INTERNET® POWER NETWORKING SIDE Street

Advanced Arts & Humanities Initiatives within MAGPI, NJEDge and Internet2

Jennifer Oxenford Associate Director

Rutgers University Arts, Humanities, and Social Sciences Symposium March 21, 2007 RUTGERS

INTERNET What is Internet2?

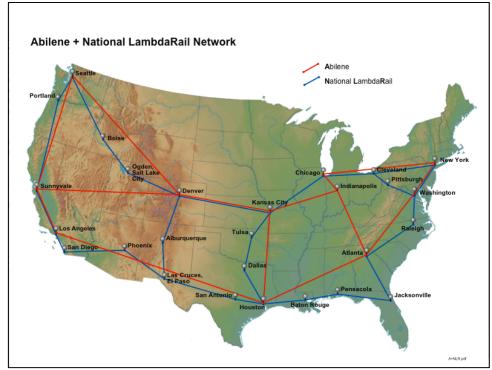
- The Research and Education Network for the United States
- Led by 208 research universities
- Close collaborations with government: NIH, NSF, NLM, NASA, to name only a few
- An organization that serves academic and technology needs at all levels of education
- A venue that brings together academics and scientists from all over the world





Internet2 Mission and Goals

- Internet2 Mission = Develop and deploy advanced network applications and technologies, accelerating the creation of tomorrow's Internet.
- Internet2 Goals
 - Enable new generation of applications
 - Re-create leading edge R&E network capability
 - Transfer technology and experience to the global production Internet







Internet2 Affiliate Members

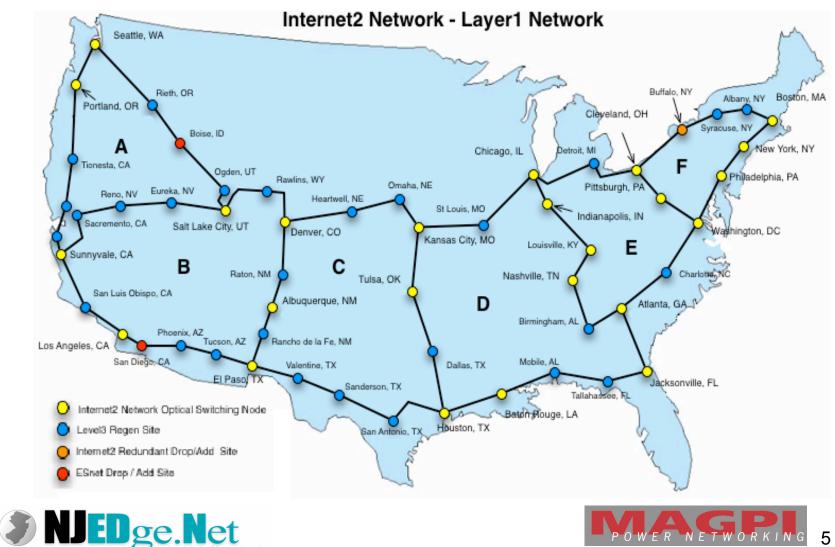
- Altarum
- American Distance Education Consortium
- Association of Universities for Research in Astronomy (AURA)
- CERN
- Charles R. Drew University
- Children's Hospital of Philadelphia
- Cleveland Institute of Music
- Cleveland Museum of Art
- CENIC
- Desert Research Institute
- EDUCAUSE
- ESnet
- Healthcare Information and Management Systems Society (HIMSS)
- Howard Hughes Medical Institute
- Indiana Higher Education Telecommunications System (IHETS)
- Inter-American Development Bank
- Internet Educational Equal Access Foundation
- Jet Propulsion Laboratory
- LEARN
- The Library of Congress
- Los Alamos National Laboratory
- Manhattan School of Music
- MCNC
- Merit Network, Inc.
- MORENJEDge.Net New Jersey's Higher Education Network

