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**September 13, 2013**

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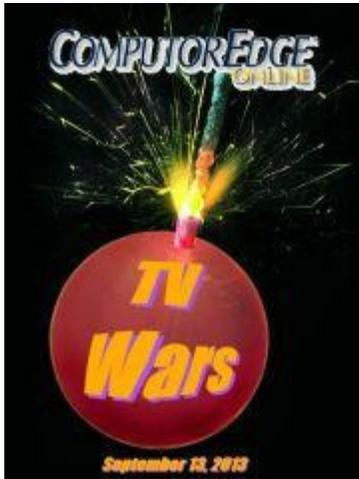
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## TV Wars



**As more young people live in zero TV homes (no cable television connection), the industry scrambles to determine their own future. Meet Mega-Disrupter Aereo; Battling Aereo: Adopt and Adapt; More Television Technology: Partnerships and New Online Services; More Third World Tech: Shelters to Food and Land Management; Native American Video Games and Facebook Outreach; More on Disrupters: Low Tech to High Tech; Super-Materials.**

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**by Digital Dave**

Digital Dave answers your tech questions.

How Many Files Will a 2GB Card Hold?; No Sound on YouTube; Runaway CPU?

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"E-Mail Programs," "Passwords in Web Browsers," "Music to Your Ears"

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## Digital Dave

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

*How Many Files Will a 2GB Card Hold?; No Sound on YouTube; Runaway CPU?*

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### How Many Files Will a 2GB Card Hold?

*Dear Digital Dave,*

*The pics that I take with my camera take up about two megabytes each, so I thought a 32MB card would hold 16 or so shots (at least the math works). Much to my surprise the 32MG card only held five pictures. So I bought a 2GB card. My question is how many pictures will this card hold? I am pretty good at math, however when a number has this many zeros it gets a little confusing.*

*Thank you for all your help.  
Mark Kowal  
Denver, CO*

Dear Mark,

Two gigabytes divided by two megabytes is 1000 images. Of course that is just an estimate. Even though your camera may be set to take two megabyte images, you will find tremendous variation in the file size depending upon the content of the image. Plus, if you take any video with your camera, the files will be surprisingly large.

In addition the digital cards can be problematic. There are many instances where people have deleted previous files only to find the space is not recovered. This is usually due to some type of glitch which made the space read-only and not available for saving new files. (This may account for the issue with your 32MB card.) Today's digital storage cards are so large that I would go with the biggest one that is compatible with my camera, yet still economical.

Digital Dave

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## No Sound on YouTube

*Dear Digital Dave,*

*When I tune into YouTube, I have no sound. This just happened recently. I have sound on every thing else. What is the problem?*

*Thank you,*

*Lynne*

*Magnolia, TX*

Dear Lynne,

Since the audio problem only occurs with YouTube, it's unlikely that one of the many other possible audio problems has occurred to computer. Most likely the problem relates to your Web browser. A quick check is to load one of the many alternative Web browsers and see if you still have the problem.

The most common fix that I've seen is to delete all of your YouTube cookies, history and temporary Internet files. Sometimes a problem with one of these files can cause a Web site to malfunction. Deleting these files is usually done through the Tools or Options menu depending upon your Web browser. Look for the browsing history section. In some browsers, such as Google Chrome and Firefox, you can view and delete the specific files directly related to YouTube. In Internet Explorer it looks a little clumsier. You may be forced to delete all of your history and cookies, except for those in your Favorites.

Digital Dave

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## Runaway CPU?

*Dear Digital Dave,*

*I'm using a 10-year old XP machine which, with a few exceptions, keeps adequately clunking along.*

*Every few weeks, however, I run into a problem where all my applications pretty much effectively grind to a halt. They are still running, but it can take forever to perform any task. For example, it can take 10 minutes to simply load a program.*

*Taking a look at Task Manager (which can take several minutes to load) explains the problem, but doesn't provide a solution. When this problem occurs Task Manager's "Performance" tab shows that CPU Usage is running at 100% and that a "Process" called*

*"setup.exe" is using 99% of my CPU capacity.*

*This certainly explains why nothing else runs very fast. I once let the computer run for over 45 minutes to see if whatever "setup.exe" was doing would finish—which it didn't. Since Task Manager won't let me "End Process" for "setup.exe" my only recourse is to reboot the computer, which I usually start by turning the power off because performing the usual Windows shutdown procedure takes forever. The reboot always fixes the problem, at least for a week or two.*

*Can you shed some light on this issue? Could Microsoft be performing some sort of update or is it possible that "setup.exe" somehow locks itself into an endless loop?*

*Thanks for any suggestions you may have.*

*Ted*

*Louisville, CO*

Dear Ted,

The program name *setup.exe* is commonly used for setup programs for many different software products. It is not necessarily associated with anything Microsoft. Usually these programs run during software install, but it is important to note that any program can use the name—even malware.

Your *setup.exe* routine may be perfectly legitimate process which is getting stuck and hogging your resources. The fact that you can't stop it with Task Manager is problematic. There is a utility free from Microsoft called [PsKill](#) which will end any process. You will need the Process ID from Task Manager. You will find instructions for how to use it on the linked download site. (Use *PsKill* sparingly since it will immediately end any process without saving anything.) At least this should save you having to hit the power switch to reboot the machine. I would advise you to reboot anyway, just to get a fresh start.

If you don't see the Process ID in Task Manager, then open the View menu while the Processes tab is selected. Pick "Select columns..." and check the PID (Process Identifier) box, then OK. See Figure 1. The Process IDs should then be in view.

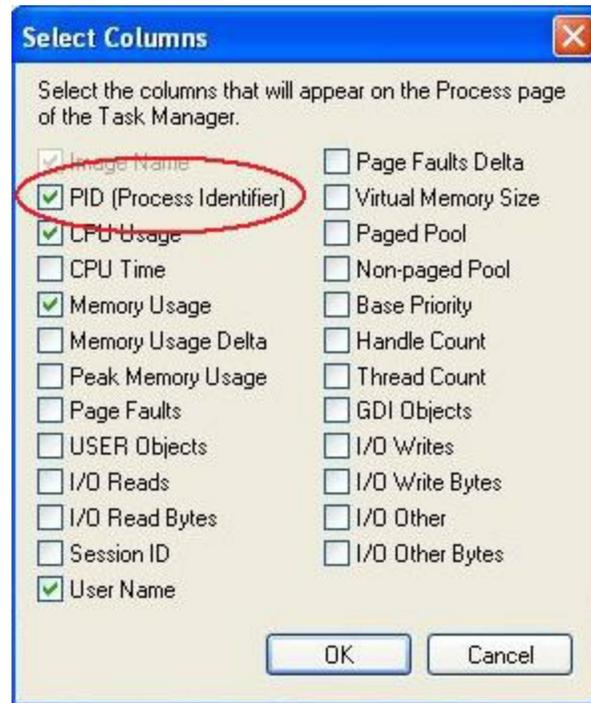


Figure 1. Check the PID (Process Identifier) box to display PIDs in the Processes tab of Windows Task Manager.

The real key to solving the problem is uncovering what *setup.exe* really is and where it is located. I would check the startup folders and services. If it's an unnecessary program, then you may want to get rid of it completely. You should also do all the usual malware scans, although it is not necessarily a malicious app.

Digital Dave

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## Television Alternatives, and More Little Known High Tech Stories

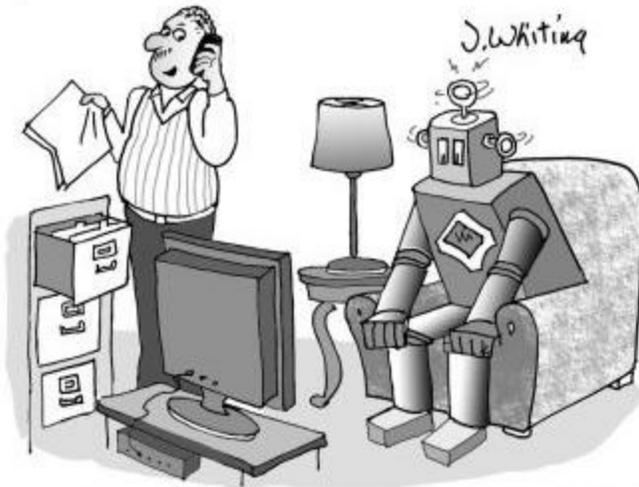
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### TV Wars!

Like traditional broadband services, traditional television (broadcast and cable) was content to lumber along with their outmoded and increasingly unpopular—but profitable—models. Both continued their carved-in-stone, one episode a week of new series. While Broadcast and Cable also continued forcing expensive channels on consumers through packaging—even if customers only watched half (or less) of the bundled channels. New forays into streaming content, and non-traditional content producers, like Netflix and YouTube, didn't bother TV's Big Guys. And Microsoft's attempt to turn their new Xbox into an always-on entertainment hub in the living room turned out to be a very unpopular idea.



"I don't have time for TV, so I have Robbie watch it all and tell me about it later."

But a *Silicon Valley* columnist reported in March 2013 that unconnected [zero TV homes](#) are growing, especially among young people. Although 75% of these homes still have an actual TV set, they are used primarily for DVDs, video games and watching Internet video. Even connected-homes with older folks report spending less time watching broadcast and cable shows, and watching more streamed online videos. So the time was ripe for a clever TV upstart, backed by some big league "clout" to help it survive the inevitable roar of lawsuits from Broadcast and Cable.

