# US UCAN workshop notes

April 26, 2012

# Opening session

Mark Johnson opened the workshop with an overview of the workshop agenda and the importance of focusing on the needs of the Community Anchor Institutions. They are neither the high-end research institutions that are typical members of Internet2 nor are they typical users of the commodity Internet. Today’s workshop is designed to learn more about CAIs in 5 domains and focus on how we can meet their needs.

Greg Palmer, moderator for the workshop, gave several examples of ‘AHA’ moments he has experienced with different users of high quality networks including 4th graders from different countries interacting, and his 90+ mother interacting with her health information.

# Speakers

Public Safety, Health, Public Media, Libraries, and K-12 Education were represented by experts (attached) who have a substantial grasp of the national trends in each area and discussed these in detail with the workshop attendees. Each speaker presented a substantive picture of the trends in their domain and participated in an extended discussion session following the presentations.

# REPORT OUT

Over lunch, the workshop split into groups to discuss and identify three or four opportunities for U.S. UCAN. They then presented their thoughts to the larger group. There was then a large group discussion about how to tackle the identified items.

## Merit, UEN, IRON

### Small Group Report

It is important to allow access to the R&E network by the regional CIA’s with I2 U.S. US UCAN can provide added value.

* US UCAN will be successful if/when the affiliates provide middle and last mile and services to the CAIs (CAN+ Services)
* What is the role of I2 in U.C. UCAN? An Advisory group should be created to provide guidance

### Discussion

There needs to be a set of services comparable to what is Net+ for USUCAN (CAN +)?

* What are the services that make USUCAN interesting to the community
* Need a way to define the interests of this project.
* Need governance
* Need to appoint permanent Executive Director

Define Services that can be used in a wider geographic region

* Merit, along with CENIC, announced that they are offering Net+ services; production services to make available over I2 network now.
* Are there other services we can look at delivering to each other’s networks?
* It is a competitive environment, but there ample opportunity to provide and share services
* The Quilt is working on a services catalog. They queried a number of regionals it might be worthwhile to talk to them talk to them

Last mile connectivity

* Partnering with commercial vendors
* Geographic Communities
  + Identify possibilities for rings, community networks and shared service models for geographic communities – cost sharing
  + Establishment of fiber or sharing existing
  + Identify where they are and who they are and get involvement

Discussion of connectivity

* In PA, the extensive network is connected on MPLS
* This can be done through Cooperatives or consortia
* Municipalities can get engaged, e.g., get the city to share with performing arts communities
* High altitude platforms are a possibility drones, dirigibles,
* 30% of members in Missouri only have TDM based connectivity available. They are exploring using microwave backbone. Extend 100megabits to each member in footprint. This becomes an alternative as an interim strategy while waiting for fiber.
* The Internet becoming major information tool

## Indiana, Missouri, WI --Sagamore of the Wabash

### Small Group report

* Engage public media to tell UCAN stories
* Promote bandwidth targets by CAI sector and ‘use-cases’ for 2013 and beyond
* Engage healthcare by value proposition that leverages I2 Net + services

### Discussion

* Strategic initiative to engage public media to tell USUCAN stories
* Show how the network can help in areas where folks are having trouble such as schools?
* Hold Town Hall meetings in certain sections; Break the state up into regions and then having a story to tell
* Take a more human interest angle
  + In Ohio at a remote hospital, they often transport kids to Columbus. Through HDTV and monitors that allow specialists in Columbus to determine if transport necessary, they cut transport by about 50%. Not only did this save money, but it also saved trouble and pain for the children and their families. Find stories that are real and have significant impact.
* Public awareness through public media
  + Use their resources, e.g., for an hour of studio time, which might be worth 20-25K. This may be a grant opportunity or an opportunity for bartering.
* Distribution network
  + We have the ability to use IP TV and one way broadcast to get the word out about issues we are facing and steps to overcome the issues
* HIE pilot
  + Stage with notables in HIE
  + E.g. hour long talk show was broadcast from MAGPI – streamed and archived.
  + Public media can do this – educate public and also universities