- NASA Goddard Space Flight Center
- NASA Marshall Space Flight Center
- National Archives and Records Administration
- National Institutes of Health
- NOAA Washington, D.C.
- National Science Foundation
- New World Symphony
- NJEDge.Net
- NYSERNet, Inc.
- Oak Ridge National Laboratory
- OARnet
- OneNet
- · Pacific Northwest National Laboratory
- PeachNet
- Ruth Lily Health Education Center
- SURA
- Southwest Research Institute
- TOPIX
- U.S. Census Bureau
- · United Nations System of Organizations
- United States Antarctic Program
- United States Dept. of Commerce Boulder Labs
- United States Holocaust Memorial Museum
- University Corporation for Atmospheric Research
- University of North Carolina General Administration

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• The World Bank POWER NETWORKING

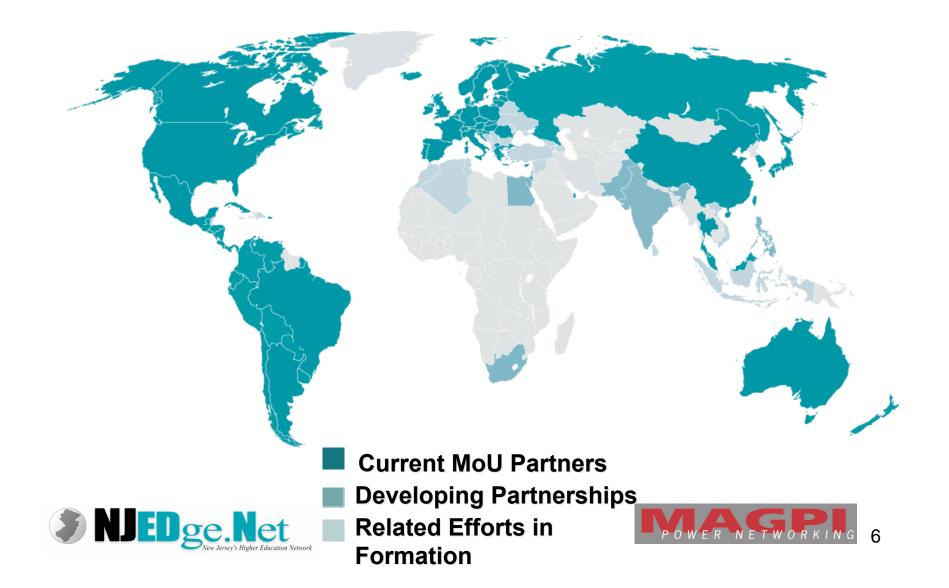
INTERNET The New Internet2 Network



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INTERNET® International Advanced Networks



INTERNET® 87 Networks Reachable via Internet2

Europe-Middle East

Europe (GEANT2) Austria (ACOnet) Belgium (BELNET) Bosnia-Herzegovina (BIHARNET) Croatia (CARNet) Czech Rep. (CESNET) oland (PIONIER) Cyprus (CYNET) Denmark (Forskningsnettet) Estonia (EENet) Finland (Funet) France (Renater) Germany (G-WIN) Greece (GRNET) Hungary (HUNGARNET) Iceland (RHnet) Ireland (HEAnet) Israel (IUCC) Italy (GARR) Jordan (JUNET) Latvia (LATNET) Lithuania (LITNET)

Luxembourg (RESTENA) Malta (Univ. Malta) Netherlands (SURFnet) Norway (UNINETT) **Palestinian Territories** (Gov't Computing Center) Portugal (RCTS2) Qatar (Qatar FN) Romania (RoEduNet) Russia (RBnet, RUNNET) Slovakia (SANET) Slovenia (ARNES) Spain (RedIRIS) Sweden (SUNET) Switzerland (SWITCH) Syria (HIAST) United Kingdom (JANET) Turkey (ULAKBYM) *CERN

Asia-Pacific

Americas

Latin America (redCLARA) Australia (AARNET) China (CERNET, CSTNET, NSFCNE Prazil (RNP2/ANSP) Fiji (USP-SUVA) Hong Kong (HARNET) India (ERNET) Indonesia (ITB) Japan (SINET, WIDE, JGN2) Korea (KOREN, KREONET2) Malaysia (MYREN) New Zealand (KAREN) Peru (RAAP) Philippines (PREGINET) Singapore (SingAREN) Taiwan (TANet2, ASNet) Thailand (UNINET, ThaiSARN) Vietnam (VINAREN)

