MAX

Mid-Atlantic Crossroads

April 6, 2010

Welcome

Welcome to the March 2010 edition of the MAX Newsletter. In these updates we highlight current technical activities and policy initiatives amongst our staff, our participants, the Regional Optical Network and national networking communities. Please let us know your thoughts, and especially your suggestions.

Executive Director Message

During March, MAX Staff and the Board have each dedicated time for further conversions about our new declared future. These discussions have clarified and identified significant conditions that must be present to realize this future, some doubts and reservations presented in the form of questions, and a high level roadmap of items to be attended to and milestones to be achieved. Holding ongoing thoughtful exchanges demonstrate our commitment to this new future and the ability to support each other. Further details soon.

The dominant story calling for attention this month involved the release of the FCC Broadband Report. Not surprisingly, "the Plan found that while broadband access and use have increased over the past decade, the nation must do much more to connect all individuals and the economy to broadband's transformative benefits." "And the nation has failed to harness broadband's power to transform delivery of government services, health care, education, public safety, energy conservation, economic development, and other national priorities." The plan states "Broadband is the great infrastructure challenge of the early 21st century."
http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296880A1.pdf
http://www.broadband.gov/
http://www.broadband.gov/plan/

The timing of the report and accompanying plan of action dovetails with the NTIA programs to expand broadband adoption and access with stimulus funds going to state approved projects.

Our colleagues in the Commonwealth of Virginia were successful in being awarded funds from their Round 1 proposal to expand their fiber footprint. Congratulations Virginia! The District of Columbia and State of Maryland submitted proposals submitted the last week of March during Round 2. Decisions are expected in September.

NLR and Internet2 also submitted a joint proposal to NTIA recently. Called the U.S. Unified Community Anchor Network (U.S. UCAN), the proposal articulates the need for a national fabric that brings together all of those community anchor institutions into a comprehensive national community. National, regional and local infrastructures are each seen as critical components to achieving this goal. A robust, resilient national research and education network infrastructure that assures performance, models operational transparency, and provides a full set of advanced capabilities to all community anchor institutions is considered essential to the economic recovery and growth of the U.S. UCAN is intended to catalyze the adoption of transformational Internet applications to fundamentally change education, healthcare and public safety and create new economic opportunities across the country.

MAX, along with other regional optical networks and R&E organizations, submitted letters of support for this proposal. We believe it is important to encourage and support these two national networking organizations to work more closely together.

- Peter O'Neil

ALL THINGS TECHNICAL

Pros and Cons of Electronic Medical Systems Still Causing Debates

The federal stimulus bill (American Recovery and Reinvestment Act of 2009) includes a section called Health Information Technology for Economic and Clinical Health (HITECH) that lists requirements that clinics and hospitals must follow in order to qualify for government money. Although money is a great incentive to implement the use of electronic medical systems, some still are weighing the pros and cons in determining if the new system would really overhaul the medical field.
http://radar.oreilly.com/2010/03/report-from-himms-health-it-co.html

The Challenge of Health Information Exchange: Identification and Format

http://radar.oreilly.com/2010/03/report-from-himms-health-it-co-1.html

An Important Issue When Installing Electronic Systems: Infrastructure

http://radar.oreilly.com/2010/03/report-from-himms-health-it-co-2.html

Mainstream Optical Connectivity

Intel is planning to bring its new high-speed optical cable technology, Light Peak, to the masses. The company is collaborating with optical component manufacturers to establish how to make Light Peak a global standard for high-speed connectivity among PCs, handheld devices, and more.
http://techresearch.intel.com/articles/None/1813.htm

Federal Communications Commission Has More to "Open"

The FCC is proposing a plan that will allow the U.S.'s broadband network to catch up to those in other countries. Prices here for bundles that include high-speed wireless internet, digital high-definition television, and unlimited long distance calling are up to five times more expensive than the same package offered in other advanced countries. The FCC realizes that currently most homes do not have a choice between providers in their area, therefore there is no competition to drive down prices. Their National Broadband Plan aims to make broadband service affordable to everyone,
http://www.nytimes.com/2010/03/21/opinion/21Benkler.html?ref=opinion

The Deep Web vs. The Dark Web

The deep web is part of the web that is hidden from search engines. Visitors to the deep web are people that enjoy their right to privacy, want to escape censorship, or are researchers and scientists looking for useful database information. But the dark web is much more sinister. It is a private network that usually requires the installation of a special software program to gain access to it. These programs allow you to anonymously browse websites, chat on forums, and share files, and their use is very difficult to trace. Browsing this dark web is a common occurrence for cyber criminals looking for easy access to anything from copyrighted software to porn to terrorist handbooks. The deep web and dark web are huge and it's hard to estimate how much data they account for.
http://www.pcpro.co.uk/features/356254/the-dark-side-of-the-web

More Interesting Articles...

The Future: Electronic Libraries
http://www.tnr.com/article/books-and-arts/toward-new-alexandria?page=0,0

HOW COOL!

