



Advanced Engineering Task Force Meeting Agenda

December 8, 2017
10:00 a.m.



1 Community Commons Building (CCB)

Academic Advising	Financial Aid
Admissions	Human Resources
Career Services	Next Step
Cashier	Student Records
Executive Offices	

2 Student Commons Building (SCB)

Adult Education	Library
Assessment Center	Disability Support
Bookstore	HALO
Café	Tutoring Services
Career Link	Security

3 Instructional Commons Building (ICB)

Academic Offices:
 Health & Human Services
 Liberal Arts & Social Sciences
 Math, Science & Engineering
McCaughey Gallery
The Writing Center

4 Instructional Commons North (ICN)

5 Physical Plant Building (PPB)

6 Receiving and Storage Building (RSB)

7 Workforce Development Center (WDC)

Academic Offices: Business & Technology Community Education Customized Training	Green Institute Pregracke Center Math Success Center Traffic Safety School
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8 Child Development Lab (CDL)

9 Fitness and Recreation Center (FRC)

10 Astroth Community Education Center (ACEC)

Auditorium	Challenger Learning Center
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11 Normal Readiness Center (IL National Guard)

12 Corn Crib Stadium



Advanced Engineering Task Force Meeting Agenda

Advanced Engineering Task Force (AET) Quarterly Meeting

Date, Time, Location: December 8, 2017 - 10:00 a.m.
Heartland Community College, CCB #2012

Join WebEx Meeting [Join WebEx meeting](#)
Meeting password: icn2017

Join by phone: **+1-415-655-0002** - Access Code: 805 484 284
US Toll [Global call-in numbers](#)

AET Members

Jim Flanagan, Chair	Tom Donovan	Rich Kulig	Michael Shelton
Andrew Bullen, Co-Chair	Robert Dulski	Herb Kuryliw	Raj Siddaraju
David Antonacci	Jim Edwards	Joe Mambretti	Shannon Smith
Troy Brown	Mindy Fiscus	RJ McGarry	Tracy Smith
Mike Dickson	Amin Kassem	Matthew Pennell	Glenn Trommels

AET Staff & Guests

Lori Sorenson	John Leonard	Robin Woodsome	Frank Walters
Andre Bouravnev	Essam El-Beik	Judy Zhu	Valerie Bolinger

"X" for Attendee "W" for WebEx "V" for Video Conference

Topic	
<p>1. Introductions/Roll Call</p> <p>2. Review Agenda, Approval of Minutes [Action Items]</p> <ul style="list-style-type: none"> • May 19, 2017 Minutes – Jim Flanagan • AET Membership Report – Jim Flanagan • 2018 AET Meeting Schedule – Jim Flanagan <p>3. ICN Updates [Informational]</p> <ul style="list-style-type: none"> • Initiatives <ul style="list-style-type: none"> ○ K-12 Broadband Update – Essam El-Beik ○ Smart State Initiative – Essam El-Beik ○ Software Defined Network (SDN) – Frank Walters • E-rate – Robin Woodsome • ICN Marketing – Val Bolinger • Network Report – Frank Walters <p>4. Focus Sessions [Informational]</p> <ul style="list-style-type: none"> • Customer / Client Needs • Possible Service Offerings • ICN Future Technologies • AET Business 	<p>5. Round Table/Member Discussion</p> <ul style="list-style-type: none"> • K-12 • Higher Education • Museums, Libraries • Municipalities <p>6. AET Business Discussion</p> <ul style="list-style-type: none"> • Future Meeting Planning • Site Visits – UIUC • Vendor Presentations • WebEx Opportunities • ICN Staff presentations as requested <p>Annual Recommendations/Report Business</p> <ul style="list-style-type: none"> • Service Related • Technology Related • Statewide Master Agreements

The next AET meeting is January 19, 2017 (pending board approval)

**ILLINOIS CENTURY NETWORK
MAY 19, 2017 ADVANCED ENGINEERING TASK FORCE (AET) MINUTES**

Submitted for: Action

Summary: Distribution of the May 19, 2017 minutes for review by the AET

Action Requested: Adoption of the March 19, 2017 minutes

Recommended Motion: *The AET adopts the May 19, 2017 minutes with any edits as noted*

**ILLINOIS CENTURY NETWORK
MAY 19, 2017 ADVANCED ENGINEERING TASK FORCE (AET) MINUTES**

Introductions/Roll Call

At 10:05 a.m. the Advanced Engineering Task Force meeting was convened by Jim Flanagan, Chairman of the AET who welcomed everyone. Jim Flanagan proceeded with the roll call.