Africa

Algeria (CERIST) Egypt (EUN/ENSTINET) Morocco (CNRST) Tunisia (RFR) South Africa (TENET)

Argentina (RETINA) Canada (CA*net) Chile (REUNA) Colombia (RENATA) Costa Rica (CR2Net) Guatemala (RAGIE) Mexico (Red-CUDI) Nicaragua (RENIA) Panama (RedCyT) Uruguay (RAU2) Venezuela (REACCIUN2)

Central Asia

Armenia (ARENA) Georgia (GRENA) Kazakhstan (KAZRENA) Tajikistan (TARENA) Uzbekistan (UZSCI)

INTERNET® K20 Status and Growth

New Jersey's Higher Education Network

Organization	Total - 9/02	Total - 5/04	Total - 5/06
K12 Schools	7,173	23,388	35,971
Community Colleges	551	594	677
Four Year Colleges and Universities	526	852	1,002
Public Libraries	1,482	2,360	3,325
Museums, Zoos, Aquariums and Science Centers	102	74	76
Grand Total	9,834	27,268	46,000
POWER NETWORKING 8			

INTERNET. What is MAGPI?

What is MAGPI?

MAGPI is a regional aggregation point for Internet2. We serve the Pennsylvania, Delaware and New Jersey research and education communities.

Our mission?

To introduce new technology

To collaboratively develop new applications with our subscribers

To make access to these technologies and applications economical and sustainable



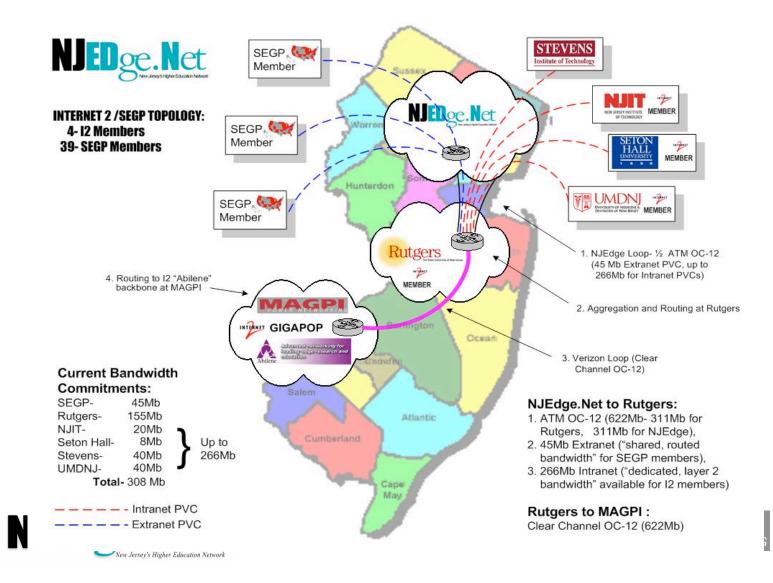


MAGPI Member Snapshot

- Arcadia University
- Capital Area IU
- Carbon Lehigh IU
- Chester County IU
- Children's Hospital of Philadelphia
- Center for Advancing Partnerships in Education (CAPE)
- Colonial IU
- Delaware County IU
- Delaware State Univeristy
- DELEARN State R&E Network for Delaware
- DeSales University
- Fox Chase Cancer Center
- The Franklin Institute
- IUs 8/9/10
- Lafayette College
- Lehigh Carbon Community College
- Lehigh University
- Lehigh Valley Hospital

- Lincoln IU
- Mont. Co. Intermediate Unit
- Mont. Co. Community College
- National Constitution Center
- NJEDge.Net State R&E Network for N.J.
- The Philadelphia Orchestra
- Princeton University
- CERMUSA / St. Francis University
- Temple University
- Thomas Jefferson University and Hospital
- Tuscarora IU
- University of Delaware
- University of Pennsylvania
- University of Scranton
- Villanova University
- Widener University

INTERNET. The New Jersey State Research and Education Network



Why Internet2?

