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BUYER**

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The shoelaces of the traditional power structures are coming untied. There is a device falling into the hands of the common people. A device which is beginning to unglue the very fabric of the autocratic way of doing business. There has not been a tool this radical since the invention of gun powder. A device called the microcomputer is causing a revolution which strikes terror into the heart of every bureaucrat, autocrat and power hungry "crat" around the world. The commies don't like it.

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Microcomputers Three Decades Ago

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Microcomputers Three Decades Ago

In 1983, the new world of microcomputers was sparse compared to now. Who could have predicted today's technological world?

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by Digital Dave

Digital Dave answers your tech questions.

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[Computers Dominate 2015—Who Knew?](#)

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Jack Says, "I Told You So!"

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[Micro Power Now! \(Circa 1983\)](#)

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[A Quick, Light App for Background Music, Plus More RegEx](#)

by Jack Dunning**TinyShuffle, a Free App to Randomly Play Your Favorite Music, Plus More AutoHotkey RegEx Tips**

This bare bones AutoHotkey script will play your favorite music in random order—but you will need to know a tiny bit of AutoHotkey. Plus, using properties (`\p{xx}`) in AutoHotkey RegEx to correct punctuation, change currency symbols, and remove sets of brackets and parentheses.

Wally Wang's Apple Farm**by Wally Wang****Superior Technology Loses Out**

Superior Technology Loses Out; Programming in Pictures; The Growing Dominance of Mobile Computing; Learning to Create Common iOS Apps; The Best Time to Shop; Learning to Draw in Vectors; Learning in Advance About Apple Watch; Teach Yourself Statistics; AirDrop.

Worldwide News & Product Reviews**by Charles Carr, News and Reviews Editor**

The latest in tech news and hot product reviews.

Americans Want Internet to Monitor Health, But Not Sex; Security Firm: More Can Be Done to Avoid Hacks Like Staples; LG G Pad 7.0 (AT&T).

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

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

"Stripping Tags," "Back Arrow in Web Browsers," "Corrupted LibreOffice Folder," "Simple PDF Printer"

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Digital Dave

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

Backup by Copying; Internet Over Power Lines; Scan to Computer.

Backup by Copying

Dear Digital Dave,

My favorite way to backup my files is by simply copying them. I always thought all versions of Windows allowed unlimited file name lengths. However, when I try to copy certain folders, I will sometimes get a message saying the file name was too long and therefore the file could not be copied. Worse yet, there is no skip option, and even if there were, I'd have to hit the skip button thousands of times, and those particular files would not be backed up. That particular folder is simply aborted and I have to move on to copying the next folder.

Sometimes, but only sometimes, it works if I laboriously copy each sub-folder and each sub-sub-sub-sub-sub-folder individually, or else copy-and-paste the contents via Ctrl-A/Ctrl-C/Ctrl-V, but that takes forever and does not leave me very motivated to back up monthly! (I mostly have a lot of photos that I'm concerned about). At least the super old versions like 3.1 simply truncated the filenames and continued copying. What to do? TIA

Werner

British Columbia, Canada

Dear Werner,

If you're using Windows Explorer to copy files then there is a limit on the length of the combination of file path and file name (generally stated as 260 characters). It also appears that there is a limit on the length of the path (128 characters) when copying or expanding ZIP files into a sub-folder. It seems your problem may rest in the "sub-sub-sub-sub-sub-folders." The most common solution is to eliminate some of the lower level (or intermediate level) folders.

I don't know if there are other file handling programs which will handle longer file path/name combinations. Perhaps another reader will enlighten us if there is one that they use.

If I decided I wanted to reformat the folder/file names, then I would probably consult Jack Dunning about using AutoHotkey. I know that there are commands that will do just that. However, I would guess that there are other programs made for the job—although I haven't tested any for limits on path/file length.

Digital Dave

Internet Over Power Lines

Dear Digital Dave,

What do you know about Internet over power lines? I listened to an NPR program about 10 years ago that explained the technology was ready to go. There was no research and development needed. Now the technology has been put on the back burner.

Electric companies claim it's too difficult! I think that's garbage, they are probably getting paid off by cable companies. This technology can be used by people in rural areas and great competition to bring down high prices charged by cable companies. Need to get government involved to distribute technology.

*Joey Derden
San Diego, CA*

Dear Joey,

While it can be done, there are a number of reasons why the power companies have not set up Internet service over power lines. There have been many such test projects throughout the world, but what looked good on paper just hasn't panned out.

As it turns out, it is not easy to move broadband signals over the power lines—especially over long distances. Then, once you get to the remote location, it rarely out performs Wi-Fi or other broadband options. There are two primary obstacles: noise from the power lines and the transformers in the power system.

There is so much RF noise generated by the power lines that it can often cause inconsistent problems. To clean things up, special equipment needs to be added to the system. That adds to the cost.

In most locations in the United States, the transformers service only one (or a few) house(s). The data signal does not move well through a transformer so a special device needs to be added to circumvent the transformer. The European power system uses transformers to service far more homes and building, so it was felt that systems would work better there. But the fact is that almost everywhere it's been tried, the projects have been force to close down

for either feasibility or economic reasons.

I seriously doubt that government involvement would help the situation. Most likely it would only waste a lot of taxpayer money. If it were a workable idea, then Google (who is not beholding to the cable companies) would probably be pursuing this option rather than laying fiber optic cable in the Google Fiber broadband markets. If you're in a remote location without cable or DSL, then satellite Internet may be your best options.

Digital Dave

Scan to Computer

Dear Digital Dave,

I have a HP Officejet 8600 printer which also scans. It sends scanned items to Win 8.1 Pictures file. I want it to send to a separate "Scans" file I set up under users/steve. Scans still are directed to the Pictures file. I even set up a Scans file in Libraries (just a short cut director). I don't see how to direct the HP printer to send scanned files to Scans folder. I don't want scanned documents mixed with pictures.

To anyone considering a printer, I'd avoid the HP 8600. It's slow, non-intuitive and bulky. It does hold a lot of ink, prints clearly and prints duplex—albeit slow.

*Steve
Encinitas*

Dear Steve,

As far as I can see, in order to scan directly to your computer, you need to setup the HP software on that computer so your printer will see it. If there is a place to set the default folder for scans, it is probably done through that HP software on your computer. See Figure 1 which is taken from the [manual for your printer](#).

Scan to a computer

To scan an original to a computer from the printer control panel

 **NOTE:** If your printer is connected to a network and you are scanning to a Windows computer, before you can scan from the control panel, you need to enable scanning from the software. From the computer desktop, click **Start**, select **Programs** or **All Programs**, select the folder for your HP printer, and then select the option for your HP printer. Double-click **Scanner Actions**, double-click **Manage Scan to Computer**, and then click **Enable**.

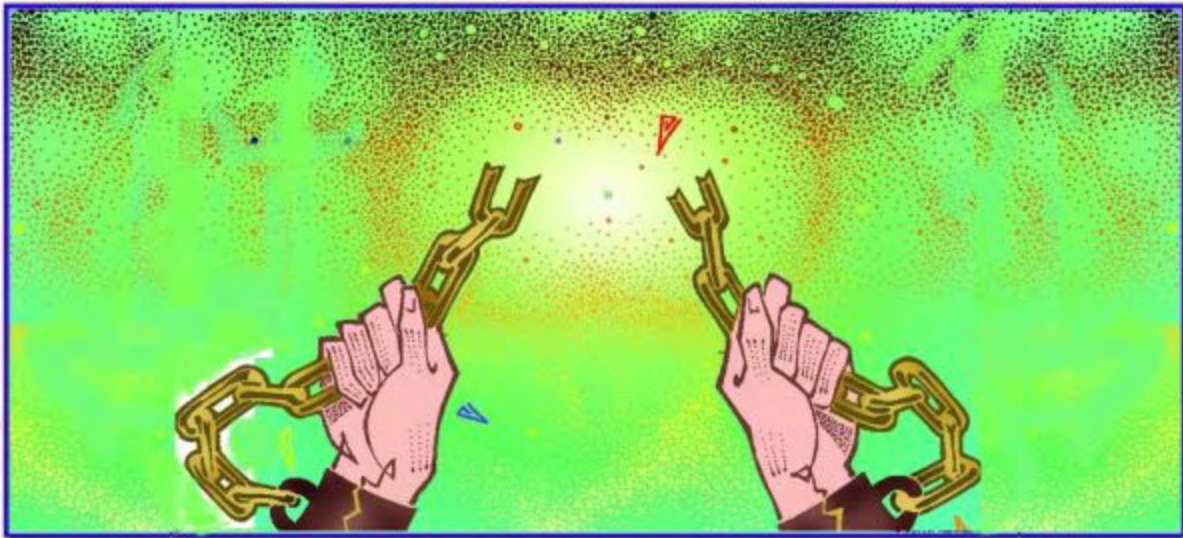
Figure 1. Defaults for saving scans should be located in the HP software or printer drivers.

Honestly, I haven't taken the time to setup every computer with my printer. I've found it easier to use a thumb drive for scans. I plug the thumb drive into the printer and select the option to scan to the USB drive. Then I use sneaker net (walk over to the computer) to move the file wherever I want it. Scanning is a natural fit for USB drives as you're at the scanner anyway to put the paper you're scanning into the all-in-one. There isn't much time savings by scanning remotely.

I know that this approach isn't very elegant, but there are so many things that you're supposed to set up on every computer that it's difficult to keep up with them all. I rarely print anything, much less scan. I only do occasional scans, so the USB drive method works great for me. If I were doing a lot of scans or regular scans, then I would dig into the HP software and look for the best options.

Having said all that, you may not find an option for changing the save folder—though it seems that there would be one. Worse case you can put a shortcut to your target folder in your "Send to" folder, (Run (⌘+R) => *shell:sendto* to open the folder, then right-click New => Shortcut. Later you can right-click on the newly scanned file and select "Send to" to move it to the other folder. Pretty easy and no awkward dragging.

Digital Dave



Computers Dominate 2015--Who Knew?

“Jack Says, “I Told You So!”” by Jack Dunning

In 1983, microcomputers were low-powered, expensive, and rare. Almost no one had a cell phone, much less a smartphone. Today's use of technology would have been considered science fiction.

Over thirty years ago in the first year of *ComputerEdge* (then *The Byte Buyer*) I was working distribution of the September 16, 1983 issue—only our sixth publishing. I was delivering bundles of the magazine to San Diego State University when I had a brief encounter with one of the professors. (I don't recall the department and never knew the academic's name.) What made it memorable were the comments he uttered after picking up a copy of that particular issue. The title article was "Micro Power Now." I don't remember his exact words, but they were disparaging remarks scoffing at the pretext of the main (only—other than Digital Dave) article—and any magazine that would espouse such tripe. The article (see [accompanying reprint](#)) predicted a coming revolution sparked by the microcomputer.

I'm sure that the professor thought that he was talking to a mere delivery boy (and he was), unaware that I had also written the article. I didn't engage him in conversation because I had many more bundles to drop off. I've often thought of that brief interaction and what it said about the times. In 1983 the IBM PC (the origin of the term PC) was just beginning to come into its own and surpassed the Apple II as the best-selling personal computer—although there were many other types of computers available.



I purchased my first computer more than two years earlier (before the introduction of the IBM PC). It was a [CP/M machine](#) with 64KB (yes KB, not MB, nor GB) of RAM, two single-sided double-density floppy disk drives, with a built-in display (monochrome) and keyboard. (Sort of like today's all-in-one computers—only less.) I bought a [Superbrain](#) (see Figure 1 at left) based upon the recommendation of Digital Dave—he already owned one—and paid over \$2000. After a couple of years experience, I felt that I was in a good position to write about the promise of technology.

