

AMPATH
For the
Joint Engineering Team
SC 2001
Denver, Colorado

presented by
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Principal Investigator
November 15, 2001



Florida International University

AMPATH

What is AMPATH?

- AMPATH is a project led by FIU, in collaboration with Global Crossing (GC), to interconnect the R&E networks in South and Central America, the Caribbean and Mexico to US and non-US R&E networks via Internet2's Abilene network



What is AMPATH?

- AMPATH is built upon Global Crossing's terrestrial and submarine optical-fiber networks



What is AMPATH?



- 10 DS3s from Global Crossing
- Cisco GSR 12012
- Lucent CBX 500 ATM switch
- Juniper M10 router
- Collocation in the NAP of the Americas
- OC3 to Abilene



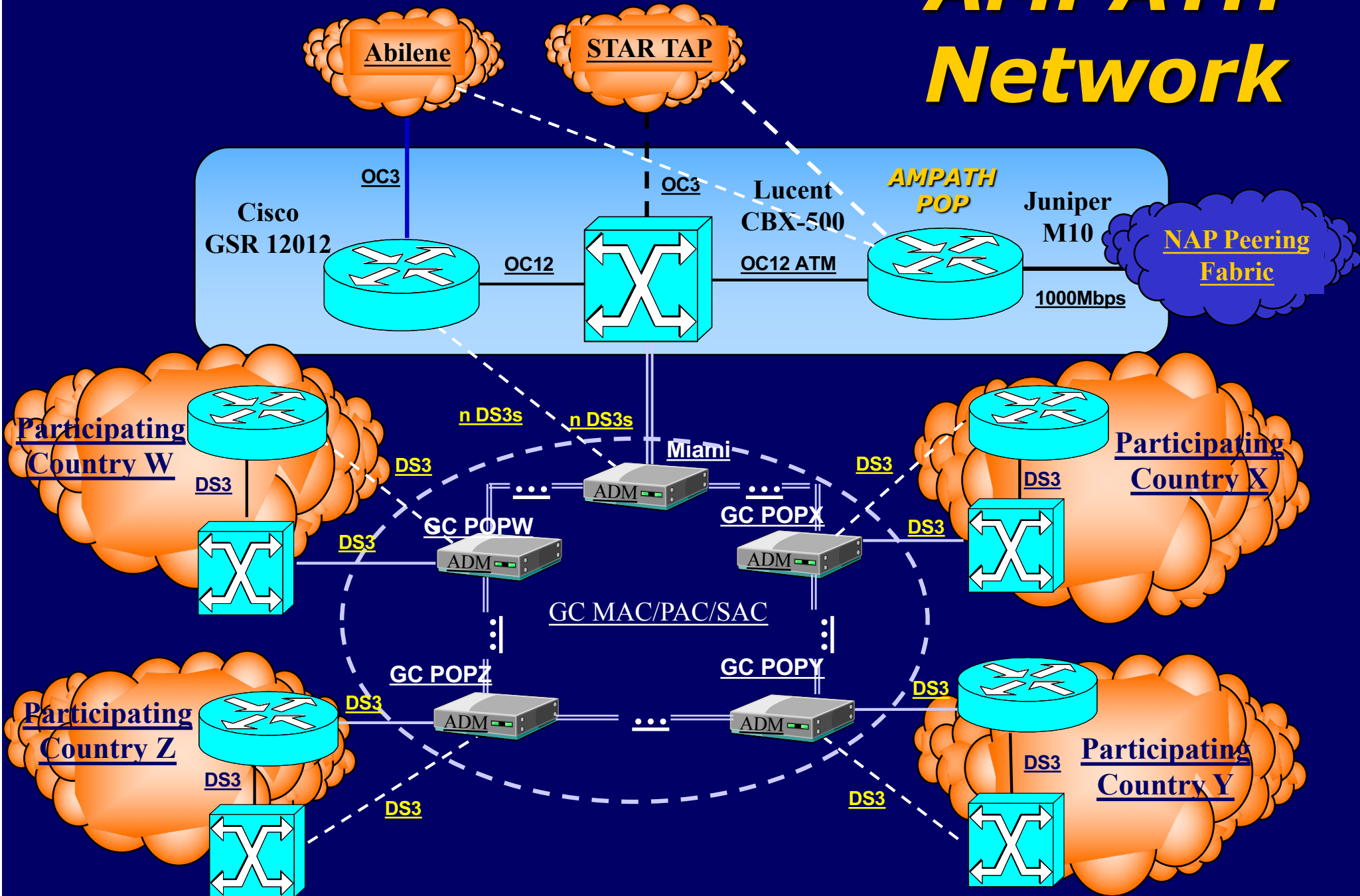


Service Area

- Argentina
- Brazil
- Chile
- Colombia
- Mexico
- Panama
- Peru
- Puerto Rico
- US Virgin Islands
- Venezuela
- Costa Rica



