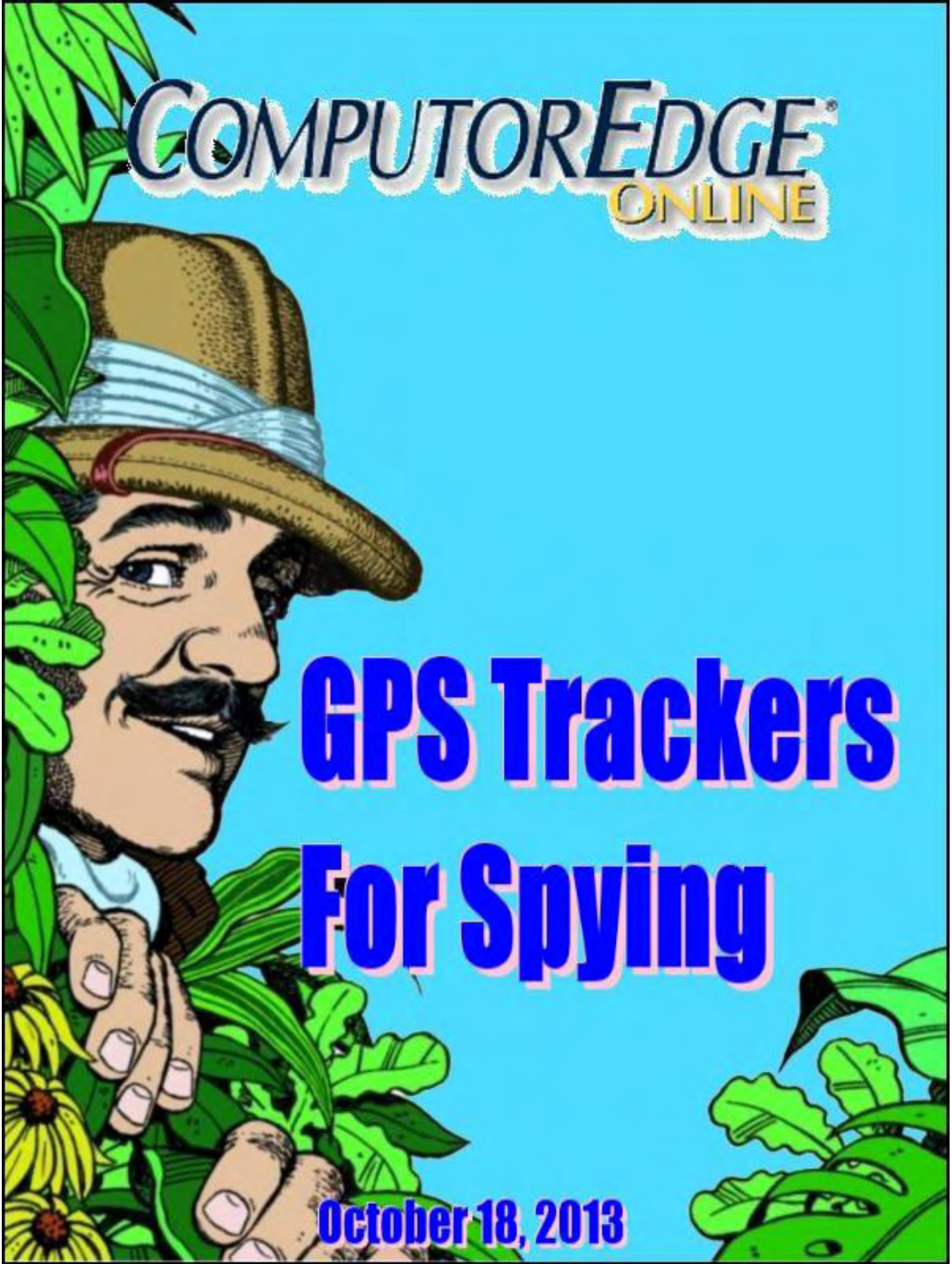
ComputorEdge® Online



GPS Trackers For Spying

October 18, 2013

List of *ComputorEdge* Sponsors

San Diego *ComputorEdge* Sponsors

Colocation and Data Center

redIT

With approaches like smart security, customized colocation and an extensive range of managed services, redIT helps you intelligently leverage IT.

Computer Books

LOL Computer/Internet Humor

Anecdotes and Jokes about Computers, the Internet, Users, and the People Who Work on Them.

Windows 7 Secrets E-Books

Four-Book Windows 7 E-Book Special at Amazon!

Computer Store, Full Service

Chips and Memory

New Systems Starting At $269 Visit Our Website or Call for Hardware, Software, Systems, or Components Laptop*Desktop*Server IT Service * Upgrades * Service Everyday Low Prices

Macintosh Specialists

Maximizers

Serving San Diego County Since 1988 * Onsite Macintosh Service for Home and Small Office Needs * ACSP: Apple Certified Support Professional ACTC: Apple Certified Technical Coordinator Apple Consultant's Network

Repair General

Hi-Tech Computers

Notebooks, Monitors, Computers and Printers We Buy Memory, CPU Chips, Monitors and Hard Drives Windows 7 Upgrades Phone (858) 560-8547

Colorado *ComputorEdge* Sponsors

Computer Books

LOL Computer/Internet Humor

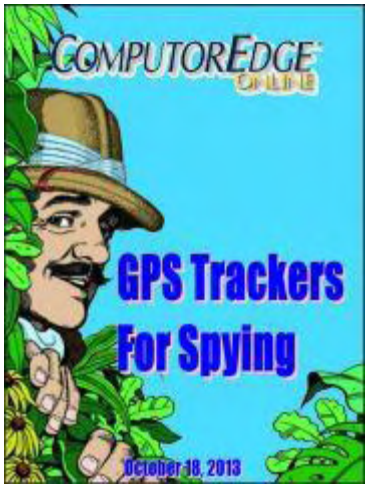
Anecdotes and Jokes about Computers, the Internet, Users, and the People Who Work on Them

Windows 7 Secrets E-Books

Four-Book Windows 7 E-Book Special at Amazon!

ComputorEdge™ Online — 10/18/13

Click to Visit *ComputorEdge™* Online on the Web!



GPS Trackers for Spying

GPS trackers are devices which record the movements of something or someone and report back. There are plenty available, but they are not all the same. Plus, are GPS trackers legal?

Magazine Summary

List of *ComputorEdge* Sponsors

Digital Dave
by Digital Dave

Digital Dave answers your tech questions.
How Can I Tell When the Computer Finishes Booting?; Picture Size in E-mails; Server Busy Error.

GPS Tracking Units for Following Something or Someone
by Jack Dunning

There Are Different Types of GPS Tracking Units for Different Purposes
Before you buy and use a GPS tracking unit, find out which one is right for you and the law in your state.

Windows Tips and Tricks: Controlling Startup Programs
by Jack Dunning

With the Free Autoruns Utility, All Startup Programs Can Be Seen in One Window
The programs and services that load after Windows login are found in various locations. Now you can work with them all in one place with the Microsoft utility Autoruns.

AutoHotkey Tips for Windows: Putting a Data File in a Variable
by Jack Dunning

Reading a Data File into a Variable Can Save Time and Disk Access
While it is often easy to work directly with a saved data file, reading the same file into a variable may speed up your AutoHotkey apps.

Wally Wang's Apple Farm
by Wally Wang

Forget about OS X and Windows
Forget about OS X and Windows; Creating Your Own E-Mail Newsletter; Wearable Computers; Blowing up Chemicals Safely; The Confusion of Windows RT; Activity Monitor.

Beyond Personal Computing
by Marilyn K. Martin

Cloud Computing: Hazy Expectations with Chance of Foggy Outcomes
From the origins of the cloud to the best and worst countries for cloud computing.

Editor's Letters: Tips and Thoughts from Readers
by ComputorEdge Staff

Computer and Internet tips, plus comments on the articles and columns.
"Clear the Confusion," "Incorrect Windows 8 Info," "VoIP (Voice over IP Internet Phone Service)"

Send mail to *ceeditor@computoredge.com* with questions about editorial content.
Send mail to *webmaster@computoredge.com* with questions or comments about this Web site.

ComputorEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 484-1998

Click to Visit *ComputorEdge*™ Online on the Web!

Digital Dave

"Digital Dave answers your tech questions." by *Digital Dave*

How Can I Tell When the Computer Finishes Booting?; Picture Size in E-mails; Server Busy Error.

How Can I Tell When the Computer Finishes Booting?

Dear Digital Dave,

I've have a lot of programs that load up when I boot (and reboot). The problem is I don't really know when they have all loaded up when I begin pounding away on the keyboard. Is there a program that will let me know that all *the crap I have setup to run at boot is done loading?*

I know I could go through and uninstall stuff, but I am satisfied with the stuff I have. I just hate when I start typing and I have to wait because one or more programs are still loading.

Big fan,
Mark
San Diego, CA

Dear Mark,

If you're using a computer with lots of startup programs then it certainly can be frustrating waiting for them all to load. If you start working too soon, the programs and typing will be sluggish and unresponsive (especially in Vista). There is no point is starting too soon.

Since some startup programs take longer than others to load and Windows will work to load programs simultaneously (share the CPU) it can be difficult to know when all the startup programs are loaded. Some people just watch the hard drive activity light until it dies down, but this is not always reliable since non-disk activity could be consuming the processor time.

You can run Task Manager (CTRL+ALT+ESC) after logon while the computer is loading the startup programs. If you know which applications load, then you can watch the process in the Applications tab. However, there may be many processes which will not appear in that tab.

By opening the Processes tab, you can view the active and loading processes. Click on the CPU heading to sort the processes by CPU usage (see Figure 1). (If all zeros display at the top, click the heading again to reverse the order.) If the System Idle Process hits between 85 and 95 percent—and stays in that area, the loading is most likely completed. There could be other background activity which might cause System Idle Process to stay lower.