Members via Audio Bridge/WebEx

Jim Flanagan, Chairman IlliniCloud	Michael Shelton, Southern Illinois University
Mike Dickson, Western Illinois University	Raj Siddaraju, Spoon River College
Tom Donovan, Aptakisik-Trip SC #102	Shannon Smith, Technology Director
Robert Dulski, Brookfield Zoo	Tracy Smith, University of Illinois
Brandon Gant, CARLI	Glenn Trommels, City of Rockford
Rich Kulig, College of DuPage	Mindy Fiscus, Learning Technology Center #6
Joe Mambretti, Northwestern University	
RJ McGarry, Kishwaukee Community College	

Members Absent:

Andrew Bullen, Co-Chair, Illinois State Library	Matthew Pennell, ROE #20
Troy Brown, Illinois Heartland Library System	
Herb Kuryliw, Northern Illinois University	

Staff & Guests:

Valerie Bolinger, DoIT/ICN	Frank Walters, DoIT/ICN
Lori Sorenson, DoIT/ICN	Michelle Medley, DoIT/ICN
Adam Ford, DoIT/ICN	John Leonard, DoIT/ICN
Kory Chapman, DoIT/ICN	Judy Zhu, DoIT /ICN
Jack Billings, Dell EMC	Paul Mustered, Dell EMC

Meeting Minutes

Jim Flanagan, AET Chairman

Jim Flanagan introduced the first item on the agenda, approval of March 17, 2017, meeting minutes. A motion was made by Mike Dickson to accept the minutes. The motion was seconded by Raj Siddaraju. The motion carried.

Old Business

Software Defined Network (SDN)

Frank Walters, Department of Innovation & Technology/Illinois Century Network

Frank Walters reported that all vendors that responded to the Request for Information (RFI) have been contacted. Servers have been installed and we have proceeded with the setup of several use cases. The centralized configuration has been completed and bids have provided for the provisioning tasks. Completion date for the engagement is May 31, 2017. SDN team members have volunteered to assist and work with the vendors on this project. ICN staff are reviewing the proposals, scheduling equipment installs and documenting technologies for future reports purposes. Joe Mambretti commented on the importance of the SDN project and provided insight on a similar project in Europe.

New Business

Smart State Initiative

Lori Sorenson, Department of Innovation & Technology/Illinois Century Network

Lori Sorenson provided report and commented that we kicked off the Smart Illinois initiative under the direction of Hardik Bhatt last year. Two working groups were established which consisted of private and

public sector entities. Several brainstorming sessions were conducted. At the 2016 Fall meeting, work teams were established and plans developed. Discussion centered around the collaborative efforts with public and private sectors on how they can share information and knowledge on a limited budget. One of the initial ideas that came out of the group was Smart Street Lighting and a proposal was released for vendors. Experts from the University of Illinois (UI) and the Department of Transportation (DOT) are building infrastructure for the lighting plan. Smart Street Light infrastructure provides adaptive controls that enable real time control of levels, supports data communications and is a foundation for Smart City Applications. Other value-added services include; cameras, smart parking, wireless network, small cell antennas and audio speakers. There will be primary and secondary vendors selected. Evaluation is ongoing. We will continue to explore opportunities to share knowledge and information statewide.

