TECHNOLOGY TIMES

"Insider Tips To Make Your Business Run Faster, Easier And More Profitably"

HP & Windows 10 Workshop

On September 15th, Wayne and HP are hosting a workshop at K1 Racing in Addison to go over what's new for Windows 10 & HP devices.
To signup click the green 'register' button.
https://www.eventbrite.com/e/xerillion-hp-k1-go-kart-racing-event-by-invite-only-tickets-26781455053

If you need assistance registering or have any questions, please contact Kristen at, 847-995-9800 or via email at Ask@Xerillion.com

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Wayne Chapin
President
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Did you see my email about Meraki firewalls? If you missed it, let me know. Wayne.Chapin@Xerillion.com

Wayne Chapin on Why Microsoft Azure Matters to Small Business

If you are a company that does not have physical servers at your office but want to move on from having a second rate email system and an ad-hoc document management system—great! I'd direct you to Microsoft Office 365 for your email and document management. These days, if you can avoid having physical servers, *your business is better off.*
If you are a company with an investment in an on-premise server system, no worries! What I would recommend is that when it comes time to replace those servers, that you consider looking at what it would cost to move your applications and data to virtual servers hosted in Microsoft's data center, known as Microsoft Azure.

Azure is a very sophisticated system with tons of functionality that is *very customizable for a company looking to move their IT workloads to the Cloud.* The options are actually nearly overwhelming when you first look at them.

Here at Xerillion, we know which ones matters to our clients, and below I'm going to go over why Azure is a great place to move your servers.

No Hardware

You no longer have to worry about server hardware. Typically if there is anything type of fault in a client's computer network that we are stressing about, it some type of hardware failure. It rarely is the software or the data—usually the hardware...a failed hard drive, a failed power supply, ect. Also, ensuring the hardware is under manufacturer support is critical, and those

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warranties get pricy the older the hardware gets—often around $800/server after the 3rd year of its lifecycle. If you don't have a server under manufacture warranty—and you think server warranties are wasted money—just wait until your server has a blow out Friday morning, and your IT company tells you that since our server is not under warranty, they have to go in the "second class citizen" queue for server, wait to speak to someone, be told that since we are not under warranty, to speak with an engineer same day will be $800, before you even know what the replacement part will cost, or if they can even supply you with a part. I digress, the main point here is that manufacturer warranties are critical for servers, and in the land of Azure—we don't deal with them. Microsoft handles the hardware for us. We just put our virtual servers up there, our data and our applications.

Windows Server Software Licenses and Client Access Licenses are Included

You no longer have to maintain licenses of Windows Server, or Windows Server Client licenses—those are included. That is a great bargain since building a single server with 20 users accessing it, can run nearly $2,000 by itself. As long as you have your subscription, you are license compliant.

High Availability is Cheap

Have you ever gotten a quote on a high availability server cluster before? They are start at nearly $100,000 if you want to do it right, and its like owning a jet. It is one thing if you can budget the capital outlay, it is another if you can afford the operating budget to maintain, care and nurture that monster, let's say, $1,000/month with reliance on expensive IT engineers.

But, nonetheless, you need that application highly available and you need to know that part of the datacenter at Microsoft goes down, your application will minimal to no downtime.

With Microsoft Azure High Availability Sets, Azure replicates your server virtual machines across 3 "fault zones" in the data center. So, if the server rack holding your virtual server goes down, your virtual server can easily be brought up live on another server rack. The cost—you pay only for the data storage of the replicated data, you do not have to pay for having a second virtual server running live as a hot-standby. In other words—the cost to you is peanuts compared to trying to replicate something like this at your own office.

Scale Sets

As a guy who has setup plenty of servers in my time, we typically spec out a server for a 5 year lifespan. So, we way-overpower the server specs to ensure the server can support our client's growth of data and applications over a 5 year lifespan. This usually results in a server with dual Xeon 6-core processors, nearly 32-96GB of memory, two SAS 10K or 15K drive sets—one for the operating system, and one for the data. We usually have to double up on drives for redundancy, and have a "hot spare" drive that is unused in most cases, but we need it available if a hard drive does fail—because if two drives fail, that server is going down.

Oh, yes and on top of that, we need proper backup and disaster recovery system.

Anyway, we build in all of this power, and then we run the server 24x7x365—because that what we do with servers. So, we provide, and pay for, server resources that run at the same power from 8am to 5pm when we have 20 people on the system, as we do from 5pm to 12am when we might have 1 person on the system, and yet again from 12am to 5am when we likely have nobody on the system.

In Azure, we can increase our server resources, or "scale out" to meet the demand of all 20 people during business hours, then "scale in" our server resources —and save money!—when there are only a few people needed access to the system. Extend that further, if you know nobody is going to be on your system from say 1am to 5am each day, you can opt to turn them off and return the money back to other parts of your company.

Azure servers we install for our clients run between 10 cents to 60 cents per hour, so let's

just call it 30 cents an hour average.
Run 2 servers 24x7 in a month—your bill, $446
Run 2 servers during business hours —your bill, $150
And of course, there are all kinds of variations in between. The bottom line—you only pay for what you need when you need it.

