place Dec. 2013 to benefit the San Marcos Historical Society.

Another original play, "All the Time in the World," has been performed many times and garnered broad acclaim from audiences and critics alike. Carr is working on a brand new adaptation of the classic Hitchcock thriller, "The Lady Vanished," to be performed spring 2014.

Carr has won many writing accolades, including San Diego Press Club awards for Best Column Writing, Best Consumer Writing, and Best Arts and Entertainment. He has repeatedly taken top honors in San Diego Songwriter's Guild competitions for his original musical compositions.

Carr is also a noted producer, director, and videographer. Several of his documentaries can currently be seen on So Cal's Cox Cable. Since its inception he has produced the Fallbrook International Film Festival's red carpet event and panel discussions.

Charles receives dozens of requests each year to appear on Southern California television and radio stations to talk about important tech events. He also speaks from time-to-time to high schools and organizations about his eclectic life in the arts.

Learn more at www.charlescarr.com.



Editor's Letters: Tips and Thoughts from Readers

“Computer and Internet tips, plus comments on the articles and columns.” by ComputerEdge Staff

"Digital Camera Slowdown," "Wi-Fi Laptop Connection, No Browsing," "Other Finder Key Modifiers?"

Digital Camera Slowdown

[Regarding the May 9 [Digital Dave column](#):]

One possibility is a replacement memory card that's not as fast as the original card. I don't understand all the nomenclature, but Class 10 seems the highest, but then there are ultra and platinum ones. Possibly just marketing names, but check that out.

-Rich Ernst, San Diego, CA

Wi-Fi Laptop Connection, No Browsing

[Regarding the May 9 [Digital Dave column](#):]

If a ping to an outside Web site works, then DNS is working.

He doesn't mention what version of Windows he's running, that would be helpful.

As a diagnostic, I'd try rebooting the system without the wired adapter connected and only connect via Wi-Fi.

Then try several browsers in case it's a browser issue, not likely if they work fine when the wired connection is used.

Assuming your Wi-Fi isn't open and uses security, try disconnecting/forgetting/deleting that Wi-Fi point and connecting fresh with correct Wi-Fi password. I've had that fix strange things when connecting to a Wi-Fi point in the past.

-Rich Ernst, San Diego, CA

Does he use Outlook?

Does it connect via wireless?

-Harold, San Diego, CA

I have seen some strange things with Internet Explorer not connecting and/or not displaying certain things especially after an update...of which there have been several lately. Try going into "Windows Update" and "View Update History." Look for something at around the time you noticed the change. You can un-install that update and see if it helps. If it is listed as a security update you might want to try another browser. Chrome is reliable.

-Bob Frincke, El Cajon, CA

Other Finder Key Modifiers?

[Regarding the May 9 [Wally Wang's Apple Farm column](#).]

Thanks for the tip on using the Option key to force a copy vs. move in Finder on the same drive.

Are there other key modifiers, say to create an alias in a different place (like the desktop), vs. right clicking, making the alias, then dragging the alias to the desktop?

Or forcing a move to a different storage device instead of the default copy?

Thanks.

-Rich Ernst, San Diego, CA

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