TECH 2017 Report

Val Bolinger, Department of Innovation & Technology/Illinois Century Network

Val Bolinger provided report and referred members to pages 9-15 of the meeting packet. Hundreds of students and teachers traveled to Springfield on May 9, 2017 for TECH2017. Governor Rauner kicked-off this year's conference with a group selfie and acknowledged the importance of technology in the classroom. 94 schools participate in this year's event and 34 of the schools were ICN customers. ICN staff visited and spoke with schools including all of our ICN customers. The purpose of TECH2017 is to raise awareness of the critical role technology plays in preparing students to succeed in today's world, and to show the need for increasing funding for classroom technology. Students demonstrated the creative ways technology is being used to enhance and accelerate student achievement. DoIT/ICN was proud to be a supporter and sponsor of the event and enjoyed visiting with schools and spending time with some amazing and talented students.

DDoS Simulation Showcase Presentation

Andre Bouravnev, Department of Innovation & Technology/Illinois Century Network

Andre Bouravnev reported and provided a live demonstration to share information and statistics about ICN Distributed Denial of Service(DDoS) protection. DDoS attacks are a threat to every organization that depends on the Internet to conduct business. DDoS attacks result in a loss of profits, damaged reputation, reduces productivity, and downtimes can become costly. These attacks may also be used as a smoke screen to disguise a hybrid attack to perpetrate data theft. ICN proactively monitors all customers 24/7 and can quickly identify real and potential DDoS attacks which may impact service. On average, ICN identifies and mitigates over 40 DDoS attacks per month targeting K-12, higher education, libraries, and government sites. Attacks have ranged between 1 to 20 Gbps per attacks, and can last between 25 minutes to over 2 hours. Most common attacks perpetrated on ICN customers are IP Fragmentation, Chargen, SSDP, NTP amplification, and TCP SYN. The ICN provides both on and off-net mitigation services to all ICN customers, and delivers the best in class DDoS protection for ICN customers by using internal and cloud based DDoS mitigation solutions.

Network Update

Frank Walter, Adam Ford, Department of Innovation & Technology/Illinois Century Network

Frank Walters and Adam Ford provided reported and referred member to page 19 of the meeting packet. End of year bandwidth use dropped and is directly related to end of the school year. We are waiting for GOMB approval for fiber maintenance. A new backbone QoS template has been created and allows for a simpler application to bring on education and agency customers. IDOT/CTA Eisenhower construction has been completed. New services for the ICN are still pending.

Advanced Engineering Task Force Membership

Jim Flanagan, AET Chairman

The AET is seeking approval on the appointment of David Antonacci, Associate Director for Information Management, Illinois Board of Higher Education, and Jim Edwards, Director of IT, City of Decatur, IL. Jim asked for a motion for approval of the membership revisions. A motion was made by Shannon Smith. The motion was seconded by Mindy Fiscus. The motion carried.

Round Table

AET Members

Valerie Bolinger commented that we have a few WebEx meetings through the 2017 calendar year, however, it's necessary to have physical meeting one or two times annually to make the communication more effective. Lori Sorenson proposed instead of going to a destination just for meetings, we should consider choosing a company or an organization to explore, learn their management methodologies and wrap our meeting around it. From a traveling cost perspective, a one-day business event is better than traveling three hours just for a two-hour meeting. However, it may increase meeting cost. Joe Mambretti proposed his place to have meetings for possible site in the future. Tom Donovan commented that time is a big concern for him due to school schedules. Jim Flanagan proposed that he would work on a time slot for membership.

Adjournment

Jim Flanagan moved to adjourn the meeting. Motion by Mike Dickson and seconded by Brandon Gant. Motion passed. Meeting adjourned at 11:46a.m. The next meeting is scheduled September 22, 2017.

**ILLINOIS CENTURY NETWORK
2018 ADVANCED ENGINEERING TASK FORCE MEMBERSHIP**

Submitted for: Action

Summary: This item seeks approval for a new member for the Advanced Engineering Task Force.

Action Requested: That the AET approves the new member for the board.

Recommended Motion: *The AET appoints Glen R. Liljeberg as a new member with a term to expire in June 2020.*

**ILLINOIS CENTURY NETWORK
2018 ADVANCED ENGINEERING TASK FORCE MEMBERSHIP**

The Advanced Engineering Task Force (AET) serves a critical role in shaping the services, rates and policies for the Illinois Century Network. Membership consists of technical staff representing the diverse community anchor institution categories connected to the network. AET members are appointed by the Policy Committee and serve staggered three-year terms which begin July 1st.