## Meet Mega-Disrupter Aereo

[Aereo](#) is based in New York City, and backed by Hollywood powerhouse [Barry Diller](#). Aereo captures live broadcast content through a personal antenna issued to subscribers, and lets them stream content through the Internet. Subscriptions start at only \$8 a month for content downloadable to any mobile device, or a little more if subscribers want to store Aereo shows on their remote DVR, to watch when they want. Or customers can buy a [Roku](#) set-top box to watch Aereo or 100 other free channels, streamed in high-definition, on regular TV sets.

Aereo launched in New York City in February 2012—and was immediately sued by all major broadcasters and cable companies for copyright infringement. But both a New York lower court and then a federal appeals court (in April 2013) ruled in favor of Aereo, saying Aereo's antenna-downloaded content was not "public performances," and thus did not constitute copyright infringement.

The *CS Monitor* in April 2013 reported that Fox (and later ABC) was so furious over losing its lawsuit with start-up Aereo, that it was threatening to [leave broadcast](#) altogether. Fox announced that they were considering moving to strictly cable and satellite distribution. Although most experts think the broadcast companies couldn't successfully switch to a subscription-based (cable or satellite) model, because of their affiliates (local stations).

In May 2013, *paidContent* ran a story about how Aereo filed its own [unorthodox lawsuit](#) against the same broadcasters that just lost their own suits against Aereo. Aereo asked the US District Court in Manhattan for "an order stating that it does not infringe on the broadcasters' copyright." Experts think that Aereo is seeking to firm up some legal justification for its "right to exist," possibly to arm itself for future lawsuits.

The Associated Press (through *Silicon Valley*) in August 2013 reported that Aereo is

accelerating [its expansion](#) into new markets. It opened in Boston and Atlanta this past Spring, and has announced its openings in Utah, Chicago, Miami, Houston and Dallas by the end of September 2013.

## Battling Aereo: Adopt and Adapt

In May 2013, *The Washington Post* (through the *Denver Post*) announced that Time Warner Cable was also considering [capturing TV content](#) from public airwaves and delivering it to customers over the Internet. The idea was pioneered by the start-up Aereo, but Time Warner is the country's second-largest cable company, and their entry into the public airwaves download controversy could be a game changer. At the moment, however, Time Warner is just watching the legal battle.

In June 2013, the Associated Press (through *Silicon Valley*) reported that Comcast was going to offer a new and compact set-top box that saves your [TV shows online](#). This will offer unlimited DVR storage, which is another attractive feature offered by Aereo (see above). This was announced at The Cable Show convention in Washington DC, where Time Warner Cable also rolled out their latest improvement, an updated channel guide with personalized recommendations in their new set-top boxes.

Per the March 2013 *Silicon Valley* column I referenced earlier, viewers are especially attracted to the idea of watching [TV content "on demand"](#)—or when and where they want, even series episodes. Netflix released the entire 13 episodes of its series "House of Cards" all at once, and anecdotal evidence is that viewers liked that option, and watched one or more episodes every evening. HBO has also expanded its streaming services, making their content available on everything from PCs to smartphones, although it is still wedded to cable and satellite providers.

## More Television Technology: Partnerships and New Online Services

*The New York Times* reported in July 2013 how Apple's penchant for [key partnerships](#) to launch new products may serve them as well with their venture into television. Apple is collaborating with distributors like Time Warner Cable and programmers like Walt Disney Company on apps to streamline the TV-watching experience. While Apple's "grand television vision" is still secret, and there may never be an iTV, they are working to improve their Apple TV box currently in 13 million households.

Meanwhile, according to Business Insider in July 2013, Google too has been busy talking to media companies, pitching its own [online TV service](#). Google is aiming for an Internet cable service that would compete directly with distributors like Comcast and Time Warner Cable.

Google is now working on licensing channels for such a service, but so far has made no content deals. Intel is also working on an Internet-based TV service. Critics say these tech companies may ultimately disappoint, if they stick to the old cable model of bundling channels.

In August 2013, *Motley Fool* reported that Sony has teamed up [with Viacom](#). This may put Sony "front and center" for TV streaming, as the two companies have reached a deal to stream popular channels like MTV, Comedy Central and Nickelodeon.

## More Third World Tech: Shelters to Food and Land Management

In June 2013, the *CSMonitor* wondered why global charities still put [refugees in tents](#), when IKEA has designed a new and better type of inexpensive shelter. The Refugee Housing Unit is much more comfortable and safer, with double the spatial volume. More than six decades after the United Nations passed a convention pledging to protect refugees, very little has changed in terms of shelter. But [IKEA Foundation](#), the philanthropic arm of the iconic Swedish furniture maker, has come up with the new shelter design which is flat-packed and requires no tools to assemble. It can also be quickly disassembled and rebuilt again elsewhere. Designed as more humane housing for the world's 3.5 million refugees, the shelter has a solar panel for electricity, and employs technologies to keep the interior cool by day and warm at night.

According to KCCI News in Iowa in July 2013, an Iowa State University researcher thinks fungi grown from ethanol byproducts could [end world hunger](#). Hans van Leeuwen says the fungi can be grown in 2 days, and is high in protein, essential amino acids and oils. It is currently being tested as livestock feed, while researchers work on improving the "powerful" taste for human consumption.

In June 2013, the *Miami Herald* reported that [fish cages](#) are bringing both food and income to small villages in Haiti. Five floating fish cages in the brackish waters of Lake Azuei are raising almost 100,000 tilapia. Tilapia are an environmentally adaptable, fast-growing species of fish that represent a rapidly expanding multi-billion dollar global industry. [The Caribbean Harvest Foundation](#), a small non-government organization, has installed tilapia cages of various sizes and numbers in seven Haitian lakeside villages. Villagers take turns rowing out to feed the fish three times a day for four months, at which time they are harvested for villagers to eat and sell, sharing the after-costs profit.

*The CSMonitor*, in July 2013, ran a story about how India's [Foundation for Ecological Security](#) works with 1.7 million poor Indians to help them manage their common land in [sustainable fashion](#). Managing pooled resources (land, forest and water) for India's farming poor is key to the sustainability of these "commons." Over the past 25 years, the Foundation has helped improve 512,000 acres of Indian land, "boosting incomes from farming, herding and forest activities." With more than 90% of rural Indians depending on community lands for

survival, more needs to be done to help them sustain the productivity of their common land.

## Native American Video Games and Facebook Outreach

According to *USAToday* in June 2013, the Cook Inlet Tribal Council of Alaska set out to find investment opportunities that would help them [connect with their youth](#) in a positive way. The Council ended up investing in a video game start-up, [Upper One Games](#). The company intends to produce commercial and educational titles that use video games to teach about their culture. It has partnered with New York's [E-Line Media](#), with plans to release its first 2 titles next year: one will be a commercial "cinematic platform" game based on traditional Native Alaskan stories, and the other a digital history curriculum modeled after [Historia](#).

In June 2013, *The Washington Post* (through the *Denver Post*) ran an article about how Facebook ads are helping couples [wanting to adopt](#) to connect with birth mothers with an unwanted future baby. Despite success stories, traditional adoption organizations are critical of Internet adoptions, calling the practice "unmonitored and unregulated." And there are always the scammers, who repeatedly answer ads of prospective adoptive parents, to milk them for "pregnancy expenses," whether or not there is a real pregnancy.

*The New York Times*, in August 2013, reported that Facebook founder Mark Zuckerberg wants to find a way for the Internet to reach the four billion people in the world who [lack Internet access](#). So Facebook recently announced an effort to cut the cost of delivering basic Internet services to mobile phones in developing countries, where Facebook and other tech companies need to recruit new users. Partners on the [Internet.org](#) initiative include Samsung, Nokia, Qualcomm and Ericsson. The companies intend to simplify phone apps, and improve phone hardware so that they can transmit more data with less battery power.

## More on Disrupters: Low Tech to High Tech

According to the *New York Times* in August 2013, Jon Mooallem had an interesting summer, keeping track of [power outages caused by squirrels](#), or P.O.C.B.S. It was a hobby picked up after Mooallem read in April about "a squirrel that electrocuted itself on a powerline in Tampa, Florida, cutting electricity to 700 customers and delaying statewide achievement tests in three nearby schools." Since Memorial Day, Mooallem has catalogued 50 power outages in 24 states that were caused by squirrels, and those were only the stories that made the news.

Portland, Oregon, racked up three P.O.C.B.S. in July 2013 alone, leaving almost 19,000 people temporarily without power. While power officials stress and admit "I sound like a broken record" with each new P.O.C.B.S., the public takes it more in stride. People will take the kids to look at blown transformers and the toasted culprits, even posting photos of the incinerated animals on Facebook pages. And power companies are fighting back, they want you to know. Arrester caps and bushing covers are being used, as well as free-spinning baffles

to make squirrels lose their balance. Although spraying utility poles with fox urine and painting equipment red have both failed to stop the P.O.C.B.S. Even that old stand-by, a plastic owl was tried. Although "one utility reported that the fake owl was attacked by a hawk, which in turn caused a substation outage." So the grim research into P.O.C.B.S. soldiers on...