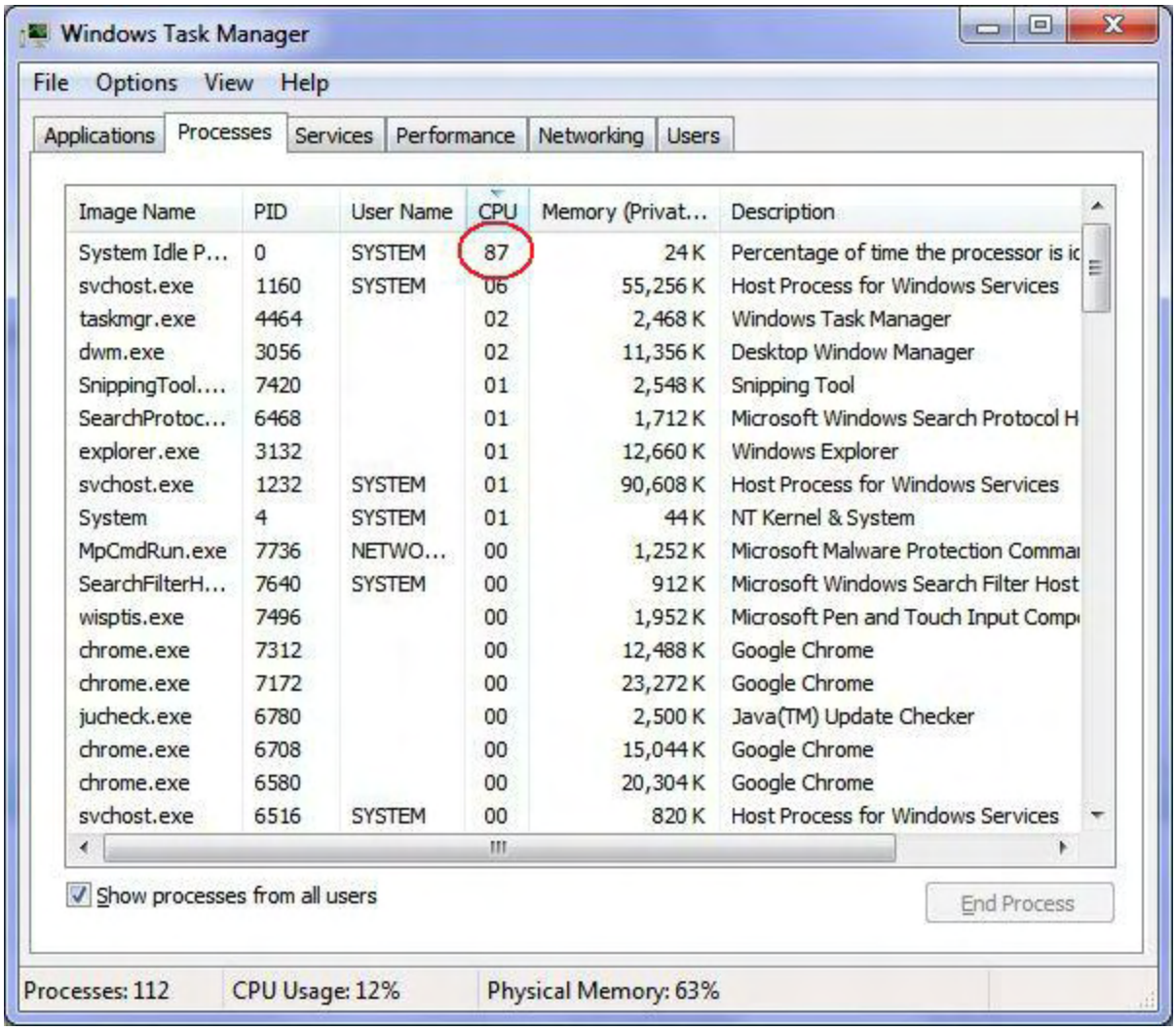


Figure 1. When the computer is finished loading startup programs, the System Idle Process will rise as there are less demands on the CPU.

Note: If you don't see System Idle Process, then click the "Show processes from all users" button at the bottom of the window.

Probably the best way to tell when your computer has finished booting is through the Performance tab in Task Manager. The CPU Usage graphic display shows a history of CPU activity. When the usage drops (and stays) at between five to ten percent, then the loading is generally complete. Processor demaind is easier to see in this graphic history.

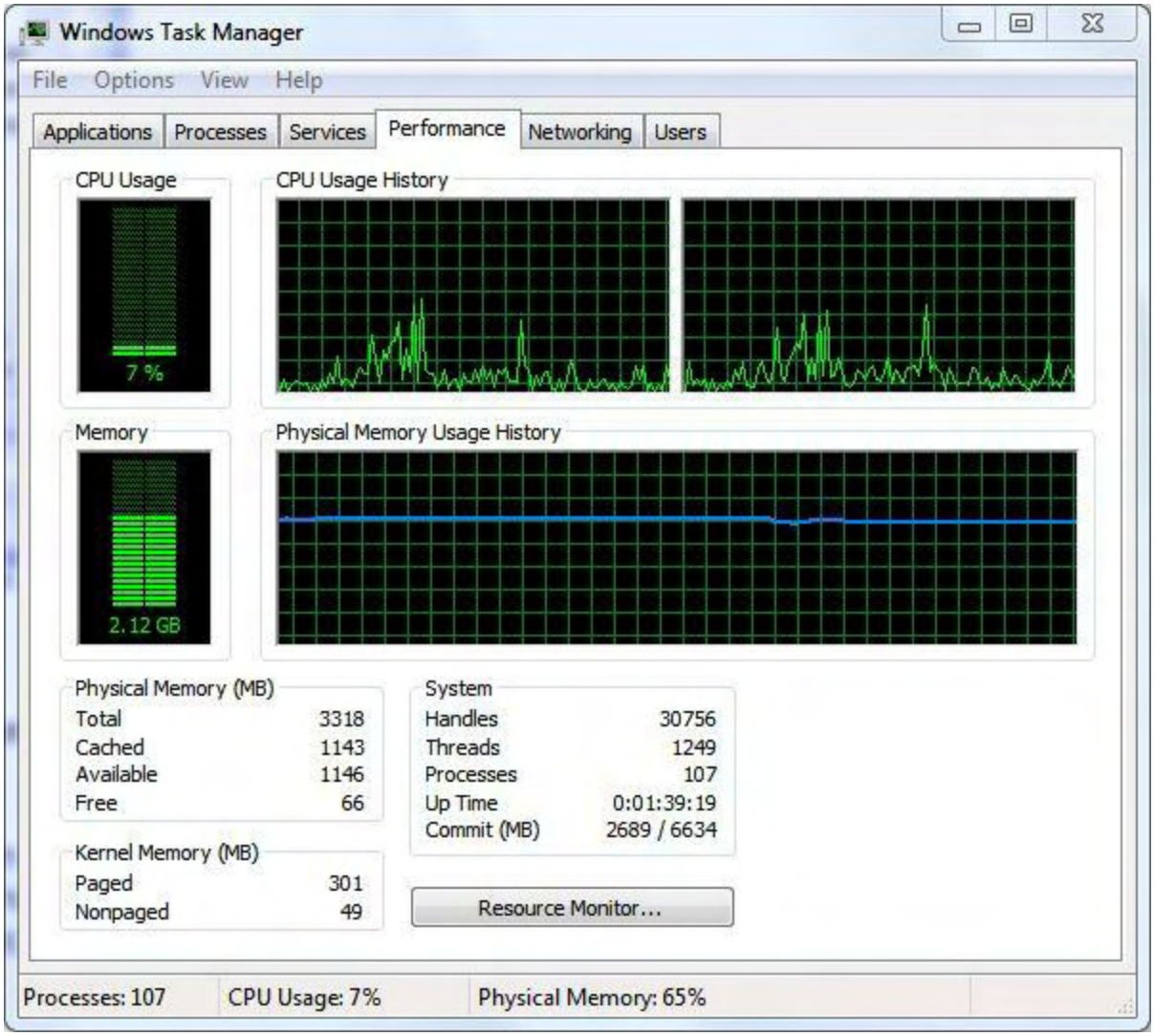


Figure 2. When the CPU Usage drops and stays there, the computer has usually completed loading the startup programs.

For slow booting computers, I'm an advocate of the cup-of-coffee method. Start up the computer, login, then go get a cup of coffee. By the time you're finished fooling with the coffee (or tea), your computer is likely ready to go. I've found that Windows 7 computers are rarely a problem and Windows 8 computers boot even faster.

Digital Dave

Picture Size in E-mails

Dear Digital Dave,

Opening a higher resolution photo using Gmail that was e-mailed to me—when I open the photo using my 17" HP laptop, the photo is too large for the screen and the scroll bars appear so I can move it to see everything in the picture. However, when I open the same

photo in Gmail using my iPad, the whole photo is properly scaled so I can view the entire photo on screen without scrolling.

I looked for a feature in Gmail that would allow me to have these photos open so I wouldn't have to scroll on my laptop, but can't find anything to help me with this. Is there anything I can set in Gmail, so I don't have to scroll to see the whole photo when using my laptop? Or is this just a PC issue vs. an Apple issue?

Thanks,
Jerry Hughes
San Diego, CA

Dear Jerry,

This is not a PC versus Apple issue, but rather a software issue unrelated to Gmail (although it may have something to do with how Google designs its Gmail Web mail pages). I'm guessing that you're using Internet Explorer to access your Gmail.

When I use IE, I get the same look that you describe. But if I use Google Chrome or Mozilla Firefox, the oversized image fits the screen and offers a zoom in icon (magnifying glass with plus sign in it) if I want to see the image at full resolution (with the scroll bars). The problem is with Internet Explorer (or whatever program you're using if it's not IE).

Safari on the iPad meets the same specification as Chrome and Firefox and therefore resizes photos in the same manner. I don't know if Google can redesign their Gmail Web pages to make the resize feature work in IE, but they probably don't have much motivation to do it.

Digital Dave

Server Busy Error

Dear Digital Dave,

Recently when one of my Windows computers boots up I get a "Server Busy" error that says to switch to the other application(?) to fix it. Such application is not to be found. The way I'm fixing it is ending the process with Task manager, which seems harmless right now. I can't figure out what's causing it.