I read that same article now and see how I was a bit over dramatic and very unpolished, but even I must marvel at its overall accuracy. The best line is probably the last sentence, "Not only is the future impact of the microcomputer not exaggerated, but it's greatly underestimated even by the wildest of dreamers." I freely admit that what I visualized three decades ago falls way short of today's reality—although I was on the right track.

Computers Thirty Years Ago

In 1983 the computer market was still dominated by mainframes (the big computers) and minicomputers (the small big computers serving dumb terminals). Some thought that I was being shortsighted by only including microcomputers in our new magazine. At a meeting of the Independent Computer Consultants Association I was asked why minis weren't a topic. I don't think I gave an answer that satisfied the questioner, but to tell the truth, minis just didn't spark my imagination. I didn't want to tell a mini consultant that I saw the mini computer quickly becoming a relic of the past. Microcomputers were the future. (Plus, I didn't know much about mainframes or mini computers. Still don't.)

Compaq had just introduced the [first IBM PC clone](#) using the compatible operating system MS_DOS recording record sales for a new company in its first year, "the most ever by an American business in a single year." Compaq sold 53,000 luggables all-in-one computer that year. By no means was there a computer in every home. In fact it was unusual to find one anywhere but in businesses.



[MS-DOS](#) (developed by Microsoft in parallel with the original PC-DOS for the IBM PC) spawned the IBM PC compatible computer—which anyone could build in their garage. In the early days, many computer stores built their business plan around assembling and selling IBM compatible machines. (This is how Dell got its start.) The PC boom was in its infancy in 1983. Today the PC continues to dominate the desktop and laptop market—although it is rare to see a PC built by IBM except in computer museums. In 2004, Lenovo [acquired IBM's Personal Computing division](#).

In 1983 Apple introduced the Lisa with the first graphical user interface. Selling at \$10,000 a pop it was not a success, but it inspired the first Mac, which came the next year. Apple certainly is responsible for creating the market for desktop publishing and other artistic endeavors. "The computer for the rest of us." Prior to the Mac computers were for nerds.

The Internet as we know it did not exist—only bits and pieces. It was in 1985 when the steps were taken which would allow those bits and pieces to evolve into the massive network of today. I had no concept of the Internet when I wrote that article, although some of the predictions make it sound like I did. Communications were through slow modems, usually connected to a service such as [CompuServe](#). It wasn't until 1989 that [America Online \(AOL\)](#) started its meteoric rise as a consumer alternative to CompuServe.

If you compared computer life today with 1983, you would have to say the old days were pretty desolate. The predictions I made in that short piece are now obvious, but back then I can understand why that professor huffed at any suggestion of radical change.

What's Changed? Almost Everything!

There has certainly been a breakdown of the major power structures. People walking around with handheld computers (smartphones) are in a position to instantly record and communicate virtually anything. There is no public activity or event which goes unrecorded. Can you imagine how many more videos there would have been of the Kennedy assassination if there

had been smartphones? (That probably would have produced even more conspiracy theories.)

Massive amounts of information is available 24 hours a day. Need an answer? Find it on the Internet. Power people and structures are more exposed than ever. The PC is now only a device at the end of one connection, although, today all institutions are almost totally dependent upon PCs and the Internet.

In 1983, stock brokers were paid big buck based upon the dollar value of a trade. Today, most have moved on to other professions since the low priced charged per Internet trade has made the churning of accounts less lucrative.

craigslist	us cities	united states	canada	asia	europa	intl cities
atlanta	alabama	missouri	alberta	bangladesh	austria	amsterdam
help pages	alaska	montana	brit columbia	china	belgium	athens
login	arizona	nebraska	manitoba	india	czech repub	bangalore
faqsheet	california	nevada	n brunswick	indonesia	denmark	bangkok
avoid scams	dallas	n hampshire	newfoundland	israel	finland	beijing
your safety	denver	colorado	new jersey	japan	france	barcelona
best-ofs	detroit	connecticut	new mexico	korea	germany	berlin
job boards	hawaii	delaware	new york	lebanon	great britain	buenos aires
movie	houston	dc	n carolina	quebec	greece	dubai
i-shirts	las vegas	florida	north dakota	saskatchewan	hungary	dublin
foundation	los angeles	georgia	ohio	ca cities	philippines	hong kong
net neutrality	miami	guam	oklahoma	calgary	singapore	italy
system status	minneapolis	hawaii	oregon	edmonton	taiwan	netherlands
terms of use	new york	idaho	pennsylvania	halifax	thailand	norway
privacy	orange co	illinois	puerto rico	ottawa	uae	poland
about us	philadelphia	indiana	rhode island	quebec	vietnam	portugal
	phoenix	iowa	s carolina	toronto	americas	russia
	portland	kansas	south dakota	vancover	argentina	spain
	raleigh	kentucky	tennessee	victoria	brazil	sweden
	sacramento	louisiana	utah	winnipeg	caribbean	switzerland
	san diego	maine	vt	more	chile	uk
	seattle	maryland	vermont	colombia	egypt	south africa
	st bayarea	mass	virginia	australia	egypt	sydney
	st louis	michigan	washington	australia	egypt	tel aviv
	wash dc	minnesota	west virginia	micronesia	egypt	tokyo
	more	mississippi	wisconsin	new zealand	egypt	zurich
		wyoming		venezuela		

In 1983, classified ads in newspapers were a major source of revenues. [Craigslist](#) which started in 1995 killed that golden goose. Today, newspapers are barely hanging on as the Internet drains ad revenues and steals readers.

In 1983, one of the major sources of distribution points for *The Byte Buyer* was bookstores. [Amazon.com](#) helped to kill them off by starting as an online only bookstore in 1995. Now Amazon is the dominant online retailer worldwide by a margin of ten to one.

There is almost no aspect of daily life which is not impacted by computers and the Internet. E-mail has devastated the post office. Now we wonder how long the postal

service will be around. If it weren't for packages—which we can't squeeze through Internet connections—home delivery could become a thing of the past.

Regardless of your political beliefs, there is no doubt that Web sites such as [WikiLeaks](#) and leakers such as [Edward Snowden](#) have upset the apple cart. In 1983 it was fairly easy to lock up secrets in a filing cabinet. Today, anyone with a thumb drive can instantly copy and disseminate vast amount of information. Whether you think it's treason or shining the light of freedom, it has changed the rules forever and made it much more difficult for government to control information.

On the downside, our dependence on computers and connections made the hacking of Target, the break in of Sony's computers, and other cyber invasions possible. Most predict much more to this type of malevolence in 2015. Possibly we need new approaches to security, but there will most likely always be holes found.

Texting and Skype have changed the political landscape in despotic countries, bringing a

number of them to their knees. (Unfortunately, many people don't know what to do with their new found freedom and allow new despots to take power.)

One of the few businesses which has seen little change is the local barbershop. I still don't know how to computerize a haircut.

We're Not Done Yet

I'm not sure that any system is safe from computers and the Internet. I never would have predicted that the hotel industry and local taxi cab service would be threatened by [Airbnb](#) room rental and [Uber](#) ride sharing, respectively. I'm not sure that each established market is as threatened as much as the local governments which control (and derive revenues from) the old way of doing business. These battles are underway today and it looks like the technology is winning—mostly because that's what people want.

It's important that we remember that technology is merely a set of tools. It can be used for good or bad. The Internet and computers only reflects the preferences of the users. Banning the technology will not work. The only thing we can do is take advantage of the good and arm ourselves against the bad.

Kids born today will never know about a world without connected computers. They will take it for granted and whine when deprived of it. For them technology will be like the mountains and ocean—a fact of life which has always existed. Those of us who have watched the change are just guessing about how to deal with the induced societal changes. Maybe the next generation will figure out how to consume the technology in their life without it consuming them.

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

Recently released is Jack's FREE AutoHotkey book, [AutoHotkey Tricks You Ought to Do with Window](#), available exclusively at ComputerEdge E-Books in the EPUB for e-readers and tablets, MOBI for Kindle, and PDF for printing formats.

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[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.

Micro Power Now! (Circa 1983)

“A Reprint from The Byte Buyer, September 16, 1983”by Jack Dunning

Some say, "The future of the microcomputer is greatly exaggerated by science fiction and dreamers." Not only is the future impact of the microcomputer not exaggerated, but it's greatly underestimated even by the wildest of dreamers.

This article was originally published in the September 16, 1983 issue of The Byte Buyer—later to become ComputerEdge. Honestly, in those early days the editorial was written primarily to fill space between the advertising and other features such as free classified advertising. While I don't consider this my best work (and it is a little over blown), I am surprised at the insights. The cover art was done by Tom Carroll—as were many of the early covers. —Jack Dunning

The shoelaces of the traditional power structures are coming untied. There is a device falling into the hands of the common people. A device which is beginning to unglue the very fabric of the autocratic way of doing business. There has not been a tool this radical since the invention of gunpowder. A device called the microcomputer is causing a revolution which strikes terror into the heart of every bureaucrat, autocrat and power hungry "crat" around the world. The commies don't like it. The fascists don't like it. With the microcomputer, the most dangerous weapon known to man is now getting into everybody's hands. That weapon: Information.



The traditional power structures are the media, big corporations, unions, universities, professionals, and political machines. At first glance it is difficult to see how any of these giants could be hurt by something as small as the microcomputer, but it is this smallness which makes the microcomputer the greatest threat to those desiring control over others. There has always been an abundance of data filling up filing cabinets, desk drawers and storage closets. In the past, it was too much work to go through these volumes of data for just one piece of useful information. Now it is possible to reduce these volumes to usable form with minimal work. The desktop computer puts quantities of information at the fingertips of the individual. The overall impact is still difficult to visualize so a few examples are in order.

Within many corporate walls the fears of high-level bureaucrats are being heard. "If people get their own computer, how are we going to be able to control the company?"

"If everybody's doing their own thing with a microcomputer, we won't be able to integrate all the work at the corporate level." "Everything will be chaos!" The vision of employees running amuck with microcomputer strikes terror into the hearts of anyone who has seen information out of control.

Imagine going to a meeting on the financial future of the company. Each stockholder arrives with individual versions of the forecast. A version based upon individual assumptions fed into a microcomputer. What's the company to do about policies and projections? How do they control information leaks if everyone has the information at their fingertips via their personal computer?

People are starting to work out of their homes communicating with the company via a MODEM. The company echoes, "How will we be able to tell how many hours they are actually working?" A company may be paying for eight hours and only getting two. It's un-American! If employees don't come to the office, how can they be properly intimidated?

When the television was invented it was a serious blow to the newspaper industry. If it wasn't for your favorite comic strips the blow could have been even more devastating. However, television could not provide the detail coverage which is provided by the Morning Times.

Now, here comes the microcomputer! Imagine sitting down to breakfast with your computer. First you scan the headlines for an item of interest. You point to that item and immediately see the first paragraph. If you want more detail, the computer will give it to you on command. You will even be able to get the comic strips.

What happens to the university when a person can actually go to college at home? A student will be able to research a term paper in minutes rather than months. A student will be able to check the professor's answers on the spot. This puts the teaching staff and faculty under the gun. A small school will be able to provide the same quality education as the huge institutions at a lower cost. But will a microcomputer replace the fraternity party?

Another situation comes to mind. Visit the doctor: "Based on your symptoms, Mr. Smith, you appear to have a terminal case of *clomibus sischerosis*," says the doctor. "But, Doctor, I hooked up to my computer and it said to also check out *excelerous discititus* and *xeroseride umpulpiles*, but regardless of the actual disease, the average cost of the treatment should be \$49.95 according to an independent survey of 10,000 medical doctors."

Politicians of questionable ethics may have the most to fear. Voters will be able to verify the voting record of any politician almost instantaneously. They will be able to research statements made by the candidate to check for consistency. If there was some political action which happened to displease just one computer user, that user could generate a personal mailing campaign. With the use of a printer, letters could be sent to Congress or any other special interest group in a matter of hours.

