

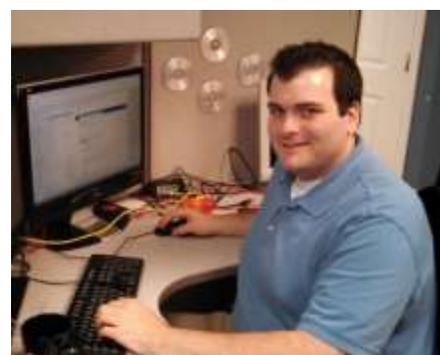
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TechSolutions New Employee is a Winner

By Dan Ayars, Marketing Coordinator, TechSolutions

We've added a new team member to our ranks. A few months ago Tyler Foster accepted a position as Network Operations Center Technician here at TechSolutions. In that role Tyler is in charge of keeping a watch on our monitoring operation, ensuring things like backups and anti-virus are working correctly and up-to-date for our clients who receive those services from us.



An experienced IT professional, Tyler's past work involved providing in-home and phone IT support for retailers and cable companies. While at Wilmington University he experimented with programming languages, earned a bachelor's degree and graduated Magna Cum Laude which is Latin for "got a lot of A's." Of course a sharp IT guy is like a person with a pick-up truck - always called on by friends and family in need and, as opposed to some truck owners I know, Tyler gladly obliges by providing tech support and building computers.

Growing up in Newark, Tyler currently lives in Bear with his girlfriend Arianne and their Shiba Inu, Jax. He claims to make a "pretty good pizza from scratch" but I can't vouch for that until he brings me a large bacon and onion or \$100. He is a big fan of horror movies and enjoys seeing standup comics live. Also a gambling aficionado, Tyler participates in poker tournaments and occasionally heads to Atlantic City to try his luck at blackjack and sometimes roulette.

Speaking of gambling, bringing in a new employee is always a risk however this one has paid off. Tyler has been a fine addition to our team. His knowledge and skill level have been instrumental in refining our network operations center. I can speak for all of us in saying that we are grateful to have him here.



Shellshock 101: What is it?

Earlier this year news broke of one of the most widespread and potentially devastating bugs to-date – Heartbleed. While Heartbleed was massive and companies are still dealing with the fallout to this day, news has recently broke of an even bigger potential threat: Shellshock. This is a security issue all business owners, managers, and employees should be aware of.

What exactly is Shellshock?

Shellshock is the name applied to a recently uncovered software vulnerability which could be exploited to hack and compromise untold millions of servers and machines around the world. At its heart, the Shellshock vulnerability is based on a program called Bash. This is a Unix-based command program that allows users to type actions that the computer will then execute. It can also read files called scripts that contain detailed instructions.

Bash is run in a text-based window called a shell and is the main command program used by OS X and Unix. If you have a Mac computer and want to see what Bash looks like, simply hit *Command (Apple Key) + Spacebar* and type in *Terminal*. In the text-based window that opens in Bash you can enter commands using the Bash language to get your computer to do something e.g., eject a disc, connect to a server, move a file, etc.

The problem with Bash however is that it was recently discovered that by entering a specific line of code in a command you could get a system to run any following commands. In other words, when this command is used, Bash will continue to read and execute commands that come after it. This in turn could lead to a hacker being able to gain full, yet unauthorized, access to systems without having to enter a password. If this happens, there is very little you can do about it.

Why is this such a big issue?

To be clear: Shellshock should not directly affect most Windows-based machines, instead it affects machines that use Unix and Unix-based operating systems (including OS X). So why is this so big a deal when the majority of the world uses Windows-based computers? In truth, the majority of end-users will be safe from this exploit. However, the problem lies with bigger machines like Web servers and other devices such as networking devices, and computers that have had a Bash command shell installed.

While most users have Windows-based computers, the servers that support a vast percentage of the Internet and many business systems run Unix. Combine this with the fact that many other devices like home routers, security cameras, Point of Sale systems, etc. run Unix and this becomes a big deal.

