

THE VILLAGES COMPUTER CLUB

There will be NO VCC meeting on December 21 and 28. VCC meetings will start again on January 4, 2013.

We have an active January planned. Please reference the [web site](#) to see the schedule. We will publish a full presentation schedule for all the months in 2013 after we do the survey.

From the VCC Board, have a Merry Christmas and a Happy New Year!

Paul Rabenold

TVCC.Pres@gmail.com

Holiday Special Offer by MMD Computers in Lady Lake for the month of December

Jmax,

We are offering data transfer for \$35 on any new MMD Computer purchased in December.

We are also offering data transfers for computers purchased elsewhere for \$50 through the month of December.

Computers purchased elsewhere should be run through their initial configuration and registration before bringing them to the shop.

Offer only applies to in shop service.

Thanks,

Thomas McNeil

MMD Computer Center Inc. 750-3707

Say goodbye to BIOS — and hello to UEFI!

By Woody Leonhard

If you've ever struggled with your PC's BIOS — or been knee-capped by a rootkit that assailed the BIOS — you undoubtedly wondered why this archaic part of every PC wasn't scrapped long ago.

Well, be of good cheer: Windows 8 will finally pull the PC industry out of the BIOS

generation and into a far more capable — and controversial — alternative, the Unified Extensible Firmware Interface.

To best understand where we're headed, it's helpful to look at where we've been. An integral part of every PC, the Basic Input/Output System spans the entire history of the personal computer — more than 30 years. The very first IBM PC had a BIOS. And despite extraordinary advances in hardware and software, the BIOS we still puzzle over today is not much different from the one in that original PC.

Essentially a miniature OS, the BIOS has a simple but critical function — when a PC powers up, the BIOS checks that all hardware is in order (the POST or "power-on self-test" sequence); fires up the full operating system on the machine, such as Windows (using OS loader code); and then hands all control of the computer over to the OS.

Although older operating systems (such as DOS) relied on the BIOS to perform input and output functions, modern OSes (including Windows) have their own device drivers and completely bypass the BIOS after they're up and running.

These days, it's rare that a PC user is forced to invoke the BIOS's cryptic and somewhat enigmatic user interface. Usually, it's in response to some near-catastrophic system failure.

The Unified Extensible Firmware Interface (UEFI) is essentially the next generation of BIOS. It's a system that potentially offers new and more advanced control of the boot-up process. If your PC is less than two or three years old, chances are good that it already has UEFI ([more info](#)) capabilities. Chances are **very** good that you didn't know that, because the hardware manufacturers have been carefully keeping the old BIOS interface as your default boot system. But that will change with Windows 8.
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How UEFI is different from/better than BIOS

The standard BIOS has all sorts of problems, not least of which is its susceptibility to malware. For example, there are rootkits that hook themselves into the BIOS OS-loader code, permitting them to run underneath Windows. They're difficult to remove and will re infect Windows over and over.

And because the BIOS sits on a chip on the motherboard, it's more difficult to update than an operating system or an application. So most PC users never update their BIOS, leaving the PC possibly incompatible with newer operating systems. (The early PC BIOS was hard-coded on a chip, so upgrading required replacing the entire chip or PROM.)

The UEFI is a more sophisticated system that runs before your primary OS kicks in. Unlike the BIOS, UEFI can access *all* PC hardware, including the mouse and network connections. It can take advantage of modern video cards and monitors. It can even access the Internet.

And as you can see in Figure 1, UEFI offers a modern, easy-to-decipher user interface. It could make dual-booting simpler, more visual, and controllable by mouse or touch. If you've ever played your BIOS, you discover that UEFI is in a whole new dimension.

Figure 1. The Asus.com website offers this view of a UEFI-interface screen — clearly, an improvement over the typical BIOS UI we're faced with today.

Unlike the BIOS, the UEFI can exist on a disk, just like any other program — or in nonvolatile memory on the motherboard or even on a network share.

At this point, it's important to note that systems can run either the BIOS or the UEFI — or both. When they're both used, the BIOS goes first to run POST, then the UEFI takes over and hooks into any calls that may be made to the BIOS. (Windows typically doesn't make calls directly to the BIOS, but other operating systems might — and the UEFI will handle them, not the BIOS.)

The UEFI can also run without the BIOS — it can take care of all OS loading/interface functions previously handled by the BIOS. The only thing the UEFI can't do is perform the POST or run the initial setup (configuring the CPU, memory, and other hardware). PCs that have the UEFI but no BIOS have separate programs for POST and setup that run automatically when the PC is powered on.

