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March 21, 2014

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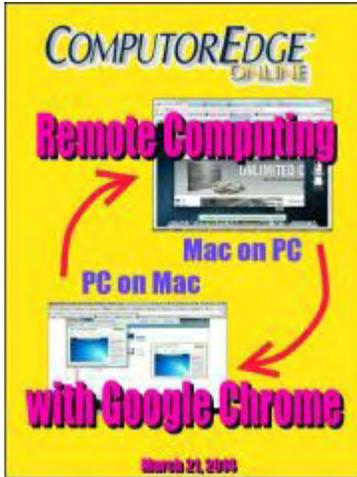
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## Digital Dave

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

*Mozilla Ate My Address Book?; Outlook Calendar Printout; Which Version of Microsoft Office?*

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### Mozilla Ate My Address Book?

*Dear Digital Dave,*

*My PC is a Dell 2400 Windows XP 250GB HD. I've apparently been hacked taking my address book (only a portion). The names of each set of addresses remain—no addresses in folder! AT&T/Yahoo offered no resolution. Browser will not allow the entry of e-mail addresses, except the favored 15. What is up with this?*

*Panda is my default security (good tech support 10 years). They offered a virus removal program (Cloud Cleaner). I ran this. Virus or malware? I have not removed. Please advise your best insight into causes both headaches.*

*Thanks,*

*Joe McGuire  
San Diego, CA*

Dear Joe,

If you're sure that you are infected with a virus that can't be removed in the traditional way—virus removal software—then it may be time to take the ultimate virus removal action. That is reformatting your hard drive, then reinstalling Windows and all of your programs. (Make sure that you have backups of all your important files.) This can be a time consuming procedure, but it will wipe your system clean. I know people who regularly reinstall Windows just to be safe.

This is considered the most drastic step. That's why I recommend many other steps first, such as trying alternative virus removal programs (no one malware removal package gets them all), uninstall and reinstall problem programs (it may not be a virus at all), and run system repair utilities.

It can be extremely difficult to track down some problems. That's why we so often throw in the towel and start all over again. For some that's wiping the drive clean and reinstalling. For others it's buying a new computer and putting the old one in the garage.

Digital Dave

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## Outlook Calendar Printout

*Dear Digital Dave,*

*Microsoft Outlook allows me to enter start and end times when I add an event to its calendar. In the past these times would be shown when I used the print function. Now when I attempt to print my Outlook calendar only the event, but not the start and end times, are shown. I've tried to change the print format to show times without success. Help please!*

*Mike*

*Cardiff by the Sea*

Dear Mike,

You may be asking the wrong person since I don't use Microsoft Outlook. (Perhaps there is an Outlook user who can give a more specific answer.) However, I have seen strange printing problems that require a work around.

First, has there been a change in the Outlook print driver that no longer includes the times you mention? Use the Print Preview mode to look at what is supposed to end up in ink. If the times are in the preview, then something is happening in the process which may relate to Outlook or possibly the printer.

I've seen similar problems with some items I've tried to print where everything looks fine in the preview, but certain lines just never make it to paper. In those situations I've found that printing to a PDF file, then opening and printing the PDF solved the issue. I don't know what caused the problem, but at least I could get a good printed copy—even though the procedure was a bit roundabout.

It is possible that the times were dropped from the Outlook printing program in the latest update. If that is the case, then you would need to roll back to an earlier version.

You might also try reinstalling the software. Sometimes that will fix quirky problems in a program.

Digital Dave

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## Which Version of Microsoft Office?

Jack sent this question on to me:

*Dear Jack,*

*Firstly, I have been reading your weekly ComputerEdge post religiously for the past year. Also, in finding your Web site, I learned of your e-books at the same time. I have read most of these as well, at a minimum, twice. I especially enjoyed the [AutoHotKey series](#) and constantly refer to these. I tried AHK many years ago, but gave up. However, your books have got me interested in the program again.*

*Just a few quick bits about me. I am a residential designer of 20-years. Consequent to the housing bust/recession of 2008, my business is now home based. I use AutoCAD 75-80% of the time behind a computer. I also use a terrific program called SketchUp. I am not a fan of "The Cloud" and particularly do not buy my music on anything but a 1-mil alum sheet sandwiched between two layers of plastic. I also have no desire to use Windows 8 or "touch" computing in general (I have garnered that Office 2013 is quite touch-centric). My only "digitally manipulated" devices are a Nexus 7 (which I've read all your books on) and a smartphone (which will soon be upgraded to a pure Android device devoid of the carrier's bloatware).*

*To my point—my current office computer setup:*

*Custom built, Win7 Pro tower, SSD for OS (64 GB), RAID 0 for storage. No Office software, although I attempting to use a portable versions of LibreOffice—primary computer*

*17-inch Vostro laptop, Win7 Pro—Office 2007 Professional—secondary system; used for my newly created stand-up computing solution in another room, driving a 46-inch Westinghouse monitor.*

*Netbook, Win7 Pro—Office 2010 PreLoad (not activated)*

*(4) Drive NAS—attempting to use as a server. Syncing software is a whole other issue.*

*I use Firefox and Thunderbird exclusively.*

*As you see, I have many flavors of Microsoft Office. I have been trying to use LibreOffice, but have found it cumbersome. Further, the majority of my clients send me MS Office based materials.*

*I am trying to consolidate, standardize and systematize my "office" programs. I really only utilize Word and Excel. I also have third party software in my AutoCAD install that uses Word and Excel, although I have not used those functions in quite some time (of course, as soon as I drop MS Office, I'll need those—damn Murphy :-).) Further, I've been reading a*

*lot lately about OneNote; however, I'm trying not to let that influence me.*

*So, I'm really asking if you have any solution(s) to a unitized "Office" solution, which will all be the same flavor, running on various computers? I do not mind spending a few dollars, as it is business related, however I do not wish to go overboard.*

*I did find this: [Family version of Microsoft Office 2010](#). It seems reasonable and has one item I like—actual disks!*

*I look forward to any advice you could provide me. I also wanted to get Digital Dave's input on the matter, but I figured this long-winded e-mail would not make it into his Web form.*

*Thank you very much for taking the time to read this.*

*Best regards,*

*Matt Murrell*

Dear Matt,

I think sometimes we over think the problem. Since you have clients who rely on Microsoft Office, there is nothing wrong with maintaining compatibility with them. Outside of software familiarity, compatibility with customers is probably the major reason for sticking with Office.

You might be right in sticking with the Office 2010 that you referenced in your letter. Even though Office 2013 will run on your Windows 7 computers, there may be too many differences which can cause frustration. (Office 2013 has been hammered in the users reviews on Amazon.) Plus, it looks like you would be able to use that 2010 package on all three of your computers.

As for your computer setup, I assume that you have them all plugged into the same network. I tend to dedicate certain computers to particular tasks. Then I move to the most appropriate computer for a particular action. For example, I only read my e-mail on one computer. I find it gets too confusing otherwise.

You say that you're trying to use the Netbook as a server. That can work out as long as you directly access all files on the Netbook. By that I mean don't keep working copies on the other computers. Working on the same document on different computers is what causes the syncing problems. There should only be one original kept in one place.

You can access the originals by mapping drives from the other computers. Then you know that you are only working on the most current copy. Of course you do want automatic backup of the originals somewhere, but moving files from computer to computer tends to be a recipe for lost work.

Another alternative is to overcome your reluctance about "The Cloud" and use a system such as [Dropbox](#). The beauty of using this type of Internet storage system for sharing files is that the original is maintained on every computer (and in the Cloud) in almost real time. The files are continuously kept in sync. Another major plus is that if you have a huge file to send to a client (too big for e-mail), and I'm guessing that you occasionally do, then you can publish a download link in Dropbox directly to a file or folder and send the link to the client. Embrace the cloud! It solves way more problems than it causes.

I don't think that you will find one perfect solution to your system setup. The power of computers is in their flexibility. You want to find that optimum setup that works for you. The key to a good system—regardless of how many computers are in it—is simplicity. Eliminate redundancy of files which cause confusion, limit yourself to the programs that you really need, and decide what you're going to do on which computer. Don't do everything everywhere.

I'm sure that there are readers who have their own personal tips for making their systems more productive. I would certainly be interested in hearing them.

Digital Dave

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# Chrome Remote Desktop for Sharing and Connecting from Anywhere

**“Google Chrome Remote Desktop, a Free Solution for People Who Need Help or Long Distance Access”** by Jack Dunning

*With so many of the remote access programs either disappearing or becoming paid services, Google Chrome Remote Desktop is a refreshing free alternative.*

The Internet based remote computer connection services LogMeIn and GoToMyPC might be in a panic right now. Google is coming at them with [Chrome Remote Desktop](#). The problem for the competition is that Google's remote control service works. I took note a few weeks ago when Stewart Levin pointed out to Digital Dave that Google offers an alternative for remotely connecting to computers or directly assisting someone from a distance. (Half of what I learn about computers comes from readers leaving comments on the *ComputerEdge* columns and articles.) I decided to take the time to check it out. It was worth it—especially since it's free.

I'm sure the Google Chrome Remote Desktop is just one part of Google's plan to rule the world. To get the benefits of its features you need to both use Google Chrome and own a Google account. Once you sign up for a Google account, you find numerous other (mostly free) products at your fingertips. (Google Drive Cloud storage has just lowered its prices. You can still get 15GB free, but it's only \$1.99 per month for 100GB and \$9.99 for 1TB.) Not everything that Google does is a hit, but in a world where the free alternatives to the Web remote connection services such as LogMeIn and GoToMyPC are dwindling, Chrome Remote Desktop appears to be a winner.

# My Remote Desktop Connections

In my daily work, I often connect to remote computers in a variety of ways. Since I operate from a virtual office I need to get onto a number of different computers. I can only carry one computer with me, so when traveling I often must access my Windows 7 desktop computer at home. Until recently I've had two methods for doing that.

I also regularly access the *ComputerEdge* servers which are maintained at a remote location and include two FreeBSD (Linux-like) servers and one Windows computer in a network. I used a couple of VPN (Virtual Private Network) routers in the remote network giving me options when one path goes down. With one router I use a paid Hamachi VPN connection (owned by LogMeIn) which only costs me \$49 per year. Hamachi gives me a path to the Windows server which I can use to access the two FreeBSD servers. The same ad hoc network gives access to all the other connected computers regardless of their location.

I was using a SonicWall SSL VPN router to directly access all three servers (and other remote computers attached to the VPN), but in their *carelessness* (by that I mean they don't care), SonicWall (now owned by Dell) disabled my router. There is a fix, but I must physically change the connection on the router to apply the fix and I won't have a chance to get to the co-location facility until sometime in April. Fortunately, with the combination of the Hamachi Virtual Private Network, the other router, and Windows Remote Desktop Connection, I have been accessing all the servers by connecting to the onsite Windows server. (I would like to claim that I had the foresight to build this redundancy into the system, but the truth is that I was forced into this situation because of a problem running QuickBooks on the remote PC through the SonicWall router—but that's another story.) To put it plainly, I need remote connections to do my job.

## How Remote Connections Work

To make a remote connection to another computer you need two things: a Virtual Private Network (VPN) connection and the connection software on both computers. It's easy enough to make a connection with another computer on an internal network at work or at home. All you need is the IP address of the other computer and a program such as [Windows Remote Desktop Connection](#) or [Windows Remote Assistance](#) set up on both ends (one to accept connections and the other to make connections). But once you leave the house, you have the additional problem of making the connection over the Internet.

Almost all computers are hidden behind routers and firewalls. There needs to be a way to tunnel through those barriers and reach the remote computers. This is where a VPN comes in. A VPN is set up by assigning a special IP to each computer then tying them together into a network (virtual since it's over the Internet and simulates an internal network) with either a VPN server or a VPN router. Only members of the virtual network can access the assigned

IPs of the other members. In the case of Hamachi, the Hamachi servers assign unique IPs to each system which are then joined together via the Hamachi servers.

With the SonicWall SSL VPN router (which has a fixed external Internet exposed IP), the router itself does the assignment of the IPs to the computers which remotely log into the SonicWall router with a secure encrypted connection and special SonicWall software. The router and software simulates an internal network for the connected computers even though they may be anywhere in the world.

Google Chrome Remote Connection does the same thing except you don't need to know the IP addresses of the other computers. Once you install the special Chrome extension on each computer and log into your Google Account, the Google servers effectively create a network for all the computers on the same account.

The implications for me are simple. I now have yet another method for accessing my remote computers without adding more hardware. Plus, it's free. If for some reason the Hamachi service goes down, I can now use Chrome Remote Desktop to reach the *ComputerEdge* servers.

## Google Chrome Remote Desktop Advantages

Over the years, I've used Windows Remote Desktop Connection extensively. I will probably continue to use it since I know how it works and it is robust. One major plus for the program is that it takes advantage of the screen space available on the connecting computer. For example, when connecting to a lower resolution screen with Windows Remote Desktop, rather than displaying the remote display as a smaller window (which is what Chrome Remote Desktop does), the entire available screen space can be used for the remote Desktop. However, there are a couple of limitations in Windows Remote Connection which makes it unusable in certain situations: when the wrong version of Windows is installed on the host and when the remote computer is a Macintosh. Google Chrome Remote Desktop overcomes these two deficiencies.

First Windows Remote Desktop will only work for Windows computers with the Professional or Business version of Windows (or above) installed on the remote computer. That means you can't use it to access most laptops which generally have Windows Home Premium installed. Chrome Remote Desktop will work with any Windows computer (XP and above) regardless of version. Second, while you can get a version of Windows Remote Desktop to control a Windows computer from a Mac, the reverse is not available. Chrome Remote Desktop allows you to control a Windows computer from a Mac and a Mac from a Windows computer. I checked it out and they both worked great.