At the high-end of the disrupter scale, the *New York Times Dealbook* in August 2013 reported on how "Activist Investors" with deep pockets are buying stakes in major corporations with the express purpose of [shaking things up](#). Once considered a niche investment strategy, activist investors aren't in the game for aggressive takeovers for quick gains. Instead they want to agitate for some long-term change, and aim to fight for board seats, help repurpose its use of cash and maybe even change a corporation's core strategy.

Hedge fund groups like [ValueAct](#) have a collective war chest of \$84 billion, double what it was four years ago, and it's fueling activists' ambitions—with mixed results. When ValueAct bought almost a \$2 billion stake in Microsoft this past April, the company agreed to let ValueAct meet with some of its directors, and ValueAct's president, Mason Morfit, could soon join MS' board. But billionaire William A. Ackman lost hundreds of millions of investor dollars in his unsuccessful campaigns against Target and J.C. Penny. However, a recent study out of Harvard Law School argues that overall, companies targeted by activist investors "improved their operating performance within three years of an activist campaign."

## Super-Materials

*Popular Mechanics* reported in January 2013, that smart design and [super-materials](#) are helping build bridges that are longer and cheaper to build than the old suspension bridges. In December 2012, the world's widest cable-stay bridge (weighing 72,000 tons and measuring more than 213 feet wide), opened to traffic outside Vancouver, British Columbia. Mega-contractor [Flatiron](#) builds most of the new US bridges, and its chief engineer, Allan Brayley, explains how more durable concrete, stainless-steel rebar, molten-zinc spray-on coatings for steel, and the inclusion of corrosion-monitoring sensors have helped extend the life of bridges.

In the May 2013 issue of *National Geographic*, various new [discoveries of super-materials](#) were discussed. Harvard researchers at the Wyss Institute have layered shrimp shell and silk proteins and created "Shrilk," which is inexpensive to manufacture, but also tough, flexible and biodegradable. And I've already written about the MIT discovery "LiquiGlide," a slippery coating on the inside of food containers that lets ketchup and mayonnaise glide completely out. Scientists have now crushed a form of carbon to create an unnamed material strong enough to dent diamonds. While Aerographite is a form of carbon with a sponge-like structure. Water-repellent, highly resilient and extremely light, it also conducts electricity and absorbs almost all light.

In the August 2013 issue of *Materials World*, a discussion on [super-materials](#) ranged from an effective invisibility cloak (Nanyang Tech University in Singapore), to MIT's researchers

creating a tool called Wi-Vi which can track humans through walls. Wi-Vi could be a game-changer for rescue operations after big disasters, finding survivors buried beneath post-disaster rubble. And an American company called [nanoGriptech](#) is researching the gecko's impressive ability to climb walls to create adhesive microfibers and micro-patterned material suitable for mass production.

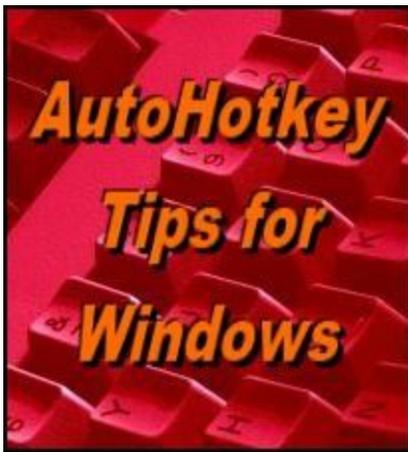
And *Gizmodo* reported in May 2012, that an amateur inventor named Maurice Ward appeared on British TV in 1990 demonstrating a super-material he'd invented called [Starlite](#). Starlite could withstand temperatures of 1000 degrees Celsius, was hard enough to drill holes in walls, and could be painted on surfaces. Ward spent plenty of time shopping it to private companies, defense researchers and even NASA, most of who ended up wanting it. But in 2011, Mr. Ward passed away—without selling the secret makeup of Starlite to anyone. In one interview before his death, Mr. Ward said his family knew the Starlite recipe. But they have been approached and so far refuse to divulge how Starlite was made. Let's hope someone researching super-materials stumbles on the recipe one day, or ends up producing something even better than Starlite!

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*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 ongoing 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.*

ComputerEdge E-Books has converted many of Marilyn's computer humor columns into four e-books.

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Reason to Use  
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Free Software!**

## How to Automate Your New E- mail Messages

**“Automatically Add the  
Name, E-mail Address, Subject, Message and Attachments to Your New E-mails”** by  
Jack Dunning

*It's easy enough to send an e-mail attachment in Windows, but now you can add all the other information with AutoHotkey. Here are some alternative methods.*

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One of the most common uses of the computer and the Internet is e-mail. It's a quick, convenient way to share information and do business without everyone else in the world knowing your affairs (e.g. Facebook). If you have regular often repetitive e-mail, then AutoHotkey could be the answer for setting up your communications. In this column, e-mail discussions with Brian Kammer explored a number of options for initiating e-mail with AutoHotkey.

*\*If you've never heard of AutoHotkey and want a quick introduction, see "[A Review and Guide for Beginners](#)."*

Earlier in the summer I received the following from Brian:

*How about setting up an e-mail compose window with multiple recipients? The following sets up a window to one e-mail address. Can't figure out how to add others.*

```
Run, mailto:capcrimes@gmail.com?subject=Whereabouts&body=I am running errands
```

*Thanks!*

This should do it:

```
Run, mailto:capcrimes@gmail.com;email2@gmail.com;email3@gmail.com  
?subject=Whereabouts&body=I am running errands
```

Place semicolons (;) between the addresses.

You can also put it all in a variable and add it with *%variable%*.

# The Mailto Protocol

Initiating an e-mail has been discussed a couple of times in this column, the last being the right-click menu *E-mail* subroutine in the Address Book app (see the "Send an E-mail to Address Book Entry" section of the [August 9, 2013 AutoHotkey column](#)). However, there has been little specific discussion of the [mailto protocol](#) built into Windows. The *mailto protocol* is a method for initiating a new e-mail using the default e-mail client from a command line (or AutoHotkey script). *Mailto* is not strictly a Microsoft scheme. It is commonly used on the Web in e-mail links and most computers will respond to it as long as a default e-mail client is installed. It's important to note that *mailto* does not send e-mail; it merely open a new message in preparation for sending.

To open a new message window in AutoHotkey the same *mailto* protocol is used with the *Run* command:

```
Run, mailto:user@example.com?subject=Message Title&body=Message Content
```

The first parameter is the target e-mail address which can also take the form *John Smith*<*jsmith@gmail.com*>. Multiple addresses can be included when separated by semicolons (;).

To add other content to the new message, follow the address line with a question mark (?), include one or more tokens (or section names) which are *subject*, *body*, *CC*, or *BCC* followed by the equals sign (=). Each section must be separated by the ampersand (&). Some sources may indicate that there is an *attach* (for attachment) token. However, it appears that it only works with Microsoft Outlook and is not considered part of the scheme.

If you want to include an ampersand (&) in one of the parameters (e.g. Jack & Jill), then there are a couple of steps needed to prevent it from truncating your data. First you must use the ASCII equivalent `%26`. But since the percent sign is a special character in AutoHotkey, it must also be escaped with the accent mark (```):

```
Run, mailto:jdunning@computoredge.com?subject=Jack ` %26 Jill&body=test
```

If you are using variables for your tokens, you may need to use *StringReplace* to search for the ampersands (&) and replace any with escaped ASCII (``%26`).

Then, last week from Brian:

*Jack,*

*Hey there. I was wondering if you knew of an AHK script which will take a selected file in a*

Windows Explorer window (I use [Xplorer2](#)) and attach it to a new e-mail message? The fastest way I can do this is by right clicking the file and choosing Send to => Mail recipient in the context menu. Would love to make a hotkey for it.

Brian

Hi, Brian,

Apparently the "Attach=" option in *mailto* only works with Outlook. I put this script together for Mail on Windows 7. The keys you send will vary depending upon the e-mail program you're using:

```
^t::
Send, ^c
Sleep 200
Run, mailto:jdunning@computoredge.com?subject=Test&body=test
WinWaitActive, ahk_class ATH_Note          ; may vary depending upon e-mail program
                                           ; use Window Spy
SendInput, {alt}{I}                      ; may vary depending upon e-mail program
SendInput, {I}{A}                        ; may vary depending upon e-mail program
WinWaitActive, ahk_class #3277           ; may vary depending upon e-mail program
                                           ; use Window Spy

SendInput, ^v
SendInput, {enter}
Return
```

Unlike a copy in Windows Explorer which copies the actual file (unless in the Rename mode), when you *Send* copy (CTRL+C) from AutoHotkey while a file is selected in Windows Explorer, it only copies the path and filename to the *Clipboard*. That means when the *Send, ^c* is issued in the second line of the script, the information needed for adding an attachment to a new e-mail is saved to the *Clipboard*. However, since there is not a reliable way to add an attachment with the *mailto* command, we need to wait until the new message window opens before attaching the file.

