

ITWORLD CANADA.COM

VOLUME 30, NUMBER 6 | OCTOBER 2014



000010	0000101	110100	0100001011010	01100010011000010110001	100100	101000	01100100110000010110
000100	01111011	100110	010000101100110	011000101001101010110110	100100	001010	01100011010101010101
010100	01110001	010010	010010100101110110110	010000100101001011011	101111	011110	0100001001010010101
000100	00010110	000010	0111101101	0110011100	01101110110110110011011	101000	0110111101101100110
000100	1001010100	110111	100110001	0000110	001001	111100	001001
000100	010100101	010111	00101011	1111000	000010	010111	011100
000100	00010010000	010101	1100101		111100	111001	111110
011110	10010011000001	110111	1110010		111100	111001	111100
001100	0001100	0011010	010010	0001010	000010	0110000011011000110110	000010100011000100110
010101	000100	0100101	100110	0101110	00110010000100	1100111110101011100101	0101110001000000110
000101	011110	01110011	100110	0101110	001011010100100	0101011	00101110001100000001
000101	001100	00110011	000011	0100000	0110100001101	1110001011010111101110	01000000011000110101
010100	010101	1111110	011111	1100011	01101010011101	11110100	011001100110011
011100	100101	0000100	001111	1111110	0011101	011011	011011
011100	100101	0111000001110	11011101	0010011		011011	011011
000000	010100	001100010010	00101001	10010110		101010	011011
000110	011100	01100100001	100001110	0000010100	011011	100010	011001
011110	011100	1011100010	11101000000100001011101	011001	101011	101011	011000
011110	01000011	01000011	001110100101010111	011011	010000	000010	01011100110101010
0001010	000110	10100111	1101001010111100	001000	111100	101000	00100001100010101
010100	001110	0100111	001011101	011011	111010	010101	011110110100010110

[illegible][illegible]

LOOKING TO ADD TO YOUR ARSENAL? HERE'S WHAT'S IN DEMAND AND WHY



Stuck in traffic. *Ideas still moving forward.*



BrightLink® Pro
Your whiteboard, reinvented.

Imagine you could see and write on the whiteboard when you're not in the meeting room. With BrightLink Pro, you can. Collaborate in real-time, whether you're in the room or across the world. Keep writing, without stopping to erase; just add digital pages. When the meeting's done, share the notes instantly through email or a USB thumb drive, so nobody has to take a picture. BrightLink Pro turns any flat surface interactive; you don't need a computer or software to use it. Just turn it on and see how easy it is to reinvent your whiteboard.

EPSON®
EXCEED YOUR VISION

Take a product tour now at epson.ca/movingforward. Or contact an Epson collaboration specialist about introductory offers including our 1st-Time Buyer program. 800-374-7300.

EPSON is a registered trademark and EPSON Exceed Your Vision is a registered logomark of Seiko Epson Corporation. BrightLink is a registered trademark of Epson America, Inc. Copyright 2014 Epson America, Inc.

Rhetoric and the CIO

The late Steve Jobs had a reputation for a mercurial temper. So in January, 1984 a week before the momentous release of the first Macintosh, when the programmers told him in a conference call they couldn't finish the software in time an explosion was expected.

Instead, recount Jeffrey Young and William Simon in their book *iCon*, Jobs told them how great they were, that they could do the job by deadline and that it was simply impossible to send out the computer with unstable code.

And to make sure they got the message, he hung up so they couldn't argue.

The code was finished at the last minute.

I recount this because academics at Britain's Warwick University business school have written a paper on how he used rhetoric as a tool (or a weapon). "We found that Jobs did not exhibit a single rhetorical style, but rather altered it depending on the situation, and yet still managed to deliver a constant message to support his company's strategy," co-author Loizou Heracleous is quoted in a news release announcing their paper "Charismatic leadership and rhetorical competence: An analysis of Steve Jobs' rhetoric."

Using Aristotle's classic tools of persuasion – ethos, pathos and logos – the release says study looked at how Jobs used each of them in different situations, from the courtroom, to a TV interview and a conference on digital technology.

Heracleous believes leaders in business and public can learn a lot from Jobs' rhetorical skills and "employ them to increase followers' belief in their charisma

as well as their own effectiveness as a persuasive speaker."

I tell you this not so you'll rush out and get the latest issue of *Group & Organization Management*, the journal where the paper appears, but to consider whether the tactics of cajoling, stonewalling, charming, flattering and pleading with your staff in the data centre is getting you anywhere.

"Do it because I say so," isn't an effective managerial tool – at least, not if it's used often – even if you add "please" at the end.

Arguments need to be marshaled, but tailored for each audience: A service desk staffer, an IT administrator or the CEO and board. Those will be private sessions, unlike the incidents studied in the paper, which were highly public. One of them was done under oath before the U.S. Securities and Exchange Commission.

"Our research highlights how it is important for leaders first to be clear about the central themes they wish to emphasize, and second, to employ these across all situations where they have to speak publicly, no matter what the context," say the academics. "But they have to be aware of the context in using the right mix of persuasive strategies for the occasion, whether that is ethos, pathos or logos."

"Further, Jobs' rhetoric drew from figurative language, using stories and metaphors to emphasize his messages. Stories and metaphors are more memorable than statistics, which accounts for his effectiveness in delivering memorable messages."

As a CIO, your skill is in part crafting IT strategy, but it is also delivering memorable messages. You and Steve have a lot in common.

Enjoy the issue.

--Howard Solomon



SUBSCRIBE

AGENDA

O P I N I O N S A N D C O M M E N T A R Y

CONTENT CLOUD: OCTOBER 2013

It's our new take on the traditional table of contents. Follow the tag reference to the indicated page. In our electronic version, simply touch or click the tag to be transported to the story.

SECURITY CAREER PAGE 12
internet PAGE 10
TEACH PAGE 6
NP PAGE 13
BLOGGERS PAGE 8
TD BANK PAGE 11
FREE PAGE 15



STANDARD TIME

The Internet of Things sounds like a simple concept, but unless standards bodies get together for data exchange, it's going nowhere.



SUBSCRIBE NOW

Subscribe to IT World's digital editions of *Computing Canada*, *Computer Dealer News* or *Direction Informatique*, or to online newsletters tailored to your IT interests. Visit my.itworldcanada.com today to register.