I'm a long time reader and you've helped me many times in the past. Keeping my fingers crossed.
Ralph Nebiker
San Diego, CA

Dear Ralph,

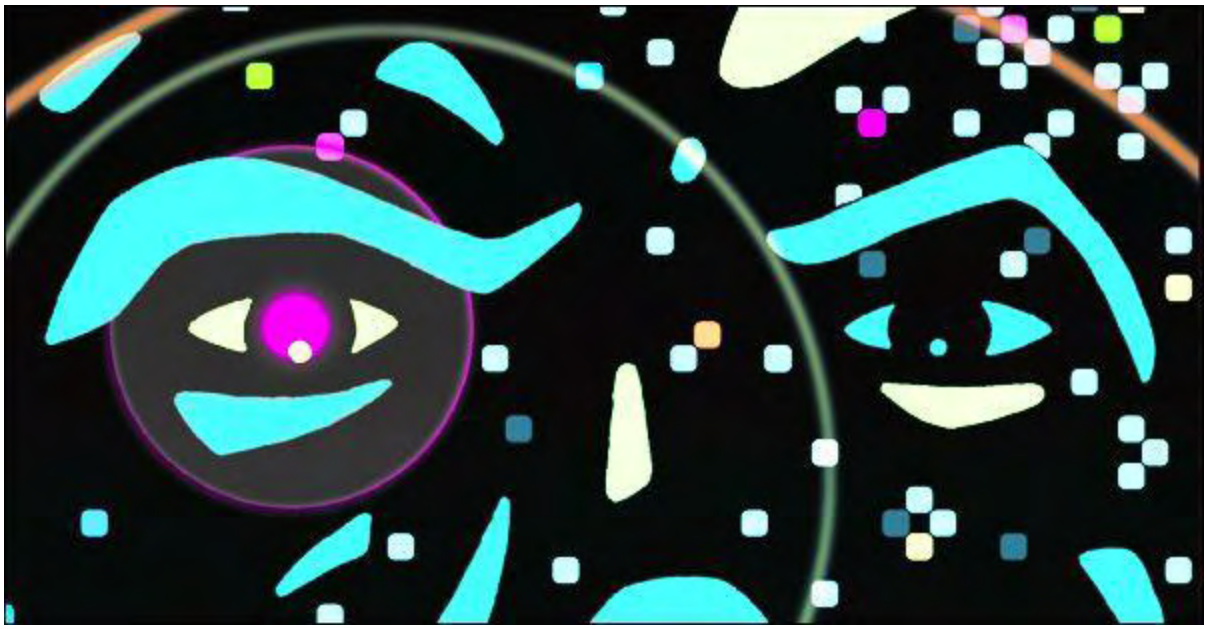
A "Server Busy" error could mean a number of different things. It might be related to any program which is trying to access a specific server over the Internet to check for updates before the Internet connection is ready. It could also be a program such as QuickBooks which runs its own database server, but the server is occupied with other activities. It is difficult to know. It doesn't sound like Task Manager is giving you a clue.

It is likely to be one of the programs that are automatically loaded when you boot. Many programs such as antivirus automatically check for updates when you startup.

One way to find the culprit is to disable startup programs one at a time and test them by restarting the computer. If you have not experienced this in the past, it is likely to be a recently installed program.

It is probably not a serious problem since ending the process seems to have no effect on performance, but it would be better if you could identify the source and stop it.

Digital Dave

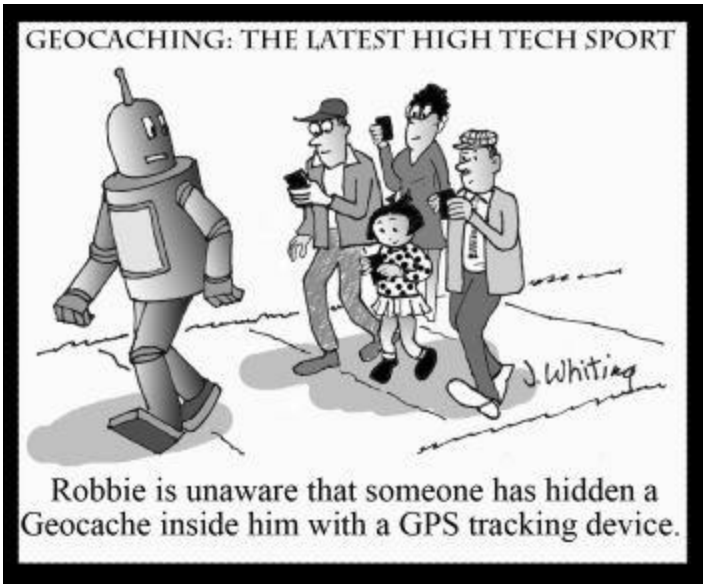


GPS Tracking Units for Following Something or Someone

"There Are Different Types of GPS Tracking Units for Different Purposes" by Jack Dunning

Before you buy and use a GPS tracking unit, find out which one is right for you and the law in your state.

GPS (Global Positioning System) use satellites to calculate the location of a GPS capable device. This equipment may be a handheld receiver or dashboard mounted display that calls out driving directions. GPS has become a common feature of smartphones. Originally, the system was designed for government and military use, but today it is commonly used by anyone for street navigation and mountain hiking. The use of GPS is so widespread, that people have little excuse for getting lost anymore.



GPS has spawned a new high tech outdoor activity called geocaching. People hide an artifact at a location and post the coordinates on a geocaching Web site. Other GPS owners use their devices to search for the hidden item. When they find it, they may replace it with another item while putting their name in a log. Later, they update their find on the same Web site. This has become great sport for the enthusiasts leading them to places they would never have ventured before.

A GPS is a passive device which receives the signals from the navigation satellites and uses an internal computer to calculate its location and elevation. This information is usually integrated with maps to show the user the exact location in relation to the surrounding terrain. But GPS isn't necessarily just for finding out where you are. You can also track and locate your pets, automobiles, personal items, and people as long as there is a GPS Tracking Unit attached. Yes, today anyone can obtain the technology for tracking the movements of anyone and anything. There is nothing illegal about owning GPS tracking devices, but if they are used to spy on someone's movements, you may be breaking the law.

GPS Tracking Units

GPS tracking units differ from the plain GPS in that there is usually a transmitting component for broadcasting the location to a system which can pass the information along. Naturally, this adds to the complexity of the device, generally using more power and adding more cost.

We see these tracking devices on television shows where the police are tracking suspects. Or, possibly a wife wants to know where her husband is going (or vice versa). There are pet collars with GPS tracking devices. There are small battery powered devices such as the Garmin GTU 10 GPS Tracking Unit about three inches long and weighing less than two ounces which can be put in a backpack or purse (see Figure 1). There are numerous types of GPS tracking devices for a variety of purposes.

Figure 1. Put the Garmin GTU 10 GPS Tracking Unit in your child's backpack to track them on the way to and from school.

Types of GPS Tracking

There are three primary types of GPS tracking devices: data loggers, data pushers, and data pullers.

Data Loggers

A Data Logger merely keeps track of its location and stores it in a log on a regular interval—usually selectable by the user. It doesn't need a transmitter since all the data is stored internally. It usually has an USB port for downloading the data to a computer for either analysis or use with a program. If a camera has a GPS component it is often a data logger which adds the location metadata to any photo shot. This type of tracker could be handy for people tracking business mileage or anyone who doesn't need the information on a real-time basis.

Most GPS devices could be used as data loggers since they will record tracks (if set to the tracking mode). The tracking mode is particular useful when hiking. Reversing the track will take you back the way you came.

Data Pushers

A Data Pusher GPS tracking device includes both the GPS receiver and the mobile transmitter in the same package. This is the most common type of tracking device and is used for vehicle tracking, animal tracking, and spying on people. Since the device needs to transmit, the power requirements are greater.

For vehicles there are trackers which plug into the OBD (Onboard Diagnostics) port found in most cars (see Figure 2). The advantage to these devices is that they use the power from the vehicle giving virtually unlimited use without draining batteries (within the life of the device). The MasTrack OBD Real Time GPS Vehicle Tracker is an example of a vehicle tracker.

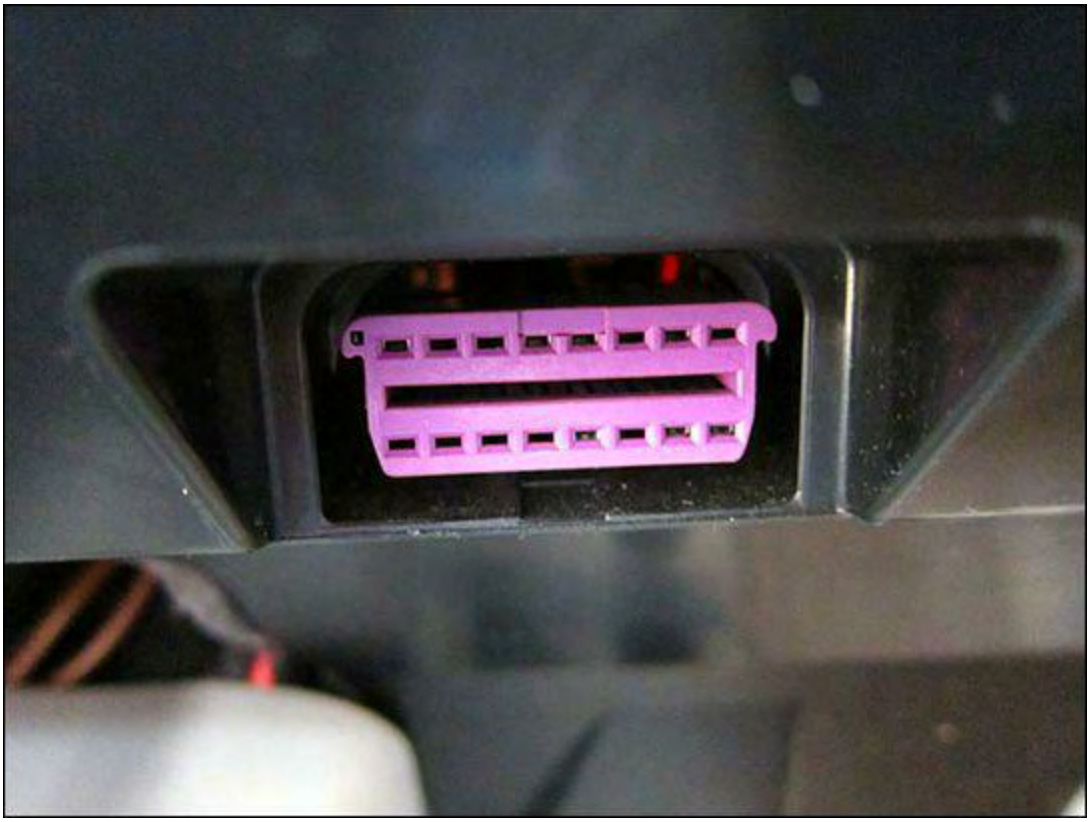


Figure 2. The OBD port found on today's car can be used to install a GPS tracker.

While the price of the MasTrack is listed as $98 at Amazon, there are more costs associated with this tracker and virtually every other data pusher. That is the cost of the mobile connections which varies depending upon how often you want an update. For the example shown the cost may run from $14.99 for updates at fifteen minute intervals to $34.99 for one minute intervals. I noted that some trackers included one year of mobile service free, but eventually you will have to pay.

You can also receive e-mails or text messages when the vehicle is speeding or going "where no man has gone before"—or is suppose to go. Plus, there is other vehicle engine status info available for monitoring. This applies to most of the push data trackers. If you use a GPS tracker to monitor the family car being driven by your teenager, virtual safe zones can be set up in the system (often on a Web site), which will set off an alarm (e-mail or text) if the car

moves outside the zone.

Some trackers are solar powered for recharging the batteries. These are useful in conditions where there is no alternative power source—such as on the GPS tracking collars used to track wild animals.