## Installing Chrome Remote Desktop

Installation of [Google Chrome Remote Desktop](#) is relatively straight forward, but you do need to use the [Google Chrome Web Browser](#). If you don't use the Chrome browser, it's free to download. You will also need to sign up for a Google account during the Chrome Remote Desktop installation process. Chrome Remote Desktop is downloaded from the [Chrome Web Store](#) (see Figure 1). The process is started by clicking the Free link in the upper right-hand corner. If you're not using Chrome then you will be prompted to download it. (If you prefer to use another Web browser by default, be sure not to let Chrome take that status during installation. Watch for it.)

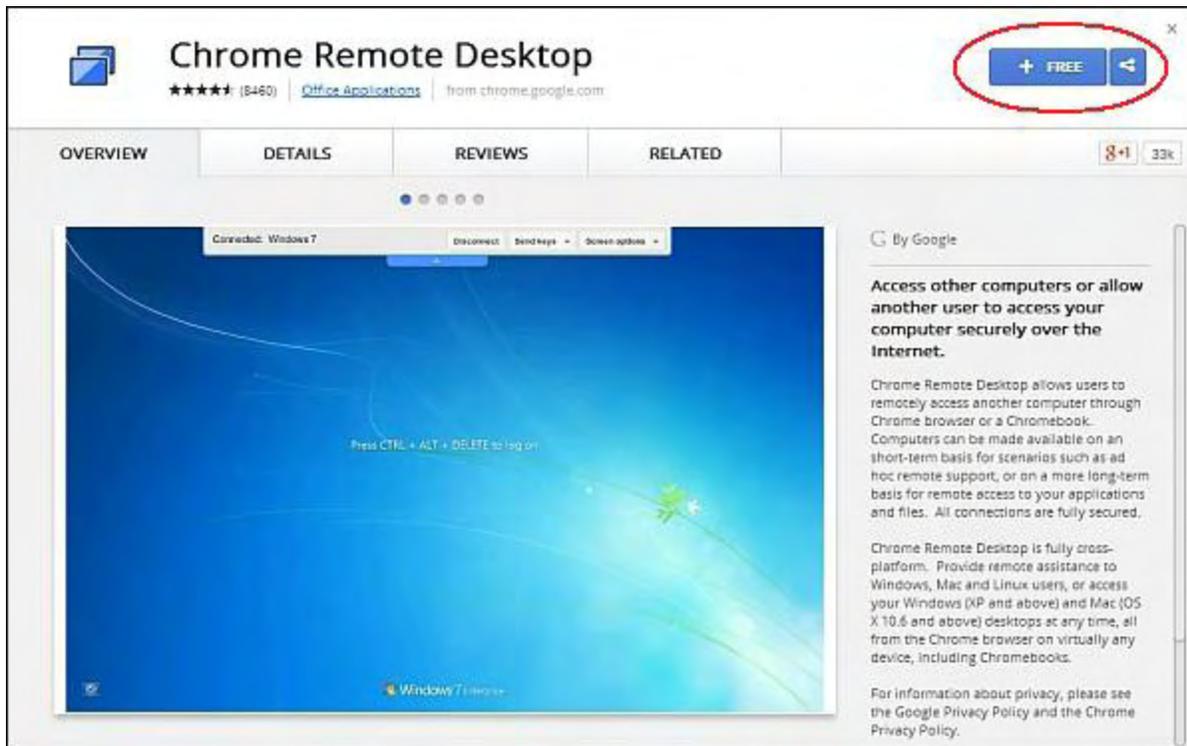


Figure 1. Google Chrome Remote Desktop is available free at the Chrome Web Store.

You will go through the usual download and installation steps that you encounter with most software. Once installed you will see a screen with two parts (see Figure 2): Remote Assistance and My Computers. These are the two basic functions of Chrome Remote Desktop.

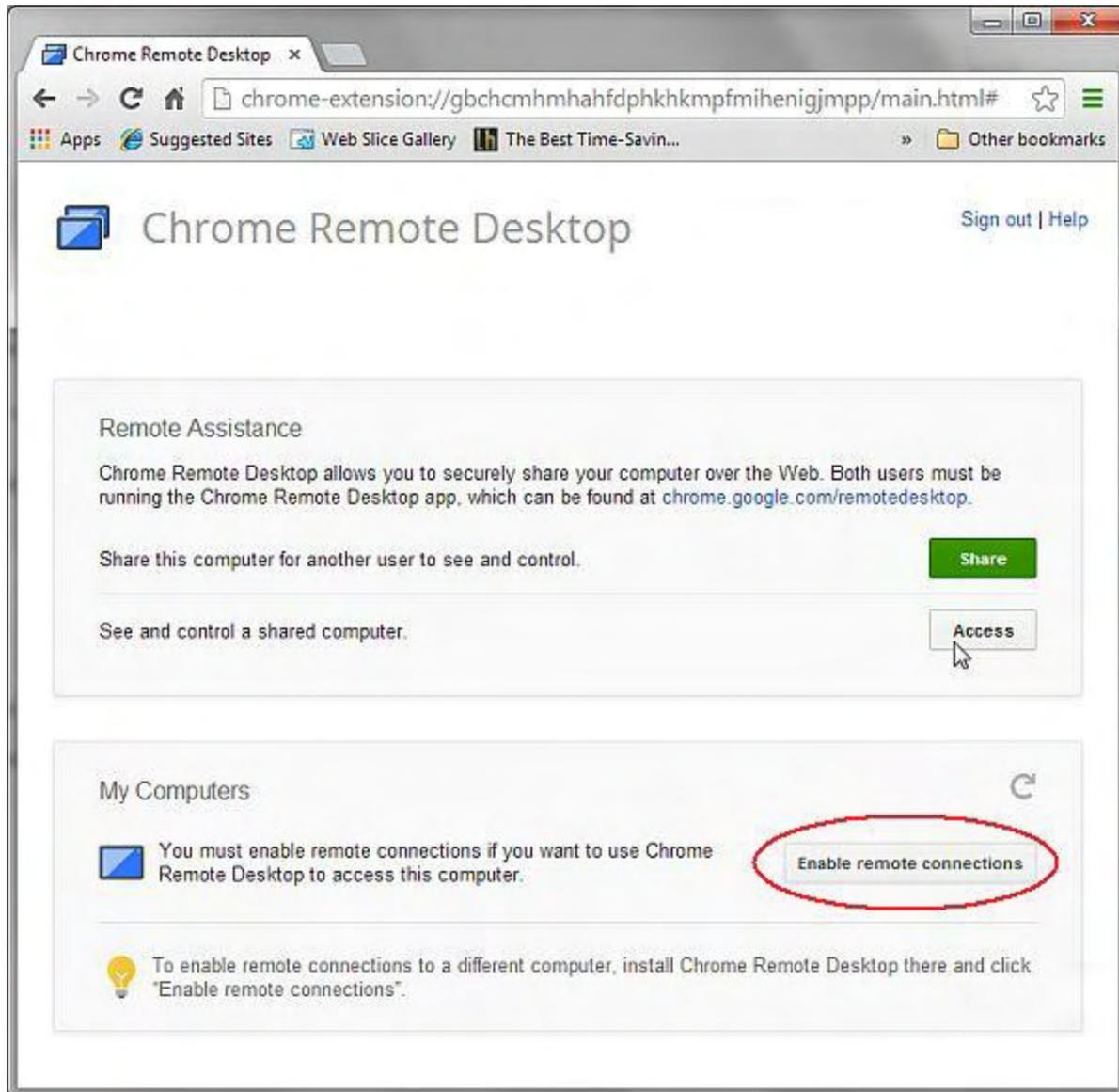


Figure 2. Chrome Remote Desktop can be used for Remote Assistance which requires someone on each end of the connection or Remote Desktop (My Computers) for unmonitored remote access to computers.

### *Chrome Remote Assistance*

To get assistance from another person both computers need Chrome Remote Desktop running, but they don't need to be using the same Google account. The helpee clicks the Share button, an access code is generated, then the computer waits for a connection (Figure 3, top). That code is communicated (by e-mail or on the phone) to the helper who clicks the Access button and enters the code (Figure 3, bottom). The assistant clicks Connect and you're both looking at the same helpee's screen.

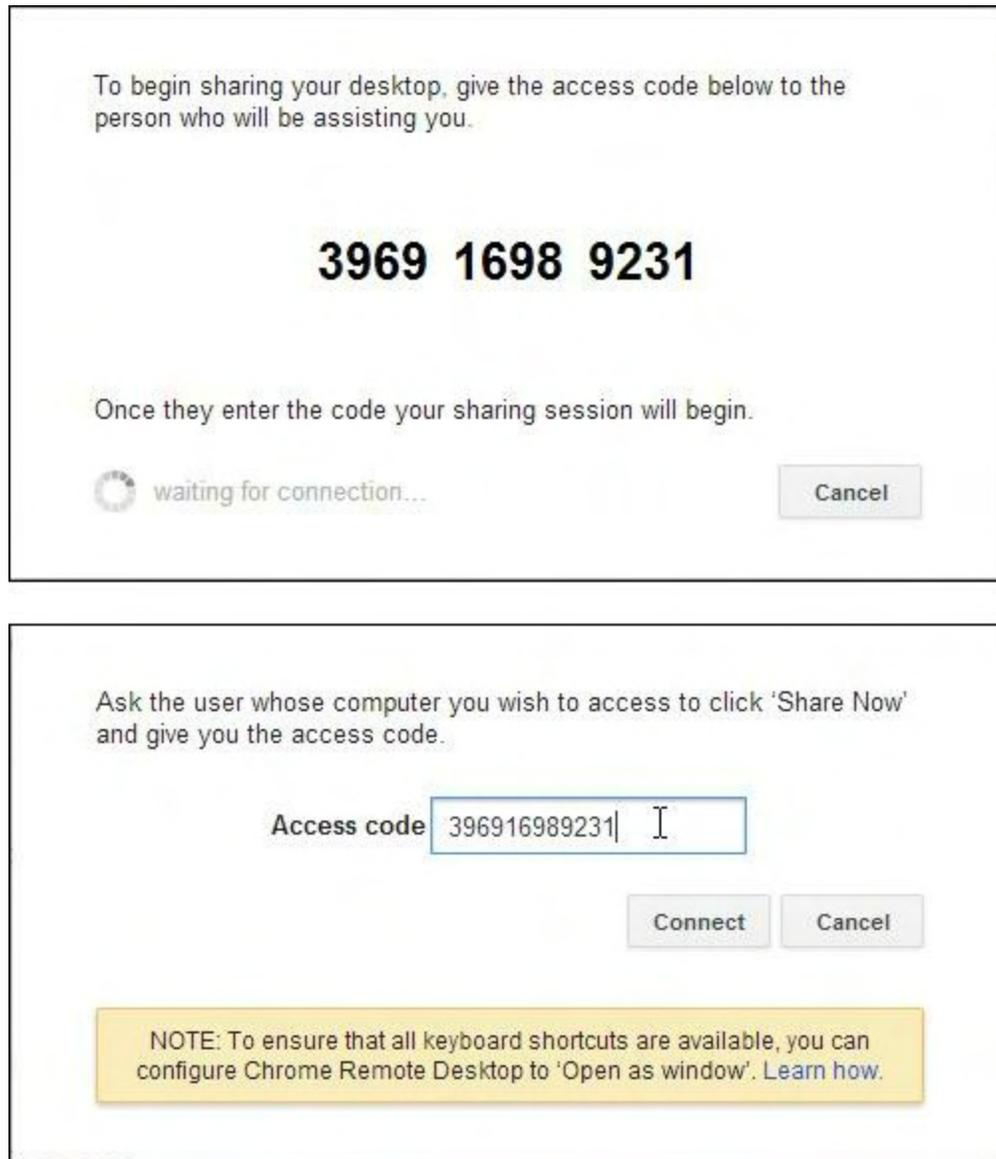


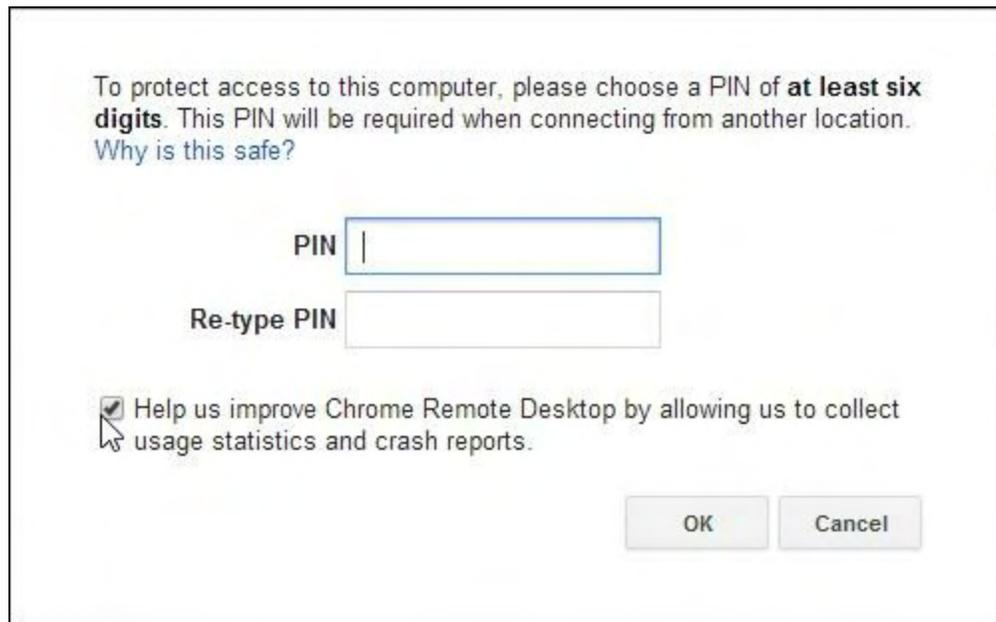
Figure 3. In Chrome Remote Assistance the person wanting help generates a code (top), then the assistant enters the code (bottom) to make the connection.