THE INTERNET OF THINGS WEBINAR

The third in our series of IoT Webinars takes place Wednesday October 29, 2014. The session's topic is how the Internet of Things is expected to develop over the next three years. For details see **PAGE 23**



SUBSCRIBE



WEBSITE



VIDEO



AUDIO



SLIDESHOW



HP VSA GIVEAWAY

Hewlett-Packard is giving a 1TB StoreV-irtual Virtual Storage Appliance licence for buying any vendors' servers with the new Intel Xeon E5 v3 CPUs. The software appliance can be downloaded. HP and Intel want to encourage those holding back from server virtualization fearing the cost of shared storage. The VSA allows the creation of shared storage for virtual servers on VMware, Microsoft Hyper-V or Linux KVM. It can scale out to dozens of node and 1.6 petabytes of capacity.

HADOOP DISTRO FOR IBM

WANdisco's Non-Stop Hadoop has been certified for IBM's InfoSphere BigInsights

platform, offering pre-configured analytics, scalability, and management features for enterprises to quickly deploy and yield value from Hadoop.

The teaming will provide a cost-effective solution to store, manage, and analyze data in Hadoop with guaranteed performance, security, and continuous availability to support critical applications on a global scale, the companies said.

Non-Stop Hadoop is also available for Cloudera, Hortonworks, Oracle and Apache Hadoop.

FREE IMAGE UTILITY

DataNumen has released DataNumen Disk Image, a free disk utility that creates a disk image from any Windows drive. The

software clones the raw data of the disk or drive, byte by byte. The cloned data adds a layer of safety to the processes of recovering drives that have bad sectors, recovering files that have been damaged and need to be restored, and performing a forensic analysis on a drive.

Disk Image lets users clone a damaged file and move the clone to a second computer that doesn't have a problem with bad sectors. If the process of recovering the data then results in additional damage to the clone file, no harm is done. The user can simply create an additional clone from the original drive, and begin the recovery process again.

Disk Image runs on Windows from 95 to 8.1, and WinServer 2003/2008/2012.

DELL UPDATES WMS

Dell has pushed out a new version of its desktop virtualization management software for its Wyse clients and PCs. Dell Wyse WMS 7, which delivers almost any Windows applica-

RELATED CONTENT



HP



Wandisco



Datanumen



Dell



Konica Minolta



Wombat Security

tion for running on a physical or virtual desktop, now includes two new features to help IT administrators oversee clients: Application layering capabilities allow separate provisioning of individual or groups of applications by policy or department to any physical or virtual desktop.

There's also a client caching feature that enhances the performance of virtual desktops and applications by reducing server storage and network bandwidth requirements.

MORE CLOUD

Cloud at Cost, a Kitchener, Ont.-based infrastructure as a service provider, will launch version 2.0 of its service in November.

The new offering will include access to support staff online,

operating system templates development API, additional IP addresses, customized storage features and other capabilities. As a result, the company says, developers can deploy and have servers working in minutes. Users can buy servers from one to eight Xeon CPUs at one time, with prices ranging from \$35 to \$1,120, or from \$1 to \$80 a month.

DOC MANAGEMENT FROM KONICA MINOLTA

Konica Minolta Business Solutions' FileAssist is a secure managed file storage and collaboration solution. The company says it helps reduce risk, cost and complexity by uniting an organization on a single and easy-to-use cloud-based doc-

ument management application. FileAssist provides the flexibility for business owners to not only scale with their needs but also have seamless access between mobile devices, the multi-functional printer and the web client from anywhere and at any time. Data is encrypted in transit and at rest.

TEACH STAFF SECURITY

Wombat Security Technologies has upgraded its Security Education Platform for staff security awareness. The company says new version enables companies to reduce security awareness and training program costs while increasing success rates. With a new interface, CSOs and security officers can now quickly create knowledge assessments and mock attack campaigns as well as assign training from a single "purpose-built" platform, it said. There's now integration between mock attacks and interactive training modules, and auto-enrollment in training modules

to ensure those most susceptible to attacks are trained first.

FIND THE PULSE

Pulse Secure is the new name of the company that now sells what had been Juniper Networks' Pulse security products. Juniper sold the division to Sirius Capital.

Products include the Pulse VPN solution, network access control gateway, mobile security solutions and branded endpoint clients for iOS, OS X, Android, Windows and Linux.

The new company's CEO is Andy Monshaw, who was general manager of IBM's PureFlex integrated systems until 2013. Since then he has been on a number of IT advisory boards, including consultancy-Mainstay Partners.

One of his first acts with Pulse Secure this month was to buy Mobile Spaces, whose Workspace 3.0 creates a secure container on iOS and Android devices. Data at rest is encrypted.

Administrators can select any app for the workspace and assign it by policy.





Thanks for raising over \$300,000 for Easter Seals Ontario and the Princess Margaret Hospital Foundation

For the past 29 years, the Canadian Computer Charity Golf Classic has raised in excess of \$4.8 million for Easter Seals Ontario and Princess Margaret Hospital Foundation.

TOURNAMENT HOST



FEATURE HOSTS



SELECT SPONSORS



CORPORATE HOSTS



PARTICIPANTS & DONORS



FOURSOMES

ASUS Computer International,
Intel, Transcore Link Logistics,
Storageflex

Every month bloggers on ITWorldCanada.com sound off on a wide range of issues. If you missed their columns, here's excerpts from a few, with links to the complete blog:

DEALING WITH IT SETBACKS

BY KEN METCALFE



As IT professionals, sometimes we respond inappropriately to disappointment. I find this surprising given how often IT work involves setbacks. But little in IT training prepares us to deliver, or receive, a disappointment. Bad news is, well, bad news.

However, how we communicate the news makes a world of difference. Being professional means delivering accurate information which is fundamental to integrity and trust. From my favourite Dragnet character, Sgt. Joe Friday, spawned the catch phrase "Just the facts, ma'am" (though he never actually uttered the phrase in any shows). I've never regretted sticking to the facts.

Read the full blog here

A HYPE CYCLE FOR THE CLOUD CHASM

BY DON SHEPPARD



I have always wondered if the [Gartner] Hype Cycle was primarily representative of market status in the U.S. (where most of the hype probably originates), and whether the results are really reflective of other countries. For example, an old marketing rule of thumb for Canada is: one-tenth the size of the USA market, and two years later than in

the U.S. I don't know where that came from but people used to swear by it! Does this seem to apply to cloud computing as well?

