AmLight ExP
Americas Lightpaths Express & Protect

AmLight Express and Protect (AmLight-ExP)

NSF International Research Network Connections
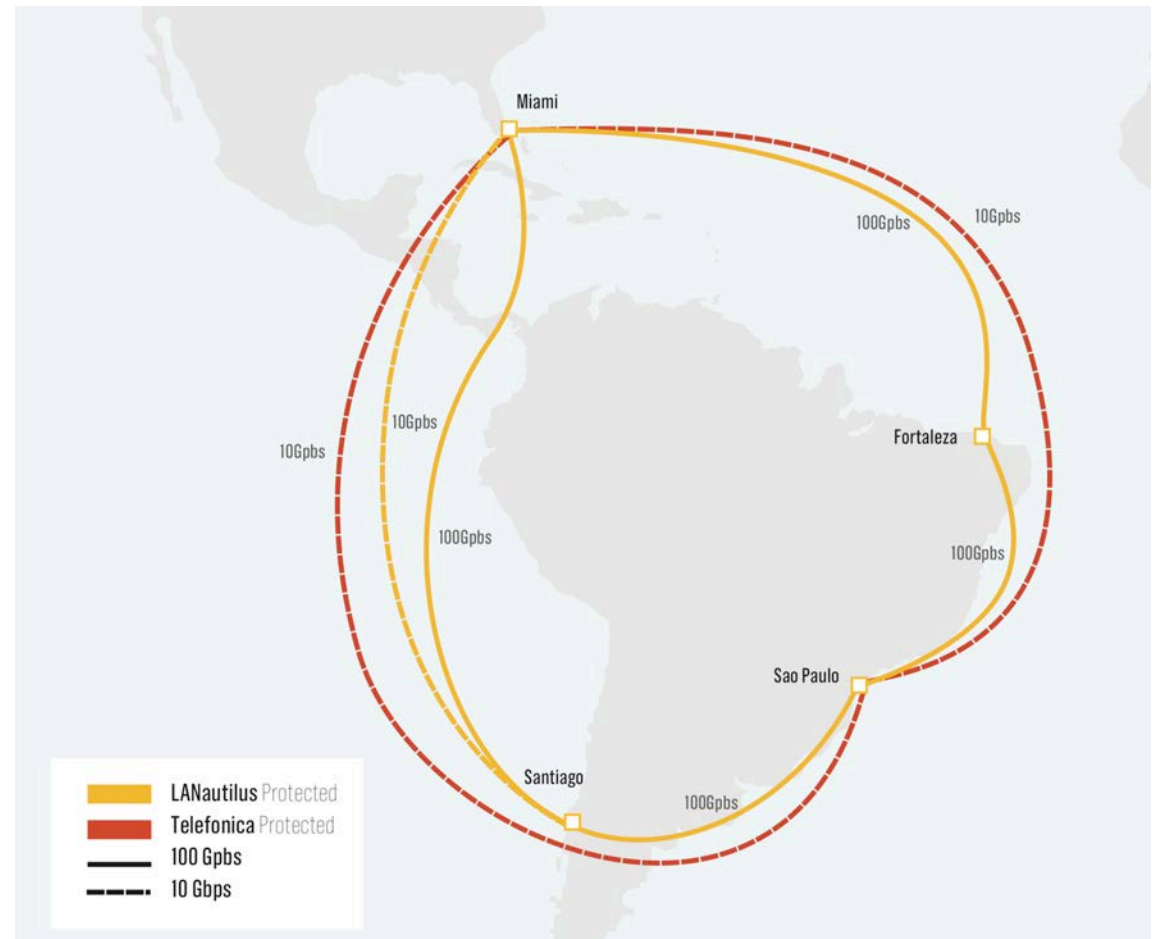Award# OAC-1451018

Julio Ibarra, PI
Heidi Morgan, Co-PI
Chip Cox, Co-PI

Jeronimo Bezerra, Chief Network Architect
Florida International University

Los Angeles
New York
Miami
Panama
Fortaleza
São Paulo
Rio de Janeiro
Santiago

GLIF Americas Working Group Meeting
September 19, 2018
Helsinger (Elsinore), Denmark

Current AmLight Network Infrastructure

- 100G ring Miami-Fortaleza, Fortaleza-Sao Paulo, Sao Paulo-Santiago, Santiago-Miami (solid yellow)

- 10G ring from Miami-Sao Paulo-Miami for protection (dashed red)

- 10G Miami-Santiago for protection (dashed yellow)

- 100G and 10G rings are diverse, operating on multiple submarine cables

- Total upstream capacity presently at 230Gbps

- Collaborative partnerships with ANSP, RNP, CLARA, REUNA, AURA, FLR, and Internet2

Legend:
- LANautilus Protected
- Telefonica Protected
- 100 Gpbs
- 10 Gbps

Map labels: Miami, Fortaleza, Sao Paulo, Santiago, 100Gpbs, 10Gpbs

AmLight ExP
Americas Lightpaths **Express & Protect**

Year 4 activities: Activate Express

- Activate Express spectrum:
  - Two 100G channels via Fortaleza (Q3 2018)
  - One direct 100G channel from Miami to Sao Paulo (Q4 2018)
- Add Panama to the 100G Protect ring: (Q4 2018)
  - Miami, Fortaleza, Sao Paulo, Santiago, Panama, Miami
- Enhance resilience to the AmLight-ExP backbone
  - Monet submarine cable bypasses the Caribbean