As we all know, the BIOS initialization process — including POST — seems to take a long time. The UEFI, on the other hand, can run quickly.

Moreover, a BIOS is easily reverse-engineered and typically has no internal security protection, making it a sitting duck for malware. A UEFI can run malware-dodging techniques such as policing operating systems prior to loading them — which might make rootkit writers' lives considerably more difficult. For example, the UEFI could refuse to run OSes that lack proper digital security signatures.

And that's where the UEFI controversy begins.

Windows 8 will implement UEFI in new ways

Back in September, Microsoft wrote voluminously about the UEFI in Windows 8. The first [post](#), "Reengineering the Windows boot experience," talks about the basic ways Windows 8 will use the UEFI. (If your PC doesn't support a UEFI, Win8 should still work fine.)

The article shows how current text-based, boot-time options, such as system repair store and image recovery, can be made more usable with a new graphical interface. The story goes on to describe how system startup could go, in seconds, from power-on to Windows Desktop without so much as flickering the screen. It also shows how dual-boot will work with a graphical face-lift.

The changes appear to be largely cosmetic, but they're long overdue and a welcome improvement to the constrained, DOS-era recovery environments under which Windows operates.

The second [article](#), "Protecting the pre-OS environment with UEFI," shows how the UEFI secure boot — using Public Key Infrastructure (PKI) digital certificates — validates programs, peripherals, and OS loaders before they can run. The system can go out to the Internet and check whether the UEFI is about to run an OS that has had its certificate yanked.

If it sounds a lot like Secure Sockets Layer protection — no stranger to controversy, as I detailed in my Sept. 15, 2011, [Top Story](#) — there certainly are similarities.

Microsoft states it will let the hardware manufacturers struggle with the difficult question of who controls the digital-signature keys. "Microsoft supports OEMs having the flexibility to decide who manages security certificates and how to allow customers to import and manage those certificates, and manage secure boot. We believe it is important to support this flexibility to the OEMs and to allow our customers to decide how they want to manage their systems."

Still, Microsoft is ensuring that anyone buying a certified Windows 8 PC can rely on a certain level of protection from rogue OS loaders. "For Windows customers, Microsoft is using the Windows Certification program to ensure that systems shipping with Windows 8 have secure boot enabled by default, that firmware not allow programmatic control of secure boot (to prevent malware from disabling security policies in firmware), and that OEMs prevent unauthorized attempts at updating firmware that could compromise system integrity."

The controversial side of dual boot

When those details first hit, the Linux community flew up in arms. Dual booting between Windows 8 and Linux might require a digital signature from a recognized certificate authority. That authority might be Microsoft, through its Windows Certification program, and Linux folks would have to pay the piper.

That controversy went on for a while but eventually died down (though it never disappeared) when it became clear that putting together the signature is relatively easy and not very expensive.

Then another conflagration started last week. To understand why, you have to understand that UEFI secure boot has two bail-out options. First, most PCs let you turn off UEFI secure boot entirely. You have to be sitting at the computer and do it manually, but it's easy enough. In one of the Microsoft postings mentioned previously, the company acknowledged that hardware manufacturers could "allow customers

to ... manage secure boot."

Second, there's a provision for something called "custom secure boot mode" in which you, as a customer, can sit at your computer and type in a signature for any OS loader you darned well like. This manually created whitelist overrides the Windows 8 or third-party check, letting the UEFI run OS loaders unhindered.

You must also understand that Windows 8 will run on two entirely different hardware platforms — Intel/AMD platforms spanning the range from (ponderous!) tablets to full-size desktops, and the svelte, tablet-friendly ARM platforms. If you use Win8, one of your first decisions will be which platform you choose.

The Linux world was taken aback when researcher Glyn Moody and the Software Freedom Law Center announced last week in a [blog](#) that Microsoft is making specific demands from hardware manufacturers who intend to sell Windows 8 bundled with their ARM machines — that is, those lightweight Windows 8 tablets. The Microsoft restrictions prevent hardware manufacturers from disabling secure boot and also prevent hardware manufacturers from implementing "custom secure boot" whitelists — but again, only on ARM hardware.

In other words, if at some point in the future you buy an ARM-based tablet with Windows 8 preinstalled, you won't be able to dual-boot with Linux or any operating system other than the ones that pass the security check. Presumably that could mean Windows 8 or some later version of Windows that Microsoft might ordain in the future.