Promote bandwidth guidelines (not minimums) by sector and have use cases

* Identify applications that CAIs need to run to get to establish guidelines rather than getting to it arbitrarily
* Provide information about what you can do with different amounts of bandwidth
  + “If you want to do these types of things, this is the bandwidth that you need”
* Bandwidth minimums are a mistake; don’t get to what we are trying to do.
  + Provide guidelines rather than a minimum
  + Otherwise it is difficult to know how CAN + applications will best operate.
  + Part of what stays in the cloud
  + Benchmark around what is enough
  + Incentives for copper in the ground, for example; need fiber in the ground so concentrate on that.
  + It is all about equity in the long run and standards sometimes help.
  + Minimums become thresholds which is a problem
  + Ways to compare what the average student has in terms of megabits per person is useful
* Common network practices would be helpful
  + How to measure saturation on a network.
  + Need to know applications, number of people, common network metrics to get a multiplier.
  + This is a very complicated issue. It would good to put a group together and get ideas done
* NG911 as a general rule should probably have guidelines
  + If also integrate CAD system then need to consider that. etc.
* Work closely with communities and have them provide data
* If agree to help CAIs define bandwidth how are we going to help them to test where they are at now. Is there support or interest in developing a user initiated speed test tool?
  + Supportive reaction from group
  + Some commercial providers.

Go to where the money is – healthcare.

* Engage healthcare with the value proposition that will matter to them…CAN+ approach – leverage CAN + services
* HER; medical imaging; HIE;
* Variety among medical centers – not a single value proposition

#### What can US UCAN do?

USUCAN should have a dedicated a PR person

* Branding
  + Affiliates Co-brand with USUCAN while retaining individual
  + Use USUCAN as coordinator/enabler/facilitator
  + Capitalize on opportunities for co-branding, co-marketing
* Net + for US UCAN?
  + US UCAN should be an umbrella
  + ‘Certified by’ or ‘part of’ US UCAN
    - What does it look like
    - How does it fit into the idea of net+?
* What will interest potential customers
  + Why does the CAI want to do it?
    - Need a reason, a thing
  + Try it out with the affiliates before moving it to a larger community
* Net + applications that will be specific to each of the CAIs.
  + The US USCAN community could make it available to states on network even if specific to one anchor group
* What is our role in helping the CAI sectors to coordinate their needs and requirements on a national scale
  + Inherently many of these communities are local
  + Public safety across the country has common needs
  + Needs are common but solutions are often different

### Florida, Ohio, PA, NC – FLOPN

### Small Group Report

* Collaborate with CAIs to develop service catalog with regionals as the convener
* Coordinate services over extra-regional areas for entities or sector, e.g., Nemours, hospitals
* Work to get Net+ services to CAIs (this is not supported today)

### Discussion

Identify sets of services provided by regionals

* Engage with communities to figure out what they need and figure out how to provide services and build value prop)
* Coordinate services over extra-regional sectors
  + Expand/reevaluate (KINBER) survey

Work to get net plus services available to all of the CAIs.

## Free Radicals

## Small Group Report

Remove bandwidth as a barrier

* Consolidation of shared CAI IT Services
* Liquid data/federated ID and access management
* Collaboration within a community
* Opportunities for global partnerships
* Expansion of educational, economic, health and safety services within a community

### Discussion

* Liquid data is the free flow of data on a network that is transparent to what is on it
* There is an opportunity for global partnerships
* Foster collaboration within the community
  + Expansion of educational, economic and health and safety services within the community
  + Brings opportunity to the communities
* How to best optimize IT spend.