The AET is seeking approval on the appointment of the following member:
Glen R. Liljeberg, Director of Information Technology, Westmont Village

The staff recommend adoption of the following resolution:

That the AET appoint Glen R. Liljeberg as a new member with a term to expire in June 2020.

**ILLINOIS CENTURY NETWORK
2018 ADVANCED ENGINEERING TASK FORCE MEETING SCHEDULE**

Submitted for: Action

Summary: Determination of the ICN Policy Committee meeting schedule for calendar year 2018.

Action Requested: That the AET Board adopts the calendar year 2018 meeting schedule as presented.

Recommended Motion: *The AET Board adopts the 2018 meeting schedule.*

**ILLINOIS CENTURY NETWORK
2018 ADVANCED ENGINEERING TASK FORCE MEETING SCHEDULE**

The 2018 meeting schedule is based on four meetings per year, occurring the third Friday of the months of January, March, May and September. Based on this formula, the schedule for 2018 is as follows:

Date	Location	Room Number	City
January 19, 2018	DoIT – 120 W. Jefferson	1 West Video Conference Room	Springfield
	James R. Thompson Center	3105 Video Conference Room	Chicago
March 16, 2018	DoIT – 120 W. Jefferson	1 West Video Conference Room	Springfield
	James R. Thompson Center	3105 Video Conference Room	Chicago
May 18, 2018	TBD		
September 21, 2018	TBD		

A WebEx will be available for those members who are unable to attend in person.

**ILLINOIS CENTURY NETWORK
K-12 BROADBAND INITIATIVE**

Submitted for: Informational

Summary: This item provides an update on the K-12 Broadband Initiative program.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK K12 BROADBAND INITIATIVE

Education Superhighway have released their annual [State of the States Report](#) documenting progress in ensuring all schools have access to scalable and affordable broadband. Highlights for Illinois include (i) 89% of school districts representing 1,255,345 students meet the minimum connectivity goal of 100 kbps per student, (ii) 94% of schools have the fiber connections they need to keep up with the growing bandwidth demand and (iii) \$80.8M of E-rate funding is left to support Wi-Fi network upgrades.

Goals for the K12 Broadband Initiative for 2017-2018 include (i) ensure at least 95% of districts are fully connected via fiber and at least 95% of districts have 100kbps per student (ii) ensure districts have robust Wi-Fi and internal networks and (iii) make high cost upgrades more affordable.

Action items to address these goals include:

October 2017

- Updating collateral, general communication and ISBE website
- Outreach to ~60 fiber target districts through various channels; support 470/RFP posting
- Engage legislators and stakeholders about state matching fund
- Contact top E-rate consultants
- Webinars:
 - 10/11: 470 tips and tricks
 - 10/18: 150 reasons to upgrade your internal networks
 - 10/24: Live Compare & Connect K12 tool demo
 - 10/25: Category 2 Procurement Masterclass

November 2017

- Continue outreach to ~60 fiber target districts through various channels; start outreach to Cat 2 and bandwidth target districts; support 470/RFP posting
- Regional E-rate workshops begin
- Engage legislators and stakeholders about state matching fund
- Webinars:
 - 11/1: Category 2 Bid Evaluation
 - 11/9: Getting More Bandwidth for Your Budget

December 2017

- Continue outreach to ~60 fiber target districts through various channels; start outreach to Cat 2 and bandwidth target districts; support 470/RFP posting
- Regional E-rate workshops
- Engage legislators and stakeholders about state matching fund

January 2018

- Regional E-rate workshops
- Face to face visits with fiber target districts

**ILLINOIS CENTURY NETWORK
SMART STATE INITIATIVE**

Submitted for: Informational

Summary: This item provides an update on the Smart State Initiative.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK SMART STATE INITIATIVE