Data Pullers

A Data Puller only sends the location when queried. It is a transponder which is used when you don't need regular updates on the location. While not as common as the other types of trackers, it is increasing in popularity for smartphones and other devices which may be stolen or lost. Since it will only transmit when probed, it is useful in those situations where saving battery life is most important.

Cellular (GPRS or SMS) or Satellite

One critical decision when picking a GPS tracker is what type of responding service will you need. If you're using it in areas with good cellular coverage, then there are plenty of cellular (GPRS or SMS) devices. However, if it's going into the mountains or desert, then consideration of satellite service may be important. Satellite for the transmitted location can work in those remote locations where there is no cell signal. The disadvantage is the satellite trackers are generally larger and much more expensive.

How GPS Trackers Work

While activated the GPS tracker uses the navigation satellites to determine location. This data is sent via cellular, satellite, or possible radio to a server. Often the data is viewed on a computer through a Web site which is displayed as a map of the area with a dot for the location of the target (just like on television). Many systems support smartphones and tablets making mobile tracking easier. Once the tracker is installed and activated, it's a matter of logging into the Web site and watching.

One of the complaints about many GPS tracking systems is that they don't give coordinates (longitude and latitude)—only the little dot on a map. This makes it more difficult if you want to put the data in another device—say a GPS to get directions.

GPS Tracking and the Law

Many states, including California, have enacted laws prohibiting people from using tracking devices to monitor the movement of other people. Law enforcement may be allowed to use

tracking devices with a warrant, but even that varies from state to state. The Supreme Court ruled that the "use of an unwarranted GPS tracker on a suspected Washington D.C. area drug dealer over a period of roughly a month violated his Fourth Amendment rights." If you plan to use a GPS tracker on a person, then you better know your local law. It's said that 80% of the private investigators are breaking the law with tracking devices.

However, you are normally free to track your own property or that of others with their permission. That means you can put tracking devices in your family cars regardless of who is driving them. What may be allowed isn't very hard to figure out. If you own it, you can track it. If you have to sneak around to install and use a GPS tracker, then it's probably illegal—although the law may be different in your state.

Jack is the publisher of ComputorEdge 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:

Windows Tips and Tricks

Windows Tips and Tricks: Controlling Startup Programs

"With the Free Autoruns Utility, All Startup Programs Can Be Seen in One Window"
by Jack Dunning

The programs and services that load after Windows login are found in various locations. Now you can work with them all in one place with the Microsoft utility Autoruns.

I recently took another look at Windows Sysinternals the free set of Windows utilities from Microsoft. I wrote about it years ago, but haven't added much commentary since. It's time to take another look because the suite of Windows utilities is active and viable with regular updates added to the set of tools. With this column, I'm starting a new series which highlights one utility each week as a Windows tip. I tend to forget about all the useful apps in Sysinternals and guess that many people would appreciate a refresher with a short introduction to those apps which look the most valuable. Most of these utilities work in Windows XP and higher.

Autoruns for Controlling the Startup Process

Trying to figure out what's happening at Windows startup can be confusing and difficult to nail down. Some loading items appear in the local Startup folder while others are in the common Startup folder. There are certain startup programs which launch from Services or a Registry entry and there is no one place to see them all unless you use the free Windows utility Autoruns.

Autoruns for Windows is one of the utilities available from Microsoft in the free Sysinternals Suite. It comes as a Windows program file (*autoruns.exe*) for direct run and a command line version (*autorunsc.exe*) for running with the Command Prompt. When Autoruns is loaded, it scans the Windows computer for all of the startup items and lists them in one window (see Figure 1).

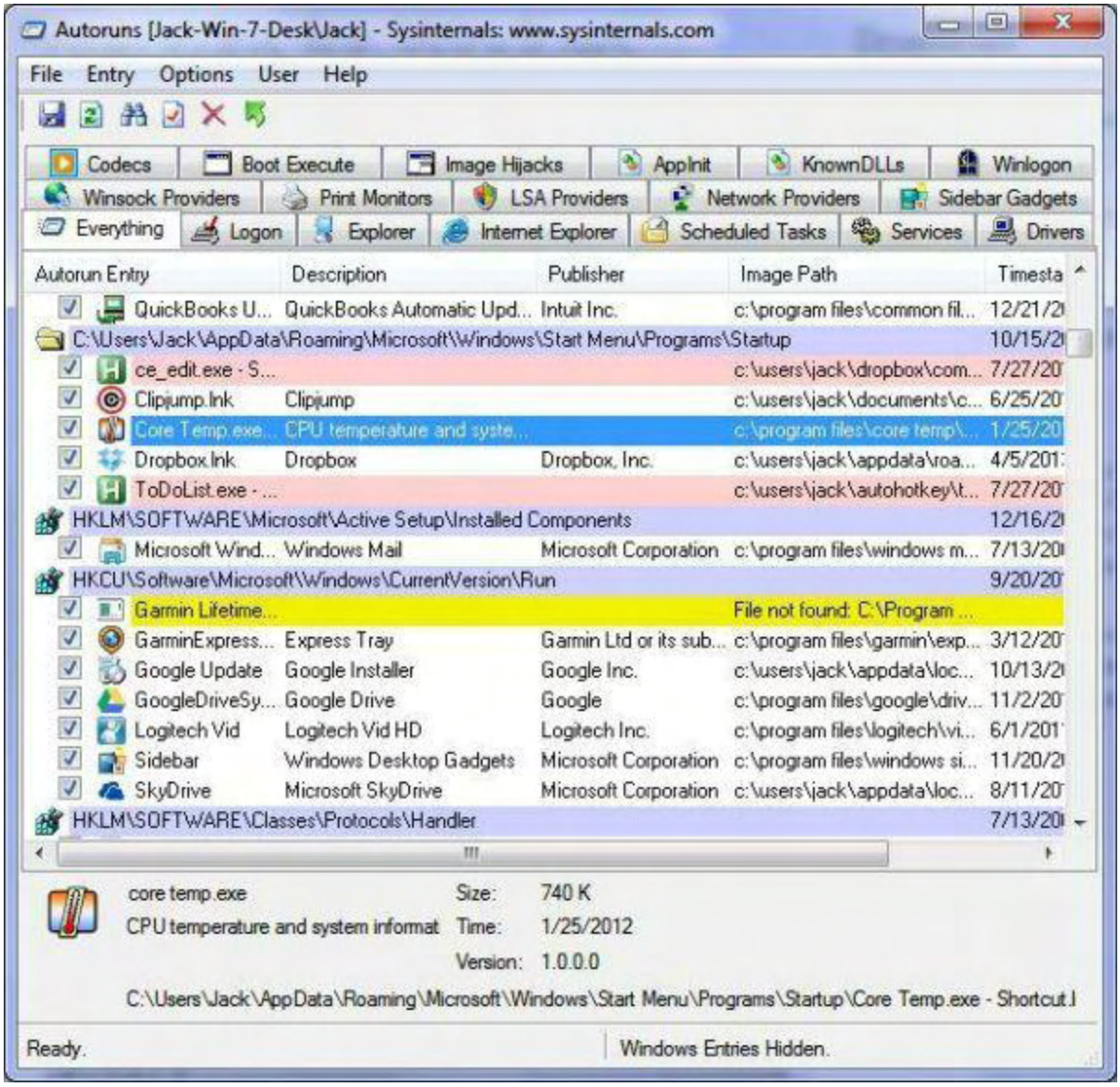


Figure 1. Autoruns shows all of the startup programs loaded during boot up and login.

Not only does the Everything tab show all of the startup items, but each of them can be disabled for automatic startup by unchecking the box on the left. This does not remove the item, but merely disables it for startup. If you later find that you need it to start on login, just recheck the box.

If you want to permanently delete a startup item, either right-click on the listing and select Delete or use Delete in the Entry menu when it is selected. An entry highlighted with yellow indicates the file is not found. If highlighted in pink, then there is no description included.

The various tabs filter for the specific type of startup such as Scheduled Tasks.

For people who are trying to figure out why it is taking too long for their Windows computer to boot, the Autoruns tool is ideal.

* * *

Clipbrd.exe Clipboard Viewer

I mentioned the Windows program *clipbrd.exe* for viewing the contents of the Clipboard in last week's Editor's Letters. People are having trouble finding it on Windows Vista, Windows 7 and Windows 8 computers because, as it turns out, it was only available in Windows XP. I must have copied it to my other computers. There are other places on the Web to find it, but I've decided to post it on the *ComputorEdge* AutoHotkey Dropbox download Web site in the ZIP file *clipbrd.zip* for anyone who wants it.

Jack is the publisher of ComputorEdge 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:

Just Released! *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*.

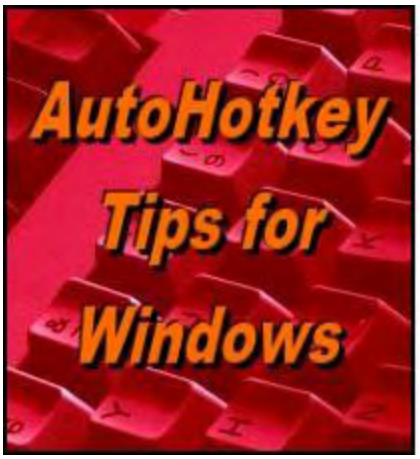
Our second compilation of stupid *ComputorEdge* cartoons from 2011 and 2012 is now available at Amazon! *That Does Not Compute, Too! ComputorEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"*

Currently only at Amazon.com, *Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!*.

Available from Amazon, *Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8!* Also available at Barnes and Noble and ComputorEdge E-Books.

Available exclusively from Amazon, *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.



AutoHotkey Tips for Windows: Putting a Data File in a Variable

"Reading a Data File into a Variable Can Save Time and Disk Access" by Jack Dunning

While it is often easy to work directly with a saved data file, reading the same file into a variable may speed up your AutoHotkey apps.

If you're curious about a few of the many ways that AutoHotkey can be used and how simple it is, check out the ComputorEdge *AutoHotkey apps page "AutoHotkey Scripts and Apps for Learning Script Writing and Generating Ideas."*

Working in Memory with AutoHotkey Data Files

While one of the safest ways to save data is in a file on some type of permanent media (hard drive, flash drive, etc.), there are a couple of problems with reading and writing files. First, it is difficult to insert something into the middle of a file, but it is relatively easy to add data to the end of a file since it does affect the rest of the file. This is how the FileAppend command in AutoHotkey works. It only adds data to the end of a file. If you want to change something inside the file, then the file must first be deleted, then rewritten with *FileAppend* with the included changes. The only AutoHotkey command that can insert data into the middle of a file is IniWrite which creates and writes to INI files. But that's because the *IniWrite* command automatically handles the rewriting process. (There is also a FileOpen() function in AutoHotkey_L which "provides more advanced functionality than *FileRead*, such as reading or writing data at a specific location in the file without reading the entire file into memory.")