### Far West – Alaska, CA, OR, WA – A Cow

### Small Group Report

* Include Native Americans in planning and collaboration efforts (this is difficult; face to face conversations).
* Also include HI and other American territories
* Explore public safety communities beyond 911
  + Justice and courts, as an example
  + (e.g., video conferencing depositions)
* Compare medical informatics including information security and imaging (allow people to share information in a secure manner – trials in clinics with remote office visits, etc. with access to experts in the field)
* Engage public media for content development and sharing
* Identify and manage common risk in cloud computing
* Proof of concept campaigns

### RENO911

### Small Group Report

Statewide library programs

* Libraries as a community hub for libraries in general
* Video conferencing as a portal to resources
* Resources include Library of Congress which has
  + More than 22 million digital images on line
  + Primary source material
  + Speakers

Pricing models for Community Anchors

* To CAIs
* Lambda pricing
* Partnerships
* Rural/Urban

Develop focus groups and best practices and make available

* Library of Congress has identified best practices in Video conferencing for libraries.
* Need motivation for people to get there.
* Capitalize on the teaching and learning K20 community in I2
* What are the services that can be provided?
  + Establish a small working group of those who use video conferencing
  + Do it at the SEGP Level
  + Work with local folk
* Getting the work out is a challenge and need something to offer (look at Idaho)
  + Need initial payoff that resonates

**U.S. UCAN Workshop 2012**

**Moderator and Speakers**

## Description: greg_sm Gregory D. Palmer

Executive Director, Mid-Atlantic Gigapop in Philadelphia for Internet2 (MAGPI)

Greg has been in the communications industry since 1980 working first as a technician for Inter-connect companies and then as full-time staff at Okidata, Inc. In 1988 he received a business degree in Operations Management from LaSalle University. In 1990, he collaborated with the Okidata parent company, OKI Electric in Tokyo Japan, to build an international network that included Japan, Thailand, Australia, five sites in the United States, and one in the United Kingdom. Following ten years of service with Okidata, Greg took the position of Director of Campus Computing at Drexel University in Philadelphia. At Drexel, he wrote, and received, a grant from the National Science Foundation for connection to the vBNS national backbone. Returning to the corporate world, he took a position as Director of Global Computing Operations at Christian Dalloz, Ltd, a French company that manufactured and distributed personal safety products. As Director, he was responsible for coordinating systems operations, WAN connectivity, and local LAN support for 42 sites worldwide. He then chose to return to the academic community at the University of Pennsylvania as the Executive Director of MAGPI, the regional aggregation point for Internet2. MAGPI now connects over 700 research and educational communities in PA, NJ, and DE to an advanced regional network and is dedicated to the proliferation of initiatives and applications requiring a high performance infrastructure. He is a former member of the Board of Directors of PACIE, (<http://www.pacie.org>) and is a member of the Board Advisory council for The Asian Studies Collaborative at the Berks County, PA Intermediate Unit. Within Internet2, he is on the Internet2 International Task Force, The Arts & Humanities Working Group, and is the current chair of the Africa Regional Interest Group. In addition, Greg was part of an 11 member consortium in Pennsylvania that received an ARRA grant of $99.6M towards the construction of a research and education network in PA. Most recently, Greg is the MAGPI representative for the Internet2 led U.S. UCAN initiative. In addition, he has written several papers on advanced networking and high performance applications in the United States and has presented on several occasions to EUNIS, (**E**uropean **UN**iversity **I**nformation **S**ystems, <http://www.eunis.org/>).

Larra Clark

Director, Program on Networks & Associate Director,

Program on America’s Libraries for the 21st Century

As Director, Program on Networks, and Associate Director, Program on America’s Libraries for the 21st Century, Larra’s responsibilities

include overall management of OITP’s telecommunications portfolio and day-to-day management of our projects in partnership with the Bill & Melinda Gates Foundation. Previously, she served as the project manager in the ALA Office for Research & Statistics for three years. Larra provided day-to-day management of the Public Library Funding &

Technology Access Study, including conducting qualitative research, contributing to and editing final annual study reports, and leading outreach and communications efforts around study findings and materials. She began her ALA career in the Public Information Office as Manager of Media Relations, following more than a decade of experience in non-profit public affairs, government relations, media relations and print journalism. Lara received her M.S. from the Graduate School of Library and Information Science at the University of Illinois, Urbana-Champaign.

