

# AMPATH™ Project Update

## ESCC/Internet2 Techs Workshop

February 2-5, 2003  
Miami, Florida

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# AMPATH: Research and Education Network and International Exchange Point for the Americas

- Launched in March 2000 as a project led by Florida International University (FIU), with industry support from Global Crossing (GX), Cisco Systems, Lucent Technologies, Juniper Networks and Terremark Worldwide
- Enables wide-bandwidth digital communications between the Abilene network and 10 National Research and Education Networks (NRNs) in South and Central America, the Caribbean and Mexico
- Provides connectivity to US research programs in the region
- AMPATH is a project of FIU and the National Science Foundation's Advanced Networking Infrastructure & Research (ANIR) Division



# AMPATH IXP Services

- High-speed peering point for regional and international Research and Education networks
- Connectivity to Abilene
- Available collocation facilities in the NAP of the Americas, in in Miami
- Smart-Hands 24x7x365 services at the NAP
- NOC Services from the Indiana Global Research NOC
- Cross-connects through the Meet-Me Room or NAP Gigabit Ethernet fabric
- Policy-free ATM PVCs and 802.1q VLANs for bilateral peering
- Native IPv6, Multicast, VRVS services
- Flow-based and QoS-based monitoring using netflow tools



# Announcements

- *AMPATH Workshop: Fostering Collaborations and Next Generation Infrastructure*
- AMPATH Science and Technology Working Groups
- Infrastructure Updates
- Other Updates



# ***AMPATH Workshop: Fostering Collaborations and Next Generation Infrastructure***

- Stimulate discussion between the networking community and the research and application community about
  - e-Science in the Americas
  - Next-Generation Infrastructure in the Americas to facilitate grand-challenge science applications
- Foster collaborations by continuing the development of science and technology working groups



# Science and technology working groups

- Astronomy WG,
  - Chair, Eduardo Vera, Chile
- Digital Data Collaboration
  - Chairs, Liane Tarouco and Guido Lemos, Brazil
- Atmospheric & Oceanographic
  - Chair, Azael Barrera, Panama
- High-Energy Nuclear Physics (HENP)
  - Chair, Alberto Santoro, State University of Rio Janeiro (UERJ)

[http://www.ampath.fiu.edu/wg/AMPATH\\_WGs.htm](http://www.ampath.fiu.edu/wg/AMPATH_WGs.htm)



# Infrastructure and Other Updates

- Abilene connection upgraded to an OC12c POS from an OC3c
  - [www.ampath.fiu.edu](http://www.ampath.fiu.edu)
- Campus network being upgraded to Gigabit Ethernet
- Experimental Gigabit Ethernet Layer2 IP-VPN between AMPATH and StarLight
  - Performance testing, IPv6, Multicast, QoS, Protocols
  - Provided for the workshop by Global Crossing, as a testbed
- Commodity Internet (IP Transit) is planned for service estimated by February



# Other Updates

- Venezuela is soon connecting to AMPATH
- AMPATH is participating in The Quilt as an Affiliate member
- AMPATH is participating in the development of an interregional Grid-enabled Center for High-Energy Physics Research and Educational Outreach at FIU, encompassing an integrated program of research, network infrastructure development, and education and outreach
  - Collaboration with Caltech, University of Florida, Florida State University and State University of Rio de Janeiro





# *AMPATH Bay Cruise*



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# ***AMPATH: Pathway of the Americas***

## ***Thank You***

For More Information, please contact us at:

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