As long as both computers are running Chrome Remote Desktop, remote assistance is pretty easy.

## Connecting to Remote Computers

Setting up a computer for remote connection is a little more involved. The host computer must be enabled for remote connection to make it available for connection. That also means never going to sleep. The Sleep function must be turned off. The computer needs to be awake and alert. Also, in Google Chrome Settings => Show advanced settings ..., you will want "Continue running background apps in the when Google Chrome is closed" checked to keep the extension running.

Click "Enable remote connections" to make the computer available for remote access. You will need to give the computer a PIN for access (Figure 4, top). Please don't use "123456" or all zeros. The next step needed is the PIN confirmation window, Figure 4 (bottom). This is a little confusing since that window does not automatically pop up on top of the other windows. A few times I was left staring at the screen with nothing happening until I noticed the Chrome Remote Desktop icon at the end of the Taskbar. Click the icon to show the window and enter the same PIN again.



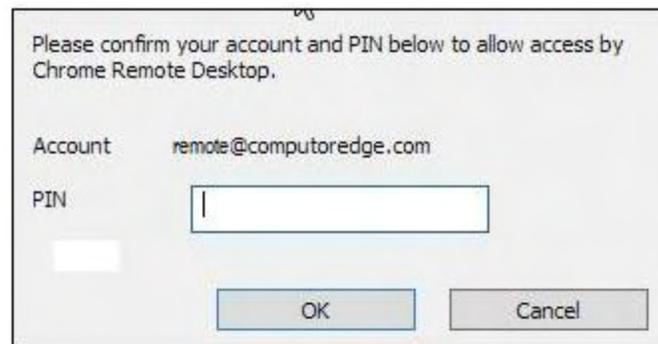
To protect access to this computer, please choose a PIN of **at least six digits**. This PIN will be required when connecting from another location.  
[Why is this safe?](#)

PIN

Re-type PIN

Help us improve Chrome Remote Desktop by allowing us to collect usage statistics and crash reports.

OK Cancel



Please confirm your account and PIN below to allow access by Chrome Remote Desktop.

Account remote@computoreedge.com

PIN

OK Cancel

Figure4. To enable a computer for Chrome Remote Desktop connections you create a six digit code (top) and re-enter it to confirm the computer's availability for access (bottom). Look for the confirmation window which may be hidden under other windows.

Once a computer is enabled, it will appear on the list of "My Computers" whenever Chrome Remote Desktop is loaded (see Figure 5). This remote availability is installed as a service and should be running even after rebooting.

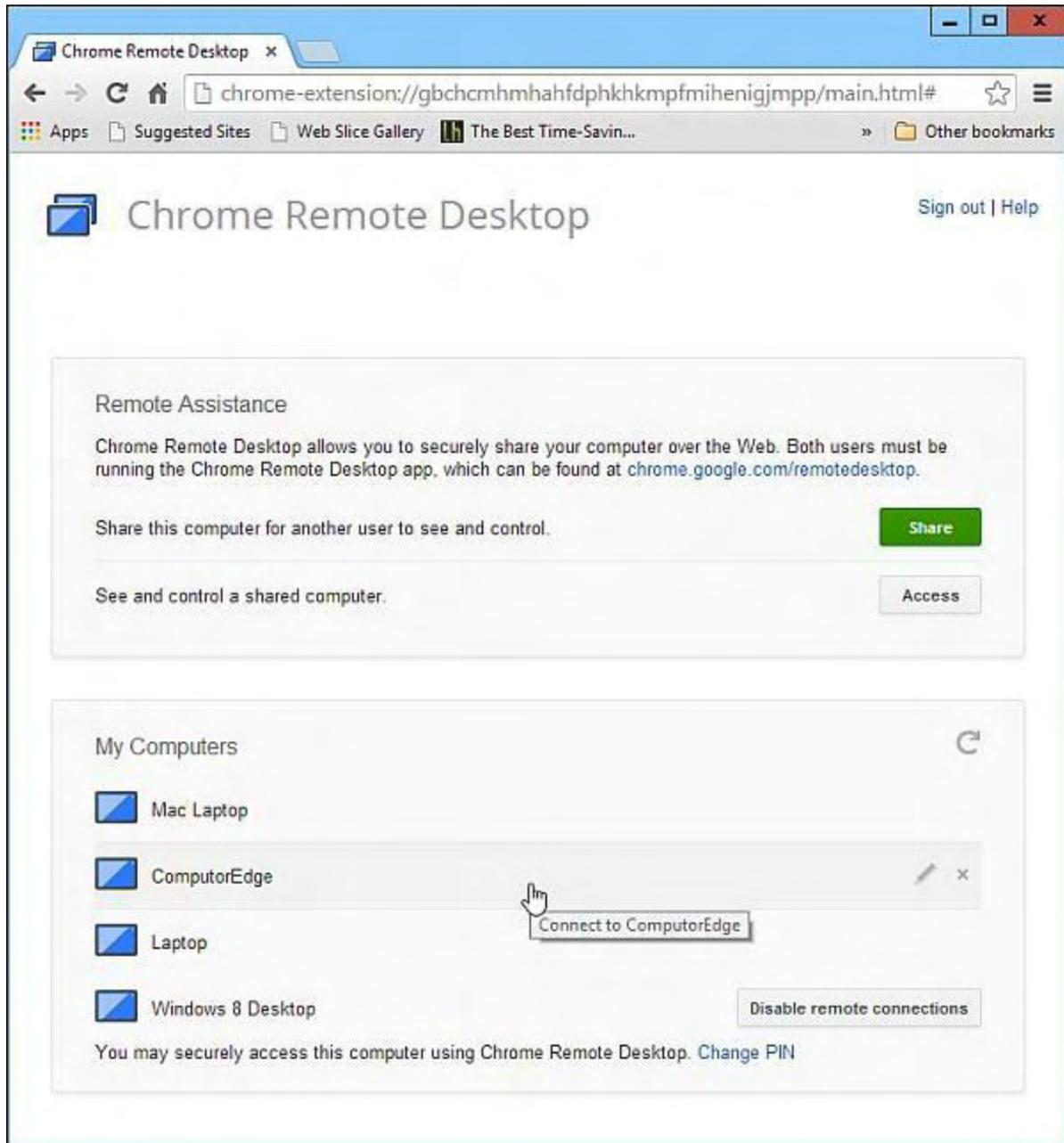


Figure 5. All computers enabled for Chrome Remote Desktop in a Google account will appear in the "My Computers" list. Click on a computer to connect.

To connect to a remote computer, click on its name in the "My Computers" list. A window will open for entering the access code (see Figure 6). I used the same PIN for each computer since remembering too many different numbers would be confusing. Hint: I applied the same code that I use when I have an electronic safe in a hotel room in Las Vegas—a combination of my birthday, part of my SSN, and the number of letters in my mother's maiden name. It's easy to remember.



Figure 6. Once Chrome Remote Desktop is loaded, all you need is the PIN to connect to a remote computer.

When connected the Desktop screen will appear in the Chrome browser. There is a bar at the bottom of the screen which will Stop Sharing when it is clicked (see Figure 7). Another difference from Windows Remote Desktop Connection is that the host screen does not turn off or switch to the logon screen when Chrome Remote Desktop is connected. (In Windows Remote Desktop Connection, the host screen will return to the logon screen. Anyone logging on to the host computer will break the connection.) That means the Chrome connection can be used for remote assistance whenever someone is available at the host computer. That also means anyone walking by the host computer can see what you're doing remotely. I don't know if this is good or bad, but there is a way to set up a Windows computer to block the host screen to nearby viewing when connected remotely. You can also turn off (or unplug) the remote computer's monitor before you leave it by itself.

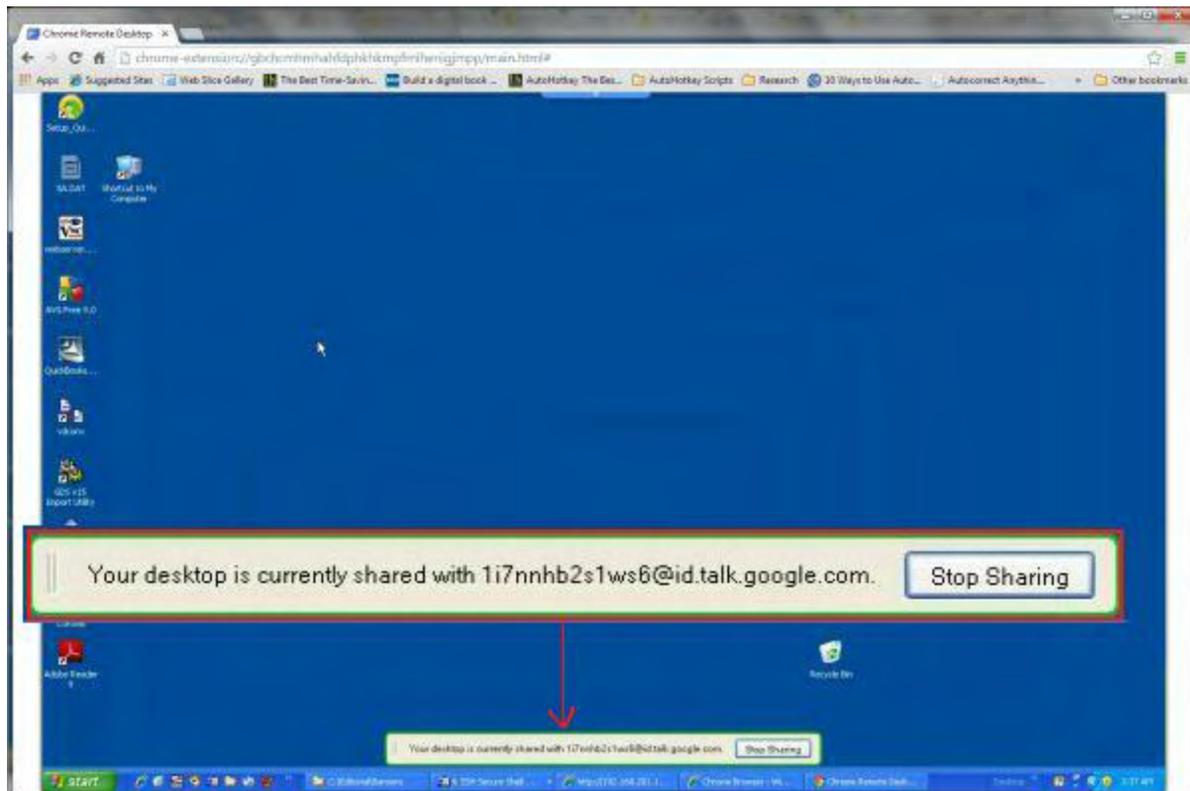


Figure 7. This is the Chrome Remote Desktop screen for a Windows computer. The connection can be broken on either end by clicking Stop Sharing (expanded in this image).

At the top of the remote window is an options bar which allows changing the screen size, as well as, disconnecting (see Figure 8). When in full screen the excess screen space of smaller screens appears in black as shown in Figure 8.

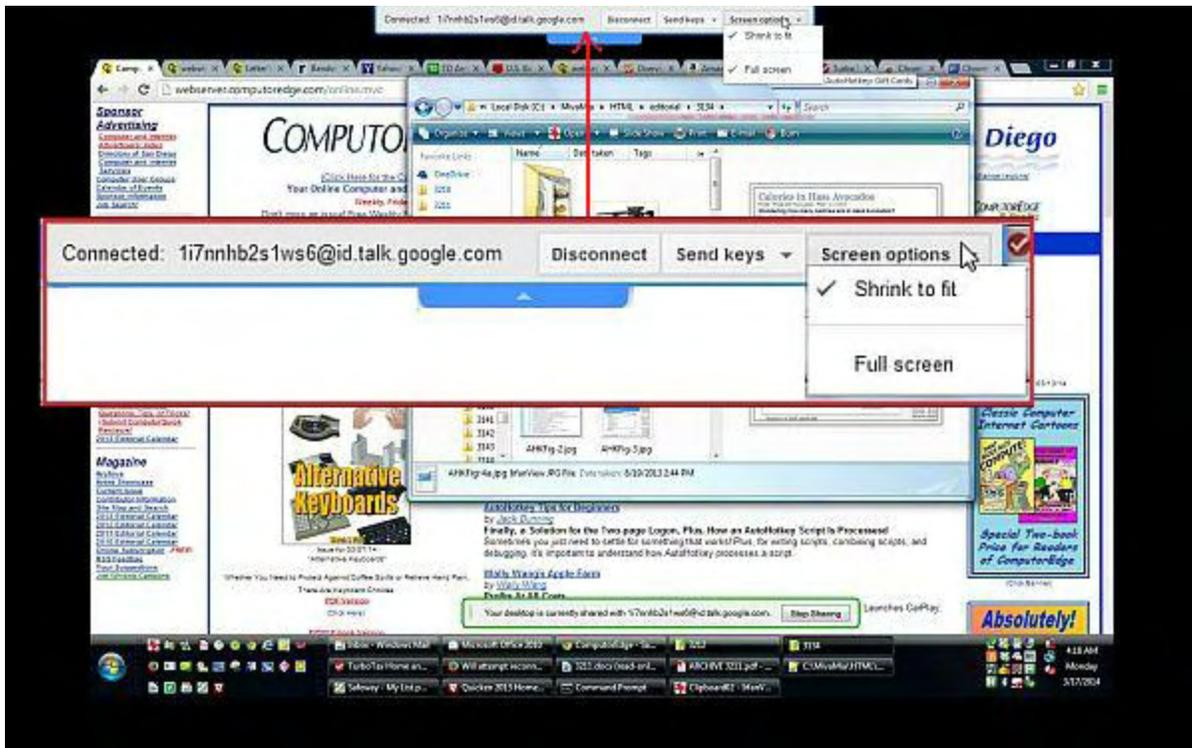


Figure 8. Another connection to a Windows computer with Chrome Remote Desktop. The option bar at the top of the screen (expanded in this image) allows different screen viewing options.