We wait for the new message window to open (*WinWaitActive, ahk\_class ATH\_Note*). Window Spy (right-click on the AutoHotkey icon in the System Tray and select Window Spy) was used to find the *ahk\_class* of the new message window (*ATH\_Note*). I was using Windows Live Mail in Windows 7. Unfortunately, this script must be tailored for your particular e-mail client. The ALT shortcut keys used in this script to add the attachment will vary based upon which e-mail client you're using.

In order to attach the file, the ALT shortcut keys in Windows Live Mail are used (see Figure 1). Many Windows programs have special keyboard shortcuts for the menu items. They are activated by first pressing the ALT key. In some cases the shortcuts are highlighted by underlining the hot character. Pressing that key will activate that menu or menu item. In Windows Live Mail the ALT shortcut for the Insert menu is I (press ALT, then I) (see Figure 1). When the Insert menu opens the *Attach file* item is activated with IA. The file selection

window opens.

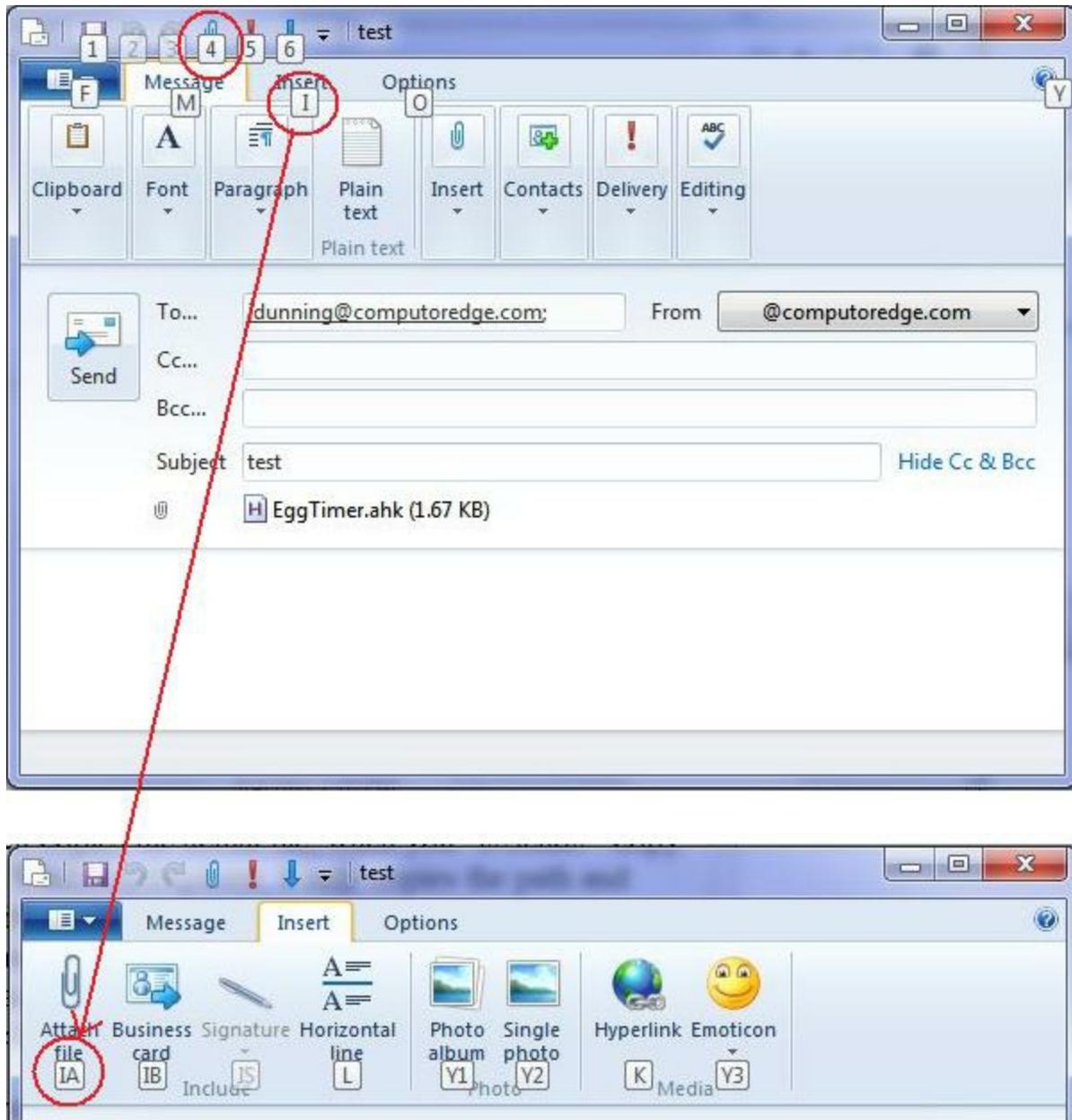


Figure 1. The ALT shortcut keys for adding an attachment to Windows Live Mail are ALT, I, IA, or simply ALT, 4.

This is different in Windows Mail in Vista which simply uses ALT, I, A to open the attachment selection window, so the code in the script would need to be adjusted accordingly if you're using Windows Mail in Vista.

I later noticed that the Attach file icon (paperclip) at the top of the window has its own ALT shortcut key (4). I was able to replace the two *SendInput* navigating lines with one line of code:

```
SendInput, {alt}{4}
```

Again, it is necessary to wait for the Attachment selection window to open (*WinWaitActive*, *ahk\_class*). The *ahk\_class #3277* was also found with Window Spy.

Once the Attachment window is open, CTRL+V pastes the file name into the selection field and ENTER closes the window while adding the attachment to the new message window are sent to the windows with AutoHotkey.

## Adding Multiple Attachments

What if you want to add multiple attachments from Windows Explorer to the new message? It's simpler than you may think.

When you make multiple selections in Windows Explorer and use AutoHotkey to copy to the *Clipboard*, all the filenames are copied, each separated by a carriage return and line feed (*\r\n*) (see Figure 2). While the e-mail program will likely only accept the first file on the list, with reformatting of the *Clipboard* values the entire list may be entered into the Attachment window.



Figure 2. When copying multiple selections from Windows Explorer to the Clipboard with AutoHotkey, the path and names of the files are saved in a list each on a new line (*\r\n*).

By opening the Attachment window and manually entering multiple selections, I was able to determine that the attachments were each surrounded with quotes separate by a space. (This is true for Windows Live Mail and Windows Mail (Vista), but may be different for other e-mail clients. Check it out for yourself.) Immediately after copying the filenames to the *Clipboard* (*CTRL+C*), the *Clipboard* is formatted with the following lines of code:

```
StringReplace, Clipboard, Clipboard, `r`n, " ", All
Clipboard = "%Clipboard%"
```

All carriage returns and line feeds are replaced with two quote marks with a space between

them. Then, on the second line, a quote mark is added to the beginning and end of the entire *Clipboard* contents to complete the surrounding of every item with quotes. This worked in my case. No loops or parsing required to get all of the selected attachments in the new message window.

While this approach to automating new message windows may be more than is needed for something as simple as e-mail, the techniques shown here can be applied to any software program which uses ALT shortcut keys. If you find that you are spending too much time navigating menus, then hit the ALT key and check out the shortcut keys. Using these shortcuts will probably speed things up on their own, but put them in an AutoHotkey script and you will see things start to fly.

## Another Approach to Automating the Addition of E-mail Attachments

Brian responded with another approach to automating e-mail attachments:

*Jack,*

*I did a little tinkering with the context menu, discovered the "Click Right" instruction, and basically created a simple macro using right click and keystrokes:*

```
^!s::
Click Right
Send, {DOWN 11}
Sleep 200
Send, {RIGHT}
Sleep 200
Send, {DOWN 7}
Sleep 200
Send, {ENTER}
```

Return

*Once you select the file or files, hit ^!s — it opens the context menu, selects the Send to => Mail recipient option and opens a compose window with the file(s) attached.*

I initially responded that his approach was "probably easier and definitely more universal, although it has the same net effect. It's another good example. Yours is certainly less complicated to do—as long as the right-click menus don't change."

Since then I realized that right-click menus are fine if all you want to do is add attachments to a blank new message window. However, if you want to automatically add the addresses,

subject and a message, then a tailored form of my first shot offers more options.

## Another Simplification with Accelerator Keys

*OK, selecting the keyboard accelerator for Send to, which is n, will avoid the single/multiple file problem and the file format problem.*

Also, it might be a little easier if you use the *m* key on the last menu to activate the *Mail recipient* item (as long as there are no other items that start with *m*). With most menus, hitting the first letter of an item will jump the selection to the first item that starts with that letter. This is not true with the top level of the Windows Explorer right-click menu which has assigned accelerator keys. To see those accelerator key values, hold down SHIFT+F10 while Windows Explorer is active (see Figure 3). Accelerator keys are underlined.