Aside from the fact that the restrictions fly in the face of what Microsoft specifically said in September, it's hard for me to get too worked up about them. If you buy a Win8 (ARM) tablet, you won't be able to root it ([Wikipedia definition](#)), and you may not be able to upgrade it. You'll just have to take that into account when you think about buying one — assuming Microsoft is up-front about the limitation and mentions it to consumers.

Intel-based Windows 8 machines — even tablets (including tablets that run only the Metro interface) — aren't hobbled by those ARM restrictions. At least at this point, Intel/AMD machines are, in fact, required to allow multibooting (with signed operating systems) and even to replace Windows 8 with an OS of your choice. It remains to be seen whether Microsoft's going to change its mind about that distinction.

Computer Rebooting Cycle

Heat can cause a computer to reboot. A faulty fan or seized fan may not be cooling as it should. Also, dust bunnies can clog the fan. As soon as the CPU heats up, it will reboot. Try this.

1. Shutdown the computer and allow it to cool for about 10 minutes.
2. Remove the cover on the CPU cover. (Do not attempt to remove the cover of a laptop. That's a job for the professionals)
3. Power up the CPU . If it doesn't reboot as it did before the problem may well be a non-working fan or a fan clogged with dust bunnies, a mouse, a snake or other air-blocking agent.
4. To remove 'dust bunnies' or such, shutdown computer, unplug from power. Open the case and using a can of compressed air blow out the dust.

Note: In Win 7 it's a good idea to uncheck the automatic restart in System Failure because should a system failure occur such as the blue screen of death, the computer begins restart and doesn't stop it just continues to reboot...rebootreboot.

To disable this feature:

1. Click Start...Control Panel
2. Click System
3. On the left column click Advanced system Settings
- 4 Under System Failure, uncheck automatic restart

More Win 7 info

Comparing some features of XP to Win 7

<http://windows.microsoft.com/en-US/windows7/help/videos/windows-xp-vs-windows-7>

Copy and Paste with Win 7

<http://windows.microsoft.com/en-US/windows7/Copy-and-paste-a-file>

Win 7 Help and How TOs

<http://windows.microsoft.com/en-US/windows7/help>

Getting started with Win 7

<http://windows.microsoft.com/en-US/windows7/help/getting-started>

Window Open Pages or Programs Lost

Sometimes you may be working with many Window screens (pages) open at a time. It is easy to find the lost window if you are working with the screens minimized. That is, there will be a single square between the (-) and the (x) at the right top corner of the pages. Minimized screens may be moved up, down or sideways by clicking on the title bar of that page (the blue bar at the time), and holding down the mouse button drag left, right, up or down.

A good feature added to Win 7 is that if you have a doublesquare(maximised) in that top right corner, and you click on the title bar, it automatically changes to a single square (minimized) allowing you to move it up, down or sideways so that you can see the open pages behind the top page.

Click on any bit of a page behind and it immediately comes up front which allows you to work on many windows pages at a time without closing any of them.

If you have more than one program open, you may click on the title of the program shown on the bottom taskbar to bring it up in front of what you were working on. You may return to other open programs by clicking their titles shown on the taskbar.

Rightclick on the program title bar and select Close Window to close the program.

Click the red X at the top of any page to close that page.

APC Backup Reset

When power fails and the APC sounds the alarm, it will need to be reset.

APC Back UP- flashing red light and cricket sound

1. Shut down computer
2. Press power button on UPS
3. Wait awhile
4. Press power button on UPS
5. Turn computer back on
6. Sound goes away
7. Bottom green light stays lit

As we approach the end of this year and the beginning of a new year, it might be well for us to consider the following:

Remarks on CBS Sunday morning

Only hope we find GOD again before it is too late !!

The following was written by Ben Stein and recited by him on CBS Sunday Morning Commentary.

My confession:

I don't like getting pushed around for being a Jew, and I don't think Christians like getting pushed around for being Christians. I think people who believe in God are sick and tired of getting pushed around, period. I have no idea where the concept came from, that America is an explicitly atheist country. I can't find it in the Constitution and I don't like it being shoved down my throat...

Or maybe I can put it another way: where did the idea come from that we should worship celebrities and we aren't allowed to worship God as we understand Him? I guess that's a sign that I'm getting old, too. But there are a lot of us who are wondering where these celebrities came from and where the America we knew went to.