An RFP was issued in 1Q 2017 for Smart Street Lighting, to facilitate Illinois municipality upgrades of street lights to LED lights, including financing options and value add services. Street light upgrades result in significant energy savings typically greater than 50% and provides the foundation for Smart City applications and services. Vendor award was announced on Tuesday 5th December. Awards are:

- Primary – Johnson Controls Inc.
- Secondary – Globetrotters Engineering
- Tertiary – TEN Connected Solutions

Next steps include:

- Contract execution
- Smart street lighting workshop
- Web presence
- Task force meeting
- Form Municipality Group 1 – first municipality group that will utilize the state master contract
 - Over 40 municipalities have indicated interest in this Smart Street Lighting project

**ILLINOIS CENTURY NETWORK
SOFTWARE DEFINED NETWORK (SDN)**

Submitted for: Informational

Summary: This item provides an update on the SDN Initiative program.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK SOFTWARE DEFINED NETWORK (SDN)

SDN RFI Review: Status 11/22/2017

Lab Review of Equipment and Controller Systems: In Progress

- Three vendors provided equipment, with multiple vendors providing more than one solution.
- Staff tested all three vendors' solutions and learned a great deal, though most systems were heavily datacenter based.
- The last system evaluated is strongly based in the service provider environment and is by far the most interesting and applicable to our needs and requirements.

Notes:

There is only one more vendor who has yet to determine their ability to provide equipment. Once this vendor has responded and the review is completed, the executive summary will be finalized and published. This summary is already in a mature draft stage and awaiting this final decision and possible lab review.

Based on the review and current understanding of the benefits available to the ICN and its customers, staff would like to move forward with the collaborative proof of concept discussed last year.

**ILLINOIS CENTURY NETWORK
E-RATE UPDATE**

Submitted for: Informational

Summary: This item provides an update on E-Rate.

Action Requested: None

Recommended Motion: *None*

**ILLINOIS CENTURY NETWORK
E-RATE UPDATE**

There are 319 unique Form 470 bids posted for Internet Access or Telecommunication services for the service year starting July 1, 2018. ICN staff are responding to all bids requesting Internet service either through the option of Internet Access: ISP Service Only, or Leased Lit Fiber. The option Internet Access: ISP Service Only, our traditional service, requires the customer to secure a transport circuit from a last mile provider. For bid requests listing the option Leased Lit Fiber, ICN will respond with our bundled service of ISP Service and transport circuit.

USAC has clarified their service options (functions) this year. This link provides detailed information:
http://www.usac.org/_res/documents/sl/pdf/e-rate-productivity-center/Filing-FCC-Form-470.pdf.

ILLINOIS CENTURY NETWORK

ICN MARKETING UPDATE

Submitted for: Informational

Summary: This item provides an update on ICN Events and Marketing.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK ICN MARKETING UPDATE



IML Conference: 09/21 - 9/22

With attendance of nearly 3,000, this year's Illinois Municipal League (IML) Conference was one of the largest. As an exhibitor, the ICN presented information on various services and provided information on Smart Street Lighting. Mike Ditka Hall of Fame football legend and sports commentator who delivered the keynote speech for this year's conference. The agenda included numerous technology topics, workshops and breakout sessions. Many municipalities are seriously considering Smart Street Lighting and are in the process of budgeting for the next fiscal year.

Illinois Digital Summit: 11/2 - 11/3

DoIT-ICN had a significant presence again this year during the Government Technology's Annual Digital Summit. Kirk Lonbom, Acting Secretary and Mike Wons, Chief Technology Officer, helped kicked off the 18th annual event, reviewed progress to date and introduced some central themes that resonated in breakout sessions and panel discussions. Thank you to everyone in attendance who shared their expertise and contributed to many productive discussions.



GMIS/GIANTS Conference: 11/15 - 11/8

DoIT-ICN was well represented at the Government Management Information Science (GMIS) GIANTS conference. Public technology from around the state served as an excellent audience for digital discussion and collaboration. DoIT Acting Secretary Kirk Lonbom and IL CTO Mike Wons shared information on "Enabling the Digital Economy in IL" and Lori Sorenson, Network Operations Manager, discussed services available for local government entities through state master contracts.