Except when appending data at the end, the file normally must be rewritten in order to insert the new data. (In some database file types space is set aside in fixed fields to allow inserting data without rewriting the entire file.) The process usually involves deleting the old file, then rewriting the new file. Every time this is done, there is disk access. If there is a great deal of data to write and it done too often, then the computer program may be slowed down by the continual disk access. That's why most programs hold the working data in memory until it is

time to save it. This is how the CalorieCount app works. (My earlier AutoHotkey apps using the *ListView* command saved to the data file every time there was a change.)

Reading a data file into memory (a variable) and manipulating the variable saves the continual disk access required by working directly with files. It is much faster, but may be subject to more data loss if there is a crash. The CalorieCount app limits the disk access by only saving when the program is exited or the date is changed. This is accomplished by using the FileRead command to copy the entire file into a variable.

Reading a File into Memory

Usually when we use a variable, it contains a relatively short bit of information—maybe a name, address, date, or numerical data. But there are few reasons not to read an entire file into a variable. In the following snippet from the AutoHotkey script *CalorieCount.ahk*, the *FileRead* command is used to copy the entire data file to the variable CalorieCount:

```
IfExist, CalorieCount.txt ;Add data from CalorieCount.txt to ListView
{
 FileCopy, CalorieCount.txt, CalorieCount%A_Now%.txt  ;incremental backup

 FileRead, CalorieCount, CalorieCount.txt

LoadWindow(A_Now)
}
```

Note that the FileCopy command is first used to make an incremental backup of the data file using the datetime stamp *A_Now*. This is a precaution that can be used in many apps to minimize data loss with a program or computer crash.

One short line of code reads the entire data file *CalorieCount.txt* into the variable *CalorieCount* (*FileRead, CalorieCount, CalorieCount.txt*).

The *LoadWindow()* function now uses the variable *CalorieCount* to load the *ListView* window rather than looping through the data file as is done in the ToDoList app:

```
LoadWindow(LoadDate)
{
Global
 WeighDate := SubStr(LoadDate,1,8) . "000000"
 Position := InStr(CalorieCount,WeighDate)
 If Position = 0
    {
           CalorieCount := CalorieCount . WeighDate . "     " . "`r`n"
    }
 Loop, Parse, CalorieCount, `n
  {
  If (A_index = 1 and SubStr(A_LoopField, 1, 1) = "x")
```

```
    {
      WinPos := A_LoopField
      Continue
    }
  Else
    {
        If SubStr(A_LoopField,1,8) = subStr(LoadDate,1,8)
           {
             Loop, Parse, A_LoopField , CSV
              {
                 RowData%A_Index% := A_LoopField
              }
         If SubStr(RowData1,9,6) = 000000
                {
                   GuiControl, ,Weight, % Trim(SubStr(RowData1,15,5))
                   Continue
                }
             If LV_GetCount() = 0
               LastTotalCal := 0

             LV_Add("", RowData1,RowData2,RowData3,RowData4
              ,RowData5,RowData6,Round((RowData4*RowData5)+LastTotalCal))

             LastTotalCal := (RowData4*RowData5)+LastTotalCal
             NextRow += 1
           }
    }
  }
}
```

Note that the various string functions (*SubStr()*, *InStr()*) can be used directly with the variables and the Loop, Parse command is used on the variable *CalorieCount* as Loop, Read could be used with a file. The primary difference is since the data file is now in memory concatenation operations (.) and the StringReplace command can be used to work directly with the *CalorieCount* variable for adding, updating and changing data as shown in the following:

```
CalorieChange := Food1 . ","""" . Food2 . """,""" . Food3
                 . """," . Trim(Food4) . "," . Trim(Food5) . "," . Food6
StringReplace, CalorieCount, CalorieCount, %CalorieOld%, %CalorieChange%
```

The string *CalorieChange* is created by concatenating the various data variables (*Food1*, *Food2*, etc.) into a CSV (Comma Separated Variable) type row of data which when using *StringReplace* directly replaces the string *CalorieOld* found in *CalorieCount*—which includes the entire data file. This technique effectively inserts data into the middle of the data set without rewriting any file.

Interesting (and possibly confusing) are the plethora of double quotes (") in the first line of code. In a CSV file text is commonly surrounded with double quotes while numbers are not. Many systems may enclose all data in double quotes, but I've chosen the more standard format and do not enclose the numbers. In order to save the appropriate quotes in

AutoHotkey, it's necessary to precede each literal quote with another double quote character. Thus, three double quotes in the concatenation line will resolve to one double quote saved in the variable CalorieCount *and therefore the data file.*

Saving the Data File Variable

While all the data manipulation is done within the *CalorieCount* variable which contains the data file, ultimately it must be saved back to the data file on disk using the *UpdateFile()* function:

```
UpdateFile()    ;Saves data to file when ListView updated
  {
    Global
    FileDelete, CalorieCount.txt
    WinGet, Min, MinMax, Calorie Count
    If Min = -1
      WinRestore, Calorie Count
    WinGetPos, X, Y, Width, Height, Calorie Count
    Width -= 16
    Height -= 38
    NewPos = x%x% y%y% w%Width% h%Height%
    FileAppend, %NewPos%, CalorieCount.txt

    StringReplace, CalorieCount, CalorieCount, %WinPos%,
    Sort, CalorieCount, u
    StringReplace, CalorieCount, CalorieCount, `r, `n, all
    StringReplace, CalorieCount, CalorieCount, `n`n, `n, all
    StringReplace, CalorieCount, CalorieCount, `n, `r`n, all

    FileAppend, %CalorieCount%, CalorieCount.txt
  }
```

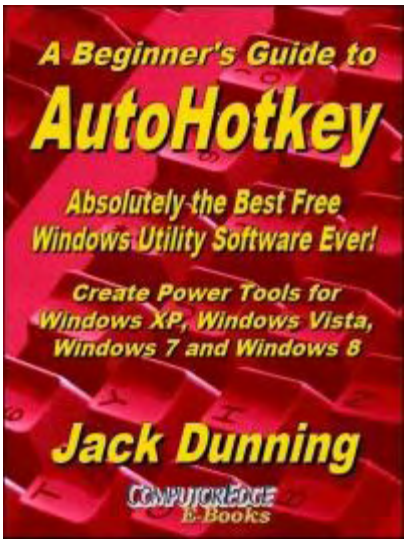
The old file is first deleted with the FileDelete command. Since the last size and location of the Calorie Count window is saved as the first line of the data file, it is determined and added to a new *CalorieCount.txt* file with the *FileAppend* command. The old size and position of the window is no longer needed in the *CalorieCount* variable and is removed with the *StringReplace* command (*StringReplace, CalorieCount, CalorieCount, %WinPos%,*).

CalorieCount is sorted (by datetime stamp which is the first data field in each line) with the Sort command before using a series of *StringReplace* commands to cleanup possible carriage return (*`r*) linefeed (*`n*) issues. Finally, *FileAppend* is used to add the data to the new data file *CalorieCount.txt*.

While in some ways this approach to reading data files into a variables and later rewriting the new file may seem more complicated than the earlier approaches of working directly with the data file, once the proper handling of the string concatenation and *StringReplace* command is worked out, it is much quicker and just as effective.

The entire *CalorieCount.ahk* script can be found at the *ComputorEdge* AutoHotkey Dropbox download Web site.

* * *



Available in e-book format from Amazon (and other formats at the ComputorEdgeBooks 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.

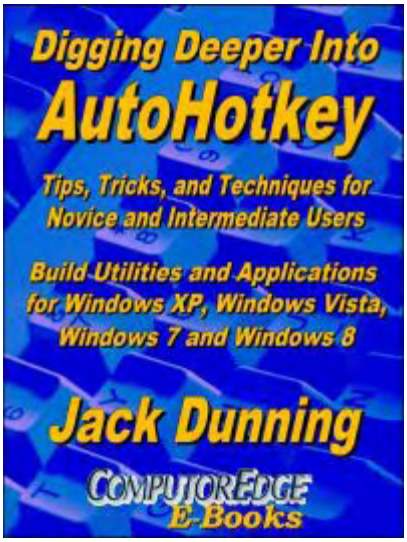
Building Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8, AutoHotkey is the most powerful, flexible, *free* Windows utility software available. Anyone can instantly add more of the functions that they want in all of their Windows programs, whether installed on their computer or while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

Just Released! *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 *ComputorEdge* cartoons from 2011 and 2012 is now available at Amazon! *That Does Not Compute, Too! ComputorEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"*

Currently only at Amazon.com, *Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!*.

Available from Amazon, *Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8!* Also available at Barnes and Noble and ComputorEdge E-Books.

Available exclusively from Amazon, *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

Wally Wang's Apple Farm

"Forget about OS X and Windows" by Wally Wang

Forget about OS X and Windows; Creating Your Own E-Mail Newsletter; Wearable Computers; Blowing up Chemicals Safely; The Confusion of Windows RT; Activity Monitor.

On October 22, Apple will likely announce new iPad models along with new Macintosh models such as the Mac Pro and maybe even the Mac mini. However, if you've been watching the trends, you'll see that the future of desktop operating systems like OS X and Windows is a dead end.

When Apple released the 64-bit processor in the iPhone 5S, they hinted that it had "desktop-class architecture." Apple's own documentation also mentioned that OS X and iOS apps can now share common code. So the trend is clear: iOS represents the future and OS X will simply fade away much like the iPod faded away with the growing popularity of the iPhone.

When Microsoft announced their new Surface Pro 2 tablet running Windows 8, they also announced a docking station. Now you can take your Surface Pro 2 tablet with you and then plug it into a docking station at home or at work to use a full size keyboard and monitor. Microsoft envisions a future where tablets are PCs and can do the work of both. The problem is that Microsoft is trying to turn a desktop operating system into a mobile device, running desktop programs that aren't optimized for touchscreen interfaces.

Figure 1. Microsoft's latest Surface Pro 2 accessory is a docking station.

On the other hand, Apple is taking a touch-centric operating system (iOS) and making it fully optimized for touch while also capable of being used with a keyboard and a mouse. Now as iOS scales up, iOS apps will get more powerful and eventually become just as good as or even better than PC programs. If you think this can't happen, just look at how MS-DOS PCs fared against the early competition of mainframe and minicomputers.

Mainframe and minicomputer users initially scoffed at PCs, calling them underpowered toys unable to do "real" work. Then PCs gradually got more powerful, easier to use, and nearly wiped out the mainframe and minicomputer market. Mainframe and minicomputer users simply believed that the future would always be exactly like the present, so the world would always need mainframe and minicomputers because nobody could do any "real" work on PCs.

