Networking 101

A Message from the Executive Vice Chancellor...

This month, the Director's Column was penned by Matt Turner, Executive Vice Chancellor for Administration for the West Virginia Higher Education Policy Commission, West Virginia Council for Community and Technical College Education.

With 2017 now well under way, extraordinary change is upon our state and nation. Historically, institutions that have thrived throughout the decades are those that have embraced change while not forgetting their roots.

One of those institutions is the West Virginia Network (WVNET). We've been here for more than 40 years, providing cutting-edge technology and support that has allowed our schools, libraries, colleges and universities to meet the always-changing and growing needs of the students and communities they serve. We've seen remarkable change in the technology we provide to our customers and have not just adapted, but anticipated those changes as the years have come and gone.

In those 40-plus years, we've also seen our beautiful state work through some pretty tough times. As our new governor and Legislature seek solutions to West Virginia's daunting budget issues, WVNET will look to transform these obstacles into opportunities. Tight budgets force us to do more with fewer resources — and technological innovation will play an important role in meeting that challenge.

Agencies and organizations across the Mountain State benefit from top-notch services at an affordable price by using the resources and technical expertise offered by our expert crew. From shared systems such as website, online library, and database servers, to shared services like providing tech support, staffing help desks and fighting online crime, WVNET provides efficient and effective solutions. The quality of our services is matched only by our employees, who are committed to our customers and our state. We look forward to working with you as together we look for new ways to move West Virginia forward.

Matt Turner
Executive Vice Chancellor for Administration
West Virginia Higher Education Policy Commission
West Virginia Council for Community and Technical College Education

CUSTOMER SATISFACTION SURVEY WINNER

High school hardwoods around the state are filled with basketballs as the girls' and boys' basketball seasons are moving quickly towards the playoffs and state tournament in Charleston. As a high school basketball official in West Virginia, I often get to travel into these great communities both big and small and see these great people come out and support their youth in athletic competition. Whether I'm in Mount Storm officiating at Union High School, or in Charleston, officiating at Capital High School, one thing is consistent; the community support of these young student athletes, extending their education beyond the classroom to the athletic competition. The lesson I'm getting at is that the great people of this state share in these common bonds, whether I'm in Ohio County or Monroe, whether in Wood or Berkeley, the people of West Virginia are amazing. This being my last year of officiating, I've met many great people in all of these places, and I feel it should be recognized. I also meet many with WVNET in my travels, and I'm thankful to each and every one. WVNET is as passionate about the State of West Virginia as the rabid fans in all of these communities, and we certainly hope that you see our commitment to making educational futures brighter in this great state.

Each month, WVNET recognizes a customer who took the time to fill out our Customer Satisfaction Service Survey to let us know how we are doing. We thank everyone who takes that extra few minutes to give us advice, kudos, or criticisms that will help us improve our service.

This month we'd like to congratulate our winner, *Johnny Davis from the Harrison County Commission*. The Commission uses a customized version of our "OZ" Work Order System. This is one of the lesser known services that WVNET provides. If a potential customer is in need of a means of tracking problems, tasks, or requests, WVNET can provide a completely improvised system that is configured to meet the demands of the client, at a cost that is a fraction of the price of more well-known products.

In this particular situation, Mr. Davis requested that there be some modification to the Work Order System. Within this, he worked with Software Developer Justin Robinson, who worked to quickly assist and make the change that was requested. Mr. Davis was quite pleased, stating *"Justin went out of his way to make sure our request was handled perfectly. Always a pleasure working with Justin or Mike (Mike Karolchik, Media Services Manager)."* Thank you Mr. Davis for those kind words. It is a major advantage to our customer that they are able to talk directly to the developers and make changes as needed, unlike with other products that are sold "As -Is".

As always, at the end of every month, we will draw a winner and contact them by email and then send WVNET memorabilia in appreciation. Please complete our survey by looking within the incident email of any interaction that you have had with us. All comments are taken seriously and help to improve what we do on a daily basis.

Thank you *Johnny*, and thanks again to all our customers who continue to shape and improve WVNET.

(Guest article by WVNET staff member Booker Walton, III, pictured.)