In light of the many jokes we send to one another for a laugh, this is a little different: This is not intended to be a joke; it's not funny, it's intended to get you thinking.

In light of recent events... terrorists attack, school shootings, etc.. I think it started when Madeleine Murray O'Hare (she was murdered, her body found a few years ago) complained she didn't want prayer in our schools, and we said OK. Then someone said you better not read the Bible in school... The Bible says thou shalt not kill; thou shalt not steal, and love your neighbor as yourself. And we said OK.

Then Dr. Benjamin Spock said we shouldn't spank our children when they misbehave, because their little personalities would be warped and we might damage their self-esteem (Dr. Spock's son committed suicide). We said an

expert should know what he's talking about.. And we said okay..

Now we're asking ourselves why our children have no conscience, why they don't know right from wrong, and why it doesn't bother them to kill strangers, their classmates, and themselves.

Probably, if we think about it long and hard enough, we can figure it out. I think it has a great deal to do with 'WE REAP WHAT WE SOW.'

Funny how simple it is for people to trash God and then wonder why the world's going to hell. Funny how we believe what the newspapers say, but question what the Bible says. Funny how you can send 'jokes' through e-mail and they spread like wildfire, but when you start sending messages regarding the Lord, people think twice about sharing. Funny how lewd, crude, vulgar and obscene articles pass freely through cyberspace, but public discussion of God is suppressed in the school and workplace.

Are you laughing yet?

Funny how when you forward this message, you will not send it to many on your address list because you're not sure what they believe, or what they will think of you for sending it.

Funny how we can be more worried about what other people think of us than what God thinks of us.

Pass it on if you think it has merit.

If not, then just discard it... no one will know you did. But, if you discard this thought process, don't sit back and complain about what bad shape the world is in.

My Best Regards, Honestly and respectfully,

Ben Stein

Subject: TOP-10 "Only In America" Observations

1) Only in America, could politicians talk about the greed of the rich at a \$35,000.00 a plate campaign fund-raising event.

2) Only in America, could people claim that the government still discriminates against black Americans when they have a black President, a black Attorney General, and roughly 18% of the federal workforce is black while only 12% of the population is black.

- 3) **Only in America**, could they have had the two people most responsible for our tax code, Timothy Geithner, the head of the Treasury Department and Charles Rangel who once ran the Ways and Means Committee, BOTH turn out to be tax cheats who are in favor of higher taxes.
 - 4) **Only in America**, can they have terrorists kill people in the name of Allah and have the media primarily react by fretting that Muslims might be harmed by the backlash.
 - 5) **Only in America**, would they make people who want to legally become American citizens wait for years in their home countries and pay tens of thousands of dollars for the privilege while we discuss letting anyone who sneaks into the country illegally just 'magically' become American citizens.
 - 6) **Only in America**, could the people who believe in balancing the budget and sticking by the country's Constitution be thought of as "extremists."
 - 7) **Only in America**, could you need to present a driver's license to cash a check or buy alcohol, but not to vote.
 - 8) **Only in America**, could people demand the government investigate whether oil companies are gouging the public because the price of gas went up when the return on equity invested in a major U.S. oil company (Marathon Oil) is less than half of a company making tennis shoes (Nike).
 - 9) **Only in America**, could the government collect more tax dollars from the people than any nation in recorded history, still spend a Trillion dollars more than it has per year - for total spending of \$7-Million PER MINUTE, and complain that it doesn't have nearly enough money.
 - 10) **Only in America**, could the rich people - who pay 86% of all income taxes - be accused of not paying their "fair share" by people who don't pay any income taxes at all.
- These top 10 observations may be worth sharing...

Jmax

Jmax's Website <http://www.jmaxbits.com/>

Jmax Bits Newsletter is now posted each Monday & Thursday on the website.
You have the option for a .pdf or a .rtf file.

1. For help with a computer problem, put **HELP** in the subject line and give me info about the computer you're using, if you know it.

2. To view or print **Jmax Bits Good Services List in the Villages area**, click link www.jmaxbits.com

3. To sign up for the non-computer newsletter, send an email to VLGSCclassifieds@aol.com. Put **SUBSCRIBE** in the subject line. To send an Ad, place **AD** in the subject line.

4. The Villages Computer Club's web page: [Click here: Welcome To The Villages Computer Club](#)

To add your name to the VCC announcements list, send email to TheVCC-subscribe@yahoo.com

5. Fred Benson's website www.thevillagescomputerbasics.com