Bits & Bytes

Insider Tips On How To Use Technology To Make Your Business Run Faster, Easier, And More Profitably

Technical Action Group Inc
TAG
we're I.T.

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"As a business owner , I know you don't have time to waste on technical and operational issues. That's where we shine! Call us and put an end to your IT problems forever."

Joe Stoll, President
Technical Action Group (TAG)
JStoll@TechnicalActionGroup.com

Inside this issue:

ALERT: The Internet Has Run Out of IP Addresses!

Although it sounds like a Nigerian Internet scam, it's true. With millions of people coming online, the number of IP addresses is exhausted and a new standard for identifying computers and devices has come online: IPv6. So what is an "IP" address anyway and what will this NEW addressing system mean to you? First, let's start at the beginning:

Every computer or device on a network has a unique identifier known as an IP address. This address is just like your home address; it acts as a unique identifier so other computers can send and receive information to you. Most computer networks, including all computers connected to the Internet, use the TCP/IP protocol to communicate (think of it as the common language all computers use to talk to one another). The IP part of the "TCP/IP" is your IP address or unique identification number. In order for all communication to work, every computer connected to the Internet or within its own private network must have a unique IP address.

Until the recent IPv6, there was only one standard for an IP address, which is made up of four groups of numbers separated by dots. For example: 216.27.61.137. This numbering convention gave us 232 possible combinations, or 4.3 billion unique addresses. Back in the early 80s when the Internet was just getting rolling, that was considered more than enough. Now with well over a billion people online and each person owning multiple devices requiring an IP address, 4.3 billion just isn't enough.

IPv6 uses a 128-bit addressing system (where IPv4 used a 32-bit addressing system) creating a massive number of possible new addresses and combinations. That massive new total is 2 to the 128 power, or 340,282,366,920,938,463,463,374,607,431,768,211,456. (How would you even *say* that number?)

Fortunately, most devices and PCs manufactured within the last 5 years should have no problem processing IPv6 addresses. However, older legacy systems that were engineered without IPv6 in mind will have problems. The companies most affected will be companies providing mobile devices and ISPs, particularly those in emerging markets who are bringing on thousands of new customers for cable TV, smartphones and voice over IP phone systems. Of course, our clients won't have to worry since we're keeping up-to-date on IPv6 for you. But if you have any questions regarding IPv6 and how it will affect you, give us a call!

Shiny New Gadget Of The Month:

iRig MIC Cast Portable Microphone

If you need to make voice recordings on the go for a Podcast, an in-person interview or even recording a presentation, your iPhone, iPod Touch or iPad isn't the best option because their built-in microphones are not designed to record high-quality audio.

For those occasions where quality matters, we recommend using the iRig MIC Cast with your iOS device. This small microphone plugs into your iPhone, iPod or iPad and turns it into a mini recording studio with the ability to capture high-quality audio. Best of all, it's tiny and light so it's easy to carry around for those impromptu opportunities that arise.

The iRig also comes with a mini stand for your device so you can conveniently prop it up on a table. It provides real-time monitoring of what's being recorded and works with all regular phone calls and voice-over IP app.

Bring Your Own Device To Work:

Excellent Money-Saving Idea Or Security Disaster Waiting To Happen?

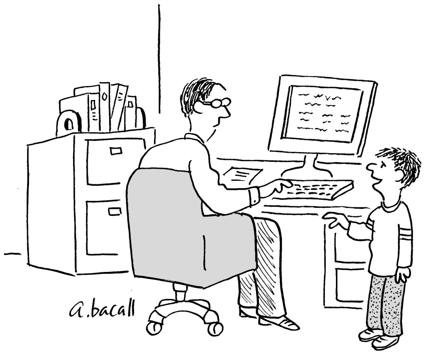
Maybe you've heard the term "BYOB" (bring your own bottle) when you were invited to a party with some friends. Now a similar trend is happening in business called "BYOD" (bring your own device) where employees are bringing their smartphones, tablets and other devices to work.

