Education Council Meeting   Report from the Office of the CIO & NITC
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Monday, November 2, 2009   tom.rolfes@nebraska.gov

Office of the CIO K-12 Letter of Agency Response

- ESU 03: 5-Yes, 4-No, 9-Not responding
    o Bennington, Elmwood-Murdock, Gretna, Millard, Ralston,
- ESU 04: 1-Yes, 3-No, 8-Not responding
    o Johnson-Brock
- ESU 05: 2-Yes, 5-No, 4-Not responding
    o Daniel Freeman, Fairbury
- ESU 06: 2-Yes, 0-No, 15-Not responding
    o Fillmore Central, Norris Dist 160
- ESU 16: 1-Yes
    o South Platte Public Schools @ Big Springs

Possible Network Nebraska--Education Phase IV New Members

- K-12 Entities
    o **South Platte Public Schools**
    o **Millard Public Schools**
    o Diocese of Lincoln
    o Diocese of Omaha
- Public and Nonpublic colleges/universities
    o Bellevue University
    o **Clarkson College**
    o **College of St. Mary**
    o **Creighton University**
    o Dana College
    o **Doane College**
    o **Metro Community College**
    o **Nebraska Wesleyan University**
    o Union College
- Tribal Colleges
    o Little Priest Tribal College @ Winnebago
    o Nebraska Indian Community College @ Macy, Niobrara, South Sioux City
- Public Libraries
    o Grand Island
    o Lincoln
- Science Centers/Museums
    o Durham Museum
    o Joslyn Art Museum
    o Sheldon Museum of Art
    o Others

Prior to the OCIO committing to backbone capacities, doing our backbone e-rate filing on or before Feb. 5, 2010, and setting the 2010-2011 Interregional Transport fees, I feel that we need the following information:

- New Internet access rates from the state contract
- How many new entities that will be joining Network Nebraska—Education in 2010-11
- Current peak Internet bandwidth demands reaching PKI from GNENC, NNNC, LPS, OPS, ESU 9 & higher ed partners
- Actual Internet2 K-20 traffic graphs between UNL and the Kansas City Gigapop
- Receptivity of ESU and school tech staff to the cautious "opening up" of blocked applications
- Anticipated Internet purchases for July 1, 2010 from GNENC, NNNC, LPS, OPS, ESU 9 & higher ed partners
- Projected inter-regional exchange of synchronous video classes for 2010-11

Network Nebraska—Education Membership & Fees

2007-08 (Phase I Entities)
Network Nebraska Participation Fee $200.00/entity/month (94 entities participating)
Interregional Transport Fee $ 0.00/entity/month

2008-09 (Phase I, II Entities)
Network Nebraska Participation Fee $197.80/entity/month (182 entities participating)
Interregional Transport Fee (Pre-Erate) $ 93.35/entity/month (Higher Ed Billed Amount)
Interregional Transport Fee (Post-Erate) $ 34.21/entity/month (K-12 Billed Amount)

2009-10 (Phase I, II, III Entities)
Network Nebraska Participation Fee $192.47/entity/month (231 entities participating)
Interregional Transport Fee (Pre-Erate) $ 92.72/entity/month (Higher Ed Billed Amount)
Interregional Transport Fee (Post-Erate) $ 34.48/entity/month (K-12 Billed Amount)

2010-11 (Phase I, II, III, IV Entities)
Network Nebraska Participation Fee $XXX.XX/entity/month (??? entities participating)
Interregional Transport Fee (Pre-Erate) $ XX.XX/entity/month (Higher Ed Billed Amount)
Interregional Transport Fee (Post-Erate) $ XX.XX/entity/month (K-12 Billed Amount)

Internet2 Commodity Internet Peering
There are currently over 60,000 companies that are available to Network Nebraska participants through Internet2's Commodity Peering Service. While these same companies can be reached through normal Internet routes, the ability to rely upon Internet2 has the following benefits:
- Cheaper - any traffic sent this way eliminates the need for an institution to purchase additional Internet capacity through their internet provider. Typically, higher ed institutions usually see about 1/3 of their internet traffic flowing over to this service, saving 1/3 the cost of their internet connection.
- Faster - due to the nature of how the Internet2 network was built, traffic flowing across Internet2 usually arrives faster than "normal" internet traffic, providing a better end-user experience. FYI - UNL has a 10G (that is - 10 gigabit, or 10,000 megabit) network connection into the heart of the Internet2 backbone, and from there we ride a 10Gb network connection right to the door of these companies.
- Just a sample of some of the companies and services that can be reached through Internet2's Commodity Peering Service:

| Yahoo | Cisco | Microsoft | Google | Facebook | YouTube |
| Hulu | iTunes | Tweeter | ESPN | Disney | Myspace |