There are a couple of special Send keys (PrtScr and CTRL+ALT+DEL) in the same options bar which work with the remote computer.

## Loading Chrome Remote Desktop

Once Chrome Remote Desktop is installed, the app needs to be loaded before accessing either Remote Assistance or one of the computers on the My Computers list. One of the easiest ways to launch the app is type `chrome://apps` into the Chrome browser address/search field. Chrome Remote Desktop will appear on the page as one of the apps. Another option is to return to the [Chrome Remote Desktop page](#) at the Chrome Web Store. The page will detect that Chrome Remote Desktop is already installed and the Free download link will now be a Launch App button (see Figure 9).

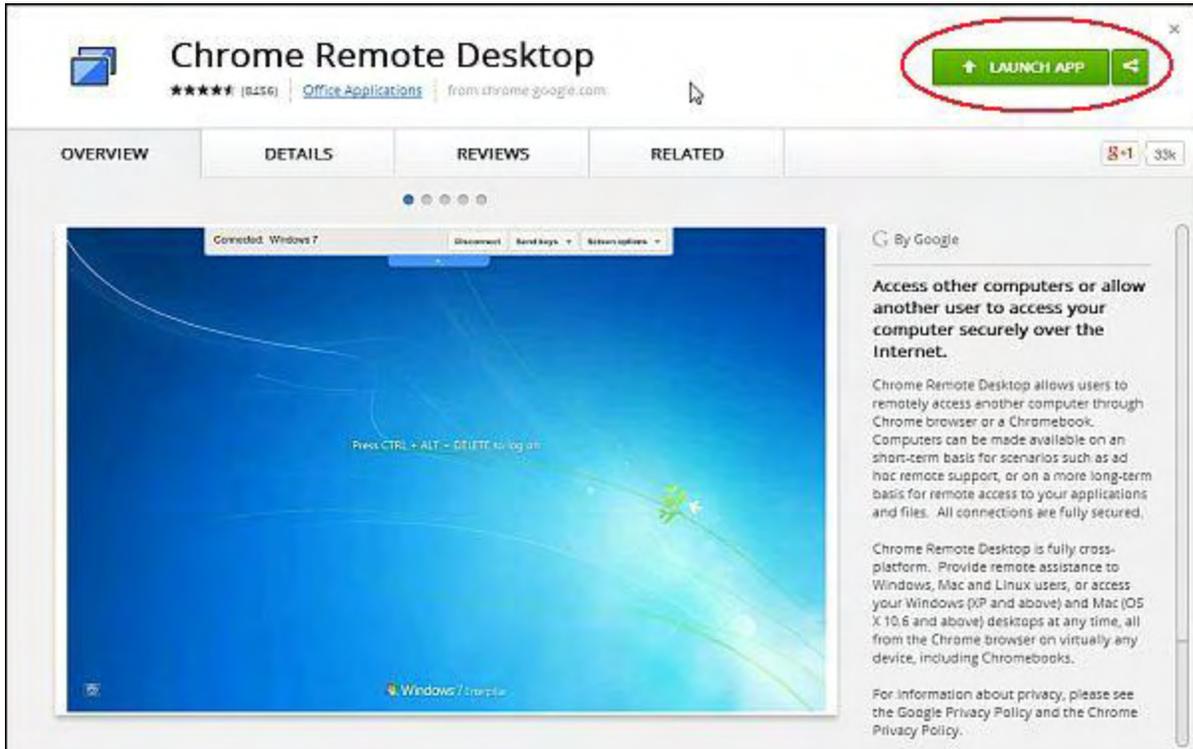


Figure 9. Visiting the Chrome Web Store is another option for launching Chrome Remote Desktop.

Still another way to launch Chrome Remote Desktop is to install [Chrome App Launcher](#) which adds the Google apps options to your Desktop and Taskbar (see Figure 9).

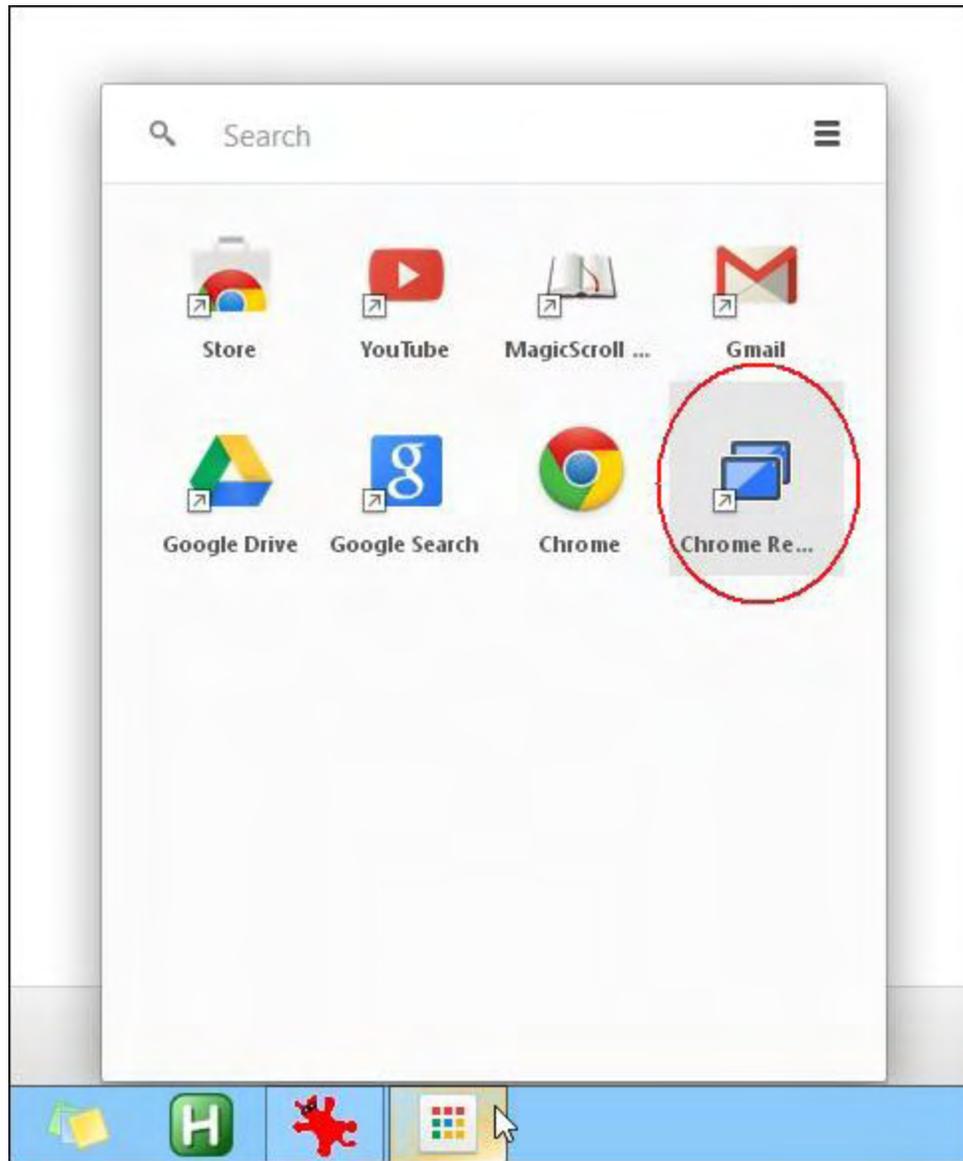


Figure 10. Chrome App Launcher makes all your Google apps available on the Desktop and Taskbar.

## Remote Controlling Macs and PCs

One of the more fascinating tests was accessing a PC from a Mac and vice versa. It worked great and is probably one of the best solutions for people who own both. If both computers are in the same house you may wonder why you might want to use a remote connection when you can easily move from one computer to the other. There are a limited number of computers which will fit on one desk. By using a capable remote access program, you can quick access another computer for data, files, or screen shots without ever leaving your seat.

Despite the disorientation that the Mac always causes me, I quickly installed the Chrome Web browser and the Chrome Remote Desktop extension. I was able to access my laptop computer (see Figure 11).



Figure 12. A remote connection from a Windows computer to a Macintosh computer using Chrome Remote Desktop.

Everything worked fine and I was duly impressed. If you own more than one computer (PCs or Macs), then you should give it a try. All I can say to services such as LogMeIn and GoToMyPC is "Be afraid!"

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*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](http://www.computoredge.com). He can be reached at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com). Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:*

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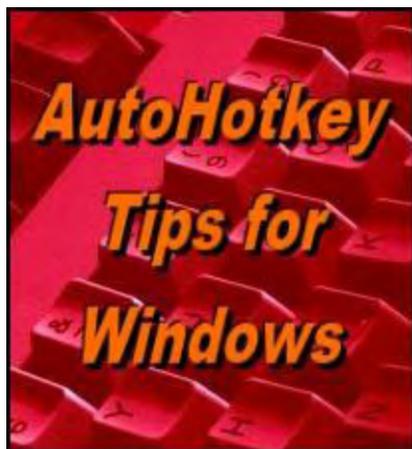
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*[Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7,](#)*

*[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.



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

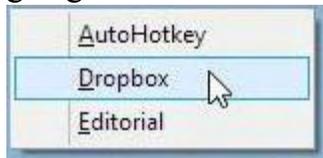
**Easy Beginner AutoHotkey Tricks You Should Use to Open Favorite**

## Folders

**“If You Do Nothing Else, Use AutoHotkey to Quickly Open Your Most Used Folders in Windows Explorer”** by Jack Dunning

*This is a cool trick. Do you find that you are opening the same Windows folders innumerable times during the day? Set up a hotkey combination with AutoHotkey to instantly open each of those most used favorites. Plus, you can put those key actions in a quick pop-up menu.*

If you have key folders that you're continuously opening in Windows Explorer, then you're going to love this AutoHotkey trick. Rather than open Windows Explorer (⊞+E) and navigate to the right location (or click the folder in your Favorites) every time you need to access an important folder, you can set up a hotkey combination which will instantly open it. All it takes is one line of code. But even better, with only a couple more lines of code, you can add a pop up a menu that does exactly the same thing (see image at left). If you can open Notepad (and have the free [AutoHotkey software installed](#)), then in a matter of minutes you can add a cool feature to your Windows computer which will astound your cohorts and friends.



## Open Folders Instantly

The first step is to set up a hotkey combination for one of your most used folders. Open Windows Explorer (⊞+E) and navigate to the target folder (see Figure 1). (Windows Explorer is called File Explorer in Windows 8.) Copy the exact path to the folder or use in the AutoHotkey script.

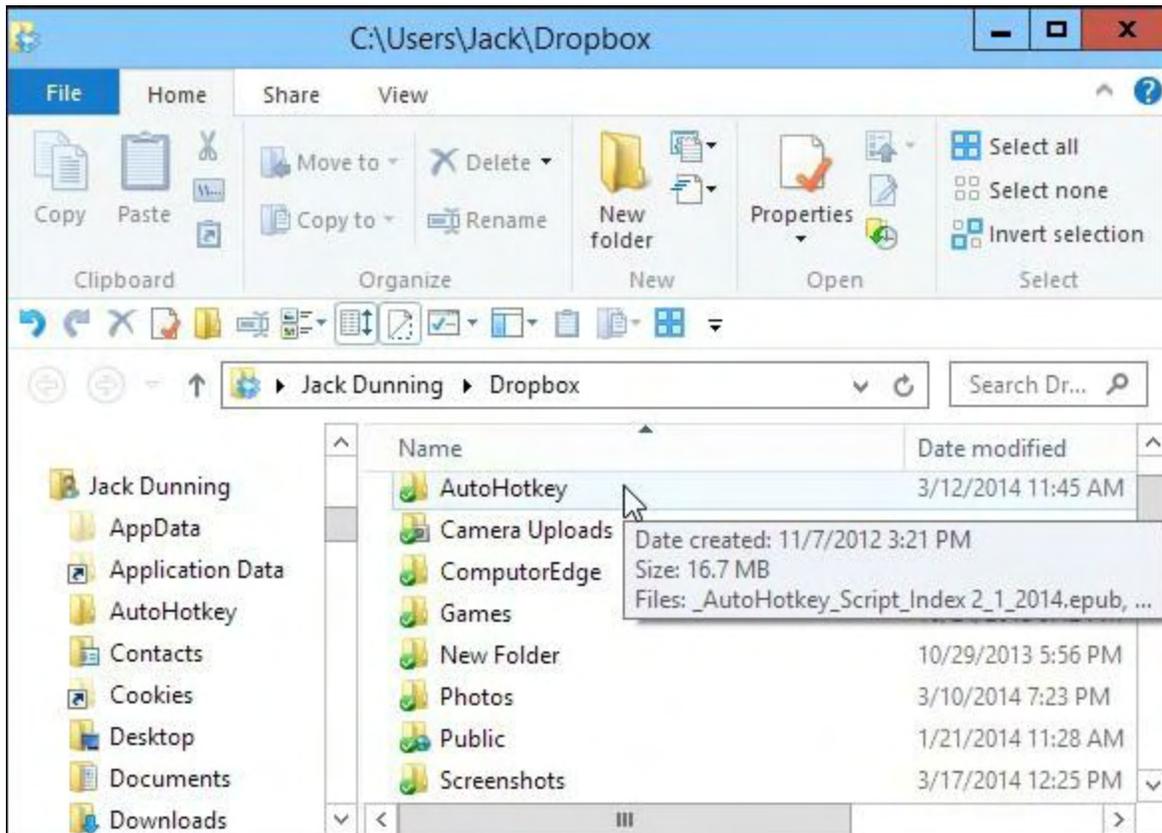


Figure 1. My Dropbox folder is open in File Explorer in Windows 8 (Windows Explorer in all other versions of Windows).