As we stated above, hackers can gain access to systems using Bash. If for example this system happens to be a Web server where important user information is stored, and the hacker is able to use Bash to gain access and then escalate themselves to administrative status, they could steal everything. In turn this could lead to the information being released on to the Web for other hackers to purchase and subsequently use to launch other attacks – even Windows-based systems. Essentially, there are a nearly unlimited number of things a hacker can do once they have access.

If this is not dealt with, or taken seriously, we could see not only increased data breaches but also larger scale breaches. We could also see an increase in website crashes, unavailability, etc.

So what should we do?

Because Shellshock mainly affects back-end systems, there is little the majority of users can do at this time. That being said, there are many Wi-Fi routers and networks out there that do use Unix. Someone with a bit of know-how can gain access to these and execute attacks when an individual with a system using Bash tries to connect to Wi-Fi. So, it is a good idea to refrain from connecting to unsecured networks.

Also, if you haven't installed a Bash command line on your Windows-based machine your systems will probably be safe from this particular exploit. If you do have servers in your business however, or networking devices, it is worthwhile contacting us right away. The developers of Bash have released a

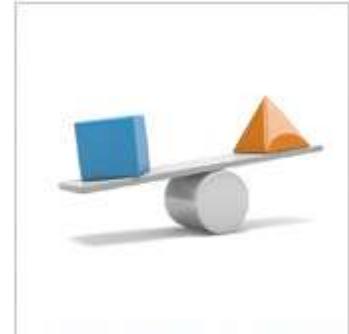
partial fix for this problem and we can help upgrade your systems to ensure the patch has been installed properly.

This exploit, while easy to execute, will be incredibly difficult to protect systems from. That's why working with an IT partner like us can really help. Not only do we keep systems up-to-date and secure, we can also ensure that they will not be affected by issues like this. Contact us today to learn how we can help.

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Comparing Office 2013 and 365

When it comes to integrating Microsoft Office into your company, you are faced with two main options: Either purchasing Microsoft Office 2013 or signing up for the cloud-based version, Office 365. With both of these options you do get access to the Office suite, but there is some confusion over what the main difference is between the two product offerings.



What is Microsoft Office 2013?

Microsoft Office 2013 is the latest version of Microsoft's popular Office suite. With apps like Word, PowerPoint, Excel, and more, it is mostly similar to all previous versions of Office. When you purchase this type of Office you receive a number of licenses allowing you to install this on up to five computers or devices – depending on the version (e.g., Home, Student, Professional) of Office that you get.

You can purchase these products outright, as you have done with previous versions of Office, but Microsoft is really pushing their subscription-based version of Office, what they call Office 365. When you subscribe to Office 365, you get the same Microsoft Office software as you would if you purchased it outright, the only difference is you pay for it either monthly or yearly, instead of all at once.

What is Office 365 for Business then?

Where it gets confusing for many is that in 2011 Microsoft launched a cloud-based version of Office for businesses also called Office 365. Despite the same name as the subscription-based version of Office 2013, this is a different product that is aimed at businesses.

Office 365 for businesses is a monthly (or yearly) per-user subscription service that offers businesses productivity software, enhanced communication apps like email and video conferencing; guaranteed security; and support for intranet and collaboration solution SharePoint.

With Office 365 for business, companies can sign up for a number of plans. Some of them, like Office 365 Small Business Premium and Office 365 Midsize Business, offer full versions of Office 2013 (including Word, Excel, PowerPoint, Lync, Outlook, Notes, Access, etc) that users can install on their computers or mobile devices. Other versions, like Office 365 Small Business, come with Office Web Apps which can be accessed via your browser.

Which is better for business?

Most businesses will benefit more from Office 365 because of the extra features and enhanced security. Not to mention the fact that the monthly per-user cost is usually lower when compared to licensing the same version of Office 2013 for each individual.

Some other benefits Office 365 for Business include:

- **All users are on the same version of Office:** Because Office 365 for Business is based in the cloud and is managed via a central admin panel, you can ensure that all users have exactly the same version of Office, which in turn ensures that your files will be compatible.