AMPATH Network

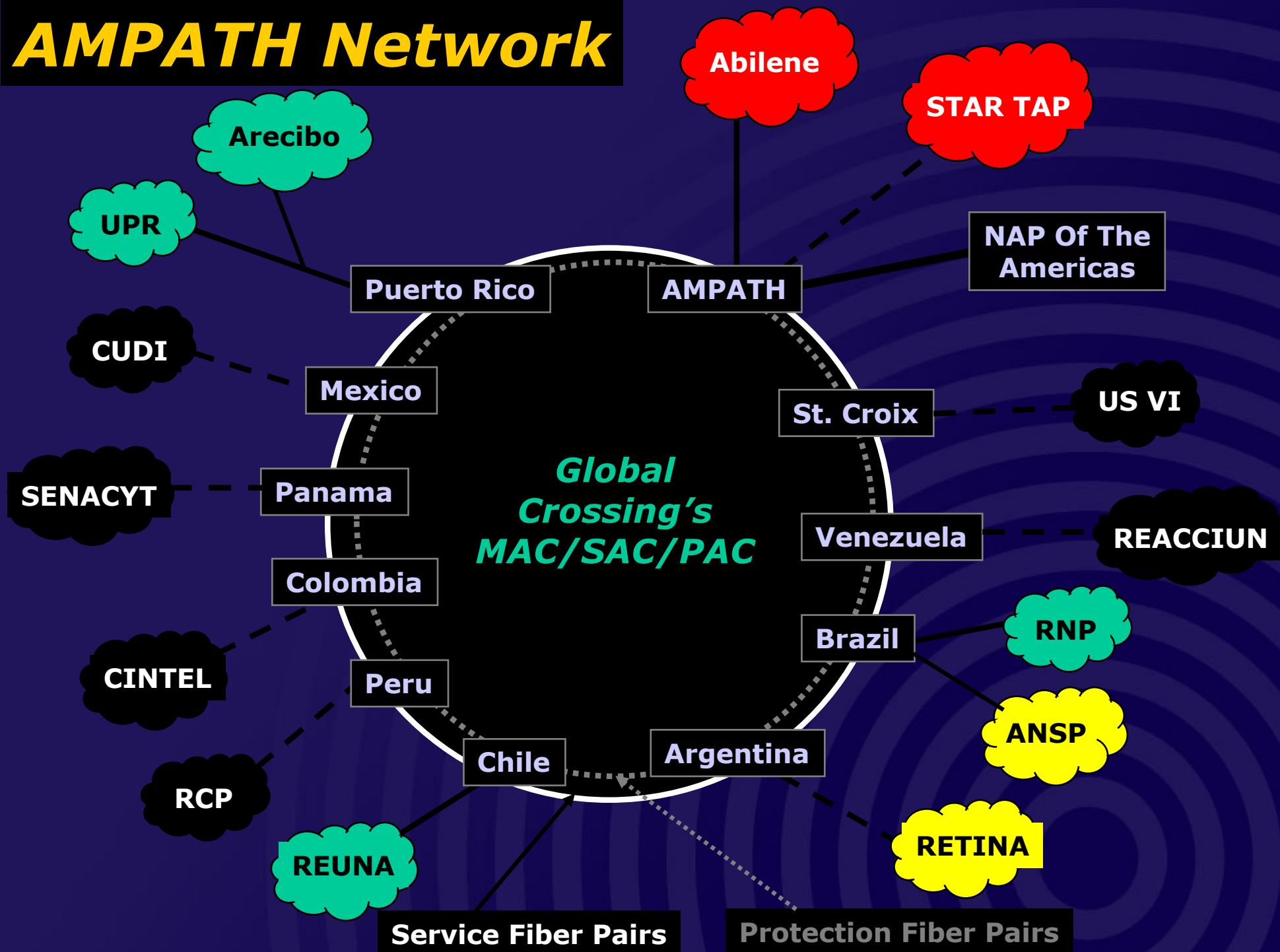


AMPATH Network

- Flexible and Scaleable
- SDH Infrastructure:
 - ✓ Avoids ATM overhead
 - ✓ Benefits Participant NRNs not using ATM
- ATM infrastructure:
 - ✓ PVCs, PVPs
 - ✓ Direct peering between Participants
- Optical infrastructure supporting wavelengths
