AmLight Express and Protect (AmLight-ExP) Update

GLIF Americas (GLIF-Am) Working Group Meeting
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U.S.-Latin America 100G network link

PRESS RELEASE
FOR IMMEDIATE RELEASE
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Americas Lightpaths Express and Protect Activates First US – Latin America 100G Networking Link Enhancing Infrastructure for Research and Education

Miami, Florida, May 11, 2016 – Florida International University's Center for Internet Augmented Research and Assessment (CIARA) is pleased to announce the first 100G research and education network link between the U.S. and Latin America, a major component of the five-year AmLight ExP (IRNC BACKBONE: Americas Lightpaths Express and Protect) NSF Award#ACI-1451018.

On April 18, 2016 the AmLight Consortium activated the first 100G link of the AmLight-ExP project. It has 106ms delay and it goes via the Atlantic between Miami, FL and Sao Paulo, Brazil. The 100G link is under evaluation for the next 30 days. "To date, we have not seen any packet loss or errors and, to evaluate it, we are using an IXIA 100G packet generator," said Jeronimo Bezerra AmLight Chief Network Engineer.
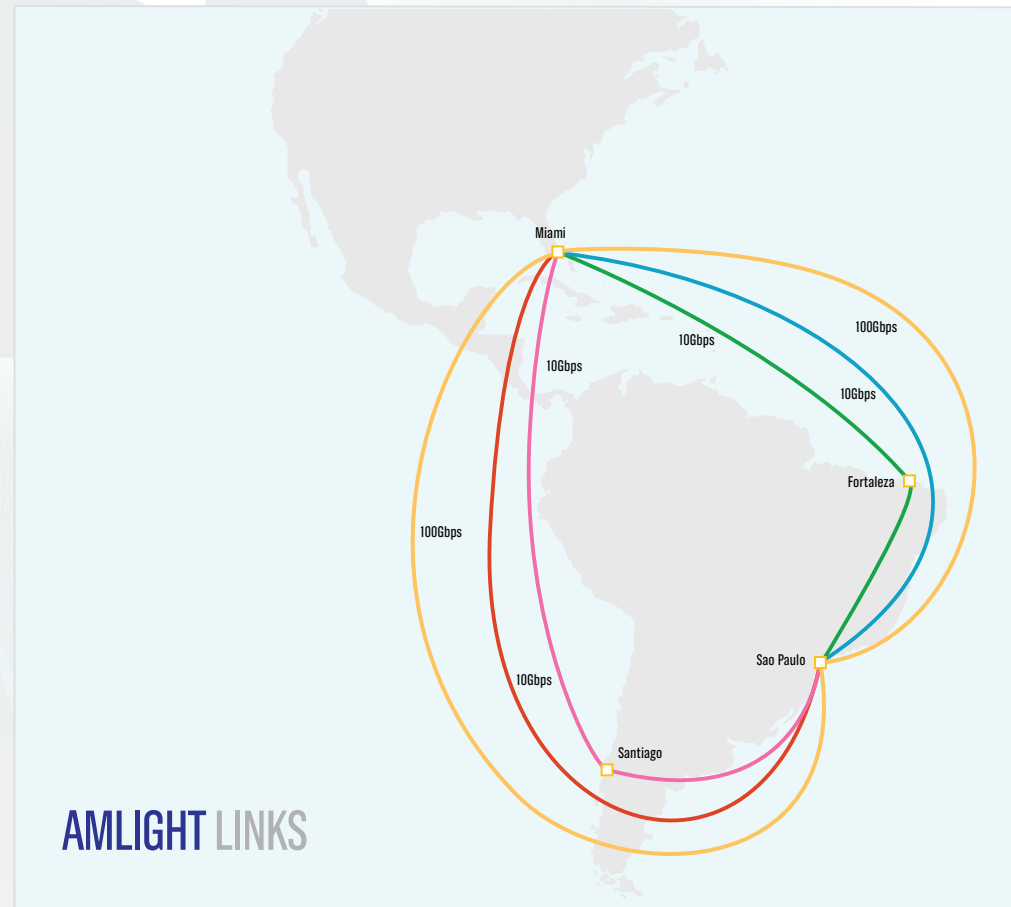
The AmLight Consortium is a group of not-for-profit universities, state, national and regional research and education networks including the AmLight ExP project at Florida International University, RNP, ANSP, RedClara, REUNA, FLR, AURA, Latin American Nautilus, and Internet2.

AmLight Express and Protect (AmLight-ExP)

- AmLight-ExP is a project (2015-2020) of the National Science Foundation
  - Award# ACI-1451018
- AmLight-ExP builds upon the achievements of the AmLight project (2010-2015)
  - Award# ACI-0963053
- Introduces spectrum capacity between the U.S. and Brazil
- Continues evolving a rational network infrastructure, using both spectrum and leased capacity

AmLight-ExP Today

- 100G Miami-São Paulo, Atlantic

- 100G Miami-São Paulo, Pacific

- 4x10G links, landings in São Paulo, Fortaleza, Santiago

- 240G of aggregate bandwidth capacity

- 100G ring to include Santiago and Fortaleza in November 2016

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AmLight-ExP Future

- **AmLight Express:**
  - 300GHz of spectrum: Miami-São Paulo, São Paulo-Santiago (2018)
  - Spectrum to be configurable by RENs to meet user/application requirements
- **AmLight Protect:**
  - 100G leased capacity ring
  - Miami, São Paulo, Santiago, Panama City, Miami
  - AMPATH, Southern Light, REUNA, and RedCLARA operated
- **Fortaleza as a South Atlantic Crossroads**
  - EulaLink submarine cable from Fortaleza to Portugal
  - SACS submarine cable to Angola (Q3 2018)
  - CBCS submarine cable to Cameroon (Q4 2017)

680G+ bandwidth capacity