The future with micro computers is not rosy for those who wish to seek and control large domains of power. This powerful tool in the hands of the common folk will decentralize and democratize our society more than any other event in the history of mankind. If microcomputers ever become widely available in the autocratic countries around the world, they will be controlled by the governments of those countries more tightly than guns as they pose a much more dangerous threat. A dissident could write a book in his own home and transport it quietly and quickly on a floppy disk. It would become possible to control information and the survival of an autocratic government is dependent upon the control of the information.

Some say, "The future of the microcomputer is greatly exaggerated by science fiction and dreamers." Not only is the future impact of the microcomputer not exaggerated, but it's greatly underestimated even by the wildest of dreamers.

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Free Software!**

A Quick, Light App for Background Music, Plus More RegEx

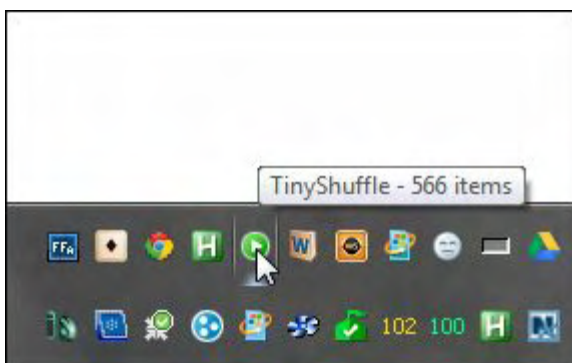
“TinyShuffle, a Free App to Randomly Play Your Favorite Music, Plus More AutoHotkey RegEx Tips” by Jack Dunning

This bare bones AutoHotkey script will play your favorite music in random order—but you will need to know a tiny bit of AutoHotkey. Plus, using properties (\p{xx}) in AutoHotkey RegEx to correct punctuation, change currency symbols, and remove sets of brackets and parentheses.

If you enjoy listening to music while computing, but don't want to deal with figuring out all the controls on the typical audio player, then this little AutoHotkey script called [TinyShuffle](#) by *firace* may be just the ticket. It's simple, light, and easy to use. However, you do need to edit the simple AutoHotkey script to add in your favorite music directory. (Only the top level folder path is needed. The sub-folders are automatically retrieved.)

If you want to test the app and you haven't installed AutoHotkey yet, then you will need to do that first. Go to "[Installing AutoHotkey and Writing Your First Script](#) for instructions. You should have AutoHotkey installed on at least one computer for modifying the script, but you can then compile the script into EXE files and run it on any Windows computer with a double-click.

How TinyShuffle Works



After making one modification to the file, running TinyShuffle is as simple as running the AutoHotkey script. The designated music folder list is loaded and they are played in random order. The default Windows Media Player (in the background) is used to play the songs and the icon is shown in the System Tray as shown at the left. If you want to skip a song, then use the WIN+S (⊞+S) key combination. To exit the app, hit ESC. That all there is to it.

Modifying the script is easy. Once you have the main AutoHotkey program downloaded and installed, copy-and-paste the script shown below (see Figure 2 for an image of the script and copy from the text below the image) into any text editor (I usually use Notepad). Insert your music folder path into code and save the file with the name *TinyShuffle.ahk*. Load the TinyShuffle script by right-clicking on the file name in Windows Explorer and selecting Run Script from the context menu. The music will start playing.

```
; TinyShuffle by firace
; http://www.autohotkey.com/board/topic/51861-tinyshuffle-smallest-
mp3-player-on-earth/

#singleinstance force
mp3root = c:\Users\Jack\Music ; change to your music folder path
IfNotExist, %mp3root%
    exitapp

menu, tray, NoStandard ; remove to add context menu
menu, tray, icon, shell32.dll, 138

FileList =
Loop %mp3root%\*.mp3,, 1
{Listsize++
    FileList%Listsize% = %A_LoopFileFullPath%
}

menu, tray, tip, TinyShuffle - %Listsize% items

loop
{
    Random, rand, 1, %listsize% ; randomize the play order
    randfilename = % filelist%rand%

    if rand != %last%
        Soundplay, %randfilename%, wait
    last = %rand%
}

#s:: Soundplay,skip
~esc:: exitapp
```

Figure 2. For the TinyShuffle music player to work properly the path to your music folder must be added to the AutoHotkey script (red box).

While you can copy the same script from the site linked above, it's provided here for easy cut and paste:

```
#singleinstance, force
mp3root = c:\Users\Jack\Music
IfNotExist, %mp3root%
    exitapp

menu, tray, NoStandard
menu, tray, icon, shell32.dll, 138

FileList =
Loop %mp3root%\*.mp3,, 1
```

```

{Listsize++
  FileList%Listsize% = %A_LoopFileFullPath%
}

menu, tray, tip, TinyShuffle - %Listsize% items

loop
{
  Random, rand, 1, %listsize%
  randfilename = % filelist%rand%

  if rand != %last%
    Soundplay, %randfilename%, wait
  last = %rand%
}

#s:: Soundplay,skip

~esc:: exitapp

```

The skip song key combination can be changed to any other combination by changing the `#s:: Soundplay,skip` line of code with your [preferred hotkey combination](#).

The one problem I see is whenever you hit the ESC key the app will exit—regardless of what you're doing. If you need to use ESC in another program, then the music will stop. This can be dealt with in a number of ways, but any changes will tend to add complication. A while back I wrote another music player I called QuikPlay. It is discussed starting in an earlier [AutoHotkey column](#) and combined, updated, and included in Chapter Five of the [AutoHotkey Applications e-book](#). There you will find a number of techniques for adding other hotkeys and items to the System Tray icon right-click menu.

The *QuikPlay.ahk* AutoHotkey script is listed at the "[Free AutoHotkey Scripts](#)" Web page and available for download at the *ComputerEdge* [AutoHotkey download site](#). If you want to take advantage of the System Tray icon right-click menu features, then the *menu, tray, NoStandard* line of code will need to be either deleted or commented out by placing a semicolon in front of it.

Of note for people learning to use AutoHotkey is the [Random command](#) which is used to randomly pick the next song to play:

```
Random, rand, 1, %listsize%
```

The line of code randomly generates a number between 1 and the number of songs and stores it to the variable *rand*. The variable *rand* is used to find the random song to play. This technique is useful anytime you need to randomize a list. It is similar to the way the banner ads on the *ComputerEdge* Web site are sorted so that they will always appear in random order—although it is not done with AutoHotkey, but a language which generates HTML code with a similar randomizing function.

Using Properties (\p) with AutoHotkey Regular Expressions (RegEx)

This next discussion is part of an ongoing series about AutoHotkey Regular Expressions (RegEx). If you've never done anything with RegEx before, then you might want to check out the column "[Easy Regular Expressions \(RegEx\) in AutoHotkey](#)" for a simplified introduction to AutoHotkey Regular Expressions, then work your way back to the current date. RegEx offers powerful tools, but they are not always easy to grasp.

This time we take a look at RegEx properties which are called with the operator \p. The various \p options are not listed in the AutoHotkey documentation, but there are many places on the Web where they are discussed. In this column we will take a look at a few ways that properties can be used and include a list of some of the most useful options.

(Robert Ryan's AutoHotkey [RegEx Tester](#) shown in the figures below is used to demonstrate the effect of properties in a RegEx.)

A property is called in a RegEx by inserting \p{xx}. The \p tells RegEx to use the property designated by the characters within the following curly brackets {xx}. For example, \p{P} tells RegEx to look for any kind of punctuation. This could be used to correct typographic errors as shown in Figure 3. In this case, any word (as bounded by \b) with any punctuation inside it will change that punctuation to an apostrophe.

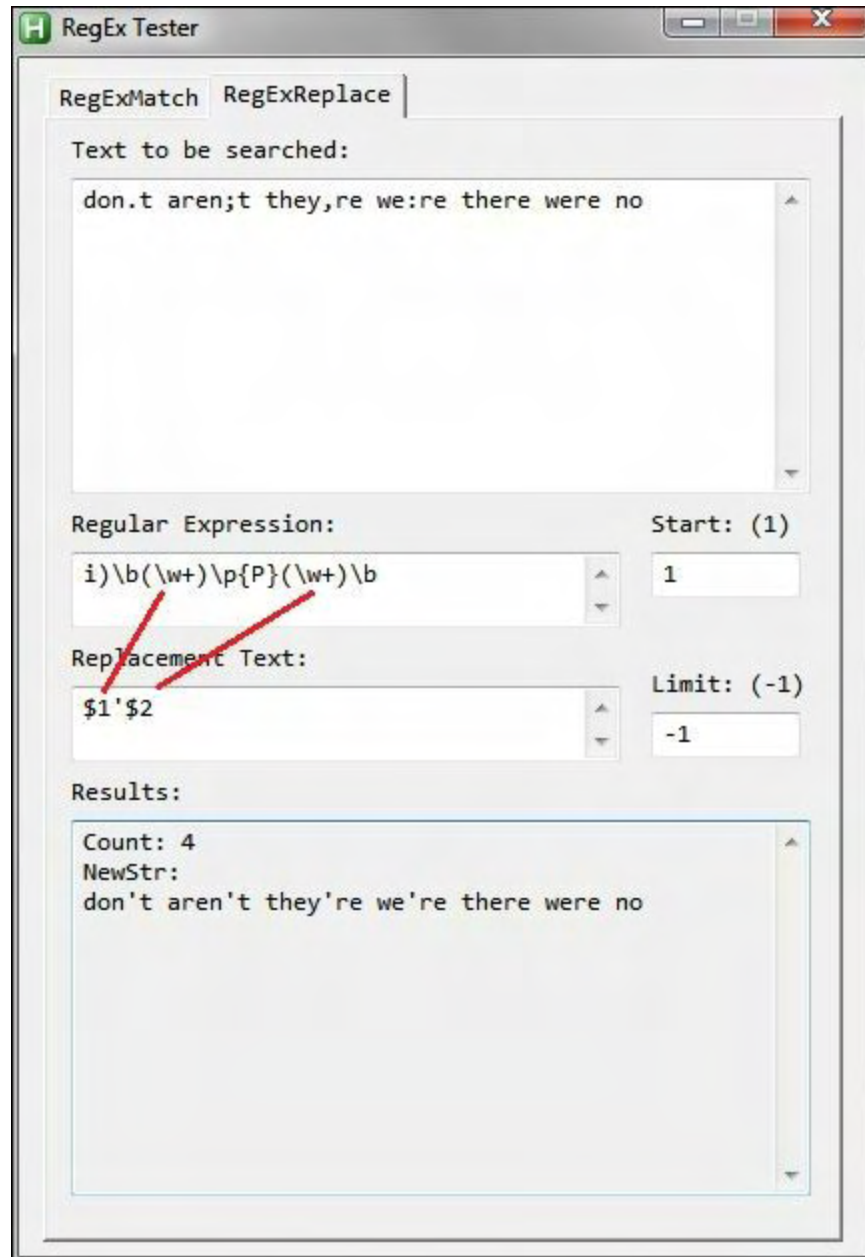


Figure 3. This RegEx finds words with any punctuation inside and replaces the punctuation with an apostrophe

The RegEx is fairly straightforward:

```
i) \b(\w+)\p{P}(\w+)\b
```

The *i)* option at the beginning tells RegEx says to ignore the case of any letters. Surrounding the RegEx with `\b` will ensure that only single words are matched. The first sub-pattern `(\w+)` as designated by the first set of parentheses tells RegEx to match one or more letters or digits. Next, any punctuation mark can match `\p{P}` followed again by one or more letters or digits `(\w+)`.