Ironically, PC enthusiasts have forgotten the past and become the new mainframe and minicomputer users, scoffing at tablets, calling them underpowered toys, unable to do "real" work. With Apple's 64-bit processor, tablets will soon get more powerful until eventually tablets will be capable of doing almost everything PCs can do, just as PCs can do almost everything that mainframe and minicomputers used to do.

As Microsoft's docking station for their Surface Pro 2 tablet shows, the future of tablets will be taking them on the road when you're away from your desk and plugging them into a docking station when you need to sit down and work on them for extended periods of time. That means tablets will soon be capable of doing desktop publishing, CAD, database management, and even programming.

So the future is mobile computing devices like tablets that will eventually become powerful enough to take over most work currently done by PCs. Tablets can't do processor-intensive work like computer-aided design yet, but they're getting more powerful every year just like PCs got more powerful every year.

If you're a software developer, forget about developing for desktop operating systems. Writing programs for OS X or Windows 8 is just as much a dead end as writing programs for mainframe and minicomputers when the PC market was taking off. The future of software development used to be PCs. Now the future of software development is tablets.

For anyone studying computer programming, focus on iOS and Android and forget about OS X and Windows. Major computer manufacturers like Hewlett-Packard and Lenovo are starting to sell PCs running Android so if you learn Android programming, you'll be able to sell your apps to smartphone, tablet, and PC users. Apple will likely develop an iPad Pro with a docking station so you can use your tablet for everything. Unlike Microsoft's Surface tablets, Apple's iPads can run software completely optimized for touch, but also capable of being used with an external keyboard and a mouse.

The traditional PC running desktop operating systems is a dying breed. Just look at publications like *PC Magazine* that used to focus exclusively on PC software and hardware, but now has to resort to printing articles comparing big screen TVs and smartphones. The era of PCs has passed. Your next PC might be a tablet with a docking station, or just a PC running Android or iOS.

As a programmer, you can either embrace mobile operating systems or cling to the desktop operating system world and wonder why the world is passing you by. Guess which choice has more of a future?

Creating Your Own E-Mail Newsletter

Many people complain about the price of a Macintosh, yet price depends on your point of view. These same people likely eat in restaurants rather than picking pizza crusts and leftovers out of the garbage dumpster in the alley, yet they're not worried about the cost of paying for a meal compared to getting one for free in the dumpster. That's because people are always willing to pay for what they value and not willing to pay for what they don't value.

Walk through any shopping mall and you can see that women are easy markets for high-priced shoes and clothes because many women value these items. On the other hand, you'll find far fewer high-priced men's clothing and shoe stores because fewer men value these same types of items.

You rarely see a man complaining that a pair of pants is too expensive when he can just buy some jeans much cheaper somewhere else. That's because most men don't care about the

price of pants. If a pair of pants is too expensive, they simply buy something cheaper and rarely waste their time criticizing the store or the manufacturer of the higher priced pants.

If someone does criticize the cost of the high-priced pants, it's likely because they'd like to afford those pants but feel that they can't. So to make themselves feel better, they just criticize the higher priced pants and the people who buy those pants, and pretend that they never really wanted those higher priced pants anyway, using all sorts of twisted logic to convince themselves that the cheaper pants are just as good as or even better than the more expensive pants.

Since many people would like a Macintosh or another Apple product but don't feel they can afford one for whatever reason, the obvious solution is to make more money. If you're stuck in a job, you have little control over how much money you can make other than working harder and better to get a raise, so here's another solution: start your own business.

When most people think of starting their own business, they think of taking out a massive loan and quitting their job while taking a huge risk. However, starting your own business can be as simple as just writing about what you enjoy and sharing your knowledge with others. Nearly everyone has specialized knowledge that others would like to know whether it's information about fishing, gardening, selling, fixing cars, or drawing pictures.

If you have specialized knowledge that others would want, the best way to attract people who want your information is to give it away for free. By following the instructions in the book *Reinventing the Entrepreneur* by MaryEllen Tribby, you can learn how to start your own e-mail newsletter, which MaryEllen calls an iMag.

The basic idea behind an iMag is to publish and distribute a newsletter on a specific topic at least once a week. You set up a Web site describing the contents of your iMag and offer a bonus of some kind, such as a PDF file, if people sign up for an e-mail subscription to your iMag. In MaryEllen's case, she's passionate about helping working mothers since she's one herself, so she started a Web site and a newsletter called Working Moms Only.

Each issue of her Working Moms Only newsletter comes out two or three times a week and contains useful information written by her or other people, catering to the working mother (or father) to help them use time wisely, raise their kids, and come up with fun activities for their family. The newsletter is absolutely free for anyone to receive by e-mail. Even better, by sending out her newsletter by e-mail, MaryEllen doesn't have the expense of printing and mailing anything on paper so her subscribers can receive her iMag instantly anywhere in the world.

So the first step is defining what type of specialized knowledge you would like to share with others. It has to be something you're genuinely passionate about because then you'll find it easy to create and publish an iMag on a regular basis, especially in the beginning when you'll have almost no subscribers.

The goal of every iMag is to develop a growing base of happy subscribers who read your newsletter regularly. Now in each newsletter you promote a product related to your newsletter's topic. If people order that product through the link that you provide, you get a commission.

As long as your iMag provides valuable information with each issue, you'll soon develop a loyal following. Now if you promote only those products that truly help others, you'll always get a percentage of your subscriber base that will buy that product. The larger your subscriber base, the more people will buy a product with each iMag issue. When you get a large enough subscriber base, the income you earn from a single iMag can soon replace your regular income from a job. Best of all, you'll be writing about a topic you like anyway and getting paid for helping people at the same time.

Creating and promoting an iMag is well within the capabilities of anyone willing to do the work and take time to learn to avoid the pitfalls, which MaryEllen lays out in her book. Basically, an iMag establishes trust by providing useful information for free. You never need to get "pushy" and try to cram products down your subscriber's throats (because they can always stop receiving your newsletter). All you need to do is explain how a particular product might be useful and then you let your subscribers judge for themselves.

Since MaryEllen has created several iMags, her book explains how to create your own iMag without doing everything yourself. Her book shows what type of software to use, and how to attract subscribers to grow your subscriber base whether you're just starting out or have been publishing your iMag for several years.

Although MaryEllen earns a full-time income from her iMags, creating your own iMag can be a part-time income based on your favorite hobby. No topic is too small because you'll always find people interested in something you enjoy. By creating an iMag, the costs are minimal and the potential rewards are limited only by your effort and imagination. Best of all, you can create, run, and manage an iMag anywhere you have an Internet connection, so you could run it from a beach in Hawaii if you wanted.

The Internet has opened up huge opportunities for everyone willing to take the time to learn and put in the necessary work. The next time you want to buy something but don't think you can afford it, you now have two choices.

One, you can complain about the high cost of the desired item and get angry at anyone who can afford it, or two, you can do something about your own income so you can afford what you want without getting mad at others. By reading and following the instructions in "Reinventing the Entrepreneur," you can decide if running an e-mail newsletter is a business you might enjoy doing to earn a part or full-time income.

Wearable Computers

For an example of the potential that wearable computers offer, you can read about Reebok's Checklight cap, which athletes can wear without affecting their performance. By using an accelerometer, the Checklight cap can measure the G-force of a physical blow to an athlete's body.

Figure 2. The Reebok Checklight concussion indicator.

While the athlete is healthy, the Checklight cap glows green. If the athlete received a moderate hit, the Checklight glows yellow. For a severe hit, the Checklight glows red to indicate a possible concussion. By tracking the movement of the head, the Checklight cap can possibly prevent further damage to athletes.

Imagine other types of wearable computers that could monitor your pulse, body temperature, and heart rate to detect signs of strokes or heart attacks ahead of time. For everyday use, a wearable computer could detect how far you've walked to measure how many calories you've burned off so you can track your weight loss.

Wearable computers represent a huge potential market that just requires a little bit of creativity to imagine. While there will always be people who lack such imagination and angrily denounce anything that sports the wrong corporate logo on it, the rest of us can watch wearable computers get more powerful and change the world around us.

Blowing up Chemicals Safely

To learn about chemistry, you need expensive laboratory equipment along with safety equipment in case something goes horribly wrong. Even then, you can't mix certain chemicals to watch them explode or give off toxic fumes without endangering yourself and others.

If you have a creative affinity for mixing chemicals together to see what happens, you don't need to buy laboratory equipment of your own when you can just download the Chemist app for the iPad. With the Chemist app, you can safely mix different chemicals together, heat them up or freeze them, and watch what happens.