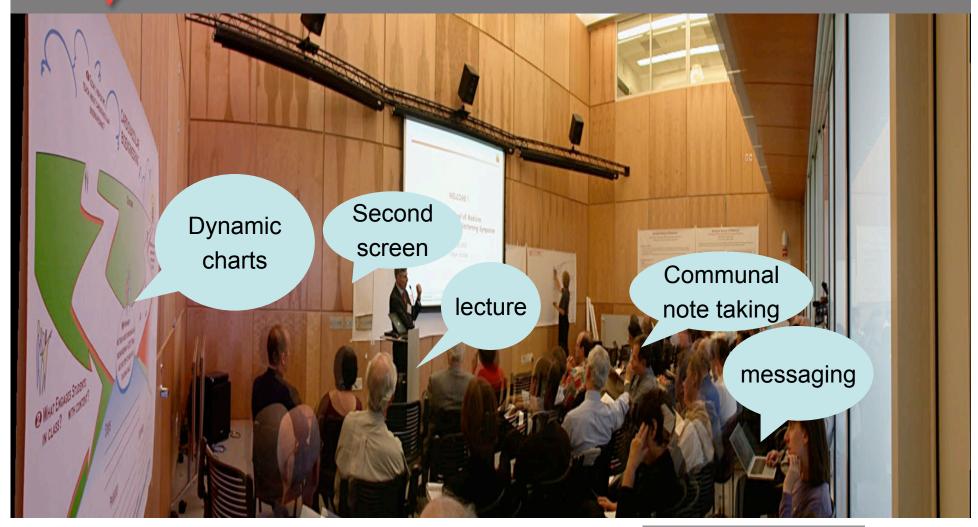
- Real-time access to remote resources
- Large-scale multi-site computation and data mining
- Interactive collaboration
- Rich, multi-media digital libraries
- Shared virtual reality







INTERNET Changing Teaching and Learning in the 21st Century Classroom





Slide courtesy Parvati Dev, Stanford



INTERNET Changing Live Performance in the 21st Century Arts Venue







INTERNET. Bradley University - The Adding Machine

- Distributed production of Elmer Rice's *The Adding Machine* as part of Bradley's performance season
- Four institutions participated
 - Bradley (theater arts and multimedia programs)
 - U. Waterloo
 - Univ. of Central Florida







INTERNET Cleveland Museum of Art: Survey of Non-Western Civilization

- Largest Museum Educational Outreach Program in US
- International Conservation Network
- For-Credit, fee-based, semester long course "Survey of Non-Western Art"
- Meets demand for specialized art, music, humanities faculty



http://www.clevelandart.org/educef/distance/





Rise of Serious Gaming

- UN Food Force
 Game
- Second Life for Education
- Open Croquet
- Discover Babylon
- Virtual University

. . .



http://www.food-force.com/





NJPAC New Jersey PERFORMING ARTS CENTER

 NJPAC now directly connected to the NJEDge network

NJPAC

- Verizon grant provided vc equipment for major performance spaces
- Education groups within NJPAC and the NJ Symphony Orchestra now use videoconferncing for K12 programs across the state
- National Conference on Arts and Aging: Creativity Matters
- Planning a virtual dance education program





INTERNET. US/Japan Interactive Dance Event Leni-Basso - Group Motion Dance Co.

- DVTS 30 Mbps each way
- Keio University in Tokyo and Montgomery County Community College, Blue Bell, PA
- Live rehearsal and critique of "Rondo"

http://www.magpi.net/Sept16.html









Game Film Project

- Interactive Game Film Project
- Used Access Grid
- Apple Servers run out of MAGPI
- Access Grid support by Penn Video Network
- International University Collaboration between 13 schools







Language & Culture Exchange

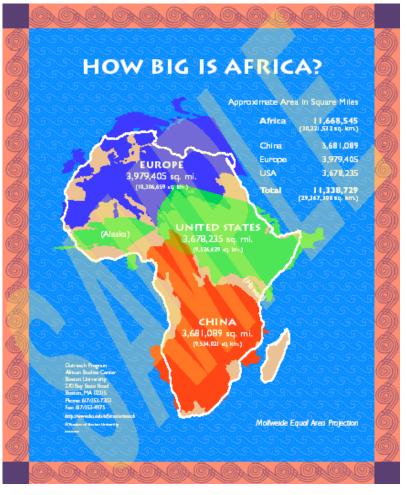


- Designed by U Penn students at the Graduate School of Education or students currently enrolled in the university's English Language Program
- 45 minute, live interactive sessions
- Scaled for grade levels and appropriate for social studies, world cultures, foreign language and geography classes
- Programs included: French West Africa, Japanese Pop Culture Exchange, Chinese New Year, ...