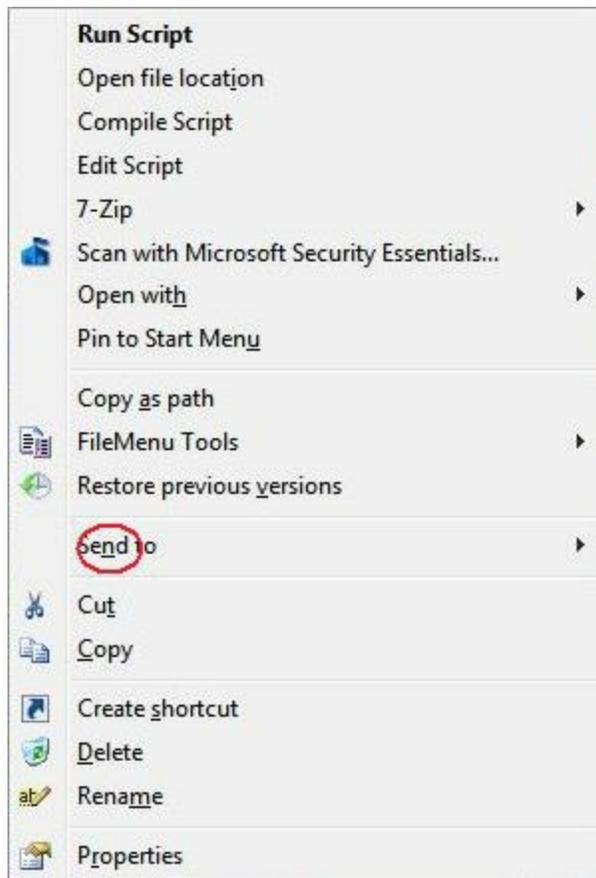


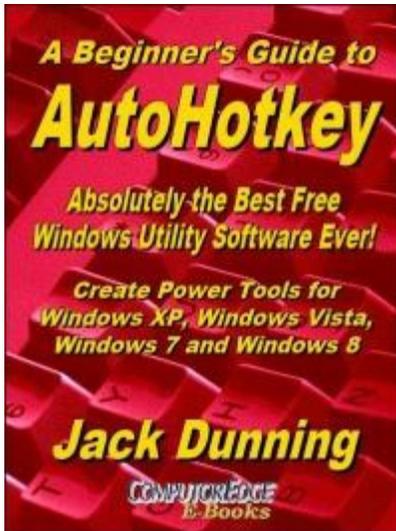
Figure 3. Press SHIFT+F10 while Windows Explorer is active to see accelerator keys (underlined).

With this accelerator key approach, there is probably no point in putting it into an AutoHotkey script. It would be almost as quick to just hit the keys yourself. Sometimes we are so busy trying to use AutoHotkey for everything that we forget how easy it is to do some things in Windows without any extra help.

While I definitely prefer this last approach over counting the number of menu items, if you need more customization the first use of *mailto* would be more flexible.

I was planning to talk about doing calculations with AutoHotkey, but was overtaken by this e-mail project. Next time, I will continue with the *CalorieCount* script and doing spreadsheet-like calculations.

\* \* \*



Now available in e-book format from Amazon, 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.\*](#)

Building Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8, AutoHotkey is the most powerful, flexible, *free* Windows utility software available. Anyone can instantly add more of the functions that they want in all of their Windows programs, whether installed on their computer or while working on the Web. AutoHotkey has a universality not found in any other Windows utility—free or paid.

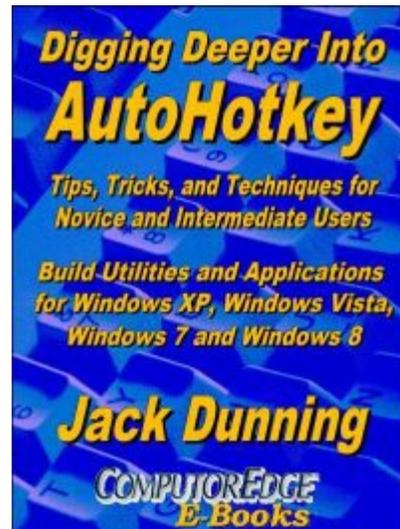
Based upon the series of articles in *ComputerEdge*, Jack takes you through his learning experience as he explores writing simple AutoHotkey scripts for adding repetitive text in any program or on the Web, running programs with special hotkeys or gadgets, manipulating the size and screen location of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

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

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

\* \* \*

Jack's latest AutoHotkey book which is comprised of updated, reorganized and indexed columns from the last six months 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.



If you've been following along with my AutoHotkey columns, then there is little new information in the book (although I have added more clarification for techniques I felt were either confusing or wrong). The only reason I can see to buy it would be as a handy reference. The AutoHotkey commands used are included in a special index to the chapters in which they appear. Even I can't remember everything I wrote.

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

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

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

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 *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?"](#)

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 [ComputerEdge 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

“Apple's Latest iPhones” by Wally Wang

## Wally Wang's Apple Farm

*Apple's Latest iPhones; Microsoft Buys Nokia's Smartphone Business; Security Tips from the NSA; Hiding From the NSA; Creating Movie Titles; 3D Printers Create an Artificial Hand; Save Wi-Fi Passwords.*

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On September 10, [Apple announced](#) the iPhone 5S and the iPhone 5C. The iPhone 5S represents the new high-end iPhone that comes with a fingerprint recognition sensor so you no longer need to type a passcode to unlock your phone. Just train the iPhone to recognize your fingerprint and now you (and only you) will be able to unlock your iPhone.

On the technical side, the iPhone 5S contains a new A7 processor that makes the iPhone 5S twice as fast as the original iPhone 5. One unique feature is that the A7 processor is a 64-bit processor, which gives the iPhone 5S more processing power than the older 32-bit processors. For consumers, the difference between 64-bit and 32-bit processors means that the iPhone 5S will be capable of running more powerful programs such as more realistic video games.



Figure 1. The iPhone 5S represents the new high-end iPhone.

To cater to the budget conscious, Apple also released the iPhone 5C, which is basically a repackaged iPhone 5 in a colorful plastic case. This lower cost iPhone 5C is meant to increase sales in countries where carriers don't subsidize the cost of the phone (such as in China and India). Other than the colorful case and lower price, the iPhone 5C is just a slightly modified version of the iPhone 5 so if you already have an iPhone 5, there's little reason to upgrade.



Figure 2. The iPhone 5C comes in several different colors.

Both the iPhone 5S and the iPhone 5C will go on sale on September 20. If you already have an iPhone 5, there's probably not enough changes to justify an upgrade, but if you're still using an older iPhone model, then you may want to take advantage of the latest features of the iPhone 5S or iPhone 5C.

If you have a fairly recent iPhone model (iPhone 4 and up), you can download the new iOS 7 starting September 18. The new iPhone 5S and 5C will come with iOS 7 installed, but when you buy any new iOS device, including new iPads, you'll now have an option of installing Apple's iWork suite for free that includes Pages, Numbers, and Keynote, which previously cost \$9.99 each. You'll also get a chance to download a free copy of iMovie and iPhoto to edit and manage videos and photographs on your iOS device.

By making the iOS version of iWork free, Apple hopes to attract more iOS users. A free office suite can make iOS devices more attractive so iOS users can create documents on an iPhone or iPad, which is something that Bill Gates [insists is impossible](#) to do despite contrary evidence right before his eyes.

The latest iPhone 5S and 5C are more evolutionary devices than anything revolutionary like

the original introduction of the iPhone. With iOS 7, a more powerful processor that represents the future, and a fingerprint scanner, the iPhone 5S will be the phone you'll want to stay current with the future. Eventually more and more apps will require iOS 7 and a 64-bit processor, so if you don't get the iPhone 5S now, you should look into getting it next year when Apple introduces a new iPhone model and the current iPhone 5S model gets cheaper to buy.

Most people don't need a phone with a 64-bit processor right now, but you can already see that more powerful processors will lead to more powerful software. Eventually, you will need a phone with a 64-bit processor just to run the software you want and need. Fortunately by that time, the cost of 64-bit processors in mobile phones will have dropped dramatically.

While you're waiting for the new iPhone models to appear on September 20, you can wait for OS X to arrive on October 30, which will likely coincide with new Macintosh models including the already announced Mac Pro and possibly future versions of the iMac and Mac mini.

In the meantime, you can also wait for Microsoft to announce new Surface tablets on September 23 that will come with an optional keyboard that doubles as an extra battery pack. Now you can see if Windows 8.1 makes a computer [easier or harder](#) to use.

## Microsoft Buys Nokia's Smartphone Business

Microsoft decided to spend \$7.2 billion buying Nokia's smartphone business in an effort to more closely integrate hardware with their Windows Phone 7 operating system. If you ever get a chance to try a Windows Phone 7 phone, you'll see that the tile interface isn't bad. It just may not offer a dramatic improvement over existing Android phones or iPhones.

Microsoft still promotes Windows Phone 7 through a licensing model where any manufacturer can make a Windows Phone 7 phone. The problem is that manufacturers like Samsung and HTC may decide they can't compete against Microsoft's own phones now that Microsoft can sell phones without paying a licensing fee. Given the fact that Microsoft can now [share advance information](#) with Nokia about upcoming Windows Phone 7 developments, other Windows Phone 7 manufacturers are at a disadvantage.

Just as manufacturers gave up trying to sell Windows RT devices against Microsoft's Surface tablets, expect manufacturers to give half hearted efforts to sell Windows Phone 7 phones. If Microsoft hopes that Windows Phone 7 phones will grab a larger market share, they'll have to rely mostly on themselves to do it.