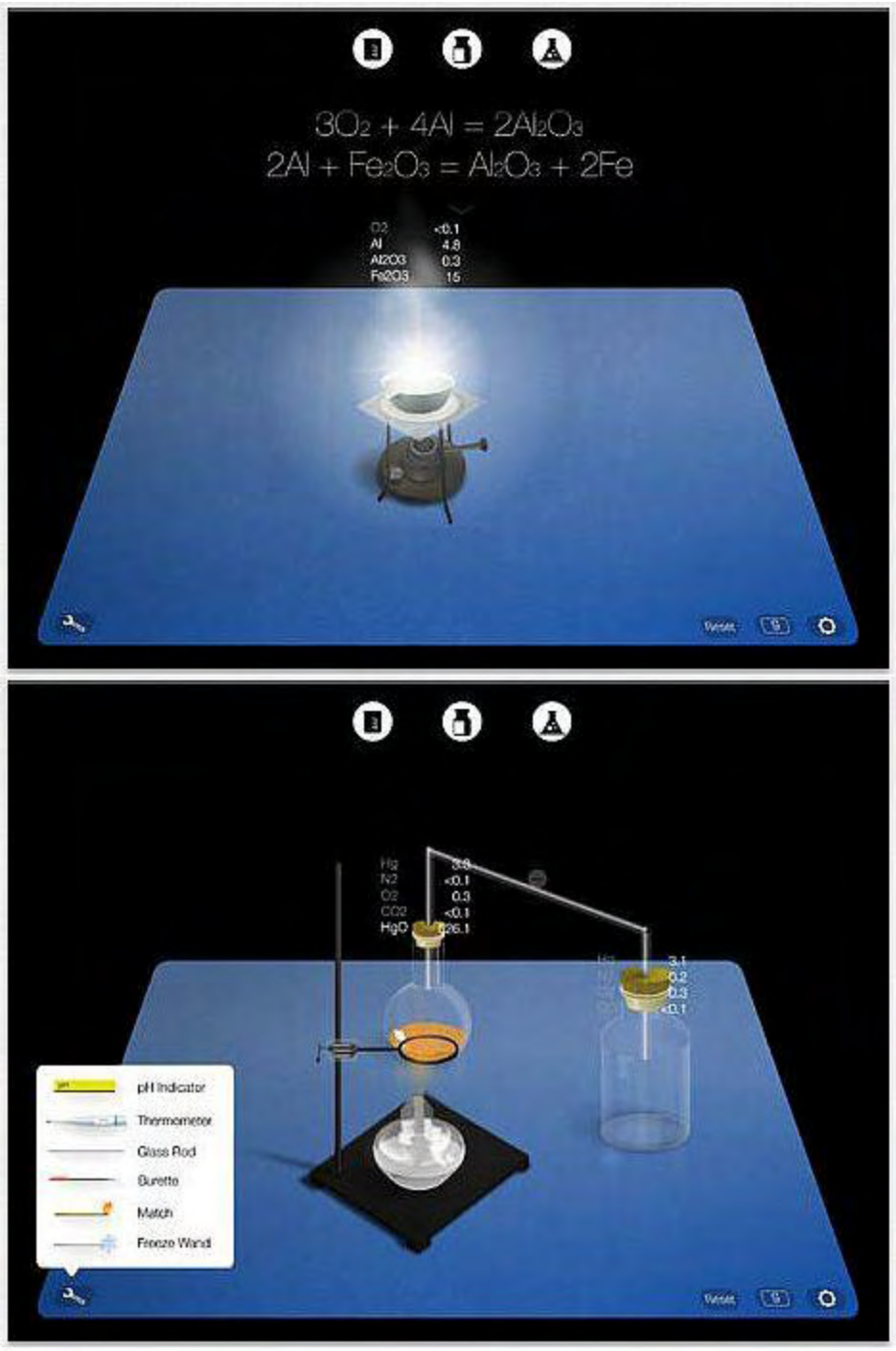


Figure 3. The Chemist app for the iPad lets you create a virtual laboratory.

With educational apps like Chemist, anyone can safely learn the basic principles of chemistry without burning their hands with sulfuric acid or worrying about dumping toxic chemicals safely. Instead of manipulating chemical equations, a virtual laboratory lets you actually see what happens with different chemical substances and reactions. Now you can learn about chemistry in safety wherever you take your iPad.

The Confusion of Windows RT

When Microsoft first announced they were porting Windows to ARM processors, I thought it had the potential to create a decent tablet operating system. Then Microsoft botched it by releasing Windows RT, which looked like Windows but couldn't run Windows programs. Even worse, its sole selling point was a free version of Microsoft Office that didn't even use the tile interface of Windows RT.

Now Microsoft admits that Windows RT might have confused people, so rather than call their tablet the Surface RT, they're calling it Surface 2.

When Microsoft first introduced Windows RT, people complained that the name risked confusing consumers. By getting rid of the name "Windows RT," Microsoft hopes to avoid confusing consumers. Now consumers will need to figure out why a Surface 2 tablet looks like it's running Windows 8 but really isn't.

If anyone thinks just changing the name will eliminate confusion while the software retains its limitations that created the confusion in the first place, maybe they can apply for the new opening of CEO at Microsoft. Microsoft's executives constantly make boneheaded decisions and then wonder why they don't work out until they finally listen to what their customers have been telling them all along.

Windows 8.1 should have been Windows 8 because everyone asked for the option to boot directly into the desktop instead of the tile interface. Vista should have been Windows 7 because everyone wanted an operating system that simply worked and got out of the way. Even Microsoft's own executives couldn't use Vista, yet they chose to release it anyway.

Here's the huge difference between Apple and Microsoft. Apple strives to develop products that work well, although they often run into bugs such as the iPhone 5S crashing more often than earlier iPhone models. On the other hand, Microsoft chooses to ignore criticism and rush a product to market. Then they gradually revise it (listening to the critics that pointed out the flaws that Microsoft should have fixed earlier) until it finally works decently.

In the old days, Microsoft could afford to slowly improve their products until they got it right because there were few other choices people could use and technology changed much slower. Now with more options for people to choose and technology changing rapidly every year, Microsoft's gradual improvement strategy is simply too slow. Rather than wait to get a product right the first time, Microsoft turns their customers into beta testers and even then doesn't always listen to their suggestions for improvements.

Waiting for Microsoft to get their tablet strategy right will likely take another product generation. In the meantime if you want a tablet, there are plenty of decent Android tablets to choose from, or you can simply buy an iPad that defined the current tablet market in the first place.

* * *

Most people should never need to look inside the Utilities folder buried inside the Applications folder. However, if you do peek inside this folder, you can find a program called Activity Monitor.

The whole purpose of Activity Monitor is to show you how much memory each program currently running gobbles up. By examining the memory hog programs, you can shut them down and make your computer work faster.

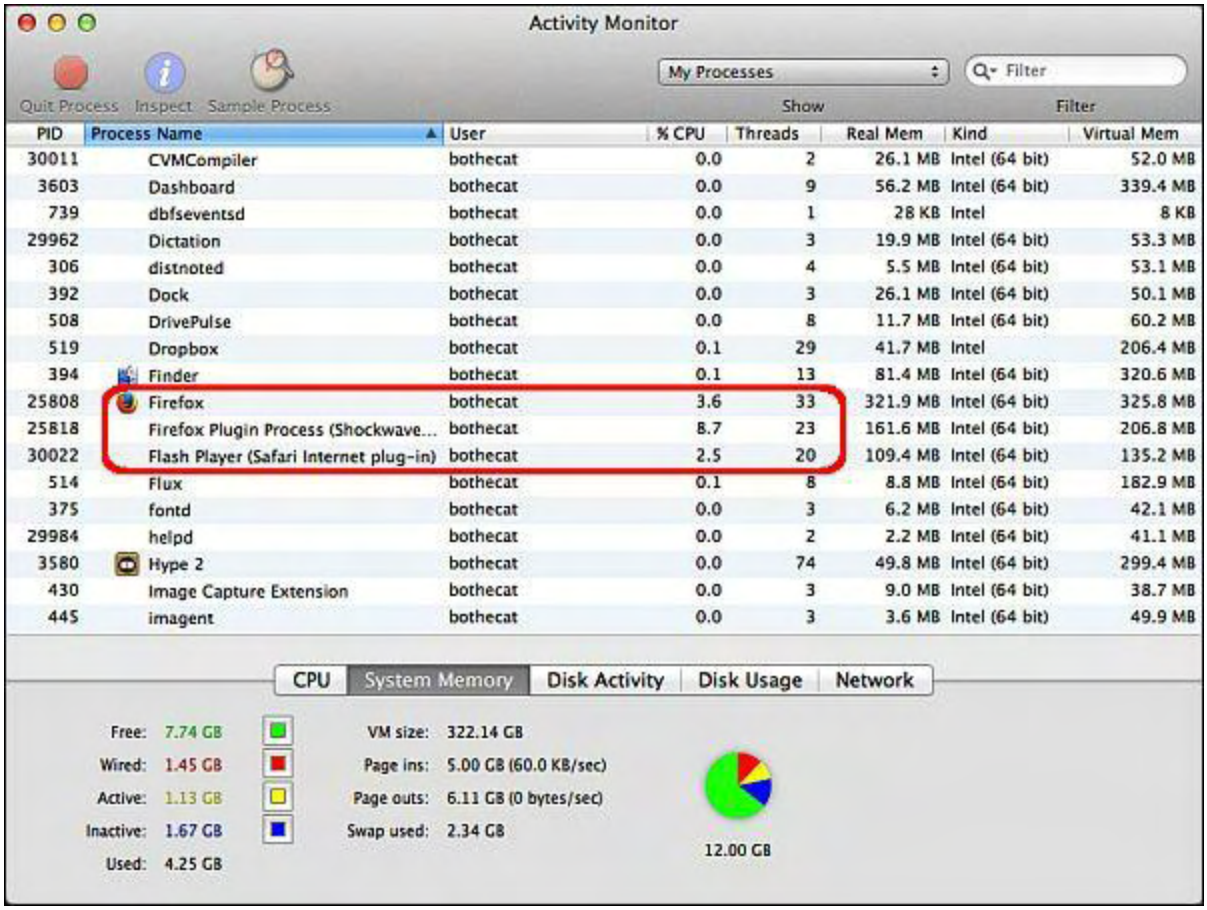


Figure 4. The Activity Monitor can show you how much memory each program uses.

You'll notice that in this example, Firefox and its plug-ins (Shockwave and Flash) gobble up the largest percentage of CPU processing time along with taking up the most memory of any program. If you need your computer to run faster, you can use the Activity Monitor to spot memory hogging programs, shut them down, and you should see your computer immediately run better.

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

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," 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*.

Beyond Personal Computing

"Cloud Computing: Hazy Expectations with Chance of Foggy Outcomes" by Marilyn K. Martin

From the origins of the cloud to the best and worst countries for cloud computing.

Despite the nebulous term "cloud," cloud computing really involves a large number of very concrete computers and servers that are connected through a real-time communication network—like the Internet. It's the ability to run a program on many connected computers at the same time, and can be leading us to abandon software for "subscription downloads." (Although Microsoft's attempt to try that with its gaming console Xbox has had a "stormy" reception.)

Cloud computing lets companies rent computing power, software, storage and other services from shared public data centers. This is less expensive and more flexible—although companies may not know where or in which country their data is being stored. A big volcano explodes in Iceland—PFFT!—your little company in Nebraska is suddenly in "disaster recovery mode."

And in the Beginning...

The original concept of cloud computing started with monstrous mainframe computers in the 1950s. To make more efficient use of these costly mainframes, they were hooked up to multiple dumb terminals which had no internal processing capabilities. "Dumb" referred to the terminal—not the person sitting before it—since it only connected to that mainframe. This was to share physical access, cost and CPU time, and was called time-sharing. (Which may have led to that disastrous, only-available-for-you-on-October-3rd real estate scheme of buying part of a time-share condo in Fiji.)

The 1960s saw ideas that computing could one day be organized like a public utility. Or everyone could be on a terminal/computer that connected to a huge global data center. Companies soon popped up that marketed time-sharing as a commercial venture. By the 1990s, telecomm companies began offering virtual private network (VPN) services, with the

same quality but cheaper than dedicated point-to-point data circuits. "Virtualized or distributed computing" was born.

After 2000, Amazon modernized their data centers (housing computer and telecomm systems, as well as storage), after finding that their expensive centers were using as little as 10% of their capacity. Amazon discovered that by using cloud-architecture, smaller data center teams could add new features quicker and easier, and the rest of the unused space could be rented out. So Amazon jumped on the "virtualization data center" bandwagon, to provide cloud computing to external customers. Amazon Web Services (AWS) was launched in 2006, with its core Elastic Compute Cloud (EC2).

Why Call It a Cloud?

Science uses the term "cloud" to describe a bunch of objects which, seen from a distance, appear as a featureless, misty cloud. Or any grouping of things whose details are not inspected further, like a "weather cloud" in meteorology, or a large number of points in a coordinate system in mathematics seen as a "point cloud." In astronomy, stars grouped together are known as nebula, which is Latin for "mist or cloud."