In any case, the conclusion would be that the chasm has not yet been crossed for enterprise cloud computing. There is certainly, in my view, no single "gorilla" that owns the architecture, and so far switching out (at least for IaaS) is not really very difficult. There may be some SaaS providers, however, that are approaching gorilla status (Salesforce and Facebook, for example).

A better question might be: How do we get cloud computing across the chasm and into the "bowling alley"?

Read the full blog here

HOW CANADIAN ORGANIZATIONS USE THE INTERNET OF THINGS

BY BRUCE HARPAM



According to a Telus commissioned survey, only six per cent Canadian companies are using Internet of Things technology in 2014 – the vast majority have not made a move. Despite that low adoption rate, the survey found that IoT spending in Canada exceeds \$5 billion.

In my view, this is analogous to website development in early to mid-1990s. There is a great opportunity for your organization to move early to grow with these technologies.

Read the full blog here

AUGMENT ENCRYPTION WITH TOKENIZATION

BY MICHAEL BALL



Tokenization is not encryption. Tokenization completely removes sensitive data from your network, and replaces it with a format preserving unique placeholder or “token.”

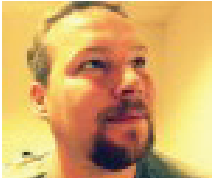
You no longer store an encrypted copy of the original data. You no longer transmit an encrypted copy of the original data. Transaction servers no longer keep a copy of the sensitive data in their memory.

With no data to steal, any network breach would prove fruitless.

Read the full blog here

WHY ORGANIZATIONS WILL RUN TO THE CLOUD, NOT FROM IT

BY JEREMY HILL



When attending the Gigaom Structure conference in San Francisco this summer, two things stood out for me: One was how few organizations are actually running loads in the cloud today. The second was the huge amount of work, both legislatively and technically that cloud providers were doing in order to resolve concerns companies have around data sovereignty, security and privacy.

Millions of dollars are being spent to try and conform to different regions' privacy concerns as well as on huge lobbying efforts to shape policy that is public cloud-friendly.

At one point a question was asked to an overfilled room of about 300 IT professionals and IT architects from major North American corporations: “How

many of you have working loads in the public cloud today – that you know about?” asked the presenter. There was a small round of chuckles at the last part of the question. As I looked around, I was blown away to find that there were only about 10 other hands raised beside mine in the room.

Read the full blog here

FIGHTING BACK: IS THE TIME FOR DEFENSIVE IT SECURITY POLICY OVER?



BY DAVE O'LEARY

It is becoming increasingly clear that there are two distinct camps when it comes to how best address the growing cyber threats we face daily:

The defenders are committed to putting up strong barriers and frustrating the attackers' attempts to gain entry. This approach is recommended by the defenders regardless of the types of information or systems at risk. Even the banking industry subscribes to the strong defence approach. The defensive strategy has resulted in a significant business sector providing products and services of a defensive nature. These same companies also remove those invasive attackers who ultimately make it through the perimeter defenses.

A new and growing camp is calling for an attack strategy.

Read the full blog here

A Canadian at the centre of the Internet

BY HOWARD SOLOMON

The road to being an Internet infrastructure entrepreneur can sometimes be a twisty one. For Al Burgio, it wound from an Ontario farm, an accounting degree, being at the centre of the dot-com boom and stint in the food processing business.

Now he heads a Silicon Valley company with customers like domain registrar and Web hosting provider GoDaddy, LinkedIn and TripAdvisor needing low latency and security to directly connect to other Internet exchanges around the world.

The usual way organizations send data back and forth is through Internet transit, which lets bytes cross networks of big carriers — Bell, Rogers, AT&T, Deutsche Telecom, NTT Communications — and small.

A BETTER WAY

But if your service is latency sensitive — like the VoIP service Burgio's co-founded in 2006 — transit isn't good enough. So he began thinking of a better way.

There are direct connection exchanges like Torex in Toronto, but few enterprises use them. Those that do connect locally. Burgio's idea is a service that connects exchanges globally, with software that automates the routing so customers can join and drop exchanges when needed.

"IIX can be thought of as the LinkedIn for enterprise networks," he likes to say: With the click of a button a customer can connect to an exchange. IDC analyst Brad Casemore noted in an email that companies typically peer with one another to reduce WAN expenditures and to directly exchange traffic and data. Usually, though, it's done on an ad hoc basis, and the

relatively high costs of peering services limited their reach. But the cloud has put the technology back in the spotlight, he said.

IIX has placed its switching platform in a number of locations, and it's charging on megabits-per-second (Mbps) consumption, effectively a

usage-based business model, he noted, and made it easy for customers to connect.

The company's executive team includes board member Phillip Koen, a former Equinix president, and Equinix co-founder Bill Norton, now IIX's CTO.

Born in southern

Ontario's wine and tourism area, Burgio was a young teen when the Internet started sprouting in the 1990s and was smitten. Working for an accounting firm, he dispensed advice on the side to fledgling Internet companies. Then he began founding and selling them.

But when the Internet bubble burst he took a hiatus. That ended in 2006 when he co-founded VoIP provider TalkWorks and began thinking about a better form of transit. After working on the bones of the solution, in 2011 he and a group were introduced to southern Ontario angel investors. In the spring of 2013 they opened an office in Silicon Valley, hired a team of software engineers to hone the software and quietly launched in the fall.

IIX now has 100 customers and an number of exchange partners in Canada, the U.S. and Europe. In July IIX raised US\$10.4 million in series A funding from New Enterprise Associates, which will be used to expand the current staff of 15 to 50 (including adding more to the St. Catharines, Ont. office) and expand to customers and exchanges in Asia/Pacific. 





TD Bank CIO on mobile opportunities, Apple Pay

BY SHANE SCHICK

Jeff Martin has a challenge for those who assume everyone now does most of their banking on a smartphone, PC, tablet or landline phone.

"If you're bored on a Sunday, go to a TD branch. If you think branches are dead, it will blow your mind," Martin, vice-president and CIO of Direct Channels Technology Solutions at TD Group, told the Mobile Enterprise Canada Summit in Toronto. "We do not think we will be closing all our branches."

Martin said TD is making major changes to the way it thinks about its physical presence, the way it gets in front of customers and how it provides the technology to support it all. As non-traditional payment providers like Apple move into the financial services space with Apple Pay, he also suggested IT leaders need to recognize the regulatory and other differences between Canada and the U.S.