ILLINOIS CENTURY NETWORK
ICN MARKETING UPDATE



DoIT-ICN Webinar

Fighting Ransomware - Defense Against the Dark Arts: 12/12/2017

DoIT/ICN will be hosting a series of free webinars “Hacker Hour” focusing on cybersecurity topics. Our first webinar will discuss the key steps to prepare and defend against Ransomware. It’s much easier to launch sophisticated Ransomware attacks and the number of data breaches suffered by organizations increase daily. Find out what you need to know about Ransomware and what it takes to detect, mitigate and prevent rapidly growing threats. Go to Illinois.net to reserve your spot



About our Host: Jeff Thompson, Security Analyst and Certified Ethical Hacker with the Department of Information and Technology (DoIT)/Information Security, will share his expertise and ideas on the best ways to protect your environment and data. Jeff has over a decade of experience in threat hunting, incident response, vulnerability assessments and computer forensics. As a member of the DoIT Information Security Team, Jeff is responsible for preventing, monitoring and reacting to security incidents in State of Illinois agencies.

ILLINOIS CENTURY NETWORK ICN MARKETING UPDATE

Starting last February, the ICN started producing a monthly e-communication to maintain regular contact with customers “ICN Connection”. The ICN Connection provides an opportunity to increase awareness of the ICN and our services with customers. The communication provides information on current initiatives, product and service updates, event news and spotlights a service of the month.

ICN Connection

Volume 1 Number 9
October Issue

FAST
RELIABLE
SECURE

This Month:

- Conferences You Won't Want to Miss this November
- Learning Technology Centers of Illinois
- Secure Connection to Microsoft Office 365 & Azure

Conferences You Won't Want to Miss this November
You won't want to miss a line-up of dynamic presenters and exhibits at the [Illinois Digital Summit](#) (Springfield), Nov 2-3 and the [GMSIS Illinois Annual Networking Training Symposium](#) (Bloomington), Nov 5-8. These conferences bring together IT leaders, industry experts and the tech community under one roof. Presentations, discussion panels and break-out sessions will be centered around the hottest areas in technology. **Stop by and visit with DoIT/ICN staff**, we have exciting information to share with you on Smart State initiatives.

Learning Technology Centers of Illinois
The Learning Technology Center (LTC) is an [Illinois State Board of Education](#) program that provides educational technology leadership, expertise, and support to K-12 districts in Illinois. LTCs work closely with several organizations across the state and offer a variety of professional learning opportunities for teachers, administrators, and technology staff. In addition, they provide support along with consultation on E-rate. Visit the [LTC website](#) for links to calendars, technology projects and support information.

Secure Connection to Microsoft Office 365 & Azure
If your organization is considering or currently using Microsoft Office 365 and/or Microsoft Azure, be aware your traffic will likely be going over the public Internet to reach Microsoft. This presents a security risk, may result in performance issues and some services may not be available on the Internet. As an ICN customer, you can take advantage of a secure ICN connection, that provides a secure, reliable and diverse connection direct to Microsoft Cloud. ICN Secure Connection does not enter the public Internet and directly connects to Microsoft Express Route. Contact Robin.Woodsome@illinois.gov for info.

Service of the Month: 24/7 Network Monitoring
Dedicated customer support available 24/7! The ICN Communications Management Center (CMC) is our 24/7 service desk ready to assist you with any level of need. The CMC monitors your connection and will work directly with your last mile provider if you have an issue. Simply stated, our highest priority is to keep your network up and running.