Q: Did you hear what NSA is calling their newest spy program, after PRISM blew up?
A: Cloud Offering Platform On Unaware Telecommunications (COP-OUT)

Cloud Computing One-Liners

"Cloud computing should be renamed Cloudy Computing, because it's precipitous, vague, messy, hazy and unpredictable."

"Conspiracy sites on the Internet are buzzing that the government is really trying to control the weather with cloud computing."

"If a cold computing cloud bumps into a hot computing cloud, you can expect lighting computing and stormy computing—and then network outages."

"Wall Street thinks cloud computing is the next big thing in 'Vaporware': it's hot, cold, new, old, works, fails—and that's why it was created by an online bookstore with tons of stories and millions of different endings."

"For every Open Source Free Server, look for a bunch of squirrels inside running on tiny treadmills."

iCloud Jokes

Q: What do you call a sheep with no legs?
A: A cloud.

Q: What do you call a cloud with legs?
A: iTornado.

Larry Ellison thinks that someone decided to change the word "Internet" to "Cloud" because it was a lot easier and cheaper than actual innovation.

Q: What cloud is so lazy it won't get up?
A: iFog

Microsoft's cloud computing platform is called Azure. Think they were trying to combine multiple meanings to reach a larger crowd? Like a cross between iAssure and izUsure?

Q: What do you think the ultimate version of Cloud will be?
A: Cloud 9, physically based in Shangrila.

What's Old is New Again

Old: Tech support that would come to your home or office.
New: iCloud support that lives in Denver and connects to your cloud data center outside Hamburg, Germany.

Old: Directed Meditation is to free yourself from your problems and focus on your Happy Place.
New: Directed Meditation is to send all your troubles to the Cloud and focus on iHappy.

Apple's iReign

Some think Apple's new Big Circle headquarters in Cupertino (California) is so that Steve Jobs can beam into the iCenter from his own MiCloud.

Getting Cloudy on the Cloud

Newsmax reported in July 2013 that US regulators are investigating why International Business Machines (IBM) doesn't break down its revenue from cloud computing.

The government, of course, is always sniffing around for "more revenue." They want a breakdown of IBM's cloud-computing if it contains such "taxables" as software, network, databases, or anything human fingers, breath or thoughts can "virtually relate to."

Cloud Computing and Big Data—Marriage Made in Heaven?

Everyone's busy collecting tons of unstructured data—and most of it can only be stored on the vastness of multiple virtual servers on a cloud. But getting new business value out of Big Data requires Analytics.

Q: What do you get if you mix risk analytics and fraud analytics on cloud computing with data visualization?
A: A new TV series called "Breaking Baud."

Skittish about Moving "Mission-Critical" Data to a Public Cloud?

How about a private cloud? Although it's more expensive, and too few IT personnel have the skills to run private cloud systems. A hybrid cloud lets an organization manage some critical resources in-house, but archive data or operate non-private functions on a public cloud.

The key to juggling public and private clouds is to try and match design-differences. Especially since an application that runs in a private cloud, but bursts into a public cloud when computing capacity spikes, is called "cloud bursting."

Q: What happened to the weather segment on channel four last night? Something blew the power and the station went dark.
A: Their IT intern heard "cloud burst" and switched from their private cloud to their public cloud—when they aren't connected to any public cloud.

The Top Five Countries for Cloud Computing

According to *CIO* the top rated cloud-countries are Japan, Australia, US, Germany and Singapore.

Although, according to *Forbes*, the US cloud computing industry could lose up to $35 Billion over the next three years, as a result of NSA eavesdropping with PRISM.

Q: Why did the NSA call their eavesdropping project PRISM?
A: Because a prism is a crystal used to separate a spectrum of light into different colors. So every federal Agency gets their own slice. And if they misuse the data, the last letter is changed to an "N" for all expendable employees.

How to Tell the Worst Countries for Cloud Computing

"Yes, we have great privacy. See the little cartoon fence on screen around that cloud?"

"Support of ... industry-standards? Hey, you show us the industry, we'll support it!"

"Of course we have data-security protections! See the big dog out back?"

"We used to have free-trade policies. Then China showed us how to cut corners for more profit with never-quite-free trade."

"Global...harmonization of rules? Hey, we have rules, you have rules. We get together and have big fun time making harmony with all our rules!"

(Many of these jokes and anecdotes are on multiple Internet sites. But special thanks to Wikipedia.com, TheDailyDose.com, Archives.thedailydose.com, Capitalogix.typepad.com, Artofservice.com.au, Cartoonstock.com, Pinterest.com, NPAcomputers.com, Techrepublic.com, Searchcloudcomputing.techtarget.com, and Opencompute.org)

Marilyn is a freelance writer and humorist, with a special interest (besides computers and technology) in Science Fiction. Besides short stories published in various magazines, she also has some new e-books available on Amazon Kindle: Hunting Monster Aliens is an on-going series of novellas, about a wise-cracking team of ghost investigators who occasionally turn into alien-monster hunters. *Culture Crash! A California Yankee Transplanted to Texas* is a collection of humor essays chronicling her adventures in her new home-state.

Twelve months (July 2012 through June 2013) of Marilyn's Little Known High Tech series has been compiled into an almanac (with a complete index) available exclusively at Amazon. If you want a quick reference for the obscure or unusual in computers and the Internet over the last year, then check it out.

ComputorEdge E-Books has converted many of Marilyn's computer humor columns into four e-books. Now available in a four-book Kindle bundle from Amazon.com *The Best Computer and Internet Humor, Anecdotes, and Jokes Found on the Web*. Marilyn's collection of the funniest stories about our computing machines and how we use them at home, the office, and in cyber space. Save 25% off the individual book price!

Editor's Letters: Tips and Thoughts from Readers

"Computer and Internet tips, plus comments on the articles and columns." by ComputorEdge Staff

"Clear the Confusion," "Incorrect Windows 8 Info," "VoIP (Voice over IP Internet Phone Service)"

Clear the Confusion

[Regarding Jack Dunning's October 4 article, "Will Windows 8.1 and the Surface 2 Tablet Give Momentum to Microsoft":]

Sincere thanks, Jack Dunning, I needed that. It's far too confusing out there...

-Cicero Walker, Colorado Springs, CO

Incorrect Windows 8 Info

[Regarding Jack Dunning's October 4 article, "Will Windows 8.1 and the Surface 2 Tablet Give Momentum to Microsoft":]

I can't believe how much incorrect information this article contained. You will not be able to purchase Windows RT Retail or OEM, it will only come pre-installed on an ARM Device.

Here is a simpler breakdown:

Windows RT 8.1 (Real Windows made for ARM Processors so your 1986 x86 software will not work)
Windows 8.1 (Home Edition)
Windows 8.1 Pro

Tablets come in two flavors the RT and PRO. RT competes with iPad and Pro competes with laptops. I can envision RT in the data center when people start using ARM based servers.

Just can't stand tech writers that don't know what they are talking about.

-Anonymous

My mistake on the line about Windows RT (which is now corrected). This does illustrate the

problem with the Windows 8 name. While I accidentally used the name Windows RT when I meant Windows 8 Standard, I hardly think that puts me into the category of one of those "tech writers [who] don't know what they are talking about." I don't think of myself as a tech writer, but merely as someone who is trying to help people deal with the confusion. Ironically, your comments help to make my point about the Windows 8 name.

-Jack

For Anonymous: It's true that Microsoft has not been clear about what the various versions of Windows can do. But simply calling one version "real" doesn't help in itself unless you explain what you mean by "real."

Jack did explain quite well what he meant by "real," but anonymous just calls RT "real" without also calling the two Windows 8.1 versions "real." Obviously they're all real since Microsoft chooses to call all of them Windows.

We can certainly say that Windows 8.1 and Windows 8.1 Pro that are installed on non-ARM processors are more "real" since they include the functionality of Windows RT along with all the functionality of traditional Windows.

-Ron Cerrato, San Diego, CA

VoIP (Voice over IP Internet Phone Service)

[Regarding the September 27 Digital Dave column:]

I went with VoIP about three years ago and have been extremely happy with it (Ooma). I did have an intermittent problem for about the first 6 months which anyone considering VoIP should look out for. It's called "jitter" which is a problem with your Internet service which causes voices to break up over the phone and which you can't do anything about because its caused somewhere on the Internet, in my case by my Internet service provider.

Jitter is a measure of the spacing between data packets traveling over the Internet and is not related to how fast your Internet connection is. A jitter of less than 5ms is needed for consistently clean VoIP. Over 5ms can cause voice breakup and at 15ms conversation is nearly impossible.

You can easily check your jitter by going to *pingtest.net* which is free and clicking on "begin test". It give you your measurement after running about a one minute test. I suggest checking this randomly a couple of times a day for several days as in my experience jitter can come and go. If you are consistently below 5ms you should have no problem with any VoIP service.

-Ted, Louisville, CO

I've been using VoIP since 2006 (Magic Jack). The first three years I had problems with dropped calls or skipping, but in 2009 there was an upgrade and at that time the only time I had problems was during peak use hours. Then in 2012 I got the MJ Plus that you just plug into the wall and your router so you can turn your computer off and still make phone calls. I make and receive calls any time of the day with no problems. I bought the five year plan at $99. for free calls anywhere in US and Canada. I'm very happy with Magic Jack VoIP service.

-Buck-O, El Cajon, CA

I have Ooma for over three years and have no problems. I also made a couple of international calls to Asia without problems. A relative has MagicJack and he is satisfied with it. I think you evaluate features and costs and go with the one that meets your needs.

-Ken, San Diego, CA

Dear Dave: I have been using MagicJack for over two years. I was able to keep my original phone number but I have to pay to keep it each year I extend my service. It cost me 11 cents per day. So much for paying a phone company.

-Arthur Bowen, San Diego, CA

I'll add to the chorus of satisfied Ooma users. I had to bump up to 7 Mbps on DSL to stop the echo effect when I first started a number of years ago, but since then it's been all I could ask for. Even if the Internet goes out, Ooma still collects your calls and voice mails and you can get those on the My Ooma site from anywhere there is an Internet connection. Definitely worth it!

-Mike, Denver, CO

ComputorEdge 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 ComputorEdge.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 "ComputorQuick Review", or yell at us, please e-mail us at ceeditor@computoredge.com. If you would like to review our recent e-books, please visit ComputorEdge E-Books.

Send e-mail to ceeditor@computoredge.com with questions about editorial content.
Send mail to cewebmaster@computoredge.com with questions or comments about this Web site.

ComputorEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 484-1998

Click to Visit *ComputorEdge™ Online* on the Web!

Table of Contents