- Direct layer 2 or layer 3 connectivity to other countries connected to the AMPATH network.



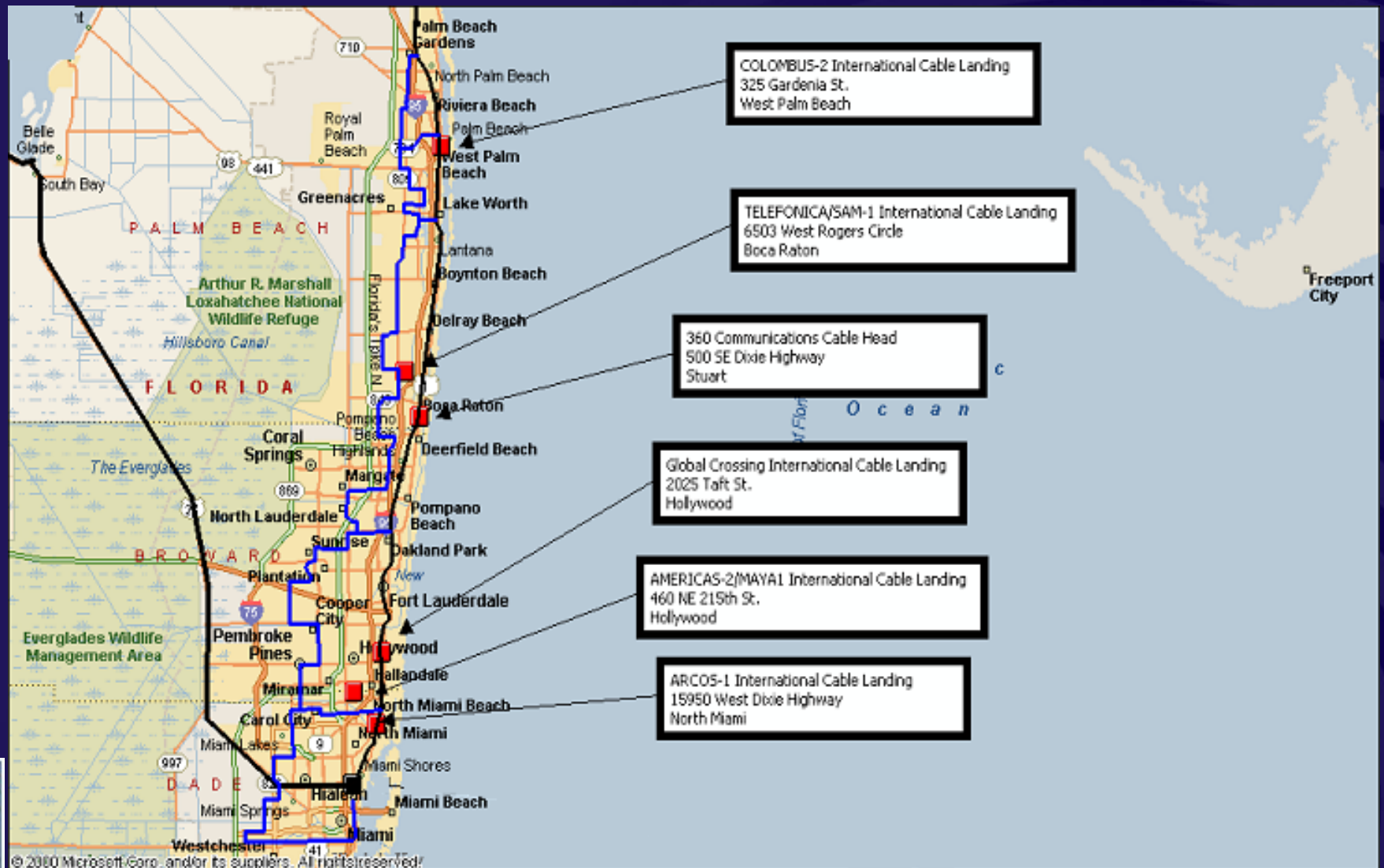
AMPATH Network





- **Fifth Tier-1 NAP**
- **Strategically located to serve Latin America, the Caribbean, Southern Europe and Africa**
- **Close to major carrier POPs and 7 worldwide undersea cable landings**

