STRONG FLEXIBLE FAST

ICN Insider

Iowa Communications Network
July/August 2017 Newsletter

INSIDE THIS ISSUE:

ICN's Vision:

ICN CERTIFIED Broadband STRONG
STRONG FLEXIBLE FAST

BROADBAND MATTERS.COM

Register to Reserve Your Spot for InterConNEXT 2017

ICN is transitioning to its new Intelligent Communication Fabric to command software automation and move powerful features to the edge for customers to control.

Customers will have a mobile application to interface with the new Software Defined Network (SDN) living at the heart of Jekard.

- Fast and flexible cyber security services.
- Monitor bandwidth performance.
- Instantly increase or decrease broadband services.
- Add virtualized services by loading software to equipment on the edge.
- Powerful over-the-top services such as voice, video, analytics and other rich content sources.

All of this is powered by a new 200Gb intelligent automated core network with integrated Cyber Security features.

Come see the future unfold!

Date
Thursday, August 3; 9 AM - 12 PM

Location
FFA Enrichment Center
1055 SW Prairie Trail Parkway
Ankeny, Iowa 50023

Cost
Free! Space is limited.

RESERVE YOUR SPOT!

InterConNEXT
A BETTER CONNECTED IOWA 2017

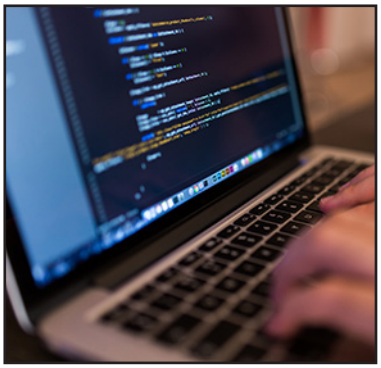
Iowa Communications Network | Grimes State Office Building
400 East 14th Street | Des Moines, IA 50319
Phone: 515-725-4692 | Toll Free: 877-426-4692

Visit us on the web at www.icn.iowa.gov

Staying Cyber Aware to Security Threats

As we look back on the first half of 2017, we want to remind our customers to protect themselves from cyber threats. Staying cyber aware will give you a head start. Below is a list of the top five security risks from ICN's Security Bureau.

1. **Out of Date Systems.** The WannaCry malware exploited a vulnerability that Microsoft had addressed two (2) months prior. Any Microsoft system older than Windows 7 no longer receives Microsoft updates. Attackers have a list of exploits that automatically run against out of date systems. It really is point and click to get into a vulnerable system these days.
2. **Logging into a Computer as an Administrator.** Even with the improvements made in Microsoft Windows it is still too easy to bypass User Account Control. As a safety measure you should only use an administrator account when absolutely necessary (installing new software or making changes to the system that require administrative privileges).
3. **Installing Unknown Software.** Treat installing software on your computer like giving the source of the software every piece of information that goes through your computer (your online banking, shopping, and email). If the wrong piece of software is installed you are giving access to all this information and more to the world at large.



4. **Oversharing on the Internet.** One of the first steps in determining how to attack computer systems is to conduct recon on your target. This is made much easier with the increase in utilization of social media like Facebook. Make sure that anything you post isn't compromising your password, password hints, or organizational information. Once an attacker gains this information they can draw inferences about what type of information may be in your password or use that same information against you when they are trying to social engineer or spear phish you.
5. **Lack of Technical Controls.** Not having anti-virus, system firewalls, and network firewalls in place, turned on, and configured to block things that you don't need is a big no-no. Anti-Virus is a reactive solution that doesn't really protect your system. It is more of a trip wire letting you know that something bad is already on your system. Even after your anti-virus "cleans" your machine it can only remove the things it knows about. Treat a virus notification as an indication that a fresh install is needed on the system. Firewalls are more of a pro-active approach. They block bad traffic before it gets on to your machine. You need both a system and a network firewall. The system firewall protects your computer from threats that make it on to your network. The network firewall protects your systems from the Internet and typically allows less traffic (you may have to open ports in your system's firewall to allow traffic to devices within your network that you wouldn't want accessible from the internet like a wireless printer or media server).