If Windows Phone 7 phones had come out before the iPhone, they would have been considered revolutionary for their time. Now Windows Phone 7 appears as just a decent phone operating system with fewer apps than Android and iOS along with fewer clear cut advantages over Android and iOS.

Windows Phone 7 has already overtaken Blackberry for third place in the smartphone market, but considering Blackberry's steady decline, that's a minor achievement. Windows Phone 7 is an example of what happens when you react to the market rather than lead it. As long as you're always chasing the leader, you'll never be a leader yourself unless the leader stumbles.

For Microsoft to dominate the smartphone market, they have to hope that both Google and Apple stumble at the same time, which isn't likely. To see a list of more technology giants that once dominated their market, but stumbled badly and fell apart, view InfoWorld's [gallery of failed tech giants](#).

During the 80's, Wang Laboratories had the word processing market locked up. Then less expensive IBM PCs and compatibles took over. Wang Laboratories refused to port their dominant word processor to MS-DOS, which let WordStar, then WordPerfect, and finally Microsoft Word to take over the word processing market. In the meantime, Wang Laboratories went bankrupt in 1992.

When a once dominant leader refuses to port their software to a dominant hardware platform, you can expect that dominant leader to lose their leadership position in a hurry. Someone at Microsoft should study the failure of Wang Laboratories and note the similarity with Microsoft refusing to port Office to dominant hardware platforms like Android and iOS. Then again, Microsoft seems intent on repeating the mistakes of the past and then paying their executives massive salaries as these executives lead Microsoft down the drain. At least these executives will get all their retirement benefits so that's all that really matters to these executives who never have to take responsibility for their actions (or inactions) while the workers suffer for their mistakes.

## Security Tips from the NSA

Nobody should be surprised that the National Security Agency (NSA) knows how to break common [encryption algorithms](#) used on the Internet, especially when known terrorists are [using encryption](#) to mask their communication. People act surprised that Edward Snowden's leaked documents show that the NSA has been cracking and reading encrypted information for years. These same people are probably also shocked to hear that ice is cold, water runs downhill, and that the surface of the sun is hot.

Although most people portray the NSA as an evil surveillance government agency, the NSA does contribute tips for protecting different types of operating systems. The NSA helped create [Security-Enhanced Linux](#), which is now a standard part of the Linux kernel. The NSA has also created a short report on how to increase security for [OS X 10.6 Snow Leopard](#).

By following the NSA's security tips, you can make your Macintosh more resistant to attacks at the expense of greater complexity and less functionality. Security will always be a trade-off. The more secure your computer, the less convenient it will be to use. Just implement the

security measures that make sense to you and assume that anything you create on a computer can be read by someone else. If the NSA isn't reading your data, then somebody else is probably doing it instead.

## Hiding From the NSA

In case you're worried that the National Security Agency (NSA) might be reading your e-mail and tracking your Internet usage, you no longer have to apologize for feeling paranoid in the wake of Edward Snowden's leaks. However, it's unlikely that you'll stop using the Internet just to avoid possible surveillance so try using [TAILS](#) (The Amnesic Incognito Live System) instead.

TAILS is a modified version of Linux that can boot up from a DVD or USB stick, which avoids storing any incriminating data on your hard disk. Although the NSA can reportedly crack most encryption, TAILS still offers various encryption tools to protect your privacy. To encrypt your USB stick, TAILS uses [LUKS](#) for disk-encryption.

When browsing the Internet, TAILS automatically encrypts your data with HTTPS (Hypertext Transfer Protocol Secure). When you send e-mail, TAILS uses [OpenPGP](#) to protect your messages from prying eyes. If you use instant messaging, TAILS encrypts your messages using [OTR](#), a cryptographic tool that offers encryption, authentication and deniability.

To protect your anonymity on the Internet, TAILS relies on the [TOR network](#) that routes your Internet activities through multiple computers to prevent others from seeing what you're doing or which sites you've visited. TAILS can't offer 100 percent security, but it offers far better security than using no privacy tools at all.

Assume that anything you do on the Internet can be tracked by others, so behave accordingly. You may never need to worry about your government tracking you down and arresting you, but you may still not want to take that chance anyway. With TAILS, you can improve your chances for anonymity short of not using any computers at all.

## Creating Movie Titles

If you enjoy creating videos for yourself or to post on video sharing sites like YouTube, you may want to make your videos look a bit more professional by creating title images ahead of your actual video. Although iMovie and other video editing programs offer simple title creation features, a more sophisticated program for creating movie titles is [Animationist](#).

To create a title, just place different objects on the screen such as text, shapes like rectangles or ellipses, graphic images, or even complete movies. After you place your objects on the screen, you can define where you want each item at any particular time. By defining the

starting and ending location of an object, you can tell Animationist where to move items, how far, and how fast.

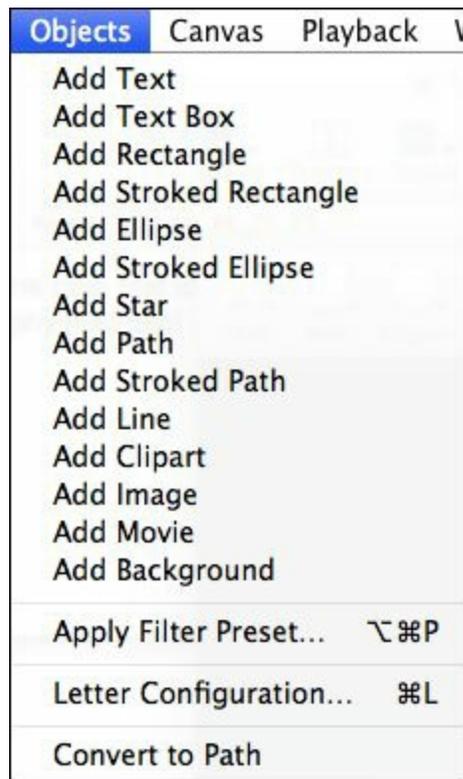


Figure 3. Animationist can add different types of objects to animate.

To help you create unique movie titles, Animationist includes plenty of templates that include unique visual effects where objects seem to bounce, flip around, stretch, and spin on the screen. By modifying one of these templates, you can create movie titles quickly and easily.



Figure 4. Animationist provides plenty of templates that you can modify rather than create a title from scratch.

When you're done creating an animated movie title, you can export it in a variety of file formats including H.264, animated GIF, or even static images as a PDF file or as a Photoshop file with images separated into layers. By exercising your creativity with Animationist, you can create titles for videos to import into iMovie or Final Cut, or use Animationist to create unique visual images to edit in Photoshop.

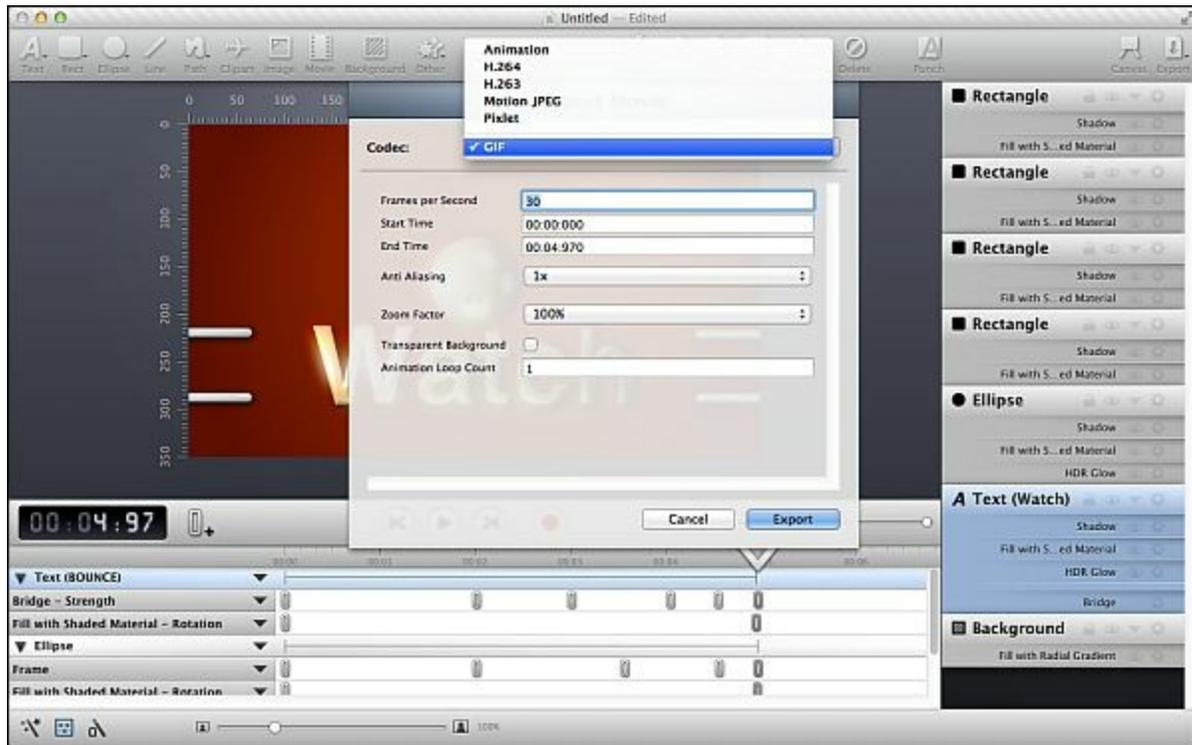


Figure 5. Animationist can export files in a variety of formats.