For more information about the ICN and our services, go to www.illinois.net

The ICN is managed by the Department of Innovation & Technology (DoIT) and provides high-speed fiber optic broadband and IT services for K-12, higher education, public, private, municipal, state and local governments, and healthcare organizations. www.doit.illinois.gov

ICN Connection

Volume 1 Number 10
November Issue

FAST
RELIABLE
SECURE

This Month:

- Verizon & Project Lead the Way (PLTW) Grant Opportunity
- What's the State of Illinois got to do with IT?
- National Security Agency (NSA) Day of Cyber

Verizon & Project Lead the Way (PLTW) Grant Opportunity
A two-year, \$20,000 grant opportunity, made possible by Verizon, will support the implementation of two PLTW Gateway units – [App Creators](#) and [Computer Science for Innovators & Makers](#) – at eligible middle schools for the 2018-2019 school year. These grants will assist in offsetting costs associated with implementing units. Any middle school in the US with a 70 percent or higher free and reduced lunch-eligible student population is encouraged to apply. The application window is open now through December 15, 2017. [Click here for info.](#)

What's the State of Illinois got to do with IT?
The State of Illinois - Illinois Century Network (ICN) was well represented at the [Government Management Information Science \(GMIS\) GIANTS](#) conference. Public technology professionals from around the state served as an excellent audience for digital discussion and collaboration. DoIT Acting Secretary Kirk Lombom and IL CIO Mike Wors shared information on "Enabling the Digital Economy in IL" and Lori Sorenson, Network Operations Manager, discussed services available for local government entities through state master purchasing contracts.

National Security Agency (NSA) Day of Cyber
The NSA day of Cyber is a self-guided interactive online cybersecurity awareness experience called LifeJourney. Its purpose is to enhance awareness about cyber-related career fields, and inspire the next generation of cyber professionals. It also provides students with the opportunity to create a "cyber resume" that compares their interests and education to that of NSA cyber professionals and identifies educational areas that students can pursue to further their goals in becoming a cyber-related details. Visit the [NSA Day of Cyber website](#) for additional details.

ICN Benefits at a Glance:

- **High Availability:** The ICN will keep you connected! Our redundant, backbone network will not die.
- **Synchronous Bandwidth:** You get exactly what you subscribe to with the same upload and download speed.
- **Speed & Reliability:** Fast, reliable and scalable service with low latency and ability to control Quality of Service (QoS).

For more information about the ICN and our services, go to www.illinois.net

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ICN Connection

Volume 1 Number 11
December Issue

FAST
RELIABLE
SECURE

This Month:

- Hacker Hour: Defense Against the Dark Acts
- Internet2's Free Distance Learning Program
- Interactive Illinois Report Card Website "Now Live"

Hacker Hour: Defense Against the Dark Acts
Join the Department of Innovation & Technology (DoIT) and the Illinois Century Network (ICN) on **December 12th**, for "Hacker Hour", a first in a series of webinars focusing on cybersecurity topics. Our first webinar will provide the key steps to prepare and defend against Ransomware. This webinar is a value add service exclusively for ICN customers and features best practices to prevent cyber threats. [Register Now](#) and reserve your spot!

Internet2's Free Distance Learning Program
Internet2's free distance learning program kicks off in January! The Presidential Primary Source Project is presented in collaboration with the National Park Service and Presidential Libraries and Museums. This program connects K12 students across the country with park rangers and educators for live distance learning programs. Internet2 is a free value add service for ICN customers. More information on these programs can be found by [clicking here](#).

Interactive Illinois Report Card Website Now Live
The 2017 Interactive Illinois Report Card website launched in November. [IllinoisReportCard.com](#) is the state's official source for information about public schools across Illinois. The site contains information on education matters. Families, researchers, policy makers, and community members can use the site to find school data, including academic performance and school highlights. Find your school by [clicking here](#).

Happy Holidays from Team ICN!
On behalf of all the team at the ICN, we wish you and your families a Merry Christmas and a very prosperous New Year. Our offices will be closed on Monday, December 25th. For technical support, please contact the Communications Management Center (CMC) at 1-800-366-8768 Option 2. Dedicated support is available 24/7!