SAVE THE DATE...
West Virginia Higher Education Technology Conference 2017
Monday and Tuesday, October 2-3, 2017

DANGEROUS W-2 PHISHING SCAM EVOLVING

The ever changing CEO email spoofing attack that, according to an FBI report, as of June 2016 has netted thieves over 3.1 billion dollars, has started to incorporate the W-2 Form phishing attack that was first noticed in February 2016. This variant has expanded beyond businesses to include schools, and nonprofits.

In a statement that can be read here, U.S. Internal Revenue Service Commissioner, John Koskinen, said the scams are some of the most dangerous email scams the agency has seen in a long time.

Attackers use various spoofing techniques to disguise an email to make it appear as if it is from an organization executive. The email is sent to an employee in the payroll or human resources departments, requesting a list of all employees and their W-2 forms.

The IRS noted some of the details contained in the phishing e-mails:

"Kindly send me the individual 2015 W-2 (PDF) and earnings summary of all W-2 of our company staff for a quick review."

"Can you send me the updated list of employees with full details (Name, Social Security Number, Date of Birth, Home Address, Salary) as at 2/2/2016."

"I want you to send me the list of W-2 copy of employees wage and tax statement for 2015, I need them in PDF file type, you can send it as an attachment. Kindly prepare the lists and email them to me ASAP."

Wire Transfers Requests

Sometimes, after a successful attack, an attempt at looting the victim organization's bank account is performed. The attackers follow up with an "executive" email to the payroll or comptroller requesting that a wire transfer be made to a bank account they control.

Organizations receiving a W-2 scam email should forward it to phishing@irs.gov and place "W2 Scam" in the subject line.

Employees whose W-2 forms have been stolen should review the recommended actions by the Federal Trade Commission at www.identitytheft.gov or the IRS at www.irs.gov/identitytheft. Employees should file a Form 14039 (PDF) Identity Theft Affidavit, if the employee's own tax return rejects because of a duplicate Social Security number or if instructed to do so by the IRS.

(Guest article by WVNET staff member Randall Long)

Lawsuit Offers Reminder to Avoid Cable-Company Router

The N.Y. attorney general says Charter/Time Warner Cable supplies customers with outdated gear

By James K. Wilcox
February 2, 2017

A lawsuit filed against Time Warner Cable is a reminder that buying a modem and router yourself is nearly always a better idea than renting the devices from your cable company.

New York attorney general Eric Schneiderman announced Wednesday that his office is suing Time Warner Cable, New York City's biggest broadband provider, and its parent company over two issues. (The company was acquired by Charter Communications in 2016 and is officially known as Spectrum-Time Warner Cable.)

First, the suit alleges that Time Warner Cable and Charter failed to deliver the internet speeds consumers were promised – and that aspect of the suit has received the most attention.

14

Number of Wireless
Routers
In our Ratings.
Current Wireless
router ratings.

Second, the Time Warner Cable is accused of wrongly assuring subscribers they could get those promised speeds via WiFi using the modem/routers provided by the company.

In response, the company said: "Charter made significant commitments to New York state as part of our merger with Time Warner Cable…We will continue to invest in our business and deliver the highest quality services to our customers while we defend against these allegations involving Time Warner Cable practices."

It's not only TWC customers who should look at alternatives to the hardware provided by their internet service.

One issue is simply cost. We've found that it generally sets you back $5 to $10 per month to lease a cable-company router, meaning you'll pay anywhere from $60 to $120 a year in rental fees. (Time Warner Cable subscribers, for example, paid $10 per month.)

If you look through our router ratings, you'll find recommended models that cost as little as $100. Simple math reveals that if you buy a router, it will quickly pay for itself, sometimes even within the first year of ownership.

Another reason is that a cable-company router may not be equipped with the latest technologies. In the Time Warner Cable case, for example, the attorney general alleges that the company supplied customers with outdated equipment, knowing that the routers couldn't provide the WiFi speeds it had advertised.

One final reason you may want to own a new router: We're currently in a golden age of router technologies and designs. Many of the newer models have sleek-looking designs you won't mind displaying in a living room and they can provide whole-home coverage, something you're not likely to get with cable-company routers.

While many of these new, high-tech models are expensive, they are capable of providing the higher levels of WiFi performance required in households – like mine, for instance, where multiple family members regularly stream movies, play games, or watch YouTube videos.