Since we don't expect digits in any of our target words, a better RegEx would be:

```
i) \b ([A-Z] +) \p{P} ([A-Z] +) \b
```

This limits the possible characters to letters—upper or lower case as allowed by the *i*) option. However, this RegEx will only be useful when there are no other uses of punctuation inside a word. URL with dots or underscores would change the first occurrence to an apostrophe.

Since this is merely a demonstration of how `\p{xx}` works we'll move on to other examples. If you actually wanted to fix contraction typos, you would probably be better off listing the worrisome characters:

```
i) \b ([A-Z] +) [ ; ; , ] ([A-Z] +) \b
```

This eliminates the use of `\p{xx}` but makes the expression more narrowly targeted.

The Currency Symbol Property

There is a RegEx property which matches any symbol, `\p{S}`. To match only currency symbols, the expression is `\p{Sc}` (see Figure 4). This might come in handy if you need to either find any mention of currencies or replace all dollars with British pounds.

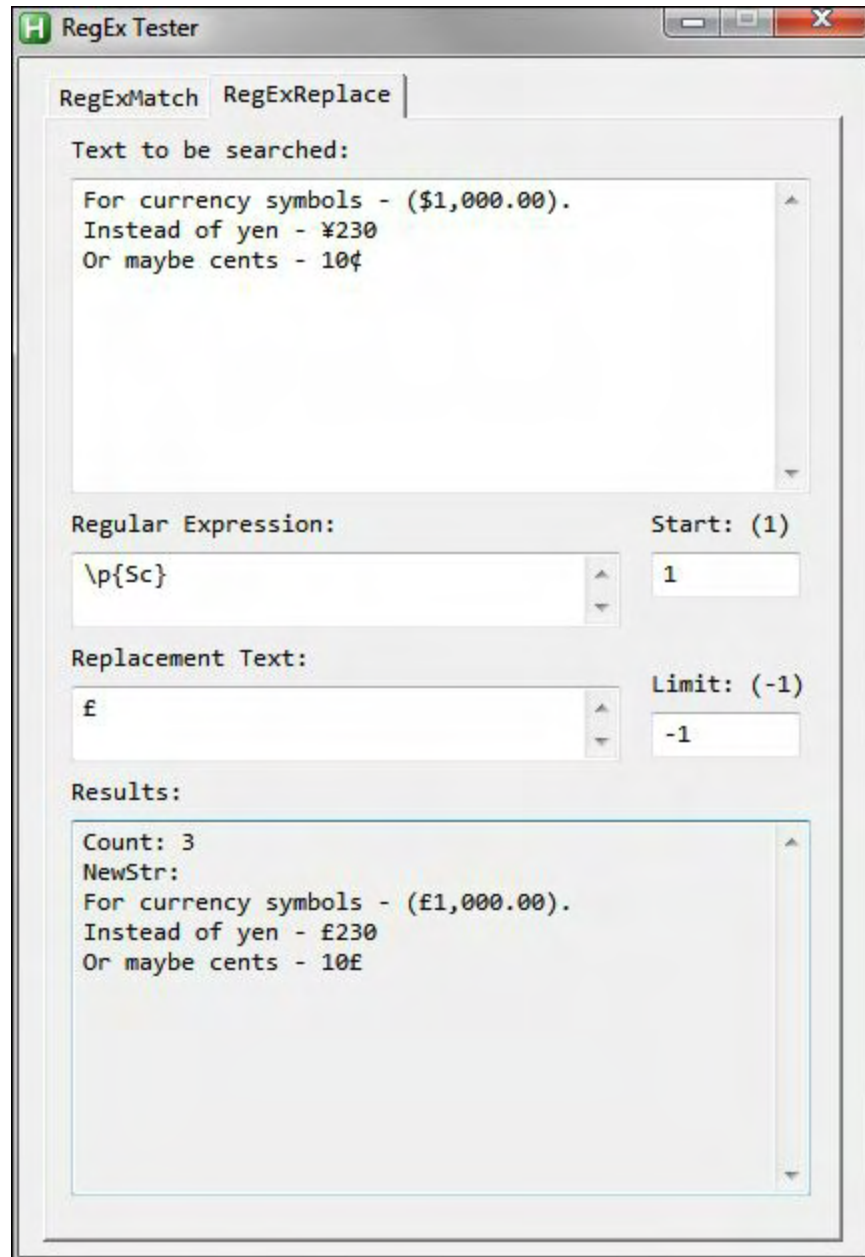


Figure 4. Any currency symbol is matched and replaced with the British £.

Notice how every currency symbol whether dollar, yen, or cents was matched (and replaced with the £ symbol) by `\p{Sc}`.

Removing Parentheses and Brackets

The expression `\p{Ps}` (for punctuation start or open) matches any opening punctuation such as an open parentheses, curly bracket, or square bracket. The expression `\p{Pe}` (for punctuation end or close) matches any closing punctuation such as a close parentheses, curly bracket, or square bracket. By pairing the two properties, sets of brackets can be matched and removed (see Figure 5).

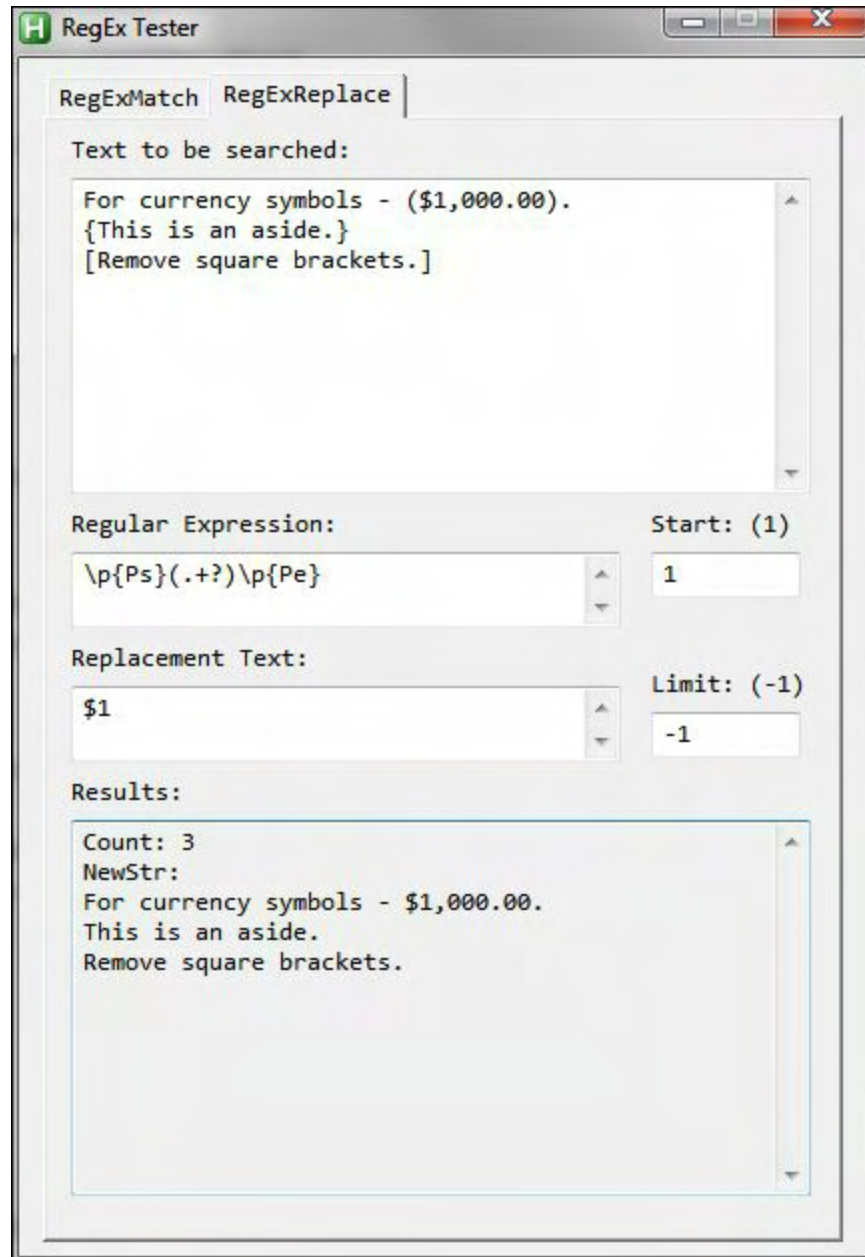


Figure 5. Parentheses, curly brackets and square brackets are removed by using `\p{Ps}` and `\p{Pe}` respectively.

These examples are designed only to demonstrate how the properties can be called and work. It is up to the script writer to determine when they may be most useful and how to implement them. Make sure that you're using the current version of AutoHotkey since `\p` is supported in AutoHotkey 1.1 (AutoHotkey_L) versions.

Most Useful RegEx Properties

The following is a list of RegEx properties I found the most useful. For a complete list, see www.pcre.org/pcre.txt and search for `\p{xx}`.

P Punctuation `\p{P}`: any kind of punctuation character.

Pc Connector punctuation `\p{Pc}`: a punctuation character such as an underscore that connects words.

Pd Dash punctuation `\p{Pd}`: any kind of hyphen or dash.

Pe Close punctuation `\p{Pe}`: any kind of closing bracket.

Pf Final punctuation `\p{Pf}`: any kind of closing quote.

Pi Initial punctuation `\p{Pi}`: any kind of opening quote.

Po Other punctuation `\p{Po}`: any kind of punctuation character that is not a dash, bracket, quote or connector.

Ps Open punctuation `\p{Ps}`: any kind of opening bracket.

S Symbol `\p{S}`: math symbols, currency signs, dingbats, box-drawing characters, etc.

Sc Currency symbol `\p{Sc}`: any currency sign.

Sk Modifier symbol `\p{Sk}`: a combining character (mark) as a full character on its own.

Sm Mathematical symbol `\p{Sm}`: any mathematical symbol.

So Other symbol `\p{So}`: various symbols that are not math symbols, currency signs, or combining characters.

L Letter `\p{L}` or `\p{Letter}`: any kind of letter from any language.

Ll Lower case letter `\p{Ll}` or `\p{Lowercase_Letter}`: a lowercase letter that has an uppercase variant.

Lm Modifier letter `\p{Lm}` or `\p{Modifier_Letter}`: a special character that is used like a letter.

Lo Other letter `\p{Lo}` or `\p{Other_Letter}`: a letter or ideograph that does not have lowercase and uppercase variants.

Lt Title case letter `\p{Lt}`: a letter that appears at the start of a word when only the first letter of the word is capitalized.

Lu Upper case letter `\p{Lu}`: an uppercase letter that has a lowercase variant.

N Number `\p{N}`: any kind of numeric character in any script.

Nd Decimal number `\p{Nd}`: a digit zero through nine in any script except ideographic scripts.

Nl Letter number `\p{Nl}`: a number that looks like a letter, such as a Roman numeral.

No Other number `\p{No}`: a superscript or subscript digit, or a number that is not a digit 0–9 (excluding numbers from ideographic scripts).

Z Separator `\p{Z}`: any kind of whitespace or invisible separator.

Zl Line separator `\p{Zl}`: line separator character U+2028.

Zp Paragraph separator `\p{Zp}`: paragraph separator character U+2029.

Zs Space separator `\p{Zs}`: a whitespace character that is invisible, but does take up space.

* * *

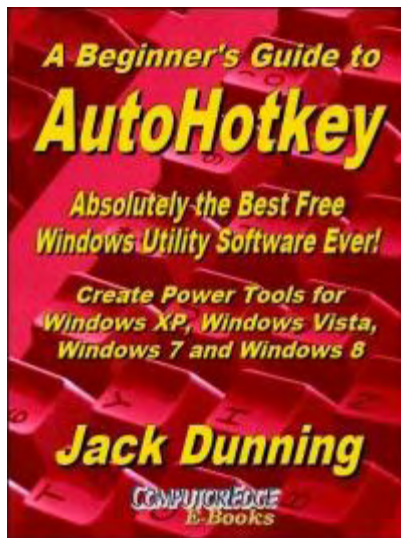
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of the AutoHotkey e-books at one special price at [ComputerEdge E-Books](#). (Note: If something goes wrong during a download and you run out of downloads, e-mail us or gives us a call and we'll give you more downloads at no extra charge.)