If you're creating YouTube videos, you might want a program like Animationist to give your videos a unique visual appearance right from the start. For just \$29.99, Animationist gives aspiring filmmakers and YouTube enthusiasts a simple, inexpensive program just for creating movie titles. Ultimately, you need to create interesting videos that people will want to watch, but with a movie title creation program like Animationist, you can make sure your movie titles aren't boring.

## 3D Printers Create an Artificial Hand

Dylan Laas is missing his right hand because of something known as Amniotic Band Syndrome, which is a condition where parts of the amniotic sack entrap and hamper the development of fetal body parts, most often appendages. To overcome his disability, Laas printed a [hand prosthesis](#) custom-crafted by a 3D printer.



Figure 6. An artificial hand created by a 3D printer.

A South African carpenter, Richard Van As, created the hand prosthesis after losing four fingers to a circular saw accident in May 2011. A traditional biomechanical prosthesis, activated by the electrical impulses generated when contracting muscles in the arm, would have cost tens of thousands of dollars. After watching a YouTube video of a mechanical hand prop designed by Bellingham, Wash. resident Ivan Owen, Van As decided to build his hand replacement himself.

The 3D printed device cost less than \$500. As 3D printers become more commonplace, you can expect the cost of specialized tools and devices to drop dramatically. When anyone can become a manufacturer, manufacturing will no longer be limited to overseas countries that rely on cheap labor. That means a shift of manufacturing from overseas to local areas for the future.

\* \* \*

If you have a Macintosh laptop, you may connect to different Wi-Fi networks. To avoid forcing you to type a password to the same Wi-Fi networks over and over again, OS X remembers your Wi-Fi passwords so you can connect right away.

To see which Wi-Fi networks you may have connected to, click the Apple menu and choose System Preferences. When the System Preferences window appears, click the Network icon and then click Wi-Fi on the left pane.

Click the Advanced button and then click the Wi-Fi tab to see a list of previous Wi-Fi network names you connected to.

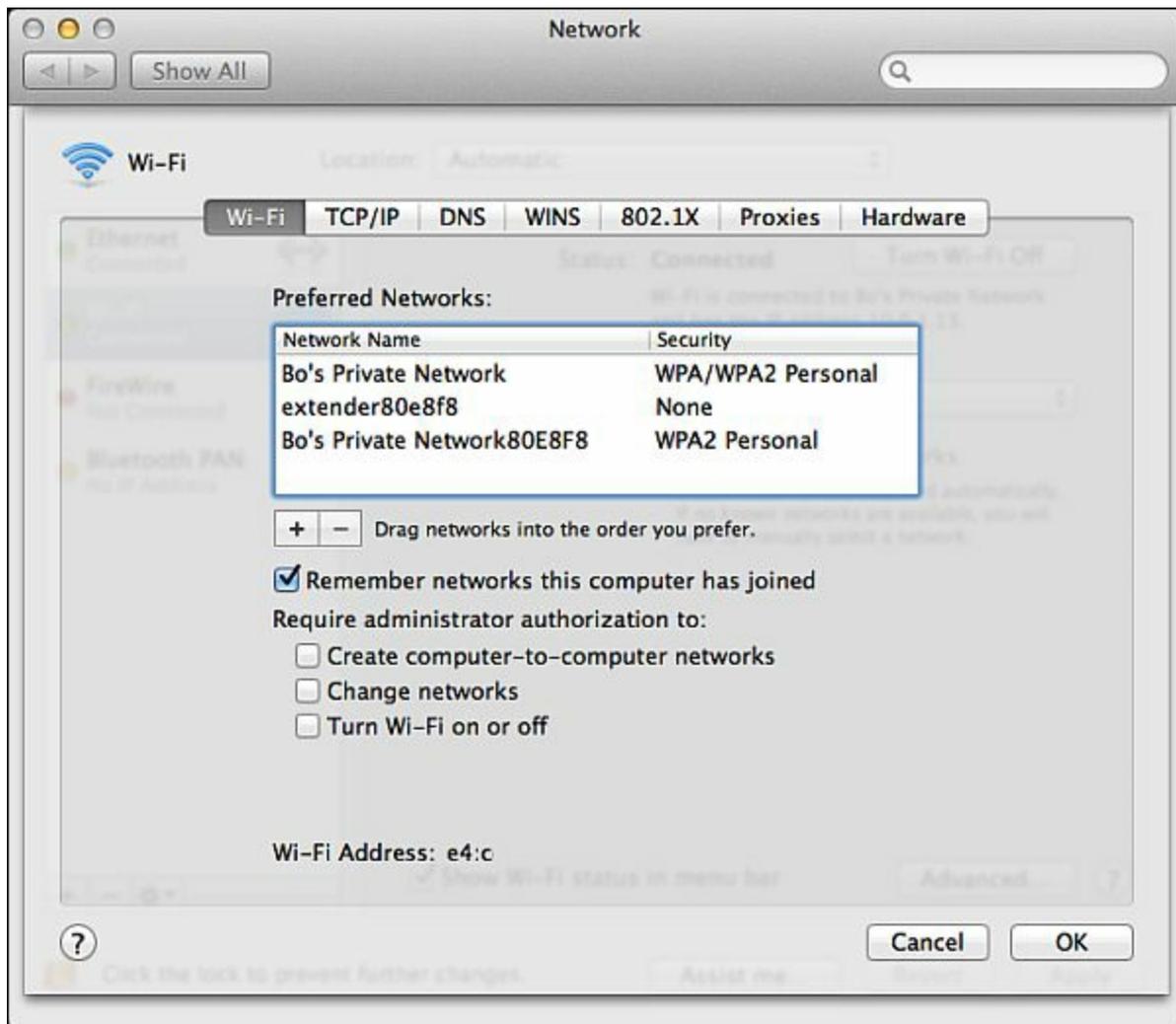


Figure 7. Viewing a list of previously connected Wi-Fi networks.

*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:*

[My New Mac, Lion Edition](#)

[My New iPad 2](#)

[Steal This Computer Book](#)

[Microsoft Office 2010 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)*

In his spare time, Wally likes blogging about movies and writing screenplays at his site "[The 15 Minute Movie Method](#)." Wally can be reached at [wally@computoredge.com](mailto:wally@computoredge.com).



# Worldwide News & Product Reviews

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

*Chinese Cyberspies Turn America's Small Businesses into Trojan Horses; Cybercriminals Infiltrate Android Markets; Points are Dead! Long Live...er...Money!; Total War: Rome II for PC.*

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## Chinese Cyberspies Turn America's Small Businesses into Trojan Horses

*The Huffington Post* sent us an article written by Gerry Smith:

A wide range of small businesses and institutions—from pizza restaurants and medical clinics to synagogues and universities—have been both victims and unwitting accomplices in sophisticated cyber espionage campaigns being carried out by hackers in China, security researchers told *The Huffington Post*.

For years, Chinese cyberspies have been quietly hacking computers at such places, but not to steal their data, researchers say. Rather, they have taken over their PCs and used them to disguise attacks against other companies.

By camouflaging their activity, the hackers are able to bypass security software that blocks suspicious Internet addresses in China from connecting to a company's network. It also confuses investigators who trace the source of cyber attacks to seemingly benign locations, including a church computer in Florida, according to Kevin Albano, a researcher at the computer security firm Mandiant.



"Think of it like someone hiding behind a parked car in a gunfight," Albano said. "You know they're shooting at you, but you don't know where they're coming from."

Since 2006, cyberspies have used PCs at dozens of apparently innocent places—including a college in Missouri and a small Internet provider in California—to cloak attacks that steal intellectual property from American companies, Albano said.

But their technique was not widely understood until earlier this year when Mandiant issued a detailed report about a hacking group based in Shanghai with ties to the Chinese military.

The group frequently routed their hacking through third-party computers so "they almost never connect to a victim network directly from their systems in Shanghai," the report found.

"These systems belong to third-party victims who are compromised for access to infrastructure, as opposed to direct victims who are compromised for their data and intellectual property," the study said.

One such third-party victim was a community mental health clinic in California. In an interview, the clinic's owner said he was unaware his computers were being used by hackers to carry out attacks until two FBI agents arrived at his doorstep in 2010.

"It freaked my wife out. She was like 'What the [hell] is going on?'" said the clinic owner, who asked that he and his clinic not be named to protect his reputation.

He said the FBI agents told him they were investigating a cyber attack against another company that appeared to originate from an IP address registered to the clinic. But they quickly realized the clinic's owner was not responsible.

"I'm a doctor, not an IT person," the clinic owner told HuffPost. "If anyone investigated me, they'd realize 'This guy doesn't know what the hell he is doing.'"

Instead, hackers based in China had compromised the clinic's computers and used them to steal files from the network of a major U.S. defense contractor, according to Albano, the

Mandiant researcher. Mandiant helped investigate the case.

The hackers find computer systems to take over by using tools that scan the Web for Internet-connected PCs with software vulnerabilities they can exploit. Small businesses are popular targets because they often have lax security.