Stay safe out there!

Holz Appointed to Commission

Bob Holz was appointed to serve on the ITTC (Iowa Telecommunications and Technology Commission), the governing body of the ICN. Holz's membership became effective on May 22.

Holz is originally from Dubuque graduating from Loras College in 1964. He graduated from the University of Iowa's College of Law in 1967. He has been a member of the Davis Brown Law Firm since 1967 and currently serves as Of Counsel to the Firm. Holz has been recognized in The Best Lawyers in America publication since 1991 in the areas of Communications Law, Energy Law and Health Care Law. Holz was a member of the Iowa Bar Association Committee which initially drafted and later revised the Iowa Administration Procedures Act. He was also a member of the Governor's task force which developed the Uniform Administrative Rules for the State of Iowa. In his Regulated Industries practice, Holz has represented a wide variety of public utilities and health care providers. He has provided counsel on operational and regulatory issues and has represented clients before numerous state and federal agencies and in state and federal court. He served as general counsel for both the Iowa Communications Alliance and the Iowa Health Care Association.

Holz's appointment is subject to Senate confirmation. His term will expire in April 2019. The vacancy was due to the departure of Mary Sellers who resigned in April.

Library Staying Digitally Strong with Increased Broadband

The Davenport Public Library is staying digitally strong by offering online services and public Wi-Fi for its patrons. A change was recently needed when the library and its users were experiencing slow Internet response times daily between 3 PM - 5:30 PM. The library reached out to the ICN to subscribe to 150Mb of broadband, up from their previous 45Mb.

A Davenport Public Library staff member helping a library patron learn to download eMagazines to her computer.

Amy Groskopf, Library Director, explains that the slow response times are particularly frustrating to library patrons who are filling out online applications. "Sometimes the speed at which the application is filled out is part of the employers screening process. Or they may get a timeout response and have to start over again. It's also frustrating to library patrons who are streaming audio or video as the response is choppy," said Groskopf.

One of the popular services provided by the Library is a teen gaming program that currently has about 60-80 teens attend every week. With the added broadband increasing Internet capacity, the library plans to offer additional online games.

Many services in the Library rely on high capacity Internet. The Library's staff shows users how to download eAudiobooks to their device by actually walking them through the process. The Library also allows community organizations in their meeting rooms and they usually want to show a video clip for training or discussion. In addition the Library's conference room will be able to incorporate video conferencing capabilities.

The Internet needs at the Davenport Public Library are constantly growing, and now they will be able to keep up with demand using strong broadband.

ICN Opens Flexible Carrier-Grade Lab for Testing Operations

Located at the Capitol Complex in Des Moines, IA, ICN's new flexible carrier-grade testing Lab allows ICN to operate efficiently as a carrier and establish a standards base approach to evaluate future technology.

The focus of the testing facility will be on enhancements to network stability, integration of new services, and research and development of emerging technologies.

The ICN Carrier-Grade Lab Offers:

Automated Operations
Today's customers have an 'always-on' connectivity expectation. As a result, ICN is moving away from traditional network management tools and approaches. Technology integration provides the ability to maintain service integrity in virtualized network environments, and keep pace with the demands of digital business.

Faster Customer Controls
The telecom landscape is creating a shift towards increasing the need to move broadband faster. ICN's business model is changing from delivering basic conduits for connectivity to providing customer automation. The ICN Lab will leverage network modeling technologies to tackle key business challenges and support the delivery of virtualized services.

Simulation of Production Network
The Lab consists of a series of racks that duplicate an environment representative of the production network.

Data Center Environment
The space is a controlled area similar to a data center environment. The Lab is furnished with network equipment, racks, supporting servers, storage, and infrastructure space for cable plant and power distribution systems.

Technology Validation
Addressing production related testing as it pertains to new product introductions, protocol enhancements, service improvements/changes, and scalability in the network infrastructure.