Whether you decide to get your own modem/router or stick with the one you rent, you'll want to get the best performance possible. Check out these simple tips for coaxing the strongest WiFi you can from the equipment you have.

(Reprinted with permission from Consumer Reports February 2017)

Under the provisions of the West Virginia Constitution, the Legislature is the lawmaking branch of state government. Legislators are elected by the people to serve as their representative voice in government. The West Virginia Legislature is a citizen legislature – meaning the members are not full-time legislators, but ordinary citizens who hold other jobs when the Legislature is not meeting. Because the Legislature is comprised of two bodies, the Senate and the House of Delegates, it is called bicameral.

The 1st Session of the 83rd West Virginia Legislature has begun…

Opening Day - January 11, 2017: Assemble to organize by election of officers and open and publish election returns. *(WV Const. Art. VI, §18)*

First Day - February 8, 2017: First day of session. *(WV Const. Art. VI, §18)*

Twentieth Day - February 27, 2017: Submission of Legislative Rule-Making Review bills due. *(WV Code §29A-3-12)*

Forty-first Day - March 20, 2017: Last day to introduce bills in the Senate. *Senate Rule 14* does not apply to originating or supplementary appropriation bills, and does not apply to Senate or House resolutions or concurrent resolutions.

Forty-second Day - March 21, 2017: Last day to introduce bills in the House. *House Rule 91a* does not apply to originating or supplementary appropriation bills, and does not apply to Senate or House resolutions or concurrent resolutions.

Forty-seventh Day - March 26, 2017: Bills due out of committees in house of origin to ensure three full days for readings.

Fiftieth Day - March 29, 2017: Last day to consider bill on third reading in house of origin. Does not include budget or supplementary appropriation bills. *(Joint Rule 5, paragraph b)*

Sixtieth Day - April 8, 2017: Adjournment at Midnight. *(WV Const. Art. VI, §22)*

For a PDF of the West Virginia Legislature 2017 Calendar, click here:
http://www.legis.state.wv.us/Bulletin_Board/calendar_2017.pdf

For a PDF of the West Virginia Legislature 2017 Information Packet, click here:
http://www.legis.state.wv.us/Educational/INFOPACKET_2017.pdf

For up to date information on the West Virginia Legislature, click here:
http://www.legis.state.wv.us/index.cfm

For the WV Legislature Membership Directory 2017, click here:
http://www.legis.state.wv.us/Educational/membership_directory_2017.pdf

(Guest article by WVNET staff member Fran Barnes)

West Virginia Statewide Technology Conference 2017 will be held at the Morgantown Marriott at Waterfront Place and the Morgantown Event Center in Morgantown, West Virginia, on July 18-20, 2017.

Vendor registration is now open:
http://mgr.wvstc.com/register/vendor

WVSTC 2017 Call for Proposals has just been announced and may be viewed at this link:
http://mgr.wvstc.com/conferencesoftware/call-for-prop/#/form/introduction
The WVSTC 2017 conference committee welcomes proposals for presentations on a wide range of topics including those of interest to K-12 education, higher education, and state agency personnel. Presenters should plan for 40 minute presentations with an additional 5-10 minutes of questions and answers. *All proposals must be submitted via the conference website no later than April 29, 2017.*

The Emergence of the Internet of Everything (IoE) Smart Connected Devices and EduGadgets for Real-Time On-Demand Transformation of Education is the topic of discussion for Keynote Speaker Robbie K. Melton, Ph.D.

Learn about the development and impact of Internet of Everything (IoE) Smart EduGadget of mobile devices, smartphones, wearables, and virtual-augmented reality with hands-on viewing. Share in the exploration of the educational possibilities and challenges.

Robbie K. Melton, Ph.D.

Gartner (2014) defines the Internet of Everything (IoE) as the network of physical objects that contain embedded technology to communicate and sense or interact with their internal states or the external environment. The rise of these connected 'smart' technologies provide new opportunities for transforming teaching and learning, as well as real time, on-demand data, for evoking immediate changes. This presentation will address the possibilities and challenges of IoE Smart Technologies (EduGadgets) as data drived tools for improving academic and social performance and a showcase of technology highlighting the latest innovations in emerging technologies of wearables, mobile devices, health and fitness aids, STEM, mixed realities (VR/AR/Gamification/ Holograms) across the education disciplines and K-16 spectrum.