* * *

Free! [AutoHotkey Tricks You Ought To Do With Windows!](#) This e-book includes both those tips and the reference material (Table of Contents and indexes) from the other three AutoHotkey books. Pick up a copy free and share it with your friends.

* * *



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

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.

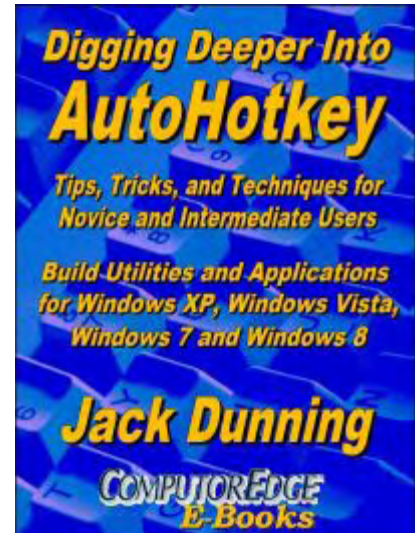
Based upon the series of articles in *ComputerEdge*, Jack takes you through his learning experience as he explores writing simple AutoHotkey scripts for adding repetitive text in any program or on the Web, running programs with special hotkeys or gadgets, manipulating the size and screen location of 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!](#)

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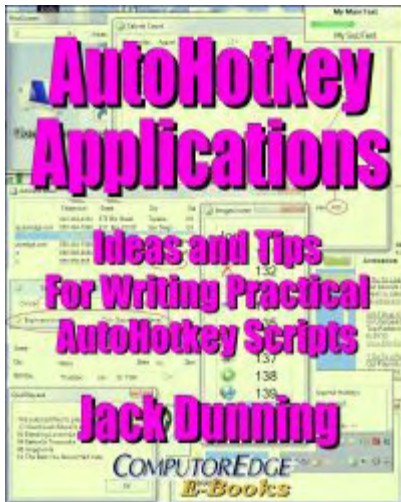
Jack's second AutoHotkey book, [*Digging Deeper Into AutoHotkey*](#) (preferred, EPUB format for iPad, Android, and computers; MOBI for Amazon Kindle; and PDF for printing) is comprised of updated, reorganized and indexed columns from *ComputerEdge* is now available. Since the columns were not all written 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. (Also available from [Amazon](#) for the Kindle and Kindle software on other devices.)



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* * *



Jack's third AutoHotkey book [*AutoHotkey Applications*](#) (preferred, EPUB format for iPad, Android, and computers; MOBI for Amazon Kindle; and PDF for printing) is an intermediate level book of ideas and applications based primarily on the AutoHotkey GUI command. The book emphasizes practical applications. The book is not for the complete beginner since it builds on the information in the other two books. However, if a person is reasonably computer literate, they could go directly to this book for ideas and techniques without the other books. There is an extensive index to the ideas and techniques covered in the back of the book. (Also available from [Amazon](#) for the Kindle and Kindle software on other devices.)

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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. 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:

Recently released is Jack's FREE AutoHotkey book, [AutoHotkey Tricks You Ought to Do with Window](#), available exclusively at ComputerEdge E-Books in the EPUB for e-readers and tablets, MOBI for Kindle, and PDF for printing formats.

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

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

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

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

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

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

[Windows 7 Secrets Four-in-One E-Book Bundle,](#)
[Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7,](#)
[Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7,](#)

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



Wally Wang's Apple Farm

“Superior Technology Loses Out” by Wally Wang

Wally Wang's Apple Farm

Superior Technology Loses Out; Programming in Pictures; The Growing Dominance of Mobile Computing; Learning to Create Common iOS Apps; The Best Time to Shop; Learning to Draw in Vectors; Learning in Advance About Apple Watch; Teach Yourself Statistics; AirDrop.

The Commodore Amiga was years ahead of the competition, yet the world settled on the far more primitive, inferior, and far more difficult to use MS-DOS operating system instead, which proves that people don't always choose superior technology and that the most popular technology may not always be superior.

For more evidence that the world doesn't always choose superior technology, look at [this sales video](#) for Lotus Improv, introduced way back in 1991. When you watch this video, you can see the amazing features of Lotus Improv as the next-generation spreadsheet.

One of the biggest problems with spreadsheets is that they reference cells using cryptic row and column headings like cell A4, which means absolutely nothing in a formula like $C10 = A4 * B5$. With Lotus Improv, you don't reference data with cryptic cell references but with the combination of column and row headings such as Quarter 1 Sales of Screwdrivers. Because your formulas always appear in plain English, there's never a risk of deciphering cryptic and abstract cell references.

Lotus Improv also made it easy to rearrange data by simply choosing different row and column data. Today's spreadsheets like Excel offer a similar feature in Pivot Tables, but Lotus Improv did it first and seems more intuitive than Excel's Pivot Tables.

Even though Lotus Improv was years ahead of Microsoft Excel, the world still clings to traditional spreadsheets. That's because Lotus Improv was best for analyzing data but not as easy to use for simpler tasks that just required adding numbers to balance a budget. Given the choice between a simple product (that would make complicated tasks harder to do) or a complicated product that would make difficult tasks easy to do (but make simple tasks clumsier), the world chose the simpler product.

That's why Microsoft Excel still rules the spreadsheet market while Lotus Improv has faded from memory. If you're still intrigued by the power of Lotus Improv, you can find an expensive Lotus Improv clone called [Quantrix](#).

If your spreadsheet needs are simple, Excel or Numbers might still be easier to use. If your spreadsheet needs are far more complicated, you could be torturing yourself unnecessarily by clinging to a traditional spreadsheet just because you don't know of any better alternatives. When people don't know of any better alternatives, they'll risk falsely believing that what they're currently using must be the best simply because they're using it.

Obviously such faulty logic makes no sense, but when people refuse to look at facts and consider alternatives, that's the inaccurate conclusions they'll often reach. Now that you know that superior technology has often existed decades earlier and that today's popular technology is not always superior, you can avoid this common thinking trap. Unless, of course, you simply refuse to acknowledge the past and pretend facts don't exist so you can justify your current beliefs.

Programming in Pictures

In the late 90's, a program called [Spreadsheet 2000](#) offered similar features of Lotus Improv. Besides mimicking some of the advanced features of Lotus Improv, Spreadsheet 2000 also was written in a visual programming language called Prograph. The idea behind Prograph was that instead of writing text commands to describe how to manipulate data, you could use icons that describe actions on data instead.

Although Prograph faded from view, a similar programming language has popped up called [Marten](#). Just as some people are better at writing than drawing, some programmers might be more comfortable drawing relationships and actions on the screen rather than writing terse, complex text commands in obtuse programming languages like C++ or Java.

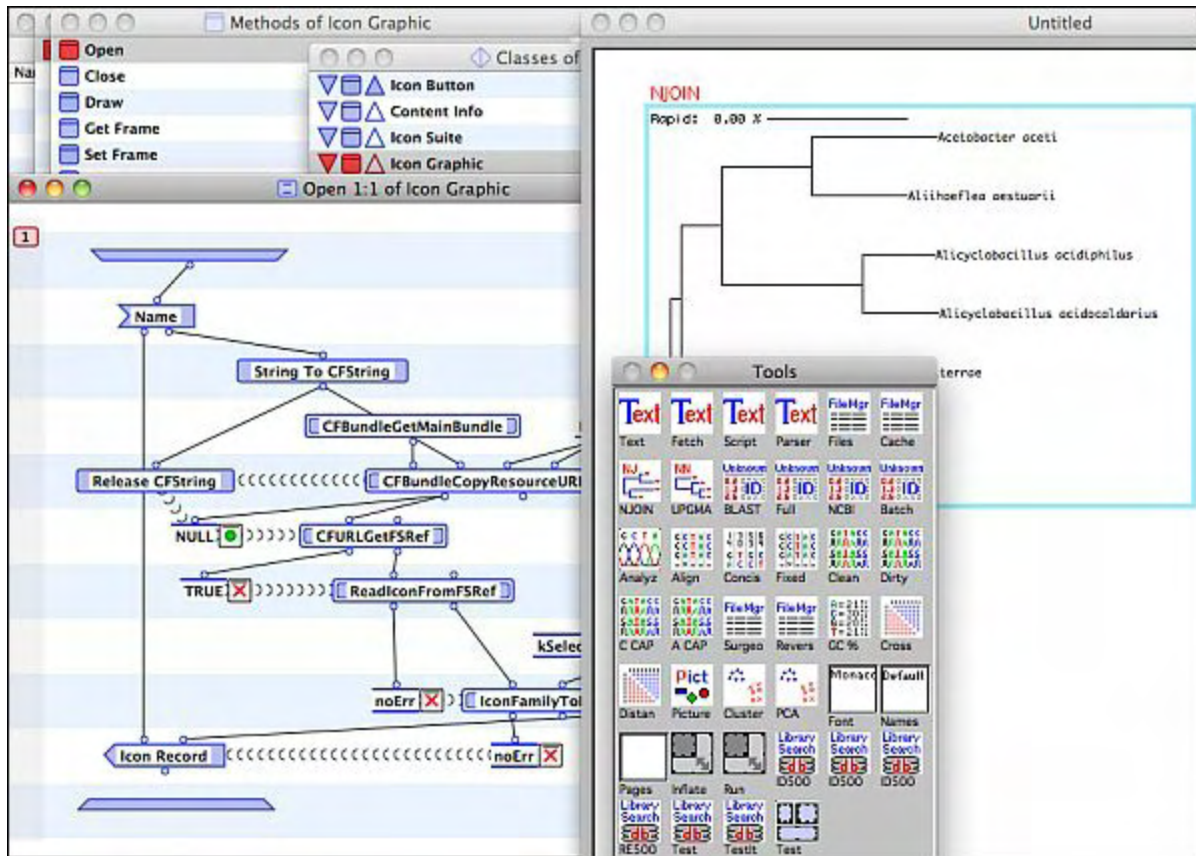


Figure 1. Marten lets you visually define how a program works.

When you understand that there are so many alternatives to doing anything, you'll realize that nothing you currently use or do may be the best solution. It might be the most convenient solution for you at the moment, but that doesn't rule out better alternatives. As long as you keep an open mind, you may be delighted at your choices. Once you can see the pros and cons of alternatives, you can truly pick out the best solution for you.

The Growing Dominance of Mobile Computing

The technology world is changing and growing at a rapid pace today thanks to the shift to mobile computing that will likely dominate the planet. According to [Juniper Networks](#):

- 97 percent of people in developing countries say mobile Internet access has been transformative in their lives, versus 78 percent in the richest countries, including the United States.
- 52 percent of people in developing countries say mobile Internet access has been a key change agent for how they work, versus 26 percent in the richest countries. Also, 40 percent of people in developing countries report that connectivity has improved their earnings power, compared with 17 percent in rich countries.

- 24 percent of people in developing countries use the mobile Internet for educational purposes, versus 12 percent in the richest countries.
- People in rich countries use the mobile Internet more for tasks rich people can do: shop (41 percent), bank (51 percent), and (increasingly) control gadgets in our homes. In poor nations, 33 percent shop via mobile and 40 percent bank via mobile. Home automation is relatively unknown in developing countries; instead, the mobile Internet focus is more on communication, research (such as on foodstuff prices, weather, and traffic), and education.