To copy the folder path, click the little folder icon on the left side of the folder path field (see Figure 2). The field will convert to the proper Windows format and become highlighted for copying. Use the Copy command (CTRL+C) to save the path to the Windows Clipboard.

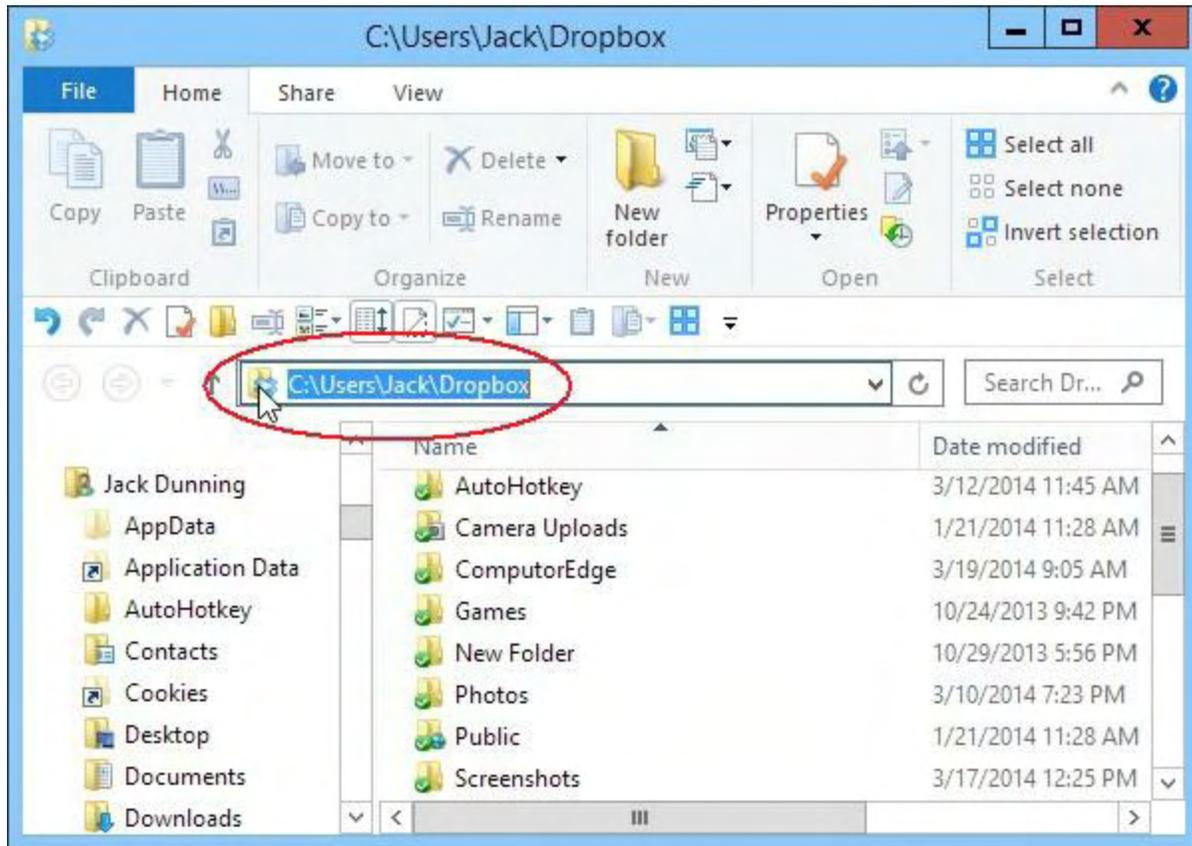
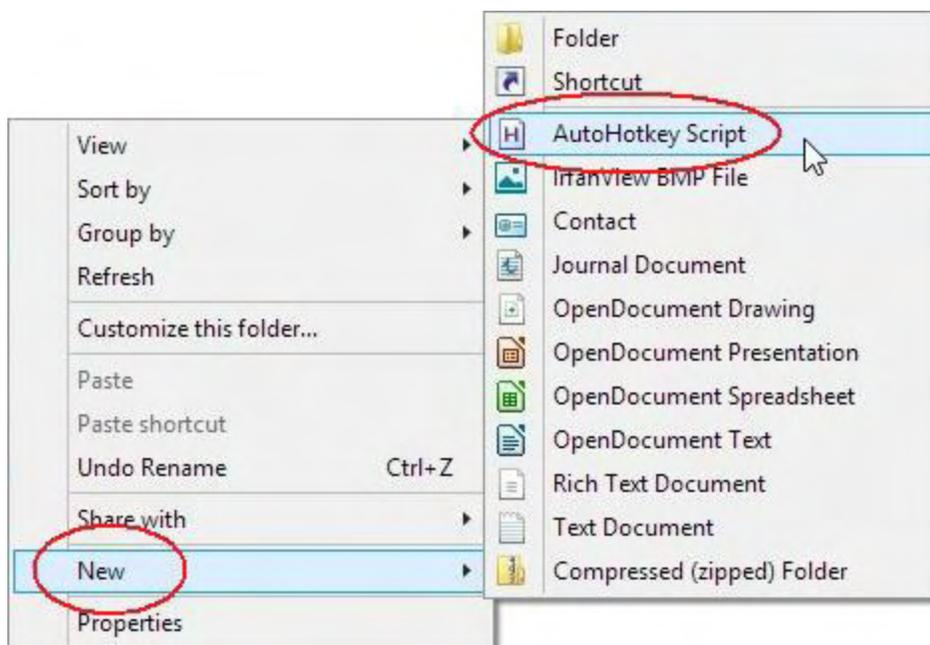


Figure 2. Click the folder icon on the left side of the path field to highlight the correct syntax for the folder path. Use CTRL+C to copy.

In Windows XP, the folder path will already be in the proper format. Just select and copy. When used in conjunction with the AutoHotkey Run command, this copied path automatically opens the target folder in Windows Explorer.



Once you have installed AutoHotkey, you can right-click in your script folder (or for that matter any folder) and select New => AutoHotkey Script (see image at left). A new AutoHotkey file will be created with the AHK extension. Give it any name you like—possibly, *OpenFolders.ahk*.

Tip: When the AutoHotkey software is installed on your Windows computer, it

adds a number of options to your Windows Explorer right-click context menu. In addition to the New => AutoHotkey Script option mentioned above, whenever you right-click on an AutoHotkey script file name (AHK extension) options for Run Script, Compile Script, and Edit Script are displayed. These options make it much easier to work with scripts. Editing, testing, and compiling are always just one right-click away.

Right-click on the new AutoHotkey script file name and select Edit Script. Your default text editor will open the file for editing. (In many cases, the default text editor will be Notepad. If another editor or word processor opens, be sure that you always save the file as text with the AHK extension.) Add the following line of code to the file:

```
!2:: Run, C:\Users\Jack\Dropbox
```

where you substitute your copied path for *C:\Users\Jack\Dropbox*. (Type *Run*, then use CTRL+V to paste the new folder path.) Save the file, then right-click and select Run Script which loads the script into memory. That's all there is to it!

Now, every time you use the hotkey combination ALT+2, the target folder will open (or activate if it's already open).

There are certain characters that represent activating hotkeys in AutoHotkey. In this example, the exclamation point (!) represents the ALT key. For CTRL use ^ and for the  key use #. These key symbols can be found in the AutoHotkey online documentation for [Hotkeys](#). When these characters (or a combination of them) are used with another key, it creates a hotkey which activates when they are pressed simultaneously.

The AutoHotkey [Run command](#) can be used to open folders, open Web pages with your default Web browser, or load programs.

Add a new line of code with a new hotkey combination for each folder:

```
!1:: Run, C:\Users\Jack\AutoHotkey
!2:: Run, C:\Users\Jack\Dropbox
!3:: Run, \\JACKSLAPTOP\editorial
```

These lines add two more folders with new hotkey combinations (ALT+1 and ALT+3). Note that the third option is accessing a shared folder on my laptop computer through the network.

If all you want are hotkeys that open your most used folders, then, after adding a line of code for each folder, you can stop right here. But if you have trouble remember the hotkeys, or just want to get a little fancier, then you can add all the hotkeys to a pop-up menu.

## Open Folders with a Pop-up Menu

There are only a couple of lines of code required to turn your hotkeys into a pop-up menu.

First the [Menu command](#) is used to add an option to a menu called *Folders*:

```
Menu, Folders, Add, Dropbox,!2
```

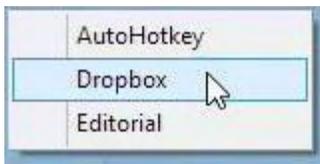
The menu will display *Dropbox* as the item name and the now familiar *!2* (ALT+2) is the hotkey action that clicking the menu item will activate. To display the menu, another hotkey combination is created:

```
!x::Menu, Folders, Show
```

which uses the *Menu* command to *Show* the menu called *Folders*. The combination *!x* (ALT+X) was used because the keys are close together on the keyboard for easy access.

Add another line of code for each menu item:

```
Menu, Folders, Add, AutoHotkey,!1
Menu, Folders, Add, Dropbox,!2
Menu, Folders, Add, Editorial,!3
```



Save the file and Reload the script. (Right-click on the AutoHotkey icon in the System Tray and select Reload This Script.) Now whenever you use ALT+X, the menu will pop up at the mouse cursor's location (see image at left). Select the folder you want to

open.

If this script does what you want, stop here! But what if you don't want to use the mouse at all?

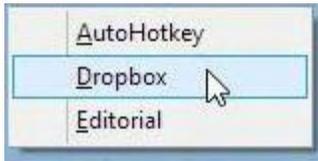
## Adding Hotkeys to the Menu

Adding a hotkey to the menu is merely a matter of putting an ampersand (&) in front of the letter you want to use as the activating key. Here is the entire script with the menu hotkeys added:

```
Menu, Folders, Add, &AutoHotkey,!1
Menu, Folders, Add, &Dropbox,!2
Menu, Folders, Add, &Editorial,!3
```

```
!1:: Run, C:\Users\Jack\AutoHotkey
!2:: Run, C:\Users\Jack\Dropbox
!3:: Run, \\JACKSLAPTOP\editorial
```

```
!x::Menu, Folders, Show
```

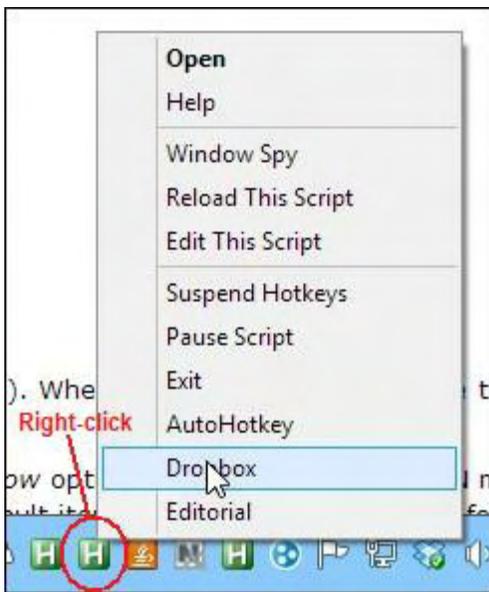


When the ALT+X menu is opened, the letter "a" now activates *AutoHotkey*, the letter "d" activates *Dropbox*, and the letter "e" activates *Editorial*. No mouse is needed. The menu will show those letters underlined, as shown at left.

Important note: While the hotkey combination lines of code (!1, !2, !3, and !x followed by the double colon ::) can appear in any order, the three *Menu*, *Folders*, *Add* lines must appear first in the script before any of the double colon lines. These *Menu* lines need to load immediately. If any of the hotkey setup lines are encountered before the *Menu*, ..., *Add* lines, the *Menu*, ..., *Add* lines will not load.

If this is enough, stop here! But, what if you want to only use the mouse without any hotkeys?

## Adding the Menu to the System Tray Right-Click Menu



If you prefer to do everything with clicks of the mouse, then with minor modifications you can add the menu to the right-click menu of the System Tray icon. Then all you need to do is right-click on the running AutoHotkey icon, then left-clicking on the target menu item (see image at left).

The only required change to the script is replacing all occurrences of *Folders* with the word *Tray*. Then the menu will be added to the bottom of the System Tray AutoHotkey icon right-click menu. All of the hotkey combinations will continue to work, but now you will be able to do it all with only the mouse.

Note: If you do activate the menu with ALT+X (menu pops up next to mouse cursor, not in the System Tray), since it is using the same letter as a menu hotkey, the standard menu item "Edit This Script" will interfere with selecting the Editorial folder by pressing the "e" key. You may want to switch the menu hotkey to a non-interfering letter such as *Edi&torial* (activates the letter "t" as a menu hotkey.)