Considering the cost of new hardware, this trend seems pretty attractive for small business owners. Employees show up already equipped with the devices they need to work; you just give them a username and password and you're off to the races without as many out-of-pocket expenses as before. Plus, the employees are more than happy because they get to continue to use their device of choice. Cool? Maybe…

Based on surveys and chatter online from IT managers and executives, how to effectively monitor and manage employee-owned devices is murky at best; in many cases, this "wild west" device strategy is causing IT departments to work overtime to keep their network secure and data out of the wrong hands. For example, IBM started allowing employees to BYOD back in 2010. Approximately 80,000 of their 400,000 employees started using non-company owned smartphones and tablets to access internal networks. But instead of IBM saving money, this situation actually increased costs in certain areas, namely in the management and security of those devices. Because of this, IBM has established guidelines on which apps the employees can or can't use. In addition, employee-owned devices are configured so that they can be wiped remotely in case devices are stolen or misplaced prior to being granted access to internal networks. Cloud-based file-transfer programs such as iCloud, Dropbox and even Siri, the voice-activated personal assistant, are not allowed. Employees with greater access to internal applications and files will also have their smartphones equipped with additional software that performs the appropriate data encryption.

The bottom line is this: If you are going to allow employees to use their own personal devices to connect to your network, you need to make sure they aren't a conduit for viruses, hackers and thieves; after all, we ARE talking about your clients' and company's data here! That means written policies need to be in place along with 24/7 monitoring of the device to ensure that security updates are in place to watch for criminal activity. We also urge you to establish a policy for all employees who bring mobile devices into the workplace about what they can and cannot do with their devices. They might already be using their smartphone or tablet to access e-mail or company files without you even knowing it, leaving you exposed.

For more information on how we can monitor and manage ALL the devices connected to your network, give Joe Stoll a call at **416-489-6312 x 204** or **JStoll@TechnicalActionGroup.com**



"In return for an increase in my allowance, I can offer you free unlimited in-home computer tech support."

You Won't Believe What Men Would Give Up To Get an iPhone 5

With the iPhone 5 release date rumoured to be late September it would seem men are willing to go to any lengths to get their hands on it. 1 in 11 men would be willing to go celibate for a month if it meant getting their hands on the new iPhone 5 two weeks early, according to a survey.

That is the result of a poll conducted by **RoxyPalace.com**, which also found that 22 per cent of the 800 men questioned were prepared to give up coffee for the same period, while 14 per cent would go alcohol-free if it meant snagging Apple's next-gen device ahead of its rumoured autumn release.

In addition, 38 per cent of respondents said they'd make a 'significant sacrifice' if it meant they didn't have the queue for the popular handset. A RoxyPalace spokesperson said: "[The iPhone 5 release date] is just over a month away and it seems many of the people we spoke to would happily abstain from physical intimacy if it meant they could get their hands on the smartphone early.

"On the face of it this seems a very drastic step to take and really plays up to the 'boys and their toys' stereotype. "People often make the joke that all men think about is sex, maybe in a couple of years the word will instead be tech."

What Should You Do If YOUR Network Is Compromised?

Back in June, 6.3 million passwords were reported stolen when a hacker was able to access LinkedIn's servers. The news made headlines instantly and everyone in the office (and online) was talking about it. Clearly this is a public-relations nightmare for the company and one that will, for sure, have a ripple effect for months, possibly years, as they deal with the fallout from their clients and potential lawsuits.

What's scary about this type of attack—or any major security breach to a big company—is that if it can happen to them, it can certainly happen to YOU. Although I'm not privy to LinkedIn's security procedures, I'm sure they don't take it lightly and have most likely invested a BIG chunk of change to keep their data secure, money that the "average" small business owner could never afford to logically spend. So IF this happened to your company, what should you do? How do you avoid a massive PR mess, the loss of both sales and the trust of your clients, and even potential lawsuits?

The first step would be to identify what type of attack it is and what machine(s) were affected so you can quickly contain the damage done (or being done) as best as possible and protect your assets. Naturally, you should consult with a professional security expert (like us) to make this containment happen as quickly as possible to "stop the bleeding."

Next, you'll want to notify any and all parties affected as fast as possible. In the LinkedIn attack, they immediately notified the subscribers affected by forcing a password reset. The faster you can react to this, the better your chances are of limiting the damage done. We're not legal experts here but we *would* encourage you to talk to an attorney about the breach and about what you need to do in terms of making a public announcement as quickly as possible—particularly if a security breach exposed your employees, subscribers or clients to a cyber-criminal. In some cases where medical or financial information is involved, you may be required by law to report the incident not only to your clients, but also to authorities.

Ever Wish You Could Wash Your Keyboard In the Sink? Now You Can!

Yes, you read it right. Logitech has come up with a keyboard you can actually wash. No more changing your keyboard when you've spilled your coffee on it or dealing with a sticky keyboard cuz you couldn't clean it well after a food spill.

