



President's Corner

By Terry Watson



Quanexus is
Growing!

We've been at our current address since 1996, and while it has served us well, we've grown to the point that we need additional and more functional space. We are happy to say we've found our new home and it will be at 571 Congress Park Drive. The new building will almost double our office space and provide our employees and clients easier access to the office via 675 and 725. Over the past year, we've added 3 new positions and filled 1 vacancy. We hope to continue to grow and add new employees to our team in the years to come. We're very thankful to all of our customers, family and friends who have supported us for all these years. Our plan is to be in the new office before the end of 2015. More updates will follow in the next newsletter and social media.

The Quanexus Newsletter

by Jack Gerbs



This month brings some serious merger activity; Dell is buying EMC and Western Digital is buying SanDisk. EMC is known as a storage company that also owns RSA and 80% of VMWare. The purchase price is \$67 billion. Western Digital is purchasing SanDisk for \$19 billion. In an interesting twist, IBM is buying Macs instead of PCs for their employees. IBM was once the prominent PC

manufacturer. With the high cost of compliance tools, many of our clients have been challenged to meet some regulatory requirements. So, we've been busy researching and building some in-house solutions to help. Amazon and Microsoft are both seeing big growth in their cloud platforms. In fact, 52% of Amazon's profit for the last quarter was from their Amazon Web Services (AWS) platform. Finally, the fourth amendment is under attack again with the Cybersecurity Information Sharing Act (CISA), which the Senate may vote on this month.

Making Sense of Office 365, Hosted Exchange and Hosted Sharepoint

Office 365 comes in many different flavors, but the platform we recommend for our business clients is the Office 365 Enterprise E3 edition. This platform provides the most flexibility, but if you start on a lower platform, there is not an easy way to migrate to the Enterprise platform. The key things to understand about Office 365 E3 are:

storage. Additional storage can be purchased for 20 cents per month per GB, so an additional 1 TB of storage would cost \$200 per month or \$2,400 per year. Windows applications can access the SharePoint files directly.

Hosted Exchange is the cloud based email server.

- Each user gets 1 TB of storage (One Drive for Business). This is the user's cloud storage space, and can be synced to the user's workstations or mobile devices, if permitted by policy.

Microsoft's Hosted Exchange and Hosted SharePoint can be purchased as separate, standalone products. If you are interested in exploring Microsoft's Office 365 solutions, please contact us and we'd be happy to work with you to determine if this might be a good solution for your organization.

- It includes the full MS Office Suite (Office 2016) and each user is licensed to have Office 365 installed on up to 5 computers and up to 5 tablets or phones.
- Hosted SharePoint and Hosted Exchange are Included.

Hosted SharePoint is used for file sharing. The organization is provided 10 GB of storage plus .5 GB per user. If you have 20 users, your organization would be provided 30 GB of SharePoint

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Dell Announces it Will Buy EMC for \$67 Billion

This will be the industry's largest acquisition. EMC is known for its storage products and its 80% stake in VMware, a software virtualization platform. They also own RSA, a major security company that is known for its authentication products.

This purchase positions Dell to be a corporate enterprise, complete end to end, one-stop solution provider. Dell competes directly with HP, IBM and Cisco Systems, as they have all claimed that they are a one-stop shop for the enterprise market. Dell's server market share is 18%, which puts them at number two. HP is number one in the server market, with a 25% market share. With computer sales continuing to drop in the consumer market, many are viewing this as giving Dell a very defined enterprise direction.

Some interesting numbers to consider: when Dell was taken private back in October 2013, by Michael Dell, the company had a market capitalization of \$25 billion. EMC's market cap is \$63 billion, and is selling at a premium of \$68 billion. EMC is worth more than twice what Dell was worth when it went private. To put this into perspective, Apple's market cap is \$657 billion, Google \$224 billion and HP \$52 billion (as of October 22nd 2015).

VMware, which is 80% owned by EMC, dropped 20% on October 21st, when EMC CEO announced that they will reorganize into two companies. Cloud-computing offerings would be put into the subsidiary named Virtustream, which is expected to go live early next year.