Basically mobile computing has a far greater impact on the lives of developing countries than advanced ones. That's because mobile computing can be duplicated in advanced nations by existing technology such as landline telephones (instead of mobile phones), cable Internet access (instead of Internet access on mobile phones), and inexpensive books and schools (instead of relying on e-books and Web sites on mobile phones).

Developing nations readily embrace mobile computing because it's cheap, powerful, and transformative. Advanced nations have far less incentive to embrace mobile computing to the same extent because their needs are already being met by existing technology. That's why you see so many people in advanced nations clinging to the world of Windows PCs and disparaging mobile computing because they don't see the advantages of mobile computing. What such people also don't see is that their needs don't define everyone else's needs.

In early 2015, wait for Apple Watch to arrive and usher in the new world of wearable computers. Already you can hear people grumbling that wearable computers have no purpose, but that mirrors their own lack of imagination than the lack of purpose in wearable computers. When you start seeing how people use wearable computers, you'll recognize the same obstacles that early PCs users had to face.

Initially wearable computers won't replace anything, but as time goes on, watch them get more powerful and people get more creative in using them for a variety of purposes from health and safety to productivity and efficiency. If you want to see the future, just look at how so many critics dismissed PCs, smartphones, and tablets, only to be proven completely wrong each time. Now look at how they're recycling the exact same arguments towards wearable computers as well. That alone should tell you that wearable computers already have a bright future ahead of them just like PCs, smartphones, and tablets.

Learning to Create Common iOS Apps

If you're interested in creating iOS apps, you can start with LiveCode, a HyperCard clone that lets you create Windows, Linux, OS X, Android, and iOS apps. You can try LiveCode for free but if you want to sell your programs, you'll need to buy a commercial license.

For those especially interested in creating iOS apps, if you buy the \$299 LiveCode commercial

license, you'll also get access to a five month programming course that will teach you how to use LiveCode to duplicate the common iOS apps found on an iPhone such as Notes, Calendar, Stocks, and Clock. If you're curious at how simple LiveCode can be to create fairly complicated iOS apps, you can [get a sneak peek](#) at how to duplicate the Calculator app using LiveCode.

If you're a programmer, the future is mobile and that means learning to create iOS apps. Once you learn to master iOS apps, you'll find creating standard Windows, Linux, and OS X programs far easier, especially if you use an easy programming tool like LiveCode.

The Best Time to Shop

After Christmas, many retailers offer huge sales to clear out inventory. In the technology world, you can expect many people to return gadgets that they either didn't want or that failed to work correctly. That means many retailers wind up with used items that they'll sell at a discount just to get rid of them.

If you visit Apple's [refurbished store](#), you can find a daily list of available products. Best Buy offers [open box items](#), which are products that people opened and returned. By buying an open box item, you can get an Apple product for far less than retail.

For just random technology at a low cost, check out Newegg's [refurbished site](#), MacMall's [refurbished site](#), or TigerDirect's [refurbished site](#). By shopping for refurbished items, you can stretch your money a little further and get exactly what you want without going bankrupt to do it.

Learning to Draw in Vectors

When most people think of vector-based drawing, they think of Adobe Illustrator. Unfortunately, even with student discounts, Adobe Illustrator can be horrendously expensive. For a far less expensive option, just get [Affinity Designer](#), a \$49.99 program that gives you all the main features of vector-based drawing. Apple even awarded Affinity Designer as runner-up in their best of 2014 awards.

To teach you how to use Affinity Designer to create vector-based illustrations, the company behind Affinity Designer plans to release [quarterly e-zines](#) offering tutorials and tips for creating art using Affinity Designer. These e-zines will appear in iBook format that can include video tutorials that you can watch. By reading the tutorials and watching how they work, you can better learn the nuances of Affinity Designer so you can create your own vector-based drawings.

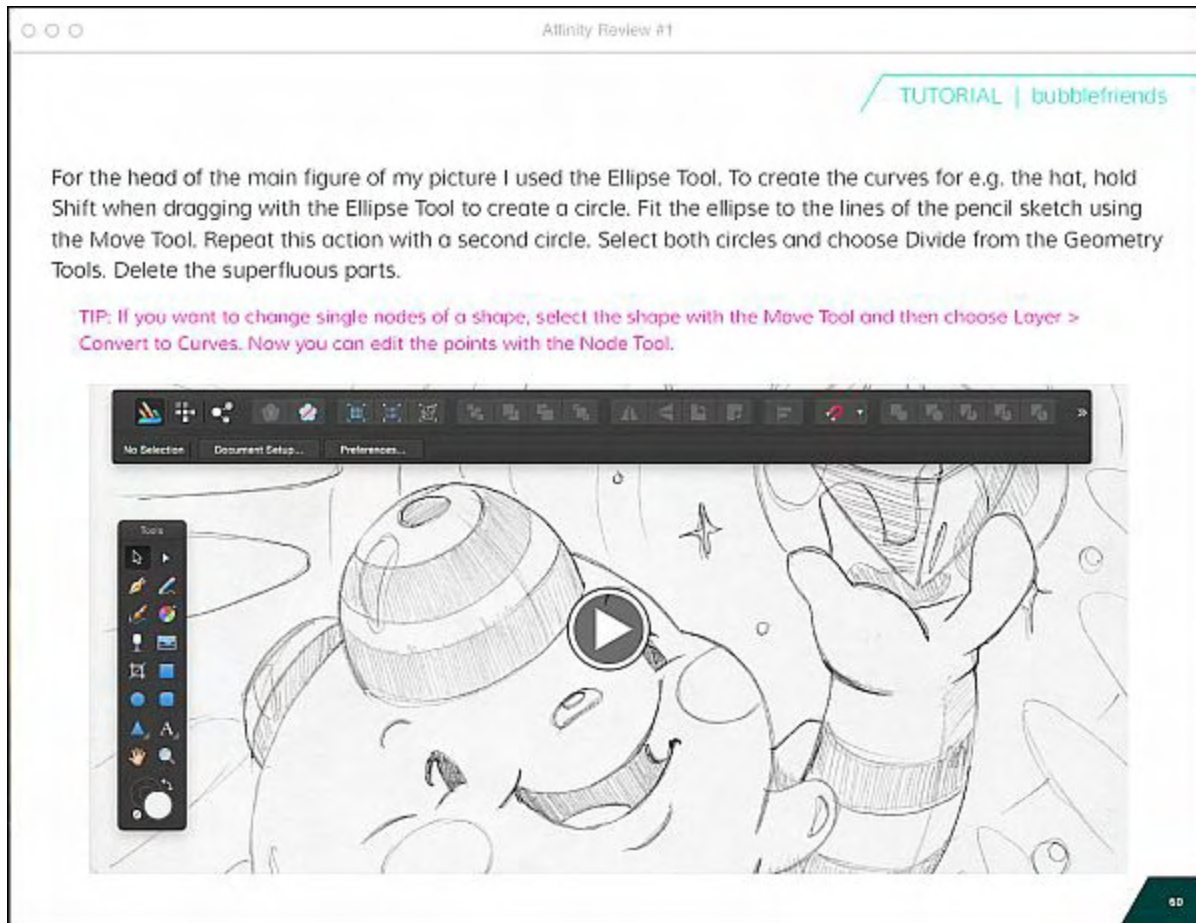


Figure 2. Affinity Designer's quarterly e-zine offers video tutorials in iBook files.

Since Affinity Designer only runs on the Macintosh, offering quarterly e-zines that can only run on iBooks makes sense since iBooks can only run on the Macintosh or iPad. As more companies realize the usefulness of offering free video tutorials in iBook format to cater to the Macintosh market, you can expect more people to use iBooks.

By downloading these quarterly e-zines, you can teach yourself how to use Affinity Designer to create better vector-based drawings. After you learn enough about vector-based drawings using Affinity Designer, you may find you might never need to rely on Adobe Illustrator ever again.

Learning in Advance About Apple Watch

While Apple won't likely release their Apple Watch until April at the latest, you can get a sneak peek at the capabilities of the Apple Watch by reviewing their [developer's guidelines](#).

Because of the smaller screen on the Apple Watch, the only two user interfaces involve a hierarchical display of pages or a linear collection of pages such as swiping through a collection of photos. To give commands to the Apple Watch, you can tap the screen, use gestures,

manipulate the Digital Crown, or press hard on the screen to provide a slightly different signal from an ordinary tap.

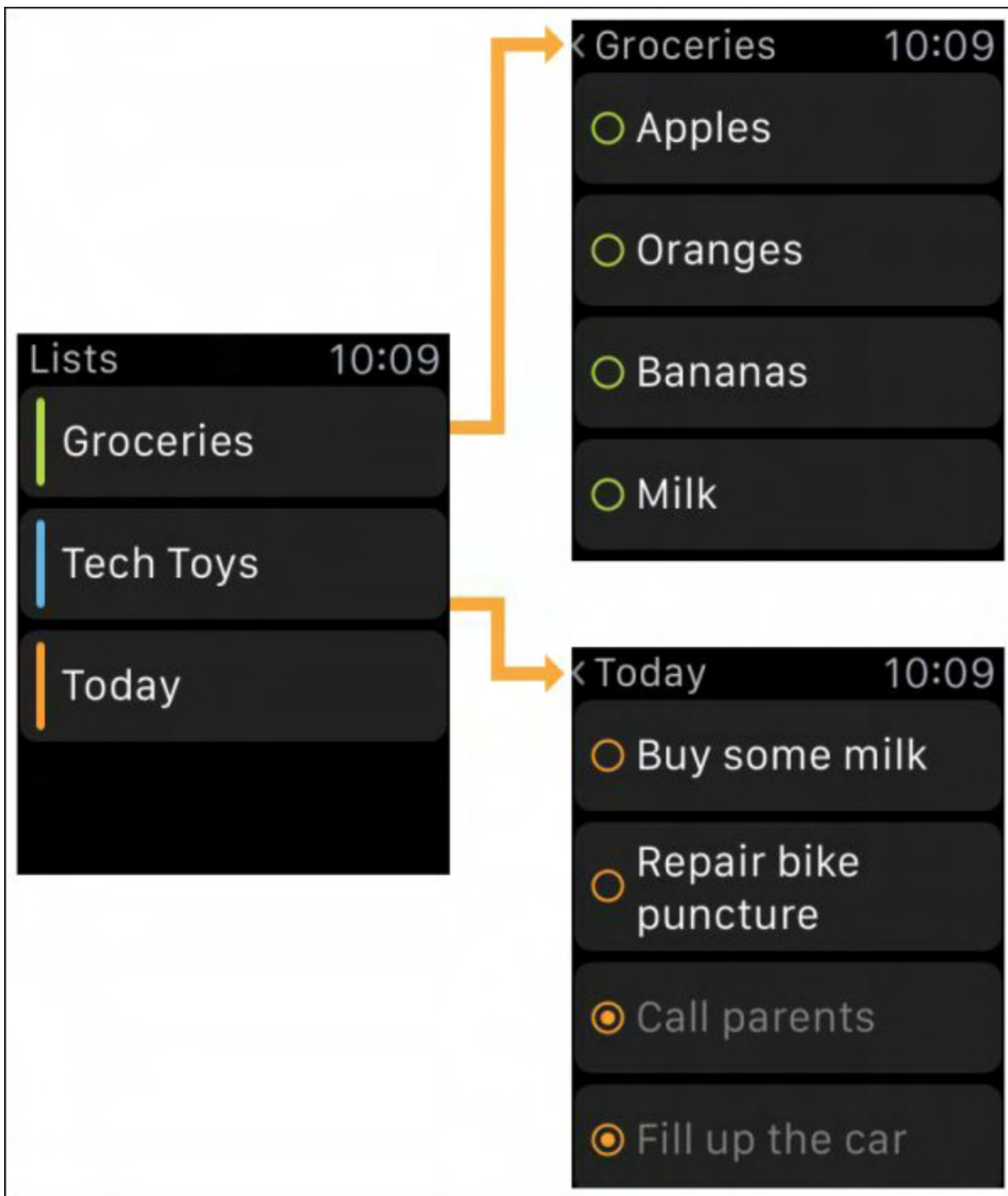


Figure 3. The Apple Watch user interface involves a hierarchical design.

