Challenges and Success for US Overseas Campuses

Internet2 Spring Member Meeting
Track Session
Tuesday April 28, 2009
1:15 – 2:30 p.m.
Session Overview

- Focus: US institutions’ growing number of programs and campuses located outside the US: issues, challenges, possibilities for leveraging Internet2 and its counterparts in other countries
- Louis Fox, Duke University
  - Duke’s International Programs
- Marilyn McMillan, New York University
  - NYU Global Programs
R&E network connectivity for US campuses abroad

• Several US institutions’ programs/offices/campuses have successfully connected to NRENs in those countries

• Examples:
  • NYU, Stanford University connected to GARR in Florence, Italy
  • Georgia Tech Lorraine connected to RENATER in France
  • Texas A&M University in Mexico City connected to CUDI
# Reachable Networks

## AMERICAS
- Argentina (INNOVARED)
- Brazil (RNP2/ANSP)
- Canada (CANARIE)
- Chile (REUNA)
- Colombia (RENA
ATA)
- Costa Rica (CR2Net)
- Ecuador (CEDIA)
- El Salvador (RAICES)
- Guatemala (RAGIE)
- Mexico (Red-CUDI)
- Panama (RedCyT)
- Peru (RAAP)
- Uruguay (RAU2)
- Venezuela (REACCIUN2)

## EAST ASIA and PACIFIC
- Australia (AARNET)
- China (CERNET, CSTNet, NSFCNET)
- Fiji (USP-SUVA)
- Hong Kong (HARNET)
- Indonesia (ITB)
- Japan (SINET, WIDE, JGN2)
- Korea (KOREN, KREONET2)
- Malaysia (MYREN)
- New Zealand (Karen)
- Philippines (PREGINET)
- Singapore (SingAREN)
- Taiwan (TANet2, ASNet)
- Thailand (UNINET, ThaiSARN)
- Vietnam (VinaREN)

## SOUTH ASIA
- India (ERNET)
- Pakistan (PERN)

## EAST ASIA and PACIFIC
- Albania (ASA/INIMA)
- Andorra (Univ. of Andorra)
- Austria (ACOnet)
- Belgium (BELNET)
- Bosnia-Herzegovina (BIHARNET)
- Bulgaria (ISTF)
- Croatia (CARNet)
- Cyprus (CYNET)
- Czech Republic (CESNET)
- Denmark (Forskningsnettet)
- Estonia (EENet)
- Finland (Funct)
- France (Renater)
- Germany (G-WIN)
- Greece (GRNET)
- Hungary (HUNGARNET)
- Iceland (Rhnet)
- Ireland (HEA
et
)
- Israel (IUCC)
- Italy (GARR)
- Jordan (JUNET)
- Latvia (LATNet)
- Lithuania (LITNET)
- Luxembourg (RESTENA)
- Macedonia (MARNET)
- Malta (Univ. of Malta)

## EUROPE and MIDDLE EAST
- Netherlands (SURFnet)
- Norway (UNINETT)
- Palestinian Territories (Govt Computing Ctr)
- Poland (PIONIER)
- Portugal (RCTS2)
- Qatar (Qatar FN)
- Romania (RoEduNet)
- Russia (RBnet, RUNNET)
- Serbia-Montenegro (AMREJ, UoM/MREN)
- Slovakia (SANET)
- Slovenia (ARNES)
- Spain (redIRIS)
- Sweden (SUNET)
- Switzerland (SWITCH)
- Syria (HIAST)
- Ukraine (URAN)
- UAE (ANKABUT)
- United Kingdom (JANET)
- Turkey (ULAKBYM)

## AFRICA
- Algeria (CERIST)
- Egypt (EUN/ENSTINET)
- Kenya (KENET)
- Morocco (CNRST)
- South Africa (TENET)
- Tunisia (RFR)

## MULT-NATL NETS
- Asia (APAN)
- Med/N Africa (EUMEDCONNECT)
- Europe (GEANT)
- Nordic (NORDUNet)
- Latin America (redCLARA)
- SE Asia (TEIN)
- S&E Africa (UbuntuNet)
- T&T, Jamaica (U. West Indies Network)
R&E network connectivity for US campuses abroad

• Case of US institutions helping to instigate NREN capabilities
  • Example: Qatar
    • Texas A&M, Cornell, Carnegie Mellon, VCU, Georgetown – worked with Qatar Foundation to get connectivity for all institutions to global R&E network infrastructure
R&E network connectivity for US campuses abroad

- Countries with emerging NRENs
  - Example: United Arab Emirates
  - UAE universities under leadership of Khalifa University of Science and Technology began effort to interconnect/build NREN 2+ years ago
  - Not yet connecting universities beyond government-funded universities
Beyond just R&E network connectivity

- Commercial Internet connectivity
- Data backup/storage/disaster recovery solutions
- Other telecommunications capabilities
- IT-related policy considerations
  - Data policies
  - Compliance with local regulations
- IT support needs
ACE Internationalization Program

• Reference
Publication: “On the Ground Overseas: US Degree Programs and Branch Campuses Abroad”

• http://www.acenet.edu
Opportunities

• Interest in collaboration among US universities
• Can Internet2 help?
  • Developing pilot project with interested members
  • Focus on aggregating needs, providing on-the-ground support for US campuses abroad
  • Initial pilot focus: China
• Continuing to facilitate in China and other countries dialogue between US institutions and local NRENs
  • NYU hosted meeting in Abu Dhabi April 7
Watch this space

• Have a campus/branch abroad?
  • email: Jocelyn Gerich
    jgerich@internet2.edu
  • http://www.internet2.edu/international

• Questions/ideas:
  • Heather Boyles <heather@internet2.edu>