The traditional view of TD is probably based on the buildings it owns. For example, the bank has more than 2,500 branch locations and has spent the last several years expanding into Eastern seaboard in the U.S. More recently, firms like TD have been talking about paying attention to the "omni-channel," where they

need to have ways to interact across physical, digital and social lines. It's not just enough to have multiple touch points, though.

"Our biggest focus area is to stop thinking about channels, and more about the customer," he said. "Everything is digital, even the branch."

'The bank branch can be everywhere'

Under a pilot project TD branch employees armed with tablets set up pop-up-style booths at shopping malls and even within businesses. So far, TD has seen five times the sales per employee than it would at a branch. Employees were also selling 2.5 products per customer on average; 65 per cent of the customers stopping by such locations are new to TD.

Based on those numbers, Martin said TD plans to expand the pilot to the point where "this will just be how we do things," he said. "Customers really liked the idea of interacting with a tablet in a friendly way and a human who's helping them."

Apple Pay: Potential problems

TD is closely watching developments such as Apple Pay, a mobile payment service which will use a combination of near-field communications (NFC) and apps to secure and process retail transactions.

Martin predicted that Apple Pay, which launches this month in the U.S. is "at least a year away" from coming here.

"There are a lot of regulatory things they will have to work out," he said, pointing out that Canadians are not without their options. "We have a mobile wallet. We can do what Apple Pay does. You could have done it a few months ago."

Whether it's Apple or a more traditional player such as TD, Martin said security will remain the No. 1 challenge in bringing more effective mobile experiences to customers.

"With this whole Shellshock thing, I was on the phone multiple times over the weekend to make sure everything was updated, that everything was patched," he said, referring to a bug in the open source Bash component that is used in many applications. "It doesn't end." **CC**

Group harnesses Canadian tech industry to fight youth unemployment

BY JIM LOVE

Youth unemployment in Toronto is in excess of 20 per cent – one of the highest rates in Canada. Yet many technology companies in the region struggle to find qualified talent. A new group is teaming with the tech sector to offer free training to the unemployed or under-employed.

NPower Canada, an off-shoot of a highly successful U.S. group, is setting up shop in Toronto to deliver its highly successful Technology Services Corps Canada (TSC) program. The program, which starts in November at Ryerson University for 25 students, provides no-cost training for skilled, in demand information technology jobs. For example, the plan is to provide up to 15 weeks of training in foundation skills such as the Cisco Systems-designed IT Essentials, and preparing for A+ Certification.

It supports internship programs to gain much needed experience. It also offers mentoring, life skills coaching, networking and a range of “post-hire” support structures.

It's this holistic approach is part of the secret of success for NPower, particularly with disadvantaged youth where unemployment percentages are staggeringly high. NPower has boasted success rates as high as 80 per cent in the U.S. cities where it pioneered this program and targets at least 75 per cent success in its initial offering in Toronto.

NPower says another secret its success is its ability to martial partnerships and coalitions of support. It launched Monday with an impressive list of technology partners including Cisco Canada and Accenture. The group is not only relying on technology providers: others groups are also stepping up. Ryerson University has signed up to provide state of the art facilities, TD Bank is providing equipment, community group CivicAction launched a parallel and supporting

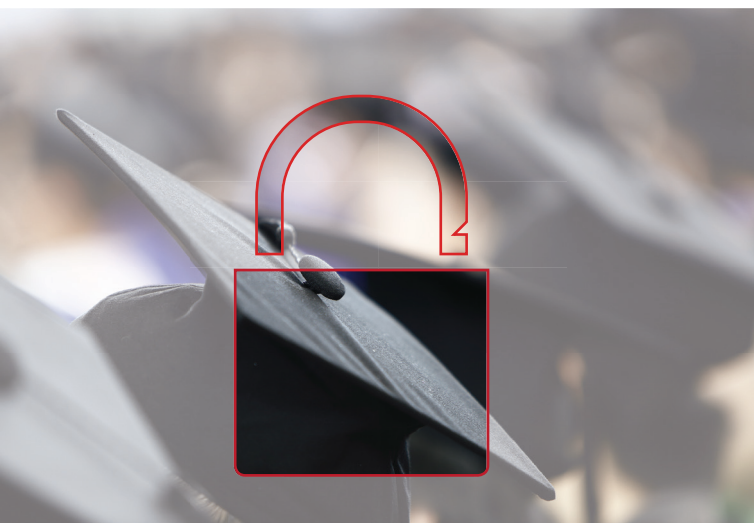
initiative it terms it's “Initialtive Escalator: Jobs for Youth Facing Barriers”.

NPower is mounting an impressive campaign to bring even more organizations into support, reaching out through standard PR techniques and a growing social media presence. Jeffrey Maddox, Cisco Canada's vice-president of sales, made an impressive and impassioned case for support on Toronto media CBC's highly rated Metro Morning show. IT World Canada is in talks with the organization to see how we can be of support after one of their volunteers reached out on social media to inform us of this exciting program.

The success of this coalition is a win-win for our industry. We not only help increase employment and break the cycle of youth unemployment, we help our own industry train eager, knowledgeable and loyal workers for jobs in the IT sector. While we often hear the bad news of disappearing tech jobs, IT World Canada's CIO Census confirms that there are many areas where there are gaps where jobs go unfilled. A recent report in “two-thirds of Canadian CEOs report skill shortages and 106,000 additional IT workers must be hired by 2016 to meet industry demands”.

The group also plans to leverage its growing list of corporate IT sector volunteers to bring programs into secondary schools. It hopes to inspire a new generation of students to reverse the declining interest in science, technology, engineering and even mathematics — essential for a growing knowledge economy in Canada.

IT World Canada is solidly behind this new initiative and urges all of our community to take a look at this new program. We hope to bring you news about the growth and success of the program in the coming months. Interested companies or individuals can find out more info at www.npowercanada.ca 



Get wide experience, not a cybersecurity degree, says expert

BY HOWARD SOLOMON

Heresy is something that rarely appears on this site (which is my fault). But a column in Computerworld U.S. by security behavior expert Ira Winkler on how to get a job in IT security certainly qualifies.

To put it bluntly, he isn't a fan of cybersecurity bachelor degrees. He believes an IT security job should be earned with a broad experience in the computer field.

In some ways, this is the same debate that was going on in newspapers 50 years ago, when many editors felt that working at a small newspaper was a better start to a reporting career than getting a journalism degree.

