Leveraging Statewide Videoconferencing Efforts in Ohio

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Today’s Presentation

Collaboration Process

Collaborative Services

Camp-On Service

Telehealth Video Resource Center

Telepresence Project
Collaborative Process

Office of Information Technology
(State Govt.)

eTech Ohio
(K-12 and PBS)

OARnet
(HE)
## Timeline

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<th>Month</th>
<th>Process or Activity</th>
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<td>Discovery Process</td>
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<td>September – December</td>
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Current Architecture
New Architecture
Rates and Services

• New Rate
  – $150 per month / per site (Old rate $350-450/month)

• Services
  – Unlimited video conferencing, bridged or point to point
  – Video NOC services: 7:00 am – 10:00 pm Monday – Friday
  – Online reservation system available 24 x 7
  – ISDN gateway service
  – Satellite downlink integration
  – High definition video bridging
  – Access to Internet 2 content
Broadcasting Services

• Satellite Downlink
  – Analog or Digital
  – Ku & C band

• Satellite Uplink
  – Analog – C band
  – VYVX access

• Production studios

• Complete architecture for the production, delivery, and storage of video and multimedia assets
Other Allied Services

• Video streaming
• Conference recording
• Transcoding
• Digital asset management repository
• High-end Telepresence applications
Transition Plan

- Customer communication
- Documentation reconciliation
- Network testing
- Transition of service
Camp-on Service
Example: Cleveland Institute of Music Concerts

- CIM creates and delivers content for a variety of educational technology applications, including:
  - Music master classes with the Manhattan School of Music, the Royal Academy of Music in London, and the New World Symphony
  - Concerts for hundreds of K-12 schools
  - Hi-Def: Two musicians in Columbus and three in Cleveland performed together via high-definition video-stream through OSCnet in June 2007
Example: Remote Use of Scientific Instruments

- FEI Sirion scanning electron microscope at the Center for Accelerated Maturation of Materials, The Ohio State University
- 850 Mhz NMR spectrometer at the Instrumentation Laboratory, Miami University
- FTIR-Raman Microprobe at the Analytical Spectroscopy Laboratory, The Ohio State University

Example of shared instrumentation application: remote access of electron microscope
Example: Remote Neonatal Consultations

• In 2006, the neonatology unit at Adena Regional Medical Center in Chillicothe linked with Nationwide Children’s Hospital via OSCnet connection
  – Enables neonatologists at Children’s to examine infants at Adena using telemedicine equipment such as an electronic stethoscope
  – Specialists can confer with attending physician, provide evaluations
  – May improve care and eliminate need for travel for some patients and families

• Grant from Board of Regents for a demonstration project on OSCnet for telehealth applications
  – Funding source: U.S. Dept. of HHS
Telehealth Video Resource Center (TVRC)
Telehealth Video Resource Center

• Access to healthcare knowledge, information and expertise is a global need and a challenge.
  – Videoconferencing provides an opportunity for fundamental changes in global response and offers real-time, cost-effective access to information about disease management.
  – Increased bandwidth and decreased cost are enabling more services, enhanced performance and better access.
Telehealth Video Resource Center

• Capabilities to provide video services for telehealth have coalesced at OARnet.
  – Seed funding of $150K
  – Hardware, Equipment and B/W use ~ $350K

• Set the stage for establishing the Telehealth Video Resource Center (TVRC).
  – a not-for-profit center, poised to serve as a video hub of telehealth activities for statewide, national, and international activities.
  – Services to include programming, videoconferencing, schedule coordination, content storage and assistance with security, technology guidance and expertise in telehealth.
Telehealth Video Resource Center

• Ohio announces seed funding for the center (Oct. 13):
  
  – Chancellor Eric Fingerhut: “Creating the Ohio Telehealth Resource Center will establish Ohio as the premier global hub for online medical education and videoconferencing.”

  – World Bank’s David Gray: “By combining technology and partnerships through this initiative, we can narrow the knowledge gaps that exist in healthcare, research, policy and education and can significantly improve the quality of healthcare available to people regardless of their location.”
Telehealth Video Resource Center

• Potential collaborations:
  – NSF – NIH
  – UN – WHO
  – PAHO – USAID
  – CDC – Internet2
  – Associations – UMET
  – Government (State / Federal)
  – Telecommunication Organizations

• Charles R. Doarn named first executive director of TVRC:
  – Has served as Executive Director of the Center for Surgical Innovation at the University of Cincinnati.
Thank you for your time.

Questions?

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Bob Dixon will now present our Telepresence project