- **Reduced licensing costs:** If you were to purchase individual versions of Office 2013 for your employees, you could end up paying over USD \$399 for the Professional version which can only be installed on one computer. Compare this with Office 365 Small Business Premium which costs USD \$12.50 per user, per month and offers the same version of Office, along with more features.
- **Enhanced security and uptime:** Microsoft guarantees that Office 365 software will be up and running 99.9% of the time, which means the programs you rely on will be available when you need them.
- **It's more mobile:** With Office Web Apps and Office 2013 mobile apps you can take your work anywhere. Combine this with solutions like SharePoint which allow you to store documents in a central location, which makes it easier to access your files while out of the office. Beyond that, if you would like to use the Office mobile apps, you will need an Office 365 subscription.

If you are looking to integrate Office 365 into your organization, or would like to learn more, contact us today.

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Windows Skips 9 and Goes Straight To 10!

At the end of September, Microsoft held their now annual Windows event, where they announced the next big version of Windows – Windows 10. While it seems a little odd that they are skipping 9 completely, from what we can see, 10 is shaping up to be the best version of Windows to date. Here is a brief overview of what you can expect from the latest version of Windows.

Why Windows 10?

When first announced, many eyebrows were raised regarding Windows 9 being skipped. In the tech world, missing a number with a sequence is not the norm, yet Microsoft stated that they believe that the next version of Windows will be such a drastic improvement over Windows 8 that calling it Windows 9 would not do it justice. From what we can see of the new system, there really are some drastic improvements, including:

One operating system (OS), many systems

When Windows 8 was released, a slightly modified version of the OS was also released for mobile devices. While this was good news, especially for mobile users, the systems were still largely separate, with different apps, app stores, and more.

With Windows 10, Microsoft has noted that the OS has been designed to run across all systems. This means that different devices will likely have slightly different interaction experiences but the underlying system will be the same. For example, there will be one way to write programs for all devices, one app store, and updates will be applied to all versions of the same app, on all devices, at the same time.

A new, yet familiar, Start menu

Windows 8 was a drastic departure from the familiar Windows desktop layout. For the most part, it was despised by business users, who instead have largely bypassed this layout for the traditional Desktop mode. Windows 8.1 allowed users to boot directly into the Desktop, but one large feature has been lacking: a Start menu.

Windows 10 welcomes it back! As with older versions of Windows, the Start menu will be at the bottom-left of the screen, and pressing it will bring up the familiar menu of programs and options. Only now, the old Tile-based layout has also been merged into this section. Think of the traditional Start menu bar, but with a mini-tile based section to the right that will be customizable.

Everything opens in a window

If you've ever downloaded an app from the Windows App store, you likely have noticed that they automatically run in full screen mode. With Windows 10, any Windows Store apps will open in window-format, similar to any desktop app.

When apps open you will see the familiar taskbar, along with the maximize, minimize and close buttons. This will make it much easier to work in multiple programs at the same time.

Multiple Desktops

Microsoft Virtual Desktops is a feature that will allow users to create different desktops for different purposes and switch between them quickly and easily. While you will only need to install Windows 10 once, you can have a different desktop setup for say home, personal, and business use all under one user.

Each desktop can display different icons and layouts, but all desktops will have access to the programs installed for that user. Essentially, this will make it easier for business users who also use their devices for personal use or those who need to switch roles at work.

An enhanced File Explorer

File Explorer has been a part of Windows for a while now, and its main function is that it helps you to find your files and folders. In Windows 10, this feature will be upgraded to now search for not only your files and folders, but also to scan the Internet as well. You will also be able to quickly see recent and most popular files and folders, meaning you'll be more likely to be able to find what you are looking for in less time.

When will it be available?

Microsoft has already released what they call a Technical Preview of Windows 10. Anyone can sign up to download Windows 10 and install it on their computers. We would advise against this however, as this version is incomplete and there will be bugs and compatibility issues.

The company has noted that this current version is really for tech experts to install on secondary computers and test, so business users will have to wait! At the time of this article there has been no actual release date set for Windows 10, but you can probably expect it sometime in early 2015. Microsoft has also been quiet about the price, but rumors are circulating that it will either be free or affordable for users to upgrade to if they already have an older version of Windows installed.

Get ahead of the curve and find out what benefits Windows 10 can bring to your business, by dropping us a line first.

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TechPoints is a monthly newsletter from TechSolutions, Inc.

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