Laurie Flaherty

Program Analyst, Office of Emergency Medical Services

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Laurie Flaherty is an emergency nurse, who has more than 20 years of clinical experience. She received her bachelor’s degree in nursing at Marquette University, and has a master’s degree in emergency and trauma nursing from the University of California, San Francisco.

Laurie is a Program Analyst in the Office of EMS at NHTSA and focuses on issues related to the application of technology in 911 services and Emergency Medical Services. She is currently the Coordinator of the National 911 Program and Co-Manager of the US DOT NG911 Initiative.

Bill Webber

VP & Chief Technology Officer

WHYY Philadelphia

Bill is a graduate of Temple University and a long term key member of the executive management team developing and executing WHYY’s overall technology and community service strategy.  In 1995, Mr. Weber co-founded the region’s first online, non-commercial Internet community service organization named LibertyNet.

In 2002, Mr. Weber’s was appointed by the mayor of Philadelphia to the Mayor’s Commission on Technology.  During the following 8 years the commission advised the Mayor and City Council on technology policies and regional work force development.

His responsibilities at WHYY have broadened significantly as new technology platforms evolved and converged with Information Technology. To most recent being digital television, high-definition content production, new telecommunication options, computer networking, digital asset management, high capacity storage and now, advanced networks such as KINBER.

WHYY’s and the other 7 public media station in Pennsylvania are early members of KINBER. And Bill was recently selected to participate on the KINBER Services and Objects committee reporting and advising the Board.

Kerry McDermott, MPH

Senior Policy Director

West Health Policy Center

Kerry McDermott is Senior Policy Director for the West Health Policy Center, part of the West Health Initiative, an independent, nonpartisan, non-profit organization whose single mission is to lower the cost of health care. McDermott focuses on health policy issues and implications, educating public and private sectors on practical solutions to U.S. health care cost challenges. Current priority areas include transforming care through use of enabling technologies, and enhancing value through a more efficient, transparent medical marketplace and appropriate care utilization. Her agenda includes health information technology, interoperability, infrastructure-independent care, incentive alignment, and practical regulation.

Prior to joining the Policy Center, McDermott was Director of Healthcare for the Federal Communications Commission (FCC). She led the agency-wide healthcare agenda, which included advancing wireless health technologies and enabling higher quality, lower cost care through expanding broadband connectivity for healthcare providers. She co-authored the healthcare section of the National Broadband Plan mandated by Congress, advised the White House Health IT Task Force, and served as the FCC’s liaison on healthcare issues across government agencies and to industry. She has testified before Congress on rural health challenges and participated in World Economic Forum mobile health initiatives.

Previously, McDermott held strategy and operations positions at CIGNA HealthCare, and roles in consulting, finance, and education in the U.S. and London.  
  
She holds a Master’s in Public Health from Yale University, and is a summa cum laude graduate of the University of Maryland with a B.S. in Finance and a B.A. in Russian.

Marla Davenport

Director, Learning & Technology

**TIES** education technology collaborative

Marla Davenport is Director of Learning & Technology at TIES, a K-12 consortium owned by 46 Minnesota school districts.   A former elementary teacher, she holds a Master of Arts in Education Degree and has been pursuing a Doctorate in Education Leadership with an Emphasis in Technology.  Her areas of expertise include professional development in technology leadership and integration, technology planning and assessment and project development.  Marla has worked with teachers and administrators from Minnesota schools, Department of Defense Schools and American International Schools worldwide to plan for technology integration and deliver professional development for nearly 30 years. She is a member of the CoSN Board of Directors and the K-20 Advisory Committee for Internet2.