The hackers then use those computers to carry out attacks against their real targets: US companies with intellectual property that could give Chinese businesses a market advantage, according to Adam Meyers, vice president of intelligence at CrowdStrike, an American computer security firm.

"Anybody who has a merger and acquisition deal or a clean energy company with new technology" is in the crosshairs of Chinese hackers, he said.

Cyberspies might, for example, control malware that steals files by hiding commands inside the code of a pizza restaurant Web site, Meyers said.

"It becomes a 'dead drop,'" Meyers said, referring to the espionage strategy of using a location to exchange information so two people never have to meet. "The malware talks to the pizza place and the Chinese talk to the pizza place, but the Chinese don't talk directly to the malware."

Read more at [here](#).

## Cybercriminals Infiltrate Android Markets



A long-term investigation performed by AV-Comparatives confirms an increasing risk of malicious code affecting Android smartphones via third-party app markets. The research, conducted between November 2012 and May 2013 on 20 major third-party Android stores, found 7,175 malware and "grayware" programs. Most of these were hosted in Chinese-based markets. At the other end of the scale, the lowest malware presence was found in European markets.

The investigations' findings suggest that the dramatic numbers of malicious apps present on the Asian market are closely linked to this market's booming activity. From this point of view, European and US markets can be considered secondary targets, as they are entering a stage where growth is steady. Still, at the individual user level, there is no way of indicating safe and unsafe markets, as threats are globally distributed and a single malicious app is enough to compromise a platform.



More [here](#).

## Points are Dead! Long Live...er...Money!

Patrick Klepek has a piece over at [giantbomb.com](http://giantbomb.com) detailing Microsoft's recent, belated move away from Microsoft Points towards real-world currency:



With a move that's been a long time coming, Microsoft has officially ditched Microsoft Points and converted its marketplace listings to real-world currency. Your existing Microsoft Points will automatically convert to equivalent real-world currency, and won't expire until June 1, 2015.



Microsoft Points made more sense when Xbox Live first launched. Consumers weren't used to spending money for digital games, and points are an interesting psychological tactic to separate ourselves from the traditional concept of money. As digital consumerism took root, though, it

felt like Microsoft Points were about tricking the consumer and forcing them to spend more money. Who hasn't been just a precious few points away from a purchase, but was forced to buy a whole bucket of points to actually do it?

In any case, it's gone. Good riddance.

More answers about the nitty gritty details regarding this transition are available in [Microsoft's FAQ](#).

More info [here](#).



## Total War: Rome II for PC

Title: Total War: Rome II

Developer: Creative Assembly

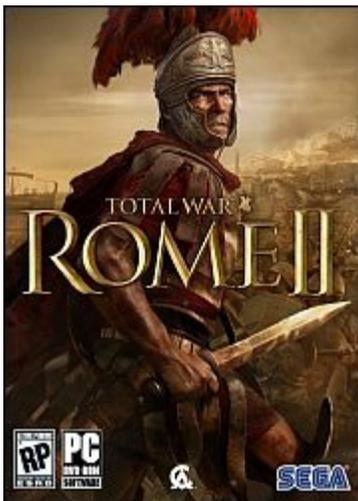
Publisher: Sega

Web site: [www.totalwar.com](http://www.totalwar.com)

Price: \$59.95

Rating: T for Teen

I'm a big fan of strategy games like the original Rome, Civilization, and Shogun 2 (including Fall of the Samurai).



Sadly, with Rome II, I feel we're seeing the continued degeneration of thinking games into dumbed-down games being developed strictly for mass market appeal. Read: sales.

First off, there were some very questionable design decisions. For example, why does it take so long to make a computer move? That's a game killer for me. Ruins the sense of immersion. Also, the combat system *looks* great, but the AI system sometimes causes your units to simply run around and do nothing or charge into an overpowered enemy for no logical reason.

If that weren't bad enough, Rome II has significant performance issues. I've got a brand new desktop computer with a fast processor and state-of-the-art NVIDIA video card and the game still runs slowly—and that's not even with maxed-out settings! On top of that, the game crashes randomly every 15-20 minutes.



Managing your city is the dumbest ever. Rome I was much more detailed. So many of the management details are missing now.

Some things are still pretty good, great even. If your computer can handle them, the graphics are incredible. Diplomacy works really well. The campaign map is a marvel to behold. And, when they play out logically, the battles—which can take place on both land and sea—look awesome, largely thanks to varied camera perspectives and a tactical cam called God's Eye View. I like that you play as one of three families and you *do* get lots of options of units, enemies, and tactics



You know, I think I see what's going on. They sacrificed depth and structure for glitz. Don't get me wrong, glitz is PL, but why does *gameplay* need to lost so that the game can *look* better?

In summation, I just have to say this game is a real mess. Wait until some (more) patches come to out or until Steam puts it on sale for \$10, so you minimize your risk.



Review contributed by Gerald Gessius

*PC System Requirements (from SEGA)*

*OS : Windows XP / Vista / 7 / 8*

*CPU: 2 GHz Intel Dual Core / 2.6 GHz Intel Single Core*

*RAM: 1 GB (XP), 2 GB (Vista / Windows7 / Windows8)*

*Video Card: 512 MB VRAM, Shader model 3*

*HDD: 30 GB*

*DirectX: 9.0c*

*In addition to being an editor and columnist for ComputerEdge and ComputerScene Magazines, where he has written hundreds of feature articles and cover stories over the past decade, Charles Carr has also penned well over 1,000 non-tech newspaper and magazine articles and columns for various publications, including two widely-read columns each week for San Diego's North County Times newspaper.*

Carr has covered such diverse topics as pesticide use in area schools, invasive background checks for county volunteers, asthma awareness, the debate over standards-based grading, potential vulnerabilities in electronic voting machines, and Southern California's devastating 2003 and 2007 wildfires. He has also written many humorous pieces.

Carr has also edited dozens of stories and articles written by others which have appeared in major publications and web sites across the country.

He has been a contributor and technical advisor to *L.A. and San Diego Parent* magazines and receives dozens of requests a year to appear on Southern California television and radio stations to talk about important events in the tech world.

Carr has judged many writing competitions including San Diego Press Club and Time-Warner Communications contests and was sole judge for the national NAPPA Tech Toys awards for five years (which his kids really appreciated). He was recently a judge for the national "Poetry Out Loud" competition.

He has won many writing accolades, including Press Club awards for Best Column Writing, Consumer Writing and Best Arts and Entertainment, and has repeatedly taken top honors in

San Diego Songwriter's Guild competitions for his original musical compositions.

Carr will soon publish his first book, *What a World*, a collection of his best writings.

Learn more at [www.charlescarr.com](http://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

*"E-Mail Programs," "Passwords in Web Browsers," "Music to Your Ears"*

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### E-Mail Programs

[Regarding the August 30 [Digital Dave column](#):]

Dave, can you have more than one e-mail program? If so, will there be a conflict with each other? Thank you.

-Lynne Legare, Magnolia, Texas

While Windows Live mail is a perfectly acceptable e-mail program, I'll put in my 2¢ in favor of one of the many free online e-mail programs, Gmail, Yahoo, Hotmail (now Outlook.com, looks very similar to his old Outlook Express). Lots of storage, no worrying about backups and usable/accessible from any computer in the world with Internet access. \Contacts/address book can be imported fairly easily and there are ways, as well as a fairly inexpensive program (that I *cannot* remember the name of) that will even move all your old e-mails to an online/Webmail setup.

And I second your suggestion about Dropbox or similar file/photo storage/sharing sites, or even Facebook for photos with easy captioning, etc.

Lastly, if he really wants to stick with tried and true, he can buy the full Outlook which is almost identical in look, feel and usage to his old OE.

-Rich Ernst, San Diego, CA

For Lynne from Texas; I use an android e-mail program to access my cable service e-mail server, but I set the program to *not* download from the server so that I can use my primary computer to download and save relevant e-mail. The same comment applies to e-mail programs on the same computer.

From an old Aggie from San Antonio.

-Ray, San Diego, CA

*The only thing that I would add to Ray's comments is that if you want to pick up the mail with more than one program, be sure to set the programs to leave the mail on the server for at least long enough for each program to get it. I used five days when I was picking up e-mail on multiple computers.*

*If you do pick up mail with more than one program on the same computer (or multiple computers), there will likely be times when one program locks out the other while it is picking up mail. Generally, the blocked program will ask for the password making you think that something's wrong. Just wait until the first is done retrieving mail before trying again. Sitting there and re-entering the password won't help.*

*-Digital Dave*

## Passwords in Web Browsers

[Regarding the August 30 [Digital Dave column](#):]

I get no kickbacks from the company, but have found the free [LastPass](#) program/add-on fantastic for not only keeping all the various and *different* (right you all???) passwords for Web sites encrypted and secure.

*And*, it will sync your passwords for sites across *different* Web browsers, like IE, Chrome and my favorite, Firefox.

As I said, it's free. Takes a bit of getting used to, but once learned, well worth the slight learning curve. I always tell it to disable and remove all the passwords the Web browsers themselves save so no one else can ever see the passwords.

-Rich Ernst, San Diego, CA

## Music to Your Ears

[Regarding the August 30 [Worldwide News & Product Reviews column](#):]

Not compatible for those who have to have hearing aids!

-Walter, San Diego, CA

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