(Continued to next column)

Dell Announcement Cont.

(Continued from previous column)

EMC's Board of Directors has already approved the purchase, and is encouraging shareholders to do the same. Under the new deal, EMC CEO, Joe Tucci, would continue as chairman and chief executive officer

of EMC until the transaction closes. Michael Dell will take over as chairman and CEO of the combined companies.



Compliance for Smaller Organizations

Compliance continues to be a challenge for smaller organizations, because of the high cost of tools needed to meet the regulatory guidelines. Quanexus has been busy researching solutions that are affordable for this segment and our clients.

The two key areas we have focused on are file access, including administrative access to the servers (separation of duties), and network monitoring. The requirements for file access and administrative access are:

- Logs need to be maintained and reviewed, showing who and when files and directories that contain confidential or sensitive information were accessed.
- Logs need to be maintained and reviewed, showing when a user with administrative privileges logs into servers, and what changes were made to the server. Examples of changes are: a new user was created, rights to who can access files have been changed, a user was moved to a different user group, & privileged escalation, etc.

The other requirement is network monitoring. Almost all organizations have a firewall in

place, which are fairly successful at protecting the network, but how do you know if they are working or if something might have slipped by the firewall? It is important to have a way to monitor network traffic inside, on your local area network (LAN) segments. We are building our network monitoring solution in two phases. Phase one is the monitoring for intrusion based traffic on the network. Phase two is to look for intrusions on workstations and servers. We are in the final stage of completing phase one of our network monitoring solutions.

As a part of the layered security approach, we are also evaluating how to better utilize a host (workstation or server) based firewall, to limit traffic between systems on the same network. This approach would detect if a workstation is trying to access, or be accessed by, a system that it should not have a need to access. If suspicious access activity is identified, an alert will be sent. Network segmentation is another control that helps protect against lateral movement and can detect if a network has been potentially compromised.

Controversial Cybersecurity Bill in the Senate

The Cybersecurity Information Sharing Act (CISA) is another piece of legislation that lets our government circumvent our fourth amendment. This bill, as presented, is allowing companies to share information with the government in the name of cybersecurity. While the computer industry as a whole supports the sharing of pertinent information to minimize cyber threats, most companies oppose the bill as it is written. The bill, as written, essentially allows our government to install backdoors on computer systems.

Rep. Jared Polis, a Colorado Democrat and onetime Web entrepreneur, said during the debate "Allowing the military and NSA to spy on Americans on American soil, goes against every principle this country was founded on."

The ACLU, on the other hand, told CNET that the amendments -- even if they had been allowed -- would not have been effective. "They just put the veneer of privacy protections on the bill, and will garner more support for the bill even without making substantial changes," said Michelle Richardson, legislative counsel for the ACLU.

The Electronic Frontier Foundation is a leading non-profit that is opposing

the CISA, and claims that the information sharing being called for, will not help prevent breaches. Many of the leading companies that oppose the CISA have joined the Electronic Frontier Foundation. For more information on the Electronic Frontier Foundation, you can visit their website at www.eef.org. Despite all the opposition as of late October, it looks like there will be enough votes for the bill to pass the Senate, and the House has already passed their version of the bill. Once passed in the Senate, the two bills will need to be reconciled before going to the President, who is for passage of the legislation.

Other fourth amendment concerns are the licensing agreements for all the major software companies. The agreements that are currently being written typically all have language to protect the company, should acts such as the CISA pass. The agreements state that the company has no liability for protecting your personal information, and will turn the information over to the government for any reason the company believes is in their best interest, without the need for a search warrant. Many of the license agreements we are accepting, actually give these companies the rights to view your data for any reason at any time.

Western Digital is Buying SanDisk for \$19 Billion

Western Digital is one of the three major hard drive manufacturers in the world. This month they announced that they will be purchasing SanDisk, a semiconductor company that is known for its solid state hard drives (SSD). This is a great strategic move for Western Digital, as it will give them new room for growth. Solid state hard drives are

replacing the typical spinning platter hard drives in many desktop and laptop systems. The advantages of solid state drives are: no moving parts, running cooler, and they offer much faster performance because memory can be accessed dynamically. Western Digital and SanDisk both have a market cap of \$16 billion.