Similarly, Winkler urges young — and maybe not so young — people interested in a cybersecurity career to get an undergraduate degree in any major, because universities and colleges help people learn to communicate better. Students have to take courses outside their area of interest, which helps them become more rounded. As important, he argues, not having an undergrad degree will hurt when it comes time for promotions.

“That degree on your résumé is a baseline that recruiters and hiring managers are going to be looking for,” he writes. “If you can't include it on yours, you will need some way to grab their attention and show just how truly exceptional you are at what you do.”

After graduating, he says get a job doing general computer work: You can't protect computers if you don't know how to administer them, or secure a database if you don't know what a database management system is. And while you're at it, teach yourself how to code.

Winkler believes that CIOs in need of security pros should look at people on their staff who have demonstrated talent, then give them on-the-job training to develop security-relevant skills. **CC**

Working in Canada?

Our Chartered Accountants and Certified Public Accountants offer full North American tax and accounting services to IT Consultants, through offices in Canada & the U.S.

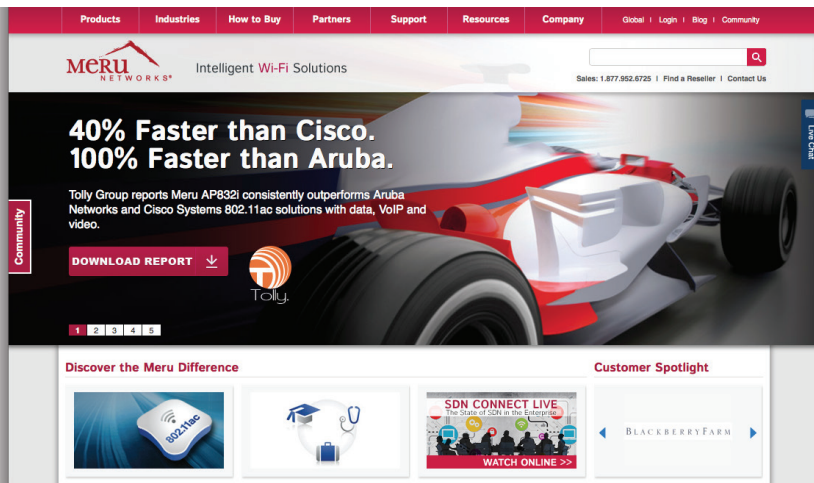
Serbinski Partners, PC
Chartered Accountants
183 Sheppard Avenue W.
Toronto, Ontario
M2N 1M9
Tel: 416-733-0300
Tel: 1-888-878-2937
Fax: 416-226-1925

Mark T. Serbinski
Certified Public Accountant
8770 West Bryn Mawr,
13th floor
Chicago, IL
60631 USA
Tel: 773-867-2914
Fax: 773-442-0853

Working in the U.S.A.?

Our fully licensed professionals offer a seamless transition for Canadians moving to and working in the U.S. including tax planning, visa information, accounting services and compliance. Licensed to practice before the Internal Revenue Service. Don't take a chance. Call us (toll free from anywhere) for a complimentary consultation if your plans include the U.S.

www.serbinski.com email: mtscpa@serbinski.com



Meru announces SDN app for Lync

BY HOWARD SOLOMON

Meru Wireless has announced an upcoming application that helps networks manage traffic spawned by Microsoft's Lync unified communications suite.

Meru Collaborator is an OpenFlow application that runs on software controllers. It connects to a Lync server API to manage flows on wired or Wi-Fi networks. Meru's 802.11ac access points are interoperable with Lync Server, but the app works across any OpenFlow enabled network.

Leveraging the advantage of an SDN network, the central controller makes automating network devices easy.

"What this application enables is a unified wired and wireless policy enforcement for the communication of a Lync session," Den-

nis Huang, Meru's director of product marketing, said in an interview.

"You can have a client on the wireless network and maybe a client on the wired network initiating a Lync videochat, for example, and with our app you can enforce policies across both networks."

The app has a check box to prioritize Lync traffic across the network.

Collaborator is in early trials now and expected to be generally available in the fourth quarter.

Apps like this are part of the promise of SDN, which is why industry analyst Zeus Kerravala of ZK Research thinks it makes

sense. "The important thing is the industry is looking for use cases for SDN, and voice optimization for Lync is a good one," he said in an interview. **CC**



RELATED CONTENT
Meru controllers for OpenFlow

JUNIPER ENHANCES SPOTLIGHT SECURE

BY HOWARD SOLOMON

Juniper Networks is extending its Spotlight Secure threat intelligence platform to improve response to network threats.

Spotlight Secure is now open to more threat intelligent information feeds from other vendors, which can be linked to the firewall policies in the company's SRX Series Services Gateways for enterprises and service providers.

The result, Juniper said, is IT departments will be able to more quickly push enforcement rules to SRX firewalls.

Spotlight Secure aggregates threat feeds from multiple sources to deliver open, consolidated and actionable intelligence to SRX firewalls.

The enhancements include

- Feeds that not only adapt protection and firewall policies based on the severity of threats in the network, but also recognize and block traffic from specified countries and send selected traffic through additional security services. These new feeds augment Juniper's attacker-device fingerprinting service, which is already available via Spotlight Secure.

- Enhanced integration between Juniper's Junos Space Security Director and Spotlight Secure links cloud-based threat feeds to the customer firewalls and provides a single aggregation point for multiple feeds into the firewall. **CC**

Unify looks ahead to cloud UC service after announcing layoffs

BY HOWARD SOLOMON

This month Unify Inc. – formerly Siemens Enterprise Communications – will release its new cloud-based unified communications and collaboration platform as it tries to put a new face on veteran brand.

The new cloud suite, known so far as Project Ansible, is part of a restructuring that started when conglomerate Siemens AG spun off its communications division in 2008 into a joint venture with the U.S.-based IT investment firm Gores Group. Last October SEC was re-branded Unify and said the company would focus on software solutions and streamline the organization.

Products have been shed. But in June it also announced 3,800 of its 7,700 global workforce would be let go. About half of those are in Germany, CEO Dean Douglas said in an interview.

Not a sign of failure

He denied that the layoffs, coming eight months after the rebranding, signals that the new thrust has been a failure. “The new brand is working very well ... We’re becoming a company that’s a leaner and more focused, but its more in keeping where the industry is.”