For more information about the ICN and our services, go to www.illinois.net

The ICN is managed by the Department of Innovation & Technology (DoIT) and provides high-speed fiber optic broadband and IT services for K-12, higher education, public, private, municipal, state and local governments, and healthcare organizations. www.doit.illinois.gov

**ILLINOIS CENTURY NETWORK
NETWORK UPDATE**

Submitted for: Informational

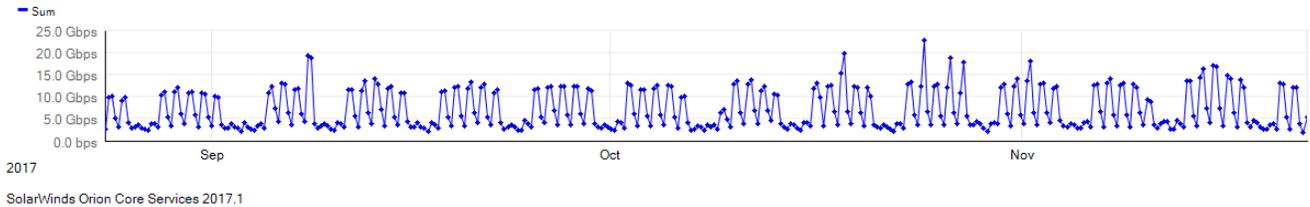
Summary: This item provides an update on ICN Events and Marketing.

Action Requested: None

Recommended Motion: *None*

ILLINOIS CENTURY NETWORK NETWORK UPDATE

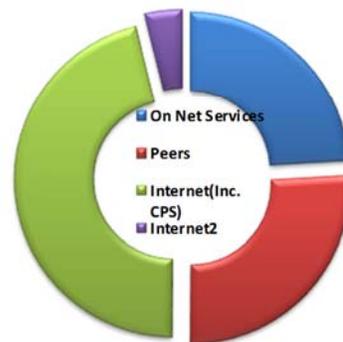
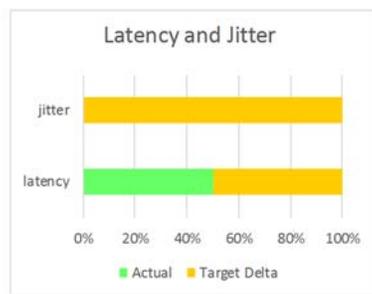
ICN Egress Bandwidth
Egress - I2 + Equinix Peers



Availability Statistics - October 2017

The ICN transmitted an estimated 34.5 Petabytes for customers in October, 2017
 Network Availability for October was 100% with availability for the last year being 99.958%.
 October Network Latency was 10 ms. The ICN Target Latency is 20 ms.
 Network Jitter for that same period was 0 ms while the target Jitter is 5 ms.*

Traffic Levels (Gb)	37.23 Gb
Peak Traffic (Gb)	43.09 Gb
Transmitted Bandwidth	34.50 Pb



**Jitter is reported in ms and when reported as zero generally indicates an average jitter greater than 0 but less than 1ms.*

Egress

- Bandwidth needs increasing as customers begin purchasing large quantities

Fiber

- Decatur project winding down

Backbone and related projects

- New Solarwinds Initiative enterprise wide single platform
- New Logging System
- IPv6 project: supporting IPv4 only and IPv6 only customers.
- IDOT/CTA Eisenhower Construction complete, move to new path for backbone

Other

- MoreNet/Great Plains Network discussion regarding access to Kansas City and Starlight GigaPOPs

Services

New Services Still Pending

- Cloud Service up (Office 365 – Azure access for customers/agencies)
 - NetMon, AWS and IBM cloud on the horizon

**ILLINOIS CENTURY NETWORK
FOCUS SESSIONS DISCUSSION**

- Customer / Client Needs
- Possible Service Offerings
- ICN Future Technologies
- AET Business

**ILLINOIS CENTURY NETWORK
ROUND TABLE/MEMBER DISCUSSION**

- K-12
- Higher Education
- Museums, Libraries
- Municipalities

**ILLINOIS CENTURY NETWORK
AET BUSINESS DISCUSSION**

- Future Meeting Planning
- Site Visits – UIUC
- Vendor Presentations
- WebEx Opportunities
- ICN Staff presentations as requested

**ILLINOIS CENTURY NETWORK
ANNUAL RECOMMENDATIONS/REPORT BUSINESS**

- Service Related
- Technology Related
- Statewide Master Agreements