http://www.magpi.net/exchange.html



Teaching & Learning About Africa



NJEDge.Net

- Professional Development program offered by the Africa Studies Center at Penn in partnership with MAGPI
- Dr. Ali B. Ali Dinar presented on the Cultural and Social diversity in Africa
- 90 minute, live interactive session
- Targeted for secondary school social instructors appropriate for social studies, world cultures, foreign language and geography classes

http://www.magpi.net/africastudies.html



INTERNET. St. Francis University's Outreach to K20





- The Didgeridoo: Exploring the Dreamtime (live performance and instruction with Jim Gagnon)
- The Universe of Song (Music Writing Workshop with Paul Purple)
- The Arts & Living Seminar
- Catholicism/World Religions
 for Secular Institutions





The Philadelphia Orchestra



Philadelphia Orchestra Music Animateur Thomas Cabaniss leads a workshop on audience development techniques with members of The Philadelphia Orchestra and the New World Symphony through Internet2 technology.

- Kicked the tires with High Def videoconferencing for audience engagement master class with New World Symphony
- Pilot with Mont. Co. Community College on 3/23 using DVTS
- International expansion of programs starting in April for multi-site DVTS streaming



INTERNET. MAGPI K20 Support Network

- K20 User Group and Virtual Forums
- Tri-State Database
- K20 Portal
- K20 Newsletter
- Training
 - Videoconferencing/I2 Commons Training
 - Curriculum Integration/Professional Development

http://www.magpi.net/k20network.html





INTERNET. 12 Working Groups, SIGs, BoFs

- Health Sciences
- Medical Middleware
- Veterinary Medicine
 - Arts & Humanities
- Arts Performance
- High Energy and Nuclear
 Physics
- Geospatial Apps
- Orthopaedic Surgery
- Radiology
- Bioethics (proposed)
- Astronomy



- Archeology
- Collaboration
- Voice over IP
- Digital Video
- VidMid VC
 - VidMidVoD
 - **Teaching and Learning**
- Digital Content Delivery
- ResearchChannel
- Network Storage
- Presence & Integrated
 Communications Communi Communications Communicat

Get and Stay Involved

- Talk with your campus IT folks and local Internet2 liaisons to NJEDGE.Net and MAGPI
- Seek/be faculty/student champions
- ✓ Follow and join MAGPI K20 User Group/Forums
- ✓ Sign-up for MAGPI PD or VC Training
- Host/attend an Internet2 Event
- Participate in Virtual Events Megaconference, Gigaconference, Collaboranza, Keystone, etc
- ✓ Send me feedback/updates/inquiries





INTERNET. NEH Digital Humanities Initiative

5 new programs launched by NEH

- 1. Start-up grants (Deadline 4/3/07)
- 2. Advancing Knowledge NEH/IMLS Digital Partnership (Deadline 3/27/07)
- 3. Challenge Grants (Deadline 5/1/07)
- 4. Digital Humanities Workshops (Deadline passed. New deadline posted in Fall)
- 5. Digital Humanities Fellowships (Deadline 5/1/07)





MAC Arthur Foundation

Digital Learning Initiative launched in 2006

- \$50M commitment to build the field of digital media and learning over next 5 years
- Several interdisciplinary reports to be published in 2007
- Several exploratory grants
- Online resources/blogs/etc.



http://www.digitallearning.macfound.org/





Resources

- www.magpi.net
- www.njedge.net
- www.internet2.edu
- www.digitallearning.macfound.org/
- www.neh.gov/grants/digitalhumanities.html





INTERNET Students are different now



DICK LOCHER / Chicago Tribune (Tony Auth has the day off.)

INTERNET Q&A - Thank you!

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www.magpi.net



