

# TECHNOLOGY TIMES

**"Insider Tips To Make Your Business Run Faster, Easier And More Profitably"  
presented to you by MACRO Systems LLC**



**Macro  
Systems, LLC.**

"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. One call does it all!"

Howard F. Cunningham, Jr.  
President and Founder

**SERVING THE METRO DC AREA  
FOR OVER 20 YEARS**

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## Facebook, LinkedIn, Twitter: Can Employers Demand Employees Give Up Their Login Info?

Here's a new question that's being discussed in the courts: Do employers have the right to ask new hires for their username and password to various social media sites? According to the state of Maryland, the answer is, "No."

Recently the Maryland General Assembly passed legislation that prevents employers in the state from asking prospective employees for their login information for various social media sites, including Facebook and Twitter. If Gov. Martin O'Malley signs the bill, it would make Maryland the first state in the nation to set such a restriction into law. Other states are considering similar legislation, including Illinois and California.



Ironically, this practice was criticized by Facebook, one of the biggest users of personal information to sell advertising to its members. Erin Egan, Facebook's chief privacy officer, wrote about the issue on Facebook, calling the practice of employers requesting potential hires' Facebook passwords "alarming" and "not the right thing to do." Maryland business groups, including the Maryland Chamber of Commerce, pointed out that there may be cases where an employer should be able to ask for the login information of potential new hires in order to weed out unwanted candidates. Of course, this bill is just one of many issues being raised between employees and employers using social media.

While asking for login information may soon become illegal, employers are still free to "friend" potential hires or search online for information about potential employees. Supporters of the bill point out that it's illegal for employers to discriminate based on age, sexual orientation, race or religion; since most social media sites contain this type of information; they feel employers might gain access to a candidate's personal details and use them to disqualify candidates illegally.

**MACRO is a computer science term that specifies a short or simple input sequence which is mapped according to a defined procedure to create a more complex output sequence.**  
**WHEN YOU CALL ON MACRO ONE CALL DOES IT ALL**

## 5 Critical Facts Every Business Owner Must Know Before Moving To The Cloud



If you need to upgrade your current computer network and are considering cloud computing to save money and simplify IT, the insights in this report will arm you with the right information and questions to ask to avoid getting “sold” a solution that doesn’t work for you. Call us for your free copy of this report. You’ll discover:

- What cloud computing is and why it matters to small and medium sized businesses.
- The various types of cloud solutions you need to know about and how to determine which is right for you.
- What you should expect to save on IT costs initially and over time.
- 15 critical questions you must know the answer to about the cloud.
- The most important thing you need to know about security and where your data is hosted.
- Little known facts about moving to the cloud most IT consultants don’t know or won’t tell you that could end up costing you big.

## 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.

## 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.

## 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  $2^{32}$  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!

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.

## IT Solutions for Small Business