IBM is Buying Macs for Their Employees

In an interesting twist, IBM, once a very prominent PC manufacturer, has announced that they will now offer Apple Macs to their employees. They are rolling out about 1,900 Macs a week, and there are more than 130,000 iOS and Mac devices being used by IBM employees. IBM CIO, Jeff Smith, said he thought IBM might end up purchasing 150,000 to 200,000 Macs on a regular basis for the company's 400,000 employees. IBM's VP of Workplace as a Service, Fletch Previn, stated that fewer Mac users require help with their machines than IBM's PC users. Only 5% of the Mac user base calls the support desk, compared to 40% of the Windows users. "Every Mac that we buy is making and saving IBM money" he said, as the Macs require less management and setup effort than PCs, even though they cost more up front.

Under the IBM Apple partnership, IBM is selling iOS devices to corporate customers, developing apps, and providing on-demand AppleCare services.



Microsoft's Big Push, Cloud Services and Office 365

Microsoft is at a new stock high this month, outperforming its top line and bottom line estimates. The reason for the increase is an 8% jump in their cloud services for the last quarter, even though they had a 6% drop in the Windows operating system sales. The 6% drop in OS sales isn't bad, considering there was a 9% drop in computer sales. It appears that Satya

Nadella (Microsoft CEO) is willing to sacrifice the sale of the Windows operating system for cloud services (Office 365 and the Azure platform). Quanexus has been a Microsoft cloud service provider for several years and will be investing more of our resources to help our clients optimize the Microsoft cloud platform. Microsoft has a market cap of \$424 billion.

How is Amazon Becoming Profitable?

Amazon is mostly known for its online retail store, but they also bought audible.com, and are now in the audio book business. Many in the IT industry know that Amazon also sells cloud services via the Amazon Web Services (AWS) platform. Third quarter sales for AWS was \$2.1B, which represents 8% of its quarterly sales. That 8% of quarterly sales represents 52% of Amazon's quarterly profit. Year over year, AWS growth is 80%. As prices continue to drop for cloud computing, this unit of Amazon continues to generate profits.

Amazon has now had two profitable quarters in a row, which is a very big deal for a company that has not been concerned with profits. They have continued to reinvest in improving its technology and infrastructure by building warehouses closer to its customer base. With the stock price more than doubling over the last 12 months, and being profitable for 2 quarters in a row, its stock is up 82% since the start of the year. Jeff Bezos is now the third richest person in the US, and Amazon's market capitalization is \$281 billion.

Office 365 Home Edition

If you have been wondering if Office 365 Home edition might be a good choice for your family, here are some details you might find interesting. To understand the benefits of Office 365, it helps to understand the traditional model. Office 2016 (the latest version) is selling on amazon.com for \$198 as a download, if you want the DVD it sells for \$229. This product provides 1 license that can be installed on a PC or Mac. Office 365 Home, not to be confused with Office 365 Personal, is \$99 per year. The Home subscription lets you install Office 365 on up to 5

computers, PCs or Macs, and 5 mobile devices, Android or iOS.

The Office 365 subscription includes OneDrive for up to 5 users. Each user gets their own 1TB of OneDrive cloud storage. What is significant about this is OneDrive is functionally the same as Dropbox. Dropbox's personal subscription is currently selling for \$99 per year for 1TB. OneDrive lets you sync your local files to the cloud giving you access to your files from anywhere. The Office 365 subscription includes online versions of the Office applications, so you

For a fixed monthly fee, we are revolutionizing the IT industry with our Q-Works program. Quanexus' complete "managed services" package means that you will see increased performance, security, and reliability immediately, at an affordable price.

Your business success depends on your IT infrastructure. You need Quanexus to deliver proactive services that not only keep your network up and running, but running effectively and efficiently.


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