International Cable Landings

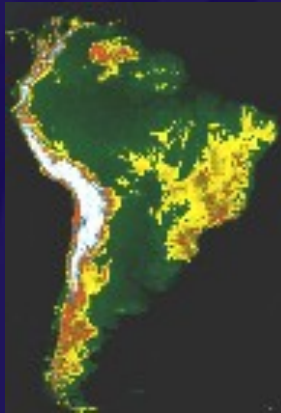


Win-Win Opportunity

- AMPATH is seeking connectivity to the US Federal networks:
 - NREN, NISN, Esnet, DREN
 - Universities and research organizations using AMPATH are very interested in connectivity to the US Federal networks
- US federal agency projects require network connectivity to South American countries



A Virtual Laboratory: NASA Astrobiology Institute, NASA Ames Research Center



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Contact:

Hector D'Antoni

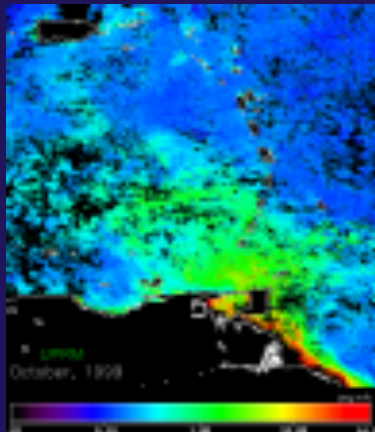
NASA Ames

Research Center

hdantoni@mail.arc.nasa.gov

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Remote Sensing Research and Digital Archives at the University of Puerto Rico



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**NASA's Tropical Center
for Earth and Space
Studies (TCESS)
University of Puerto
Rico.**

Fernando Gilbes

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URL: <http://sil.uprm.edu/>

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TerraFly: NASA Regional Applications Center



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Contact:

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Collaborators:

US Geological Survey

NASA

National Science Foundation

IBM

URL: <http://TerraFly.fiu.edu>

AMPATH

Use Of Metadata In Cross Language Information Retrieval For Multinational Counterdrug Agencies



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Collaborators:

US Southern Command

JIATF-E

Coast Guard

Customs

DEA

ONDCP

Department of State/INL



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Infrastructure Enabling Potential Areas of Collaboration Between the International Space Station and the Americas



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URL:

<http://www1.msfc.nasa.gov/NEWMSFC/station.html>

and

<http://spaceflight.nasa.gov/station/index.html>



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URL:

http://corn.eos.nasa.gov/performance/Net_Health/files/INPE-IDN.html

and

http://corn.eos.nasa.gov/performance/Net_Health/files/INPE-HSB.html



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NSF 0123388 Award

**FIU AMPATH Workshop to Identify Areas of Scientific Collaboration
between the US and the AMPATH Service Area, August 15 – 17, 2001**



AmericasPATH (AMPATH)

Computational Science and Engineering Applications

<http://www.ampath.fiu.edu/APPLICATIONS/Appendix A.htm>

**Tell us about your applications. Complete the
*Request for Application Information at:***

http://www.ampath.fiu.edu/application_info_req.htm



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Connectivity Scenarios

- US Federal networks peer with AMPATH in Miami?
- AMPATH peers with US Federal networks at an NGIX?
 - STAR TAP?
 - MAX GigaPOP?



Questions

- Establish an NGIX in Miami at the NAP of the Americas?
- Other cities being considered?
 - NYC?
 - Seattle?
- Would connectivity from Miami provide cost savings?
- What are the obstacles?



More Information ...

www.ampath.fiu.edu

ampath@fiu.edu



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JET Meeting, Nov. 15, 2001

Thank you



www.ampath.fiu.edu

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