I'm a big fan of strange gadgets, but this is one that I could find quite useful. How many times have you spilled juice, soda, beer, food, ketchup or whatever else on your keyboard? Didn't it annoy you because it was ruined or you could never clean it up properly and your keys would be forever sticky?

The Logitech Washable Keyboard K310 has got you covered (unless you spill acid on it). This is a keyboard that can be washed in the sink, should it get dirty. It can be sunk into water to a depth of up to 28cm, except for the USB cable, and the little holes on the back let the water drain out quickly.

The keys are laser-engraved, so you're not at risk of rendering them unreadable via multiple washings.

It works with Windows XP, Vista and Windows 7 (probably Windows 8 too) and I think it's a fabulous idea. It could make life much easier for clumsy people .
And the kids.
It costs $39.99 on Amazon.com.

The Struggling Butterfly

A man found a cocoon of a butterfly. One day a small opening appeared. He sat and watched the butterfly for several hours as it struggled to squeeze its body through the tiny hole. Then it stopped, as if it couldn't go further.

So the man decided to help the butterfly. He took a pair of scissors and snipped off the remaining bits of cocoon. The butterfly emerged easily but it had a swollen body and shriveled wings.

The man continued to watch it, expecting that any minute the wings would enlarge and expand enough to support the body. Neither happened! In fact the butterfly spent the rest of its life crawling around. It was never able to fly.

What the man in his kindness and haste did not understand: The restricting cocoon and the struggle required by the butterfly to get through the opening was a way of forcing the fluid from the body into the wings so that it would be ready for flight once that was achieved.

Sometimes struggles are exactly what we need in our lives. Going through life with no obstacles would cripple us. We will not be as strong as we could have been and we would never fly.

Of course, you can't saw sawdust, which simply means there's nothing you can do to un-do a security attack. Beefing up security AFTER the fact is good, but a better strategy is to avoid being complacent to the point of being negligent. After all, if a security attack happens and it's due to a simple security measure you could easily have put in place, it looks really bad.

If you're a managed services client with us, you can rest easy knowing we're monitoring your network against such attacks to limit your risks and prevent you from being low-hanging fruit for hackers. If you're not receiving proactive, preventative services on your network, call us for a FREE Network Security Audit to see just how secure your network REALLY is, and to find out how you can hire us to take care of this for you.

Small Business = BIG Targets for Hackers

Hackers are starting to move away from "big scores" that are harder to accomplish, and are moving on to smaller and ultimately easier and more profitable thefts from small and medium-sized businesses, whose generally lax to non-existent security systems make for easy and quick money.

In physics, there's a concept called 'the path of least resistance'. The meaning is plain enough – objects that move in a system take the path where they will encounter the least challenges and hurdles in order to quickly move to wherever they are going.

Apparently, the same principle applies to hackers nowadays. Instead of targeting larger firms for that big 'score', hackers are now considering it more feasible and much easier to victimize smaller firms and companies, even for a much smaller amount of money.

Why is that? First, smaller companies generally have much more vulnerable IT systems. Security is minimal or average at best, and the hackers don't get as much heat or attention when compared to trying to breach the much more complicated, state-of-the-art security systems of bigger firms and businesses. Take a small newsstand business in Chicago: cyberthieves were able to install a Trojan in the cash registers which sent swiped credit card numbers to Russia. When the jig was discovered, Mastercard subsequently demanded an investigation – at the expense of the business owner – and the proprietor had to shell out a hefty $22,000.

A survey in the United States reveals that more than half of small or medium-sized businesses believed that they ran no risk of being victimized by hackers, and less than half of the respondents had security systems in place· That looks like a path of least resistance, as far as hackers are concerned. The loss of a few thousand bucks may not be much for a big business, but it can make a significant dent on the profits and sustainability of smaller organizations. And in the case of implanted viruses that steal credit card information, your reputation can also take a big hit. So if you want your business to stay truly safe before it's too late, please contact Joe Stoll at 416-489-6312 x 204 or JStoll@TechnicalActionGroup.com to discuss options and blueprints to make your business secure.

Lock Access To Your Windows Desktop Quickly

Leaving your computer for a short time but don't want anyone peeking at your desktop or files? Simply lock it. When you lock your desktop, anyone who wants to use it will have to log in using their own username and password.

One way to do this is to press Ctrl+Alt+Del and then click on "Lock Computer".

An even quicker way is to press the Windows logo key and the L key.