British Museum to Use Wikipedia to Promote the Arts

This summer Liam Wyatt will begin a five week volunteer project with the British Museum. Wyatt is the vice president of Wikimedia Australia and was the organizer of the Galleries, Libraries, Archives, and Museums (GLAM) conference. He will aim to build a relationship between the museum and Wikipedia users by creating new articles

MAX

Mid-Atlantic Crossroads

**Advanced Regional Internetworking for
Higher Education and Research**

Office: 8400 Baltimore Avenue
           Suite 102
           College Park, Maryland 20740
           301.405.6666

April 6, 2010

and expanding and editing existing articles about the museum's collection, among other activities.
https://www.jiscmail.ac.uk/cgi-bin/webadmin?A2=ind1003&L=MCG&T=0&F=&S=&P=60254

MAKES YOU SAY "HMMM"

The Economic Impact of Daylight Savings Time

In Indiana less than a fifth of the state's counties adjusted for daylight savings time every year until 2006 when the Indiana Legislature decided that the entire state should adopt daylight savings time. So a professor and PhD student decided to do a study on how it would affect energy use in those counties new to the shift. After researching electricity meter readings every month for three years, they found that consumers paid millions of dollars more in electricity bills over that time period because of the increased use of heating and air conditioning.
http://www.physorg.com/news187946326.html?xid=rss-fullcontent

Vanishing Airport Wall Sockets

If you've ever found yourself lugging your laptop and cell phone around an airport, cords dangling, desperately looking for a wall outlet to charge them up, you're not alone. Many travelers are finding it harder and harder to locate wall sockets in airports. And if they do find one it's either already being used by another traveler in need of "juicing" up or the socket has been covered with a metal plate and no longer available for public use. Less airports are willing to pay for the electricity that we use while waiting in terminals. Are airports becoming more like *a la carte* venues where travelers will have to pay for everything separately (Wi-Fi connection, outlet usage, etc). Will we start to see more of those pay-to-charge stations?
shttp://www.newyorker.com/online/blogs/susanorlean/2010/03/empowered.html

Microbial Bacteria-R-Us

The human body carries about 100 trillion microbes, yet these bacteria alone do not cause any health problems. However, can they control the body's behavior that might lead to health risks? Studies done on mice revealed that the microbes can manipulate the diet and digestion of the animal, causing changes in its weight and overall healthiness. Perhaps these findings can help humans in the fight against obesity and other health concerns.
http://blogs.discovermagazine.com/loom/2010/03/04/i-for-one-welcome-our-microbial-overlords/

Media CEO Bans Anchors From Using Cliches on Air

The CEO of the Tribune Company, the nation's second largest newspaper publisher and operator of twenty-three television stations, presented anchors and reporters at his news/talk radio station with a list of words and phrases they are banned from using on air. While some think it allows the news to be delivered in a more informal, practical manner, others think it is senseless micromanaging within a company that is struggling financially and that efforts should be focused elsewhere.
http://www.npr.org/blogs/waitwait/2010/03/in_which_i_try_to_use_all_of_w.html

To see a list of the 119 banned words and phrases, visit:
http://blogs.vocalo.org/feder/2010/03/memo-puts-wgn-news-staffers-at-a-loss-for-words/17374

More Interesting Articles...

The Social Bubble Aspects of the Human Genome Project
http://arxiv.org/pdf/1003.2882v1

Earth's Growing Central Nervous System
http://www.youtube.com/watch?v=sfEbMV295Kk

The Invention of Writing and Its Purpose
http://www.futureofthebook.org/blog/archives/2010/03/against_writingthis_progress.html

MAX

Mid-Atlantic Crossroads

**Advanced Regional Internetworking for
Higher Education and Research**

Office: 8400 Baltimore Avenue
Suite 102
College Park, Maryland 20740
301.405.6666

April 6, 2010

Distributed Neural System of Intelligence
http://www.pnas.org/content/107/10/4705.full

Statistical Shortcomings: Subtleties Really Matter
http://www.sciencenews.org/view/feature/id/57091/title/Odds_are,_its_wrong

Why Most Published Research Findings Are False
http://www.marginalrevolution.com/marginalrevolution/2005/09/why_most_publis.html

The Insignificance of Statistical Significance
http://www.deirdremccloskey.com/docs/pdf/Article_184.pdf

MEMBER SPOTLIGHT

Library of Congress

Twitter Donates Entire Tweet Archive to Library of Congress

Twitter is donating its digital archive of public tweets to the Library of Congress. Twitter is a leading social networking service that enables users to send and receive tweets, which consist of web messages of up to 140 characters.

Twitter processes more than 50 million tweets per day from people around the world. The Library will receive all public tweets-which number in the billions-from the 2006 inception of the service to the present.

"The Twitter digital archive has extraordinary potential for research into our contemporary way of life," said Librarian of Congress James H. Billington. "This information provides detailed evidence about how technology based social networks form and evolve over time. The collection also documents a remarkable range of social trends. Anyone who wants to understand how an ever-broadening public is using social media to engage in an ongoing debate regarding social and cultural issues will have need of this material."