Please check WVSTC 2017 webpages for additional conference details as they emerge: *http://wvstc.com/*

(Guest article by WVNET staff member Fran Barnes)

Ben Mays this month's recipient of "Moby Award..."
WVNET Systems Programmer Ben Mays is the latest recipient of the Moby award. Moby is given by one staff member to another, to acknowledge that they did *"a whale of a good job."* Barbara Long handed over the whale with these comments:

"We congratulate Ben Mays for his positivity, boundless energy and dedication to WVNET. As a lead systems programmer, Ben is usually working behind-the-scenes on large IT projects such as storage management/disaster recovery and DegreeWorks."

"His actions speak louder than his words, and everyone knows that he will roll up his sleeves and help whomever and wherever he can to move a project along or unburden a team member."

Thanks for your expertise Ben, and we hope you enjoy your time in the Moby spotlight!

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News

Keeping Seniors Safe in the Kitchen
Published in Health & Safety
February 4th, 2017

Many families grew up with the kitchen as a focal point and central gathering place in the home. For many seniors who still live at home, they now prepare a meal for themselves alone. Kitchen safety is critical because the kitchen is a place where accidents often occur. When it comes to seniors and kitchen safety, here are some facts:

- The Federal Emergency Management Agency (FEMA) reports that people over the age of 65 have a 2-5 times greater risk of dying in a kitchen fire than the general population.
- The National Fire Protection Association reports that three in ten home fires start in the kitchen, more than any other room in the house.

Besides being injured in a kitchen fire, seniors are also at risk for falling when attempting to get items stored out of reach (both too high and too low) and tripping while taking food to other rooms. Other factors that contribute to injuries in the kitchen are confusion, being less able to take quick action in the case of a fire, taking medications that affect cognition, and a decrease in balance.

In terms of fire prevention, never leave food unattended while cooking (including leaving the house with food cooking in the oven). It is the primary cause of kitchen fires.

Special kitchen safety devices and alternative cooking options can also decrease the risk of fires in the kitchen. Below are some great options.

Automatic Shut-off Devices
Electric and gas stove turn-off products come with a timer, a motion sensor, and an automatic stove shut-off. Here are 4 things to consider:

- Some units allow you to set how many minutes you want the food to be left cooking unattended and others come with a preset time (eight minutes) that cannot be changed.
- **Turning Stove Back On** – Once the stove has been automatically turned off, some units only require the person to return to the kitchen for the stove to come back on when they walk into the room, whereas others must be manually turned off and back on again.
- **Stove Plug** – Some units can only be used with modern, 4-prong stove plugs and outlets.
- **Sensor Placement** – Sensors are placed on the stove.
- Most units are between $300 and $400, but well worth the cost to keep a loved one safe.

Here are some assistive technology stove turn-off product websites: Cookstop.com, HomeSensors.com, Stoveguardintl.com, and Iguardfire.com.

Automatic Fire Extinguishers
These are devices installed under the range hood. They are small cans or nozzles that are heat-triggered and automatically dispense fire extinguishing powder (mostly baking soda) when sprayed onto a stove-top fire. They can be found on Amazon.com — one device is called Auto-Out

Microwaves as an Alternative to a Stove
Many seniors, although they may not have used a microwave before, find a microwave a good alternative to using the stove. Once they learn how to use one, they will often choose the microwave over the stove or oven. Family members can make frozen dinners that can be heated up and are very convenient. There are simple microwaves being manufactured right now that only have a few buttons to use. Labels can be taped on the buttons to help the senior use the microwave safely. Guidelines must be reviewed, including never using aluminum foil or metal containers in the microwave, never heating sealed objects, and being careful when taking container out as they may be very hot.

Other Kitchen Safety Guidelines
- Test smoke detectors on a regular basis
- Clean cluttered areas
- Use a reacher-grabber to reach items on high shelves
- Remove area rugs
- Label and date food with expiration dates so it is easy to see when food has expired
- Replace glass items with plastic