Apple Watch user interfaces include labels, images, groups, tables, buttons, switches, sliders, maps, dates and timers, and menus. Because the Apple Watch screen is so tiny, apps will need to be customized specifically for the Apple Watch, unlike iPhone apps that could still run unmodified on the iPad by simply expanding up the screen.

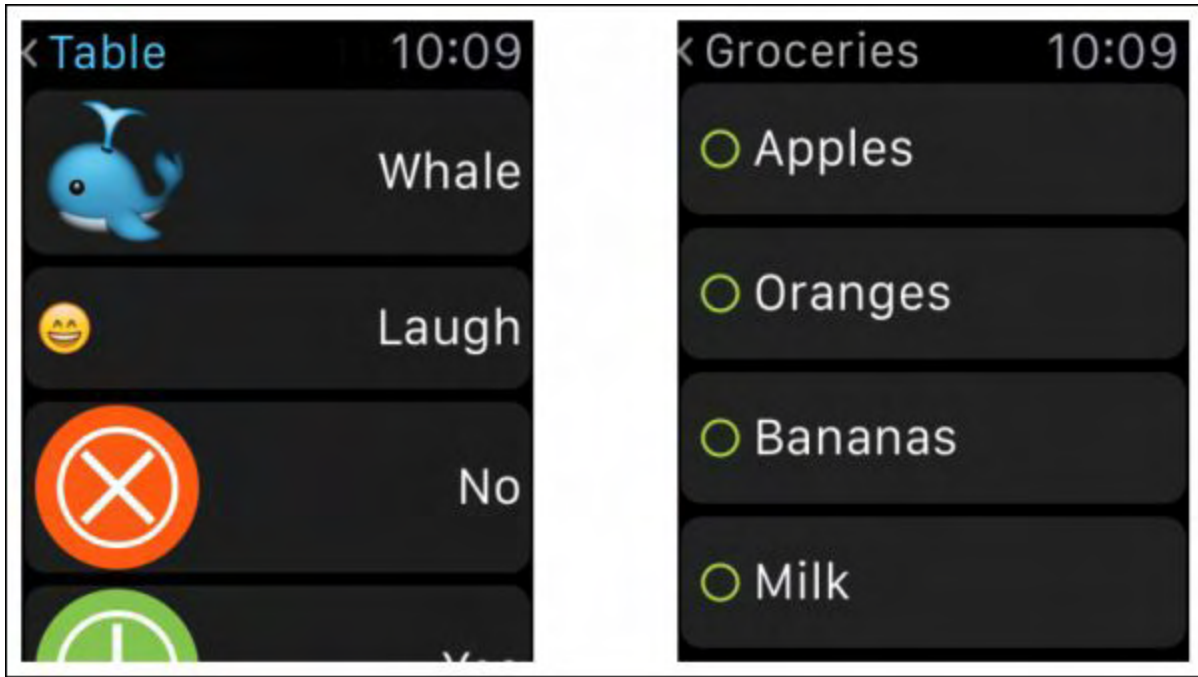


Figure 4. A typical Apple Watch user interface.

By studying the Apple Watch user interface design guidelines, you can plan your own Apple Watch apps while also getting an early peek at the capabilities the Apple Watch will likely offer. Unlike traditional fitness bands that measure your health, the Apple Watch will be able to do that while also doing so much more. The key will be seeing what apps Apple includes in the Apple Watch that will make people want to buy and use one for themselves.

Teach Yourself Statistics

A distressing number of people avoid math and science because they feel it's too difficult, yet math and science is just like any skill that anyone can learn and improve at with regular study and practice. In general, the more knowledge you have that you can apply towards solving problems, the more useful you'll be. So if you want to remain active, simply gain specialized knowledge and take action to solve problems using your specialized knowledge.

One field that's ripe for hucksters and con artists to distort is the field of statistics. Basically statistics is a branch of mathematics that focuses on collecting and analyzing data. Statistics can also be used to predict future trends as well.

For a New Year's resolution, teach yourself something interesting like statistics, which you can learn about from free tutorials at the [Stat Trek](#) site. Once you learn statistics, you can use a unique programming language developed specifically for statistics [called R](#).

The R programming language and tools are open source and run on Windows, Linux, and OS X. R provides a wide variety of statistical (linear and nonlinear modelling, classical statistical

tests, time-series analysis, classification, clustering, ...) and graphical techniques. While those terms might seem unfamiliar to anyone without knowledge of statistics, you can teach yourself the basics of statistics through free, online tutorials from Stat Trek and then practice your skills using the R programming language on your own computer. By writing simple statistics programs in the R language, you can create an interactive learning environment to increase your knowledge of statistics. If you're interested in learning the R programming language, pick up a book like [*The Art of R Programming*](#) by Norman Matloff.

Now the next time you hear advertisers or news broadcasters making claims, you can analyze their data to determine if they're telling the truth or not. Since advertisers, politicians, and news broadcasters often seek extremes for maximum shock value, you can use statistics to show that the threat of terrorism, attacks from ballistic missiles, or loss of jobs from immigration may not be quite as high as people may claim. By knowing statistics, you'll no longer have to believe everything others tell you since you can analyze the data yourself.

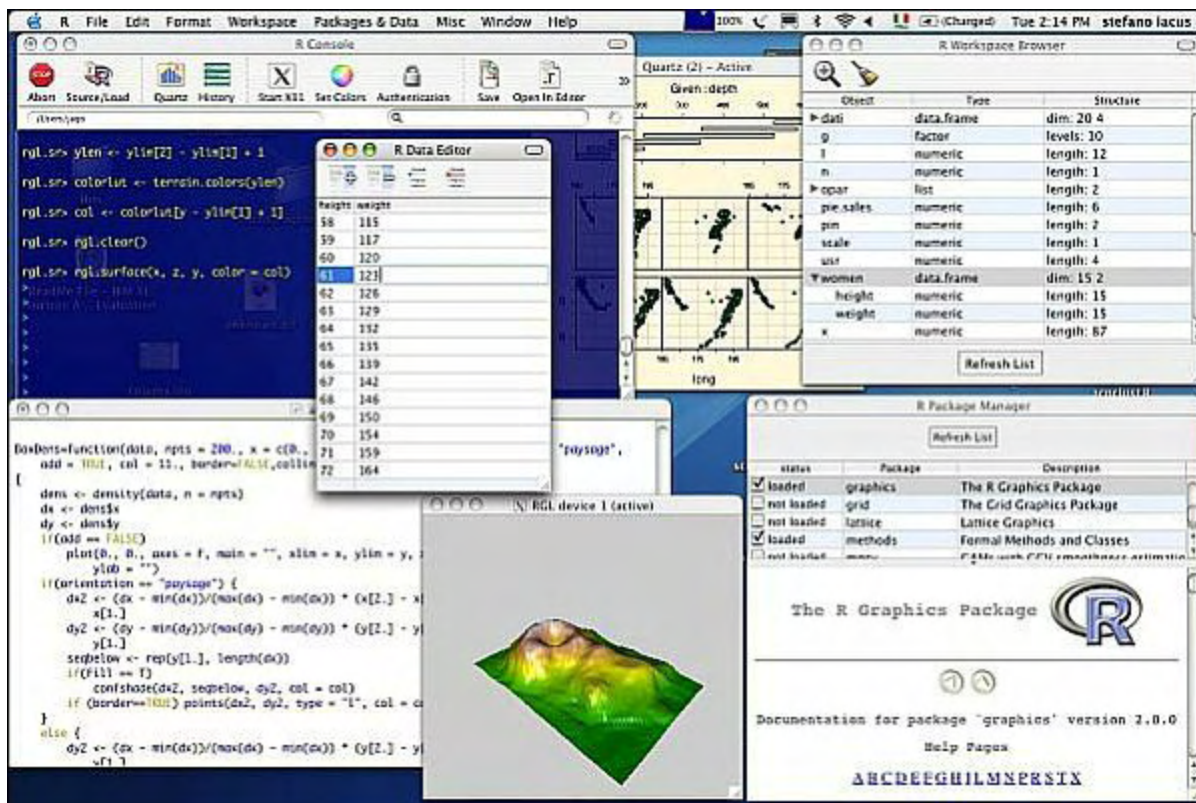


Figure 5. The R programming language lets you practice statistical computing.

Statistics don't have to be dry and dull. People use statistics to analyze the performance of athletes and predict stock market prices. With a little imagination, you can find statistics fascinating to study for fun or for a career. Anything can be interesting with the right amount of imagination and enthusiasm. On the other hand, everything can be wrong, awful, or completely useless without the imagination to see beyond narrow restrictions. The choice is yours. Statistically, can you guess which choice too many people will make for themselves and then angrily try to apply to others?

* * *

The simplest way to share files between two computers is to use a USB flash drive. Since you may not always have a flash drive available, the next best option is to use AirDrop (if you have a fairly recent version of OS X).

To use AirDrop, you need to first go to the Macintosh that you want to receive a file. Click the Finder icon on the Dock, and then from the Finder menu bar at the top of the screen, choose Go > AirDrop. The Finder window displays an AirDrop icon to let you know it's ready to receive a file through AirDrop.



Figure 6. The AirDrop icon in the Finder window.

Now go to the sending computer, click the Finder icon on the Dock, right-click on the file you want to send so a pop-up menu appears. Choose Share > AirDrop to open an AirDrop window. Within this AirDrop window, click on the name of the Macintosh to receive the file.

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](#)

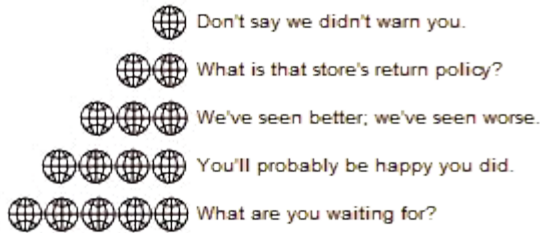
[The 15-Minute Movie Method](#)

[Math for the Zombie Apocalypse](#)

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

[Making a Scene: The Science of Scene Structure](#)

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



Worldwide News & Product Reviews

“The latest in tech news and hot product reviews.” by Charles Carr, News and Reviews Editor

Americans Want Internet to Monitor Health, But Not Sex; Security Firm: More Can Be Done to Avoid Hacks Like Staples; LG G Pad 7.0 (AT&T).

As your intrepid New and Reviews Editor prepares to head to Las Vegas for this year's Consumer Electronics Show (CES), let's take a look at what 2015 might hold in store:

Americans Want Internet to Monitor Health, But Not Sex

Curtis Sparrer, representing [A&D Medical](#), writes in this week with info gleaned from a new study:

We're OK with Internet of Things (interconnected devices) connected devices monitoring our blood pressure and weight. We're just not OK ... when it comes to using that stuff for our fertility or sex lives. This research comes just as Americans are using FitBits and Apple HealthKit to make good on their New Year's resolutions.



A&D Medical, a worldwide leader in connected health and biometric measurement devices, commissioned the research of 2,024 American adults research to bring attention to WellnessConnected, the first complete, connected health system with built-in sharing capabilities that offers both simplicity and affordability for consumers.

The online study, which was conducted in December 2014, determined that ... a majority of Americans (66 percent) are concerned about their weight, with men between the ages of 55 to 64 the most concerned demographic with 74 percent concerned, followed by women 18-34 with 73 percent concerned. When it comes to weight, American concerns included the following:

- Being overweight – 48%
- Being at risk for diabetes – 26%
- Considered attractive – 19%
- Sleep apnea – 11%
- Cancer – 7%
- Being underweight – 4%

Nearly half of Americans (48 percent) are concerned about their blood pressure, with one in four Americans (25 percent) concerned about either having a stroke or developing hypertension. Over one in five Americans (23 percent) are worried about heart attacks.