Here is the new script with all the pertinent changes:

```
Menu, Tray, Add, &AutoHotkey,!1
Menu, Tray, Add, &Dropbox,!2
Menu, Tray, Add, Edi&torial,!3
```

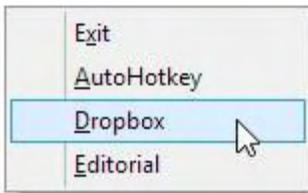
```
!1:: Run, G:\Users\Jack\AutoHotkey
!2:: Run, C:\Users\Jack\Dropbox
```

```
!3:: Run, \\JACKSLAPTOP\editorial
```

```
!x::Menu, Tray, Show
```

If you don't mind all the extra menu items from the standard System Tray right-click menu, stop here! However, the main problem with the script now is that it's too busy with all of the standard items.

## Shortening the Menu



There are a couple of ways to approach removing items from the System Tray menu, but you want to be careful. If you add the line:

```
Menu, Tray, NoStandard
```

all the extra items will be removed, but you will also have no way to stop the script (*Exit*) other than using Windows Task Manager to end the process or modifying the script and reloading it from Windows Explorer. You should at least add *Exit* back to the menu (shown at left) using a label (subroutine) to exit the app:

```
Menu, Tray, NoStandard
Menu, Tray, Add, E&xit,Exit
Menu, Tray, Add, &AutoHotkey,!1
Menu, Tray, Add, &Dropbox,!2
Menu, Tray, Add, &Editorial,!3
```

```
!1:: Run, G:\Users\Jack\AutoHotkey
!2:: Run, C:\Users\Jack\Dropbox
!3:: Run, \\JACKSLAPTOP\editorial
```

```
!x::Menu, Tray, Show
```

```
Exit:
  ExitApp
Return
```

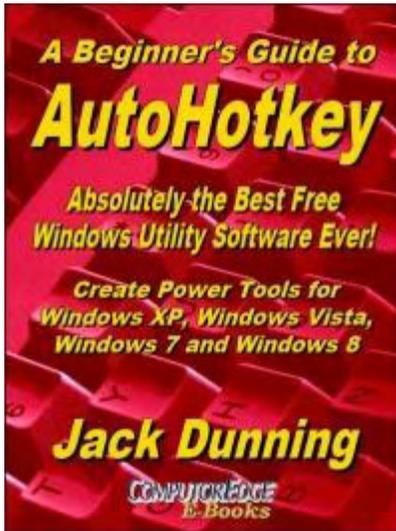
The *Exit* menu item calls the label *Exit*: which issues the [ExitApp command](#) and closes the program.

This last script is not particularly long. It can be easily modified to open Web pages and run programs by adding a new hotkey combination code lines using the *Run* command and another *Menu, ..., Add* code line to match each new operation hotkey. While there is so much more that AutoHotkey can do, you don't need to go any further than the first step in this column. But finding a quicker way to open your most used folders is something that you really should do.

\* \* \*

Find more AutoHotkey scripts at our [AutoHotkey Scripts page!](#)

\* \* \*



The new 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.

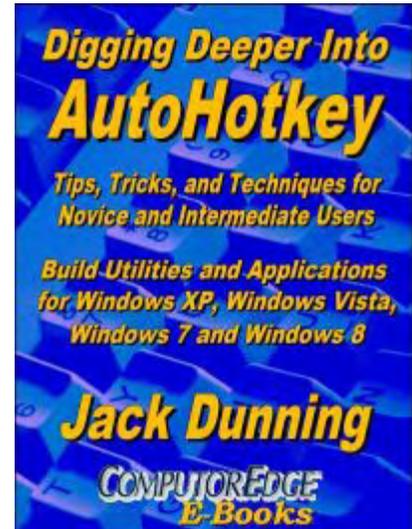
Based upon the series of articles in *ComputerEdge*, Jack takes you through his learning experience as he explores writing simple AutoHotkey scripts for adding repetitive text in any program or on the Web, running programs with special hotkeys or gadgets, manipulating the size and screen location of 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 latest 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 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](http://www.computoregge.com). He can be reached at [ceeditor@computoregge.com](mailto:ceeditor@computoregge.com). Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:*

[\*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 \(Seventh Edition\)!\*](#)

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

[Windows 7](#),

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# Wally Wang's Apple Farm

“Losing a Monopoly” by Wally Wang

## Wally Wang's Apple Farm

*Losing a Monopoly; The Real Popularity of Apple; The Role of Developers; The Benefits of Mobile Computing in Health Care; iPad Sales Not Cannibalizing Macintosh Sales; Anti-Spam Features in Mail.*

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Most Macintosh users today were once Windows users because during the 90s, Windows offered the most software, support, and accessories. If you bought a printer, you could be certain it would work with Windows. If you found an obscure race horse prediction program, you could be sure it would run on Windows. Try using any other operating system and chances were good your choices would be severely limited on which accessories and software you could use. That's why Windows once commanded well over 90 percent of the computer market.

March 2014 Market Share		
	Windows	Mac OSX
Net Marketshare	89.96%	8.16%
StatCounter	89.22%	8.34%

Figure 1. Windows has slipped below 90 percent of the market for the first time in a decade.

Now both StatCounter and Net Marketshare report that Windows has [less than 90 percent](#) of the market and the Macintosh has over 8 percent of the market. While this still heavily favors Windows, you can see the steady decline of Windows and the steady increase of the Macintosh since 2007.

Today when you buy a printer, it's often designed to work with both Windows and a Macintosh. While there are still programs that only run on Windows, there are also many programs that only run on the Macintosh. In many cases from Microsoft Office and AutoCAD, big companies release their software on both platforms.

Date	Windows	Mac OS
December, 2007	95.53%	3.74%
December, 2008	94.50%	4.48%
December, 2009	93.75%	5.20%
December, 2010	93.78%	5.21%
December, 2011	92.23%	6.36%
December, 2012	91.74%	7.07%
December, 2013	90.24%	7.54%
[ source: Net Market Share]		

Figure 2. While Windows steadily declines, the Macintosh steadily increases over time.

Of course, the statistic about Windows dipping below 90 percent conveniently ignores the massive growth in iOS and Android over the past few years. More people rely on tablets and smartphones instead of a Windows PC to browse the Internet, send and receive e-mail, and exchange instant messages. Anyone remember when AOL Instant Messenger (AIM) and ICQ dominated the instant messaging market?

In the old days, people bought Windows PCs because that's what they used at work. Nowadays people are using their own technology instead of company PCs and smartphones. While some people might still want to use a Windows PC, many others do not, which forces corporations to adapt to a mix of Windows, OS X, Linux, iOS, and Android on their networks.

As fewer people rely on Windows, fewer developers are focused exclusively on developing Windows programs. With fewer Windows-only programs, there's less of a need to get a Windows PC. As developers focus on iOS and Android, there's more of a need to get an iOS or Android device instead.

Of course, to create iOS apps, you need a Macintosh. Since you can create Android apps on either Windows or a Macintosh, any developer wishing to develop for both iOS and Android can buy a Macintosh or a Macintosh and a Windows PC. Obviously it's more cost effective to buy one Macintosh instead of a Macintosh and a Windows PC, so there goes another incentive to buy a Windows PC.

With the schizophrenic user interface of Windows 8 turning off novices and Windows enthusiasts alike, Windows supporters can either use add-ons like Classic Shell or Start8 to make Windows 8 usable again, or wait another year for Windows 9 to fix the problems that Windows 8 needlessly created.

With fewer people needing Windows, Microsoft's other monopoly relies on Microsoft Office. While Windows supporters like to point out the openness of PCs, they conveniently ignore the proprietary format of Microsoft Office that helps maintain Microsoft Office's artificial monopoly in the office suite market.

Microsoft tried to use Office as an incentive for their Surface tablets, which didn't seem to boost sales. By withholding Office from the iPad and Android, Microsoft has basically trained everyone to [rely less](#) on Microsoft Office for anything. After all, the main advantage of using Microsoft Office is file format compatibility, but once you start using alternative programs that can share files easily, you may realize you may not need Microsoft Office after all.

With Apple giving their iWork office suite away for free and other Microsoft Office alternatives available, such as Google's [QuickOffice for iOS](#) and Android, how crucial is Microsoft Office anymore? The answer is not so much every day. Just visit the App Store, search for "Microsoft Office," and you'll find plenty of apps that either let you read Microsoft Office files or replace Microsoft Office altogether.

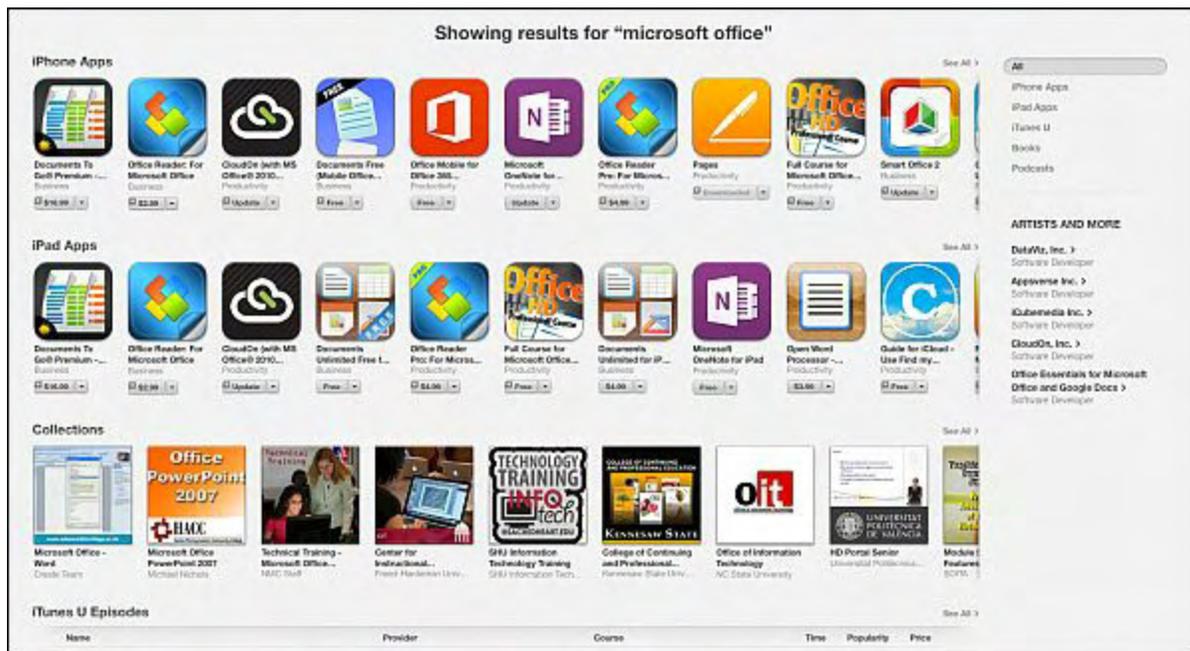


Figure 3. There are plenty of Microsoft Office alternatives for iOS.

Microsoft makes plenty of money with other products such as the tools and server software, yet how many people would have used these programs if they weren't already using Windows? Take Windows away and people have less of a need to use tools for creating Windows programs and server software optimized for Windows.

As Microsoft deals with free operating systems like iOS, Android, ChromeOS, and OS X, they can no longer earn the bulk of their income selling operating system licenses. For the first time, Microsoft actually has to compete on a level playing field with their rivals. If Windows 8, Windows Phone, and Surface tablets are the best that Microsoft can do, look for Google, Apple, and other companies to continue growing at their expense.

## The Real Popularity of Apple

With so many companies selling Android smartphones and tablets, it's not surprising that the market share of Android devices has skyrocketed. What's also not surprising is that the bulk of those Android manufacturers make little money off the sales of these devices.

When you buy an iOS device, Apple makes money on the sale of the device. Then if you buy apps, Apple makes more money on each app sale. When you buy an Android device, the manufacturer only makes money on the sale of that device. If you buy Android apps, the Android app store (such as Google) makes money off that sale, leaving the Android manufacturer missing out on app sale profits.

What's also not surprising is that despite the massive growth of Android devices, people still want iOS devices like the iPhone and iPad. The common belief is that Android devices are cheaper, but even in emerging markets, people still [want an iPhone](#).