No Disaster Recovery System Needed

We sell and integrate a really great backup and disaster recovery system for our clients that have on-premise server systems. I believe in it thoroughly and it has come through for us many times.
The interesting thing in Azure, is that if all a client's servers in Azure, we don't need to quote a disaster recovery system.
Often backup and disaster recovery systems we install range from $2,000—$5,000 for the appliance, another $1,000—$2,000 to install it, and the storage costs range from $200—$600+/month for offsite storage.
This is a moot point if your systems are in Azure. We don't have to put this in a quote for you, and you don't have to pay for it.
In Azure, Azure has its own backup and disaster recovery system, which we can use to restore files directly on the server, or we can opt to bring up an entire copy for your server if needed. The cost? Just the data storage, which is cheap. The backup system comes free with your Azure subscription.

Don't Get me Wrong Here.....

I'm not anti-server, and even in 2016 as I'm writing this, at least 75% of our clients have physical servers onsite. Many of our clients have big investments in applications that work really well in their business and provide great value in their business operations. What I'm saying though is this—when it comes time to replace your existing servers, instead of spending $15,000—$30,000 on new hardware, plus the ongoing care and maintenance of those servers—let's call that $500—$1,000/month plus the BDR system of $500/month, so $1500/month in total.
Let's look at the price to put your system in Azure and never have to worry about server hardware or Windows Server licensing again.

Wondering what happens if your servers are all in the Cloud and your Internet goes down?

Good question, and I get asked that a lot.
At Xerillion we have no server anymore. We have our email and documents in Office 365. We do run Quickbooks and our quoting application on two servers in Microsoft Azure, which we run from 6am to 6pm business days as that is the only time they are needed.
We have a very good 50Mb fiber Internet circuit that seems to never go down, though we do have a Comcast backup Internet connection as well, that, really, hardly gets used.
We have a smart firewall that knows how to "failover" and "failback" should our primary Internet connection go down.
I used to always tell clients—if you can swing it always get a backup Internet connection.
These days though, if they are primarily in the Cloud, my feeling is, if you have a good fiber Internet circuit from a reputable company, the likelihood of that going down for any meaningful amount of time is pretty unlikely. If a backup Internet connection is cheap, as in $200/month or less, AND you have a substantial amount of people at that office location, Ok, I'm in with a backup Internet connection.
But if you are a services company with people often in the field, traveling, and not a heavy office presnse, I don't think you need a backup Internet connection. If your Internet really goes down for an extended time, you can go to Starbucks, Panera, or just look for an xfinitywifi connecti—they are all over these days!!! Or just work from home. Put the extra $1,200—$2,400/year you would have spent on a backup Internet connection towards a few Microsoft Surface Pro 4's…..but that is another story…..

So let's talk Azure…. To setup a time to discuss Microsoft's data centers, contact my assistant Kristen @ 847-995-9800 or Ask@xerillion.com

Are you addicted to your work?

To find out, rate yourself 1 to 5 on the following statements. Give yourself a 5 for "often" and 1 for "rarely": a) You think of how to free up more time to work. b) You spend more time working than initially intended. c) Your work helps you reduce feelings of guilt, anxiety, helplessness and depression. d) You get stressed when you can't work. e) You set aside hobbies, leisure pursuits and exercise in favor of work. If you averaged 4 to 5, then you may be at least mildly addicted to your work. Is that a bad thing? Not necessarily. While your well-being requires a certain amount of balance, having the drive, enthusiasm and energy to achieve impossible goals marks many of the most successful entrepreneurs. *-Forbes*

We bet you've never even heard of these new technologies.

1) *Perovskite solar cells* promise to be cheap, easy to install and efficient enough to power entire buildings, large or small. Made with a compound called perovskite, they reach new areas of the light spectrum, thus producing far more energy than current solar technology. 2) *Organs-on-chips* allow scientists to test how drugs impact the body – without putting humans or animals at risk. These micro-sized chips emulate how human organs work. By injecting the chips with drugs, scientists can observe responses such as heart palpitations to predict human responses to drugs and diseases. 3) *Super-smart nanosensors*, tiny enough to fit inside the body could, for example, alert a doctor if a patient starts to show signs of heart failure. *-Inc.com*

Did you know your iPhone could do this?

Respond to texts without unlocking the phone. When you get a notification, swipe left on the message and a blue "Reply" button appears. Just tap it and text away! Take a photo with the volume button. For that ultimate, one-handed selfie, open the camera app and press the "+" button for volume on the side of your phone. Have Siri read your texts out loud. This is a great tool for when your hands aren't free or you're on the road. Press the volume button and hold it. When the beep sounds, tell Siri, "Read my texts." When done reading, she'll ask you what to do with the messages. You can have her reply or read them again. *-Entrepreneur*

You are just minutes away from creating a dazzling design - free.

With these 3 online tools you don't need to pay a pro or buy fancy software. 1) *Canva* templates make easy to create a business card, ebook or info-graphic. Just drag and drop objects until you like how it looks. Add images, tweak colors, swap fonts and voila - You've got a design you can be proud of. 2) Your brand's color palette helps get your message across and can even drive conversions. But getting just the right shade can be tough. Upload your photo to *Pictaculous* and get instant color recommendations and hex codes. 3) *PicMonkey* lets you easily edit, re-color, add borders and text - even insert graphics into your images. *-HubSpot*

Who Else Wants To Win A $5 Gift Card?

At what temperature are Fahrenheit and Celsius the same?

a) 92 b) 0 c) -40 d) 50

Call us right now with your answer!
847-995-9800 or email Ask@Xerillion.com