A majority of Americans (56%) would want to monitor their health with connected health devices that automatically connect online and send information to their doctor or other people they choose. The most popular vital sign Americans wanted monitored was blood pressure,

with 37 percent of Americans wanting to monitor that with connected devices followed by:

- Weight – 33%
- Chronic conditions (hypertension, diabetes, etc.) – 25%
- Sleep – 23%
- Physical activity – 22%
- Diet – 19%
- Vision – 18%
- Medicine – 16%
- Sexual activity – 5%
- Fertility – 4%

One in every two Americans say they want at home health measurement devices to automatically connect online to send information to their doctor and other people they choose. Americans cited several reasons they would want connected, health including:

- It would keep track of my health information accurately – 30%
- It would allow me and my doctor to see trends and patterns – 29%
- It would give me peace of mind to know how I'm doing – 24%
- It would allow my doctor to be "in the know" to prevent surprises during appointments – 19%
- It would allow my doctor to monitor my health 24/7 if necessary – 18%
- The internet is the future of medicine – 11%
- The whole world is connected so it makes sense for devices to be connected – 10%
- It's difficult to enter the information into an app – 3%

A majority of Americans (53 percent) say they would want connected health devices/apps to come from a company with healthcare experience for the following reasons: medical expertise is important to me (26 percent); I want to know I can trust the company making the device or app (25 percent); and companies with medical experience will know what information will be trusted by my doctors or important to my doctors (18 percent).

"While The Internet of Things is delivering a vast array of capabilities that come from connectivity—few come close to the human health benefits that come from professional and accurate monitoring of people's vital health signs," said Terry Duesterhoeft, President and Chief Executive Officer of A&D Medical.

"This survey shows that people really care about core health indicators like weight and blood pressure, and many want their doctors to be able to monitor them on a regular basis, with medical grade connected capabilities they can trust with their well-being."

Security Firm: More Can Be Done to Avoid Hacks

Like Staples



"There is no shortage of news about security issues these days," says Kathy Wattman representing the security firm [KnowBe4](#), "whether it relates to business, entertainment, high tech or compliance. It seems everyone is somehow affected. The IT guys and technology experts alike can often be overheard moaning about 'stupid users' and to them, it seems like an endless loop."

But rather than take the apathetic approach that every hack is unavoidable, KnowBe4 thinks there is an approach that might be of interest to users:

The addition of Staples to the recent torrent of data breaches has unleashed another flurry of concern over just how problematic security is becoming. 2014's exploits were unprecedented, but KnowBe4's CEO has pointed out that IT and security experts attitude toward users may be contributing to the latest wave. According to experts, 91% of all data breaches started with a phishing attack, yet simple actions to fix this are being ignored. Billions of dollars in security can't stop an employee from clicking a malicious link. Long held but erroneous beliefs that "there is no patch for a stupid user" are passed along from officials like Denise Zheng, deputy director of the Center for Strategic and International Studies as noted in an interview last week with CNN.

"Training users with an effective program like Kevin Mitnick Security Awareness Training is one of the easiest and most cost-effective ways to avoid a data breach", says Stu Sjouwerman, CEO of KnowBe4. "Spear-phishing attacks are opportunistic threats that can be mitigated if users were well trained and tested on social engineering methods. Don't let 'stupid users' become a self-fulfilling prophesy.

While highly targeted attacks are much harder to defend against, Sjouwerman contends defending against criminal "opportunistic" high-skill, low-focus attacks like Target, Home Depot, JP Morgan Chase and now Staples is now possible. Sjouwerman said, IT managers have to avoid breach fatigue, as this breeds a lax approach to security. It pays off to keep users on their toes with security top of mind utilizing regular phishing tests and frequent on-demand training.

Social engineering has been around for some time and highlights a problem that cannot be mitigated just with a technology solution. While many IT managers do understand the threat posed by social engineering techniques like phishing, employees need to be trained and constantly reminded of the risks. Phishing techniques have improved and now frequently include not only perfect grammar but employ social media contacts, vendor logos and may even include fake voicemail or SMS (smartphone text) links.

It is important for employees to get both direct training and real-world examples. Sending out

fake phishing emails or posing as a third party to get network credentials can provide employees with an understanding of the risks that they would never get in a classroom or an annual slide presentation in the company lunchroom. KnowBe4 offers a free phishing security test where companies can test just how phish-prone their users are.

LG G Pad 7.0 (AT&T)

Product category: Tablet computer

Manufacturer: LG Electronics

Model: G Pad 7.0 LTE

Web site: www.att.com

Price: \$99 with 2 year contract, \$249 no commitment

Thank goodness the price of tablets is coming down and performance is going up. I still remember the first Samsung Galaxy Tabs: five or six hundred dollars and slow, slow, sloooooow!

LG's G Pad is a whole new experience. The 7" screen (diagonal) looks amazing: sharp and clear with gorgeous, deep color thanks to its HD+ IPS screen with Zero Gap technology. And it's blazing-fast due to its 1.2GHz quad-core processor.

A 7" is the perfect travel companion. It's easier to pack than a 10" and much easier to hold in one hand while you sip coffee or do whatever else with the other. The extra inch over even the largest 'phablets' makes quite a difference in viewability — and it's pretty much a must if a large phone is out of the question for whatever reason.



Battery life is very good. Makes it through an entire day—especially if I'm not watching movies or Internet videos for hours on end.

A feature exclusive to LG called QPair allows you to link with your later-model Android smartphone to answer phone calls, reply to messages, and stay in touch with everyone in your social media world.

For the price, the LG G Pad 7.0 LTE is almost worth it if you only used it as a universal remote. Control just about every device you own using its big, bright touch display. It's an amazing feature.

Another feature, Dual Window, lets you split the 7" screen into two smaller (but still plenty large) windows so you can control two apps at once. You can even drag and drop information from one screen into the other. An incredible time saver for filling out forms..

Note that you should definitely consider getting some type of case for it — or ANY tablet or phone you own.

Gripes? None really. I guess I wish it had a bit brighter screen. I also own an Asus Nexus 7 and it seems a couple notches brighter, but that's a subjective opinion.

All-in-all, the LG G Pad 7.0 LTE is a pretty amazing little device that I feel I'll be happy with for years to come.

Review contributed by Mario Rellig



Tech specs (from AT&T):

Battery capacity
4000mAh

In-use time (hours)
Up to 10

Standby time (days)
Up to 23

Chipset
Qualcomm® Snapdragon™ 400 processor
1.2GHz quad core

Internal memory storage
Up to 16GB

Expandable memory storage
Up to 32GB

Memory format
microSD™

RAM
1GB

Wireless Technology
4G-LTE
Band 2, 4, 5, and 17
4G
HSPA+ with enhanced backhaul
3G - UMTS
850/1900/2100MHz

Wi-Fi connectivity
802.11 a/b/g/n
5GHz Wi-Fi-capable

Bluetooth® technology
v4.0

Mobile hotspot
Up to 10 devices

Android v4.4 (KitKat) OS

Display size (inches)
7

Resolution (pixels)
1280x800

Colors
16 million

Rear-facing Camera
Zoom
4X
Live video capture and playback

Front-facing camera

Shooting options

Panorama, Voice Shutter, Timer, Guide Line setting, Gesture Shutter, Multi Focusing

Native music player, Google Play™ Music

Supported music formats

AAC, AMR, MP2, MP3, MP4, Midi, OGG/OGA, Real, WAV, WMA, eAAC+ AWB , MKA, FLAC, QCP, MID

Chrome, LG browsers

Cool Tools

Famigo, Keeper, Beats Music, Amazon Kindle, Polaris Office 5, LG Smartworld, LG QPair, LG QuickRemote, LG QuickMemo+, LG PC Suite, LG Enterprise Suite, LG Backup, LG QSlide, Dual Window

Preloaded apps from AT&T

AT&T Locker™, AT&T FamilyMap®, YPmobile®, AT&T Device Help, AT&T AllAccess

myAT&T

Provides fast, easy account access virtually anywhere, anytime

Calendar

Alarm clock

Address book

Sensors

Accelerometer, E-Compass

USB connectivity—transfer data through a USB cable

USB cable included

Hands-free speakerphone

Via Qpair enabled smartphone

AT&T Ready2Go

Offers easy online setup and personalization of your new tablet. See Quick Start Guide included in box for details.

AT&T Device Help

Device Help provides easy access to step by step tutorials and videos about features, functions and AT&T services directly from the web browser on the device (data charges apply).

In the box:

Tablet

USB data cable

Quick start guide

Travel charger

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

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

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

To date, Art Animates Life, a CA incorporated, federal non-profit, has raised tens-of-thousands of dollars for San Diego area disaster relief, an arts non-profit and municipal gallery, a community outreach center, and several struggling community theaters.

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

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

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

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

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

Learn more at www.charlescarr.com.



Editor's Letters: Tips and Thoughts from Readers

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

"Stripping Tags," "Back Arrow in Web Browsers," "Corrupted LibreOffice Folder," "Simple PDF Printer"

Stripping Tags

[Regarding the December 5 [Free Virtual Numeric KeyPad App, Plus Stripping HTML Tags column](#).:]

I noticed that your example used a "Printer Friendly" version of the Web page. I found four different URLs that lead to the same article:

<http://webserver.computoredge.com/editorial/3235/wallysaf.htm>

<http://webserver.computoredge.com/editorial/3235/wallysafprint.htm>

<http://webserver.computoredge.com/online.mvc?zone=SD&issue=3235&article=wallysaf>

<http://webserver.computoredge.com/online.mvc?zone=SD&issue=3235&article=toc>

The first two are printer friendly and work correctly, but most Web pages these days do not have printer friendly versions, and are more like the second two, which don't work. I've found the browser "bookmarklet" known as "Readability" works on nearly all Web pages, but involves a URL going to readability.com. I suspect Readability-like code can be run locally, but I don't know how to do that. Seems like that would be a much more useful AutoHotkey app for today's overly complex Web pages.

-Ron Cerrato, San Diego

Back Arrow in Web Browsers

[Regarding the December 19 [Digital Dave column](#).:]

In Firefox, you can also left click and hold *to show the list of previous pages*.

However, I suspect you're right about redirection causing his problem because of a different URL than actually results. For example, I just tried putting just <http://www.yahoo.com> into a

page that showed another site. It redirected to <https://www.yahoo.com>. So the single click back button didn't work.

However, if I put the https in front to start, the back button works fine.

-Rich Ernst, San Diego

Corrupted LibreOffice Folder

[Regarding the December 12 [Digital Dave column](#).]

Thanks Dave. Your advice to use Revo Uninstall worked. I was able to re-install LibreOffice.

-Art Bowen, San Diego CA

Revo Uninstall has worked on everything I tried except when I tried to uninstall an anti-virus app. It finally took a special package from the A/V outfit...and it had to run in safe mode. The things that software vendors don't tell you!

-Joe, Chicago, IL

Simple PDF Printer

[Regarding the December 19 [Digital Dave column](#).]

While I have loved and proselytized for Foxit Reader's alternative to Adobe's Acrobat ginormous PDF Reader, if someone wants just a simple, free, PDF "printer" to convert documents etc. to PDF, try [CutePDF](#).

It'll also download and install the free ghostscript conversion so it'll work, but that's also free and innocuous.

I've used it for many, many years, way before Foxit added a PDF printer to their reader installation.

-Rich Ernst, San Diego

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you want to submit a short "ComputerQuick 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 [ComputerEdge E-Books](#).

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