The privately-held company was “a bit overweight,” he said. “The fact is some of our competitors, including Cisco have reduced their staff significantly over the past few years, and we hadn’t made a significant cutback.”

“As we transition from a company that’s significantly focused on a direct sales force to one where in countries

where we don’t have a significant presence and are going to use the channel, there’s obviously some (internal) sales and support people where we will be cutting back.”

At the moment about 80 per cent of Unify sales globally come from its direct sales staff. Most sales in Canada and the U.S., however, go through integrators and service providers. In Canada one of its partners is Black Box Corp., which of-

fers a wide range of communications solutions.

The company recently hired three new sales executives for North America.

New products

Unify has introduced new or updated products – in July it released the OpenScape Business XI Appliance, a UC solution for small and medium businesses with up to 30 users; and in August it announced OpenScape Enterprise with interface, security and reliability improvements. But a lot of attention will be on Ansible.

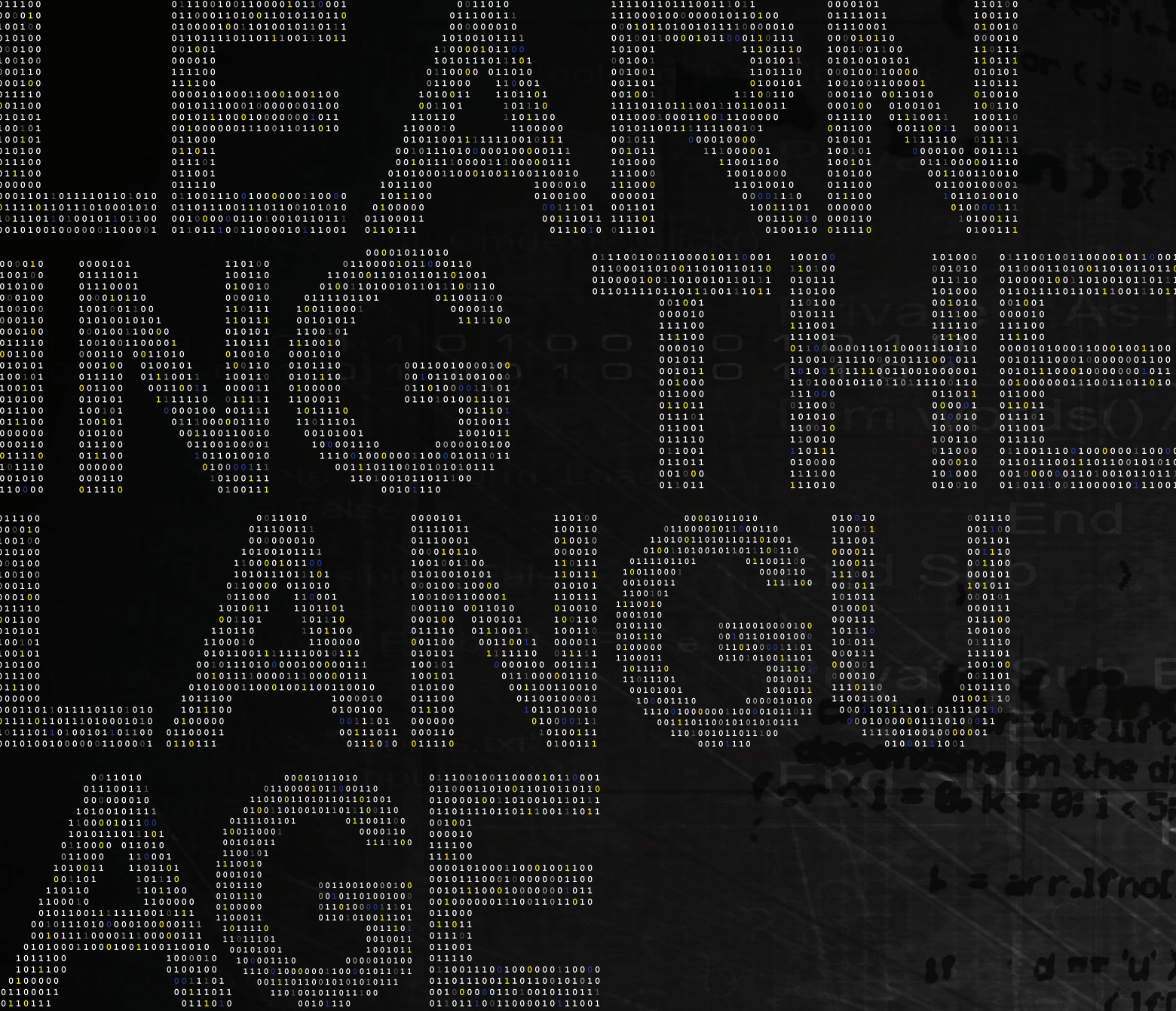
“It’s more than a unified communications and collaboration platform,” Douglas said. Multiple sources of information – such as telephony, video, text, and presentations – can be seen on one screen by teams.

As a cloud solution it also caters to the increasing demand for outsourced unified communications solutions, particularly from lines of business. But it’s also got younger staff members in mind who prefer to work on mobile devices. Integration with customers’ on-premise OpenScape installations will be announced in the coming months. No pricing has been announced. **CC**



RELATED CONTENT

New licencing program cuts bundled UC price by 40 per cent



LOOKING TO ADD TO YOUR ARSENAL? HERE'S WHAT'S IN DEMAND AND WHY

BY HOWARD SOLOMON

The computing world owes a lot to Unix, and not just because it spawned Linux and Apple's OS X.

Unix also was responsible for the C programming language (announced in 1973), which today stands at the top of many lists as the most popular development language in use around the world. A number of languages are either directly or indirectly derived from C, including C++, C# and Java.

But will C's reign, along with Java, soon come to an end?

According to the Tiobe Index, a monthly ranking of popular languages, the top six in September were C (16.7 per cent), Java (14.1), Objective-C (9.9), C++ (4.6) and C# (4.3).

However, Java and C++ were at an all time low since the index started in 2001.

Java — a preferred language for creating Android apps — dropped two per cent from its ranking in September, 2013, while C++ was down almost four per cent.

In a note Tiobe said there's still a huge demand for Java and C++. But it pointed out a growing number of specific fields are using their own programming languages to write programs today, such as biomedical, statistical, hardware and psychological programming. These appear to be gaining ground at the expense of general purpose languages.