Billington added: "The Library looks at this as an opportunity to add new kinds of information without subtracting from our responsibility to manage our overall collection. Working with the Twitter archive will also help the Library extend its capability to provide stewardship for very large sets of born-digital materials."

In making the donation, Greg Pass, Twitter's vice president of engineering, said: "We are pleased and proud to make this collection available for the benefit of the American people. I am very grateful that Dr. Billington and the Library recognize the value of this information. It is something new, but it tells an amazing story that needs to be remembered." Twitter's own take on the donation is posted on their blog http://blog.twitter.com/2010/04/tweet-preservation.html .

A few highlights of the donated material include the first-ever tweet from Twitter co-founder Jack Dorsey (http://twitter.com/jack/status/20), President Obama's tweet about winning the election (http://twitter.com/barackobama/status/992176676), and a set of two tweets from a photojournalist who was arrested in Egypt and then freed because of a series of events set into motion by his use of Twitter (http://twitter.com/jamesbuck/status/786571964 and http://twitter.com/jamesbuck/status/787167620).
The announcement came coincidentally on the same day the Library's own Twitter feed (@librarycongress) crossed 50,000 followers (April 14, 2010).

"I think Twitter will be one of the most informative resources available on modern day culture, including economic, social and political trends, as well as consumer behavior and social trends," said Margot Gerritsen, a professor with Stanford University's Department of Energy Resources Engineering and head of the Center of Excellence for Computational Approaches to Digital Stewardship, a partnership with the Library of Congress.
The archive follows in the Library's long tradition of gathering individuals' firsthand accounts of history, such

MAX

Mid-Atlantic Crossroads

**Advanced Regional Internetworking for
Higher Education and Research**

Office: 8400 Baltimore Avenue
           Suite 102
           College Park, Maryland 20740
           301.405.6666

April 6, 2010

as "man on the street" interviews after Pearl Harbor; the September 11, 2001, Documentary Project; the Veterans History Project (VHP); and StoryCorps. While the Twitter archive will not be posted online, the Library envisions posting selected content around topics or themes, similar to existing VHP presentations.

The Library has been collecting materials from the web since it began harvesting congressional and presidential campaign websites in 2000. Today the Library holds more than 167 terabytes of web-based information, including legal blogs, websites of candidates for national office and websites of Members of Congress. In addition, the Library leads the congressionally mandated National Digital Information Infrastructure and Preservation Program www.digitalpreservation.gov, which is pursuing a national strategy to collect, preserve and make available significant digital content, especially information that is created in digital form only, for current and future generations. Founded in 1800, the Library of Congress is the nation's oldest federal cultural institution. The Library seeks to spark imagination and creativity and to further human understanding and wisdom by providing access to knowledge through its magnificent collections, programs and exhibitions. Many of the Library's rich resources can be accessed through its website at www.loc.gov and via interactive exhibitions on a personalized website at myLOC.gov.

MAX

Mid-Atlantic Crossroads

**Advanced Regional Internetworking for
Higher Education and Research**

Office: 8400 Baltimore Avenue
Suite 102
College Park, Maryland 20740
301.405.6666

April 6, 2010

MAX Participants

Federal Labs and Agencies:

- ATDnet - NRL, LTS, DISA
- D.C. Government
- Energy Sciences Network (ESNet)
- Laboratory for Telecommunications Sciences
- Library of Congress
- NASA / GSFC
- National Archives and Records Administration (NARA)
- National Institutes of Health (NIH)
- National Institute of Standards and Technology
- National Library of Medicine (NLM)
- National Oceanic and Atmospheric Administration (NOAA)
- National Science Foundation (NSF)
- USDA, Beltsville Agricultural Research Center
- U.S. Department of Health and Human Services
- U.S. Department of State (through GWU)
- U.S. Department of Veterans Affairs
- U.S. Holocaust Memorial Museum

Higher Education:

- American University
- Baltimore Education & Research Network
- Catholic University
- GEANT
- Georgetown University
- George Mason University
- George Washington University
- Johns Hopkins University

- Johns Hopkins University - Applied Physics Laboratory (JHU-APL)
- Montgomery College
- National Consortium for Supercomputing Applications / ACCESS
- Network Virginia
- Smithsonian Institution
- Southern Universities Research Association (SURA)
- University of California, D.C. campus
- University Consortium for Advanced Internet Development (UCAID / Internet2)
- University of Maryland, College Park
- University of Maryland, Baltimore
- University of Maryland, Baltimore Co.
- Univ. System of Maryland Network
- University of Southern California, Information Sciences Institute / East
- Washington Research Library Consortium

Corporate and Non-profit:

- Columbia Telecommunications Corporation (CTC)
- Howard Hughes Med. Institute
- Inter-American Development Bank (IADB)
- Northrop Grumman Corporation
- The Institute for Genomic Research
- Windber Professional Services, Inc.
- World Bank
- The Venter Institute