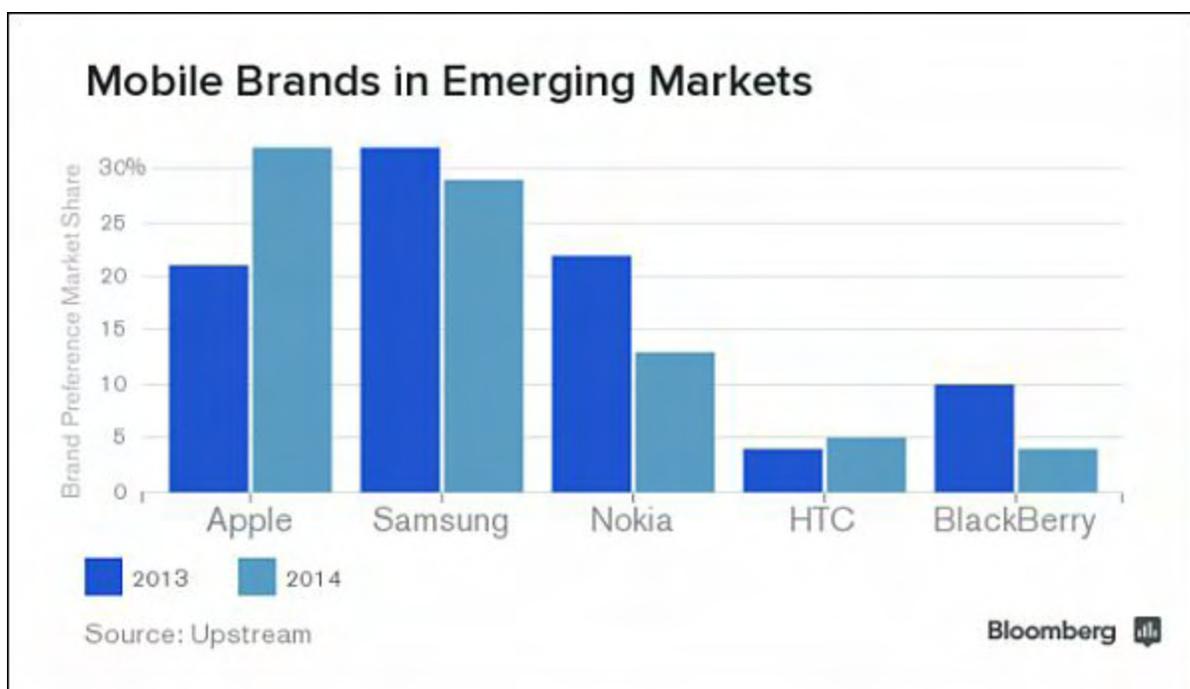


Figure 4. Emerging markets still want an iPhone even if they can't afford it.

The biggest advantage of Android is that you can choose from small to large screen phones and tablets. Yet if so many people still want an iPhone, there's a good chance that a certain percentage of Android users will switch to an iPhone when they can afford it while a smaller percentage of iPhone users will switch to Android or even Windows Phone.

To change the perception that Android smartphones aren't desirable, Samsung has been spending millions to pay celebrities to use Samsung smartphones at high-profile events like the Olympics and Academy awards. Yet too often these celebrity endorsements backfire.

Samsung paid LeBron James to use a Samsung smartphone and he [recently tweeted](#) how his Samsung phone wiped out all of his data. When Ellen DeGeneres hosted the Academy

Awards, she used a Samsung phone to take pictures. Then when she went backstage, she [used her iPhone](#).

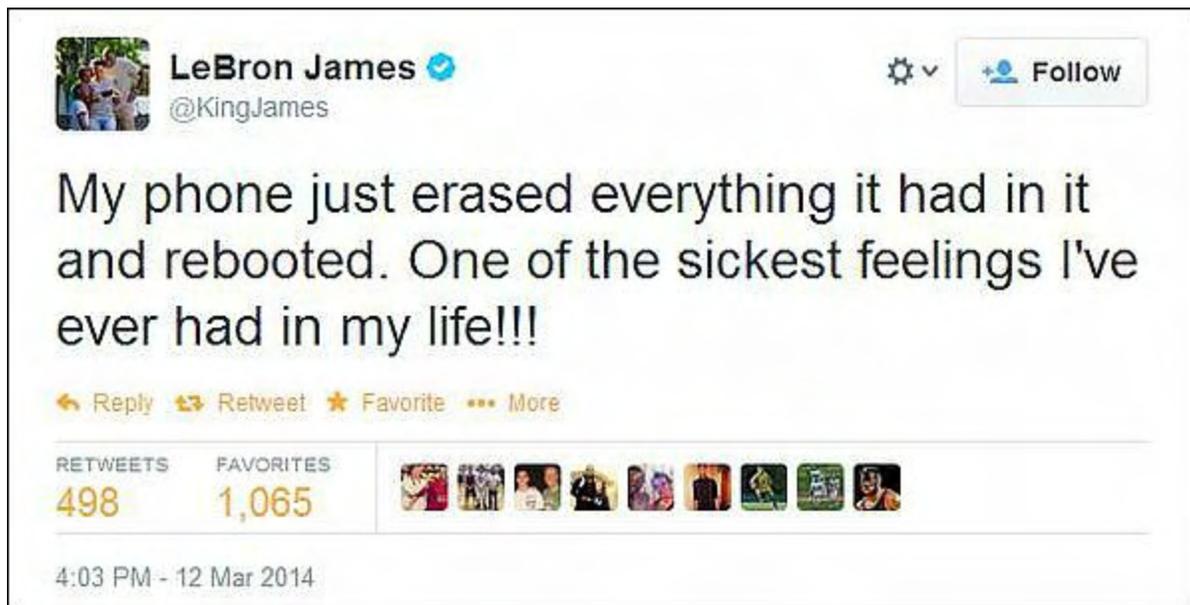


Figure 5. LeBron James tweeted about the failure of his Samsung smartphone.

Tennis player David Ferrer tweeted how much he loved his Samsung smartphone, except he did it [using his iPhone](#). When she was Blackberry's creative director, singer Alicia Keys got caught tweeting from her iPhone. When Oprah Winfrey gushed about how much she loved Microsoft's Surface tablet, she tweeted from her iPad.

When companies like Samsung, Blackberry, and Microsoft pay millions to get celebrities to endorse their products, yet they all wind up choosing Apple products instead, that pretty much tells you everything you need to know about how desirable other devices are compared to Apple products.

## The Role of Developers

Steve Ballmer once [started a Microsoft conference](#) by screaming, "Developers, developers, developers!" By saying this, Steve Ballmer suggested that the success of Windows lay entirely with developers creating Windows-only applications, which made Windows so popular.

Follow the developers and you'll see where the computing market is heading. When companies release a smartphone app, it's almost always for iOS and often for Android as well. You almost never see a smartphone app heavily publicized that ignores both iOS and Android.

To win users, every operating system needs developers. BeOS was once touted as a multimedia operating system, but developers weren't that interested so BeOS slowly faded away. WebOS was once promoted as better than iOS, especially for multi-tasking. Even

though Hewlett-Packard turned WebOS into an open source project, it too faded away when few developers flocked to it.

Now Windows 8's Modern interface faces similar hurdles. Mozilla recently abandoned their attempt to create a Modern version of Firefox citing [lack of interest](#) among users. Yet Firefox remains hugely popular on Windows, OS X, and Linux.

If Microsoft can't get developers interested in creating Windows 8 Modern apps, chances are good fewer people will care about Windows 8's Modern interface. When Apple introduced iOS, they also introduced their iWork office suite to show how a touch-centric interface could work with a word processor, spreadsheet, and presentation program. This showed developers what was possible with iOS apps.

When Microsoft introduced the Modern tile interface, they failed to demonstrate how that tile interface could create compelling touch-centric apps. Instead, Microsoft cheated and created a special desktop version of Microsoft Office for Windows RT but forbid developers from creating similar desktop programs for Windows RT. Without Microsoft demonstrating the usefulness of the Modern tile interface, few people have a reason to adopt the Modern tile interface.

If developers aren't interested in the Modern tile interface, users have little reason to get excited about it either, which further drives developers away from creating Modern apps. With the lack of touch-centric Modern apps, Windows 8 must rely on turning ordinary desktop programs into touch-centric programs, which means less than optimized results.

Now combine the fact that Windows Phone apps [aren't compatible](#) with Windows RT apps and you have another headache for Microsoft. Microsoft plans to merge Windows RT with Windows Phone so developers don't need to write separate apps for each operating system, but shouldn't Microsoft have just done that from the beginning instead of creating two incompatible operating systems for mobile devices?

If you're a mobile developer, you already know the most lucrative market is iOS followed by Android. You also know that Windows Phone and Windows RT/Windows 8 Modern are far behind. As a user, you can find the greatest variety of software for iOS and Android, which used to be the greatest advantage to advocating the use of Windows. If you want a mobile device, the developers have already spoken so your best bet (for now) will be buying an iOS or Android device.

## **The Benefits of Mobile Computing in Health Care**

When smartphones and tablets first arrived, critics completely missed their advantages and focused solely on their drawbacks. However, the ability to put a powerful computer in your hand has gone way beyond browsing the Internet or following maps. Stanford University's

School of Medicine has developed a [\\$90 adapter](#) for the iPhone that can take high-quality images of the front and back of the eye.



Figure 6. Stanford's iPhone adapter can replace more expensive eye imaging equipment.

By exploiting the iPhone's built-in camera, this \$90 adapter can replace more expensive and bulkier equipment that costs thousands of dollars and requires extensive training. David Myung, one of the authors of the research paper, said "Adapting smartphones for the eye has the potential to enhance the delivery of eye care—in particular, to provide it in places where it's less accessible. Whether it's in the emergency department, where patients often have to wait a long time for a specialist, or during a primary-care physician visit, we hope that we can improve the quality of care for our patients, especially in the developing world where ophthalmologists are few and far between."

Take a picture of your eye, send it to your doctor, and now your doctor can diagnose any eye problems without wasting time examining your eyes with expensive equipment that requires you to visit a fixed facility. With mobile computers capable of examining eyes, doctors can spend more time treating problems and less time examining patients.

By harnessing the power of mobile computers, Stanford's School of Medicine has found ways to lower costs and improve access to health care. To learn more about the latest trends to use mobile computing in health care, read the [Journal of Mobile Technology in Medicine](#). Anyone still think that computers are completely useless unless you can use a physical keyboard?

## iPad Sales Not Cannibalizing Macintosh Sales

When Apple introduced the iPad, they effectively killed the entire netbook market and also

affected the traditional PC market. While PCs sales keep dropping as more people rely on smartphones and tablets, Macintosh sales seem to be affected far less than Windows PCs.

Analyst Charlie Wolf of Needham and Company even reports that sales of Macintosh computers to the education market has [held steady](#) while the iPad has taken [94 percent](#) of the education market.

The maker of PocketPhonics, John Friend, said that Apple's dominance in tablet-specific software and its leadership role in e-textbooks "makes it difficult to justify developing for any other platform...the Android [tablet] market [in education] is currently too small to support the costs of developing an app."

With Apple introducing the [iPad 4](#) starting at \$399 and 8GB iPhone 5C models in Europe, it's now more affordable than ever to buy an Apple product, especially if you buy a previous generation model or a refurbished model directly from Apple.

\* \* \*

If you have an e-mail address, you'll likely get spam. While you can buy third-party spam filters, the Mail program that comes with OS X comes with a limited range of anti-spam features that you can customize.

Just click the Mail menu and choose Preferences. When a Preferences window appears, click the Junk Mail icon. Now you'll see a list of options you can modify so Mail can deal with the inevitable spam you'll receive in the future.

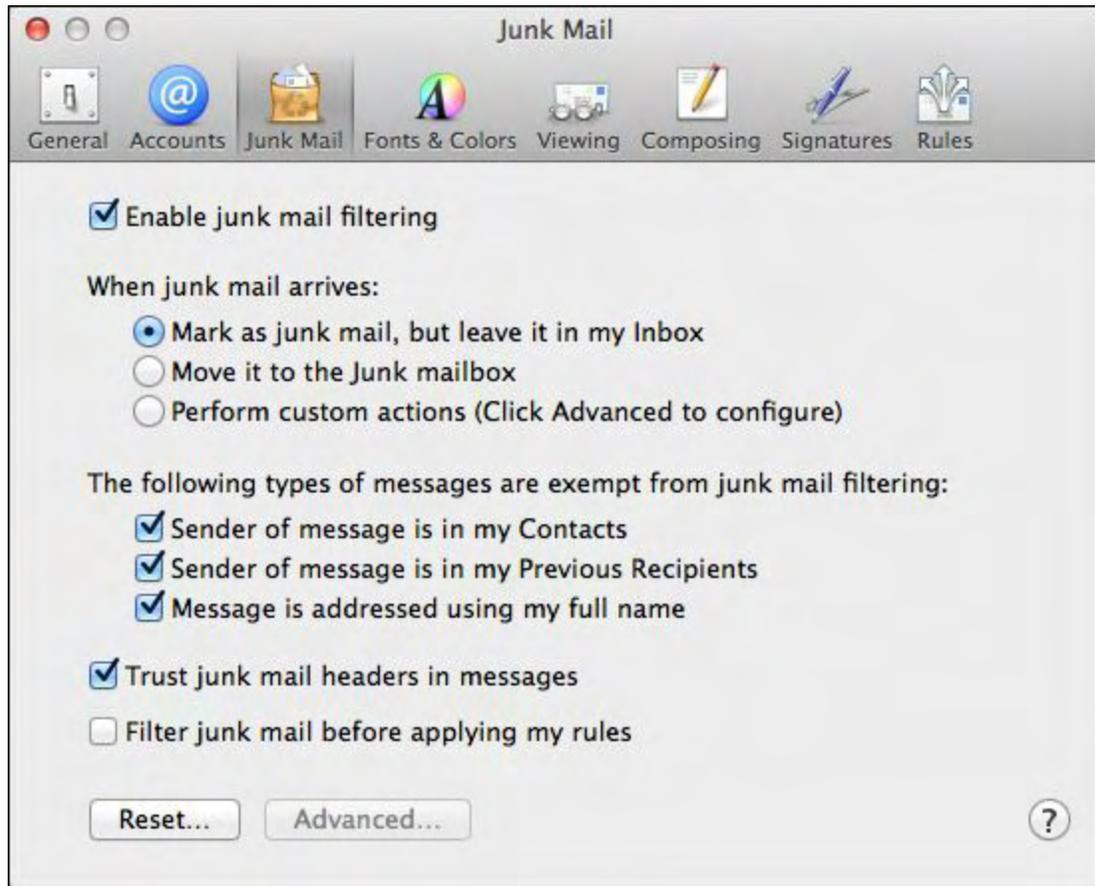


Figure 7. You can customize Mail to deal with potential spam.

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*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](#)

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](mailto:wally@computoredge.com) or you can follow him on Twitter [@wallacewang\\_com](#).



