FL-IX: 2 Years and 230G Later
Organizational Background

- True multi-site internet exchange point (IXP)
- Formed to encourage interconnection in south Florida
- 501(c)(6) non-profit funded by donations and nominal port fees
- All-volunteer staff
History

- Launched December, 2015

- Hardware donated by:
  - Netflix

- Space, power and fiber donated by:
  - Zayo (2015 - Present)
  - 365 Data Centers/Host.net (2015 - Present)
  - EdgeConnex (2017 - Present)
Port and Member Counts

- 91 active members
  - 42 content
  - 47 access
  - 2 mixed

- 121 active 10G member ports

- 3 active 100G member ports

- 7 pending 100G member ports
Member Country

- Brazil: 14.9%
- United States: 33.5%
- Colombia: 1%
- Argentina: 2.3%
- Chile: 1.1%
- Netherlands: 5.7%
- Peru: 0.6%
- United Kingdom: 2.5%
- Japan: 1.1%
Traffic (Last Year)
Facilities

- zColo, 36 NE 2nd St, 7th Floor, Miami (Core)
- Digital Realty, 6th Floor, 36 NE 2nd St, Miami (Fiber access)
- Equinix-MI2, 36 NE 2nd St, 1st Floor, Miami (Fiber access)
- iM Datacenters, 36 NE 2nd St, 5th Floor, Miami (Fiber access)
- ColoHouse, 36 NE 2nd St, 4th Floor, Miami (Fiber access)
- Equinix-MI1 (formerly NOTA), 50 NE 9th St, Miami (Transport node)
- 365/Host.net-Boca, 3500 NW Boca Raton Blvd, Boca Raton (Leaf switch)
Current Topology
Technology Choices

- VXLAN
  - Standards-based method for transport of Ethernet over UDP
  - Allows for use of IP routing protocols and thus
    - Arbitrary topology including loops
    - IP-based load-sharing (e.g. ECMP)
    - Fast convergence
  - Eliminates spanning-tree related problems
  - Broadcast/unknown flooding via head-end replication
  - RFC 7348
Future Plans

- Complete build-outs to
  - 365 Data Centers/Host.net in Boca Raton via Nx10G DWDM
  - EdgeConnex in Miami via 100G coherent DWDM (Infinera CloudXpress)
- Expand Equinix MI1 gear to support all-100G
- Add additional zColo 100G ports
- Evaluate EVPN for MAC learning
  - Better broadcast control, but uncertain return on effort
- Implement IRR-based filtering on the route servers
Questions? Suggestions?