On the other hand, Objective-C, the preferred language for creating iOS apps, was up 1.37 per cent over Sept., 2013.

It's also interesting to note that Apple's new Swift language for iOS and OS X, announced in June, was ranked as number 18 with almost 0.9 per cent.

It should come as no surprise that there's constant movement in development languages, in part because it's not hard to create one (or more accurately, to create a derivative of an existing language) and in part because of the ever-changing nature of computing.

After all, we've gone from client-server to Web to mobile computing in a relatively short period of time, and the so-called Internet of Things or machine-to-machine computing is just ramping up.

Organizations are still trying to wring

LEARN SOMETHING NEW

Want to learn a new programming language? Ryerson University computer science professor David Mason makes two suggestions:

Python, for programming and applications. "It's a fairly logically laid out language," he explained. "There's less syntax to worry about, there's less annoying detail. Things just work. Plus it's very big in the ecosystem (eighth on the Tiobe September index)."

Only PHP and the other C-related languages are above it, he said — and according to Tiobe's way of measuring, PHP's popularity is falling.

According to the Python Software Foundation, version 3.4.1 was released in May with over three hundred bug fixes and other improvements over 3.4.0. The version of OpenSSL bundled with the Windows installer no longer has the HeartBleed vulnerability.

Here's a link to a beginner's guide for those who already know programming. 

Mason's other recommendation is Javascript (number on the Tiobe index and moving up faster than Python), a cross-platform, object-based scripting language with first-class functions for building Web apps.

But with the NodeJS runtime environment, developers are also increasingly using Javascript to write server-side code as well.

Now in version 1.8.5, JavaScript is officially managed by the Mozilla Foundation. You may find its reference section useful. 

There are a number of open source platforms for building Web apps with Javascript — Mason mentioned Meteor as an example — that will make JS more significant in the near future.

Farhan Thawar recommends Ruby "because it's a dynamic language, which means less intricate syntax to worry about."

the most out of their software, says Stephen Hendrick, an industry analyst with the Enterprise Strategy Group. "In many ways we're still early in that entire journey, which started in the 40s and 50s."

This has led to the rise of new languages aimed at making it easier to program.

Farhan Thawar, Toronto-based vice-president of engineering at Pivotal Labs, which works with enterprises to build mobile and Web applications, notes in the past few years a number of enterprises have increased their software development teams.

"While .Net and Java are still very, very popular ... they (teams) are trying to move to more modern versions of those frameworks," he said. "We're also seeing some emergence of non-Java, non-.Net languages — we're seeing Ruby, we're seeing an emergence of Python (favoured by Facebook), and, in some cases, PHP." For specific types of architectures, a language called Golang,

You can't write once, run everywhere with HTML 5. But a subset will work across all platforms

which was developed by Google for its highly scalable concurrent systems, is being used.

Also growing is the use of frameworks like Node.js, which allow developers to use Javascript for server-side applications in addition to Web apps.

Among the tools Pivotal uses is the Spring framework[®], which Thawar said allows developers to build an app in Java that will run on any platform. "It gives you ways to integrate easier, to batch process, allows connection to Hadoop, gives easy access to do things on the Web."

PROGRAMMING FOR THE REST OF US

Many IT departments do programming for lines of business when the data goes beyond the capabilities of a spreadsheet. But Ryerson University computer sciences professor David Mason thinks that's wrong.

So he's working on a project called "programming for the rest of us." (programming-

fortherestofus.com).

"Programming is too important to let us geeks be responsible for all that takes place, he says. Ordinary people need to be able to program given the amount of data that's floating around. And I think it applies in the corporate worlds as well."

The idea is to create a Web-based environment allowing people

not skilled in computer languages to access dynamic data to create tables, graphs and spreadsheets..

Called "Kit," he has a prototype that's a bit rough at the moment. It runs "if you use the right browser on the right day." It's written in a dialect of Smalltalk, which is good at handling an object oriented environment, and

then translated into Javascript

"If you're not able to process data you're dependent on those who are," he says. "Even IT departments have to realize they're not going to be able to answer all the questions that their business people are going to need answers to."

He figures Kit is about a year away from being finished.

Pivotal also uses Groovy , a dynamic language for Java Virtual Machines that makes modern programming features available to Java developers.

Organizations are also using some of these languages because the software will be more easily maintained and modified in the future, he added.

The new entrant is Swift, which Thawar says is more like a scripting language than a procedural language, which means in theory it should be easier to learn than Objective-C. Thawar said it's too early to say how well Swift apps will perform compared to Objective-C applications.

One of the problems enterprises face is an inability to standardize on one development platform, particularly mobile. A recent IDC report noted for example that iOS doesn't allow certain runtimes to be downloaded on its app store, effectively banning Java and Flash. Google has platform supplied services (like Maps and Search).

For enterprises, tightly controlled application platforms with vendor-anointed tools and programming languages mean limitations in choice, an inability to leverage existing developer skills and, most importantly, an inability to easily develop code for multiple platforms.

HTML5 holds the promise of a unified set of technologies that can provide skills, code, and effort leveraged across multiple device operating systems, IDC says.

"Even if the promise of writing once and running everywhere can-

not be realized fully, and it is clear that it cannot, HTML5 can provide partial unification of some aspects of the code or development effort," the report says. "New device platforms, including embedded technologies powering many of the things in the Internet of Things (IoT), come with built-in browsers and the potential to support HTML5."

A subset of HTML5 will work on all platforms, it adds, so the job of enterprise development teams is to identify this subset and make sure there is a portfolio of applications that can stay within that subset.

Meanwhile there are other languages developers can consider. Mason points to Haskell, a pure functional language that helps take the danger out of trying to leverage the threading in today's multicore processors through parallel processing. "If not written well," Mason says, "threads tend to thrash — there will be constant back and forth between threads, and you lose the performance edge of having multicores."

That's why Facebook and Google are using functional languages like Haskell and Erlang, he said.

Another language being considered is Clojure, which is not a pure functional language. But Mason said it has controls over the interaction between multiple threads.

"They are going to become more significant over time," he said of functional languages. On the other hand, he added, it will be a long time before they knock C++, C#, Java and Objective C out of the top. 