Built to the Highest Standards
The ICN Lab is a premier telecommunications technology test facility, designed and built around the innovative Telecommunications Infrastructure Standard for Data Centers. It has the electrical power, network connectivity, HVAC considerations, and rack space/shelving needed. The ICN Lab also took environmental factors into consideration, such as physical space, power, climate control, and structured cabling.

Access and Testing
The ICN Lab will also provide customers with access to training demonstrations and equipment testing.

Employee Spotlight
Gerry Bruess

Gerry Bruess has worked with the ICN for 14 years as a Video Field Technical within ICN's Engineering and TAC (Technical Assistance Center) divisions. Gerry's duties consist of providing technical support throughout the State for the legacy video classrooms (MPEG), while also assisting with the transition from MPEG to IP Video service.

The best part of his job is being able to go to a customer site in need of repair and helping instructors and/or students resolve their technical issues. Gerry received an Associate of Applied Sciences degree in Electronics Engineering from The Hawkeye Institute of Technology (now Hawkeye CC in Waterloo, IA). He worked at Iowa Public Television from October 2000 until transferring to the ICN in 2003.

In Gerry's leisure time he enjoys golfing, watching soccer matches, fixing electronic devices, building his own golf clubs, and making fishing tackles/lures.

A memorable life experience that Gerry describes is becoming parents to twin boys in 1993. One graduated from the University of Northern Iowa in the spring, and the other will graduate from Iowa State University this coming fall.

If Gerry could meet one person it would be his dad. Gerry says, "He left us too soon and I never got to say goodbye and thank you for all he did for our family". If he could have a super power he would like the ability to control the direction of a golf ball AFTER he hit it; or the ability to turn off the mobile devices of people who are driving. "Personally, the first one would be cool, but the second one would be a tremendous benefit to mankind."

Broadband News from Around the Web

Investing in Iowa's infrastructure

The urgent state of our nation's infrastructure cannot be overstated. In our 21st Century society, high speed internet access is no longer a luxury amenity, but rather an essential service for homes and businesses in this interconnected world. Unfortunately, many rural communities lack sufficient broadband infrastructure to take advantage of this explosion of technology and economic possibility.

Love gaming? This Iowa university has created the perfect major for you

Cyndi Wiley predicted a few raised eyebrows when she pitched a new major at Grand View University that focused on computer gaming. "I expected a lot more pushback," said Wiley, an assistant professor of art and design. "And everybody was like, 'Nope, do it. This sounds awesome.'"

Iowa smartphone driver's licenses expected to launch in 2018

Can't find your ID? Check your phone. Iowans should be able to start downloading their driver's licenses onto smartphones in about 12 to 18 months, according to the Iowa Department of Transportation.

Girls Who Code wraps up semester in Iowa City

The University of Iowa Girls Who Code club wrapped up its semester of work. Eight middle school girls worked to create a website, doing all coding on their own.

A Small Telephone Cooperative in Rural Iowa Receives a Boost to Expand Broadband

A rural telephone cooperative in western Iowa is receiving a loan from the U.S. Department of Agriculture to help upgrade its broadband capabilities. The money will enable it to replace copper wires with fiber.

Virtual health integrated at Iowa Veterans Home

Residents at the Iowa Veterans Home in Marshalltown can now begin to see their care providers without leaving the facility. The decision began late last year when the Office of Rural Health put out a grant request for IVH, being granted funds for staffing and equipment.

USDA Helps Expand Rural Broadband Infrastructure

In Iowa, the Coon Valley Cooperative Telephone Association will use a $6.5 million loan to construct 216 miles of fiber to improve access to advanced telecommunications services.

BROADBANDMATTERS

BROADBAND STRONG: Delivering **FLEXIBLE** broadband and **FAST** experiences to meet the growing broadband needs of education, government, public safety, and healthcare in Iowa.

Connect with ICN: icn.iowa.gov | twitter.com/IowaCommNetwork | facebook.com/IowaCommunicationsNetwork

Connect with Broadband Matters: broadbandmatters.com | twitter.com/BroadbandIowa | facebook.com/BroadbandMattersIowa