**Without  
Digital Music,  
Life Would  
Be an Error**

## Without Digital Music, Life Would Be an Error

“or, On the Evolution of Online Music Distribution” by Matthew W. Beale

*Pono Up, It's Revolution Time (again); Will the revolution be streamed?; Wooing the Vinyl Set; The Promise of Magic & the Wall of Hype; A Dedicated Music Player...; The Bad Plus!*

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### Pono Up, It's Revolution Time (again)

You say you want a revolution, eh? Well, legendary singer-songwriter Neil Young evidently does. He in fact wants to "restore the soul of music." The reason such a lofty—if not abstract—mission is relevant for discussion here is because he plans to do this by "bringing the highest-quality digital music to discerning, passionate consumers, who hunger to hear music the way its creators intended," according to a press release.



Pono, the much-discussed, high-end digital music project, that has in fact up until this point solely existed in the abstract for most, is becoming a reality after a lot of development work, no doubt, and very public debuts courtesy Kickstarter and SXSW. Young delivered a keynote at the Austin arts and hype fest this year, simultaneously launching the Kickstarter campaign.

## Will the revolution be streamed?

"Our Kickstarter is about bringing creators and consumers together. It is about the formation of a community that values the experience of listening to music the way the artists made it, at the highest quality they can obtain, according to the Pono statement ([ponomusic.com](http://ponomusic.com)).



So, will this revolution be streamed? "Not today, but hopefully some day." Is it a new format? No. So what exactly is Pono? Hawaiian for righteous, Pono intends "to revive the magic that has been squeezed out of digital music." Perfect. Another abstraction. Let's try again: "In the process of making music more convenient...we have sacrificed the emotional impact that only higher quality music can deliver," said the company. Ok. Since "technology has solved some of the underlying problems that forced that tradeoff...you no longer have to choose between quality and convenience when listening to music."

The idea is to tap FLAC and deliver high quality music via proprietary hardware, namely, the PONOPLAYER, available as a pre-order through Kickstarter for a backer pledge of \$300 (a discount of \$99 off the future retail amount). The player uses a FLAC file in such a way that the user can hear "the nuances, the soft touches...the texture and the emotion of the music the artist worked so hard to create."

Formats such as MP3 compromise that, according to the company. "The PonoPlayer is a purpose-built, portable, high-resolution digital-music player designed and engineered in a 'no-compromise' fashion to allow consumers to experience studio master-quality digital music."

"FLAC is a lossless high quality format—that part is like the iPod had in its second generation but with far higher quality," said Rob Enderle, Principal Analyst for the Enderle Group, in an e-mail interview. "This will play to folks who just want high quality music."

The PONOPLAYER, developed in collaboration with Ayre Acoustics, comes with 128GB of storage capacity, and can house "100 to 500 high-resolution digital-music albums." A Pono online music store and app will complement and complete the product offering.



The Kickstarter page, as you probably guessed, offers a number of other rewards for pledging, such as t-shirts (\$50), limited edition PONOPLAYERS autographed by—in addition to Neil Young—Foo Fighters, Red Hot Chili Peppers, Patti Smith, Willie Nelson, etc. (\$400), and a private listening party with Neil Young (\$5k).

## Wooing the Vinyl Set

"This is the moment, now, where people can start to pay attention to quality again," said T. Bone Burnett in a star-studded video of Pono testimonials posted at the project's Kickstarter page. Elvis Costello said that the affordability and convenience of an MP3 player is great, "but it's a bit like seeing a photocopy of the Mona Lisa."



The idea (ideal), again, is to bring the quality of the original studio performance, or as close an approximation as is possible, to music fans, freaks, audiophiles, et al. Music celebrity interviews notwithstanding, I can't personally attest to the quality—the first players are to be delivered in October—but the desire of consumers to get their hands on a player like Pono is evident. At press time, the Kickstarter campaign had raised over \$4 million—the goal was \$800 thousand—with a little help from over 12,000 backers.

"With Apple pulling away from their iPod effort it actually makes some sense to create an iPod like device with improvements to go after folks who liked having a separate music player," said Enderle. "With Pono they are going way back because the devices only connect with a USB cable and will only play stored songs, albeit with very high sound quality."

"There are folks who are again buying turntables and listening to vinyl records suggesting that retro can be successful if you properly target your sales efforts," added Enderle.

## The Promise of Magic & the Wall of Hype



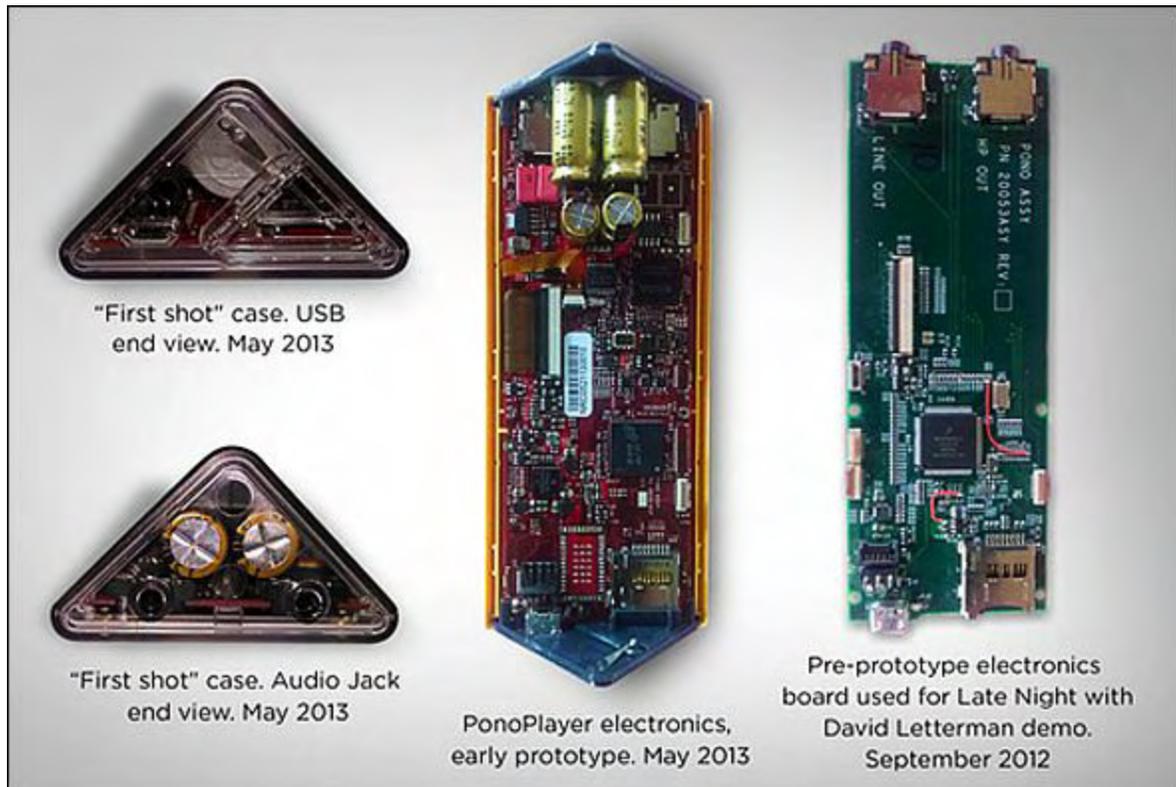
I must admit that without the ability to try out a player, I still felt myself hitting the wall of hype at every turn, and after covering e-commerce in 1999, for instance, am still a bit cynical with regard to press releases with the word "revolutionary" in their first sentence. So John Hamm, Pono Music CEO, was kind enough to engage in a phone interview late several nights ago now—in other words, on the hours of your humble insomniac

seeker.

"The magic is in the integration of the music file, with the player, with the desktop manager," said Hamm. "It's a guaranteed end-to-end experience."

As Hamm pointed out to me in our discussion, both FLAC (along with similar high quality formats), and the means to play them in different environments, is nothing new for true audiophiles, a type of listener that could include anyone reading this.

But for audiophiles, Hamm explains that Pono "went to painstaking lengths to build a player, from an audio engineering standpoint, that's extremely well-designed: the circuitry in it, the shielding of the LCD, the way we put the battery in there, the way we put the analog circuitry separate from the digital circuitry. All these things we did to optimize the player for one, and one thing only, and that was the sound quality."



"It's the finest quality music in the world, and you can fit in the palm of your hand."

## A Dedicated Music Player...

Hamm and others argue that even MP3 files would sound better on the PONOPLAYER. I had to admit that I was reminded of when I was a kid in Austin, wandering into a pyramid store where the nice, older hippie saleslady told me that any apple, for instance, placed under a pyramid would be "the best apple you've ever eaten." (Psst. Pyramid lovers. Please don't send hate tweets/e-mails/whatever. Perhaps she was right. And perhaps she met Steve Jobs back then, too.)

But an explanation for lower quality recordings sounding better on a PONOPLAYER could simply be attributable to the fact that it is a dedicated music player, "meaning it's dedicated to extracting everything from that file," said Hamm.

The project initially tried adding the player to a smartphone, but abandoned the idea I believe because of the logistical complexity created by the number of types/brands of smartphones in use.



I have defended the idea of a dedicated music player, for instance when I tried to understand the digital Sony Walkman, although that may have had more to do with nostalgia, and my own childhood/adolescence spent carrying one (the original cassette model!) everywhere I went.

But, I stand by the idea, and the prospect of having a portable digital music player that's designed both for ease of use and the ability to hear music with this promise of a sort of purity of sound and experience, is appealing. So I suppose I'm saying we'll pick the discussion up again this fall. In the meantime, if you have the money and the curiosity, please check out the [Kickstarter page](#).

Pono "is high quality, low tech, and simple," added Enderle. "There is an audience for a product like that."

## The Bad Plus!



Speaking of upcoming events, The Bad Plus is finally releasing their eagerly anticipated version of *Le Sacre du Printemps*, or, *The Rite of Spring*, on March 25th. Also on topic with regard to audio quality, I've tried to ignore the audience/patron-generated live version posted on Youtube, waiting instead for the official release on Sony Masterworks. So, I'll finally be publishing part 2 for my column, "*Le Sacre Du Printemps* Becomes A Centenarian." ([Here's the first piece](#)). Santé.



*My first published work focused on music, and related obsessions pushed me to become a DJ, Producer, and Music Director in college radio. With this column, I feel as though I'm sort of returning to something I love (although I've never left, really). I've been tracking the evolution of online music distribution since the days of Napster, and obsessively follow music releases across a range of genres. One of my music players (on each of my devices) is going from the time I wake up until the end of the day, lulling me to sleep (or what little I actually grab). "Without music, life would be an error." ~ Fred, the mad German*

*Significantly, I'm returning to work after a prolonged personal leave, functioning in the capacity as a caregiver. Please feel free to contact me with story ideas or suggestions about digital music releases at [withoutmusiclifewouldbeanerror@hushmail.com](mailto:withoutmusiclifewouldbeanerror@hushmail.com).*



## Editor's Letters: Tips and Thoughts from Readers

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

*"LogMeIn Remote Desktop Replacement," "Safe Downloads," "Solid State Drives"*

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### LogMeIn Remote Desktop Replacement

Google now offers their free [Chrome Remote Desktop](#) that allows you to set up remote access to your desktop via their Chrome Browser and associated App. Especially designed for use with ChromeBooks.

-Stewart A. Levin, Stanford, CA

*Thanks, Stewart, for the information. I was so intrigued that I reviewed Chrome Remote Desktop and [wrote about it](#) this week.*

-Jack Dunning

Hi Dave,

I agree with you on your suggestion to use TeamViewer as an alternate to LogMeIn. I use TeamViewer often to remotely help many family and friends with their PC issues. It is easy for them to install and provide the connection id.

It sure helps to see their desktop when they complain that the "thingy is not working like it used too."

-Jack Kreile, San Diego, CA

### Safe Downloads

[Regarding the March 7 [Digital Dave column](#).:]

In your answer to Dave Stang's question about finding a "safe" site to download Opera, you mentioned CNET's Download.com. I would caution people about CNET's Downloads Web site. There are many add-ons on their download page with a download button. If you select the wrong or unofficial "download here" button, you can get a download filled with "bundled"

software, some of which is practically impossible to get rid of. Download.com used to be my go-to site for downloads, not anymore due to the confusion of which button to click.

-Dave Bisbee, Chula Vista, CA

Beware of Download.com for software, especially free variety. You have to be super careful to avoid installing a bunch of programs you neither want nor need. This is not an isolated complaint as there is a lot of commentary along the same lines. There are some other sites (e.g., Hippo) that scan their offerings with more care.

-Josil, San Diego, CA

## Solid State Drives

When I bought my first solid state hard drive, I set it up as my OS system drive for Windows 7, all my downloads and program files I installed on the old disk drive, it worked great, booted fast and jumped my performance index up to 7.2! That is until Windows 8 came out and they offered a \$40.00 upgrade and dual boot capability, I bought it. Problem was the solid state drive was only 60GB, too small for Windows to install the other operating system, bummer.

I now have upgraded to a 256GB drive and it runs both OS's excellently. I formatted the 60GB drive and use it as a program drive for my graphics programs that need the speed.

I don't think I could have anticipated the dual boot need when buying my first SSD, live & learn.

-Dave Bisbee, Chula Vista, CA

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*ComputerEdge always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the specific article/column at [ComputerEdge.com](http://ComputerEdge.com). Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section. If you want to submit a short "ComputerQuick Review", or yell at us, please e-mail us at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com). If you would like to review our recent e-books, please visit [ComputerEdge E-Books](http://ComputerEdge E-Books).*

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