COMPUTING CANADA

EDITORIAL

Editor
Howard Solomon
Twitter: @cwceditor

Contributing Editors
Jeff Jedras
Brian Jackson

CREATIVE SERVICES

Senior Graphic Designer
Mel Manasan

Creative Director
Jeff Coles

CIRCULATION
Circulation Manager
Cheryl Patfield

SALES

Vice-President and Associate Group Publisher
Brad McBride

Senior Account Executive
Desere Ross

Senior Account Executive
Wayne Prihoda

CORPORATE

Chairman
Michael R. Atkins

President and Group Publisher
Fawn Annan

Controller
Rob Novorolsky

HOW TO CONTACT COMPUTING CANADA

Telephone: (416) 290-0240

Fax: (416) 290-0238

Mail: Computing Canada, 55 Town Centre Court, Suite 302, Scarborough, Ontario M1P 4X4

Employees may be reached using a combination of their first initial and last name, for example: dwebb@itwc.ca

Online: ITWorldCanada.com

Subscription inquiries:
tel: (613) 475-3217 or 1-800-565-4007
fax: (416) 290-0239 or 1-800-565-8148
e-mail: circulation@itworldcanada.com

PUBLICATIONS MAIL AGREEMENT NO. 40063800
RETURN UNDELIVERABLE CANADIAN ADDRESSES
TO CIRCULATION DEPT — IT WORLD CANADA INC.
302-55 TOWN CENTRE COURT
SCARBOROUGH ON M1P 4X4
E-mail: circulation@itworldcanada.com
Published by: IT World Canada

Computing Canada is published 12 times a year by IT World Canada Inc. a unit of Laurentian Media Group. Michael R. Atkins, Chairman, IT World Canada Inc. also publishes Canadian CIO, Computer Dealer News and Direction Informatique. Computing Canada is distributed free of charge to the following job categories in Canada only: company executives, public servants responsible for computing, management/computer consultants, IT managers/supervisors, systems analysts, programmers, operators and computer field engineers.

Subscription rates outside of Canada: in the U.S. US\$75/year; other countries US \$95/year. Available to non-qualified readers in Canada at \$2.50 per single copy. All rights reserved. The contents of this publication may not be reproduced in part or in whole without the consent of the copyright owner.

ISSN #1484-9089, GST Registration #R122605769

IT World Canada Inc. is an affiliate of International Data Group, the world's largest publisher of computer-related information and the leading global provider of information services on information technology. International Data Group publishes over 300 computer publications in 85 countries. Ninety million people read one or more International Data Group publications each month.

Canada

We acknowledge the financial support of the Government of Canada through the Canada Periodical Fund (CPF) for our publishing activities.





All Hands on Tech

Asus S1 Mobile Projector

When you're on the road dragging luggage, a laptop and a briefcase, the projector you need for a presentation can be a burden. Asus has a solution in this pocketable device. ITBusiness.ca editor Brian Jackson found it met the top three criteria for a projector: Bright images, sharp images and respectably battery life. But it's not inexpensive. For the inside story, see the video.

MOBILE PRODUCTS



Motion Computing Rugged Table

Work in tough environments? Motion Computing's new CL920 Rugged Tablet runs on an Intel Pentium Quad Core processor, making it 69 per cent faster than the previous model. The 10.1-inch unit can come with an LTE modem, Windows 7 or 8.1 and has passed the IP52 weatherproof and MIL-STD-810G standards. Weighs just under 2 lbs. Price not announced. www.motioncomputing.com

Asus Zenbook NX500

Tired of toting an ordinary laptop? The Zenbook NX500 is coming next month, with a reported price of US\$2,699. Beneath the aluminum frame it is powered by a 4th gen Intel i7 quad core CPU. It comes with a ten-point 15.6-inch 4k touchscreen display, and 802.11ac for wireless connectivity, it weighs about 2.2 kg.



Archer Wireless Dual Band Adapter

It's been a long time getting here, but 802.11ac is increasingly appearing in wireless access points. Your laptop only gets 802.11n? No problem with this T4U-AS1200 Wi-Fi adapter. It can handle traffic in both 2.4 and 5 GHz bands up to 1.2 Gbps under ideal conditions. Encryption comes at the touch of a button. \$46.99 list www.tplink.com/ca/products

dbrandglass

Want an extra layer of protection on your smart phone? Toronto's dbrand is now making dbrandGlass, a thin sheet of Corning Gorilla Glass 3 you can apply yourself. And to make sure the fit is right, it's customized -- so far for -- only three devices: the Nexus 5, HTC One M8 and the LG L3. More devices promised. Nothing opaque here. \$30. dbrand.glass





A PIECE A PIECE HERE, THERE

Google is plowing away with Project Ara, a modular smart phone that lets users change nearly all the hardware modules instead of buying a new device.

Need more megapixels in your camera? Want a more powerful chipset? How about upping the pixels with a new screen?

Given that we're in an era where style is important (hmmm, that era started around 1962...) it's no wonder that Google thinks this may

be a hit. I wish my Android smart phone's camera had more megapixels. I wish it had optical stabilization. I wish it could run LTE.

On the other hand, for \$300 it came with a nice-sized 4.5-in. screen. The real reason I'm unhappy is it's running version 4.1.2 of the OS. I'd like to upgrade to Kit Kat, but either the manufacturer or the carrier aren't interested. I wish Google would spend more time on that.

Heavy lifting

Writing about a modular handset got me thinking about buying a new one, seeing as updating the OS is unlikely. So I went to the nearest Apple store to check out the iPhone 6. Imagine my surprise: Long lines of anguished people wondering if they should risk buying a new iPhone if it might bend when they sit on it. Reminded me of when the Toonie came out and some people ran to reporters complaining that if you hit the centre really hard with a sharp instrument, the copper centre piece popped out. No kidding. Thankfully, as I passed word flashed through the line: Consumer Reports found that if you put 90 pounds of force on an iPhone 6 Plus, it would indeed bend. Scores ran for the nearest Jenny Craig. I was nearly trampled.



THE INTERNET OF THINGS IS HERE

A THREE PART INTERACTIVE SERIES

The Internet of Things (IoT) has arrived and it's evolving rapidly. How well do you understand what it means and its implications?

Join us for a series of three interactive webinars. Gain insights from a leading panel of experts and from other participants as we explore the topic together and delve into what's really possible with the Internet of Things.

SEPTEMBER 9TH

AVAILABLE ON DEMAND

OCTOBER 1ST

AVAILABLE ON DEMAND

**OCTOBER 29, 2014
1:00 PM EST**

REGISTER NOW

SPONSORED BY



PRODUCED BY

