IPV6 Multihoming and Traffic Engineering

Marla Azinger
ARIN Advisory Council
Sr. IP Engineer and Peering Coordinator
Frontier Communications
marla.azinger@frontiercorp.com

frontier
COMMUNICATIONS SOLUTIONS

Multihoming and Traffic Engineering with IP V6

- What solutions exist or can exist in order to enable V6 multihoming and traffic engineering?
- Can we come to an IPV6 Multihoming and Traffic Engineering solution on a global scale?

How are the solutions for IPV6 Multihoming and Traffic Engineering being made?

- Discussions and experimental solutions are being worked on within IETF
- A document detailing the current possible solutions with their recognized pro's and con's is available at www.nro.net

Suggested Solutions / Work in Progress

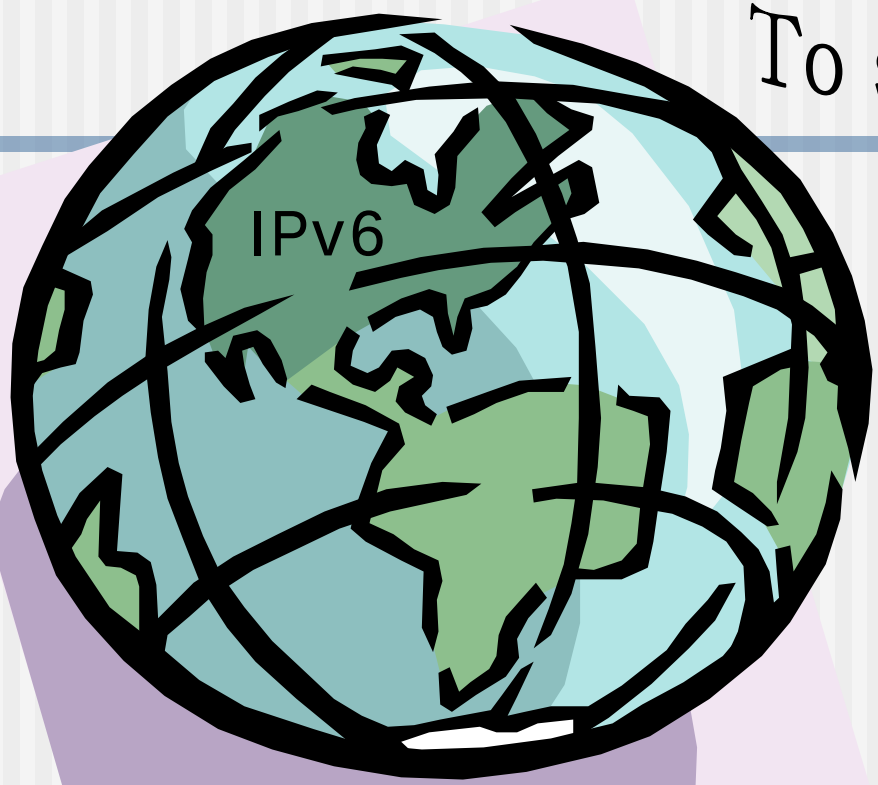
- CIDR boundry/ Filters open to a specific /? (/51, /40 what?)
- Aggregation plans that allow only a specific amount of slices to occur.
- Metro/ Regional assigning of IP Address space.
- Community Codes
- Published list of IPV6 blocks
- Policy
- Shim6 Protocol
- Map & Encap Options (prior only 8+8/GSE was listed)
  - LISP, 8+8/GSE and eFIT
- Maximum Prefix

Special thanks to some of the people dedicated to finding a solution:

- David Meyer
- Dino Farinacci
- Vince Fuller
- Chris Morrow
- Jason Schiller

Jordi and IPv6 Team Up

To save the world from…



Global Warming

Want to further understand the current works in progress?

- http://www.ietf.org/internet-drafts/draft-farinacci-lisp-00.txt
  - Credits:D. Farinacci V. Fuller D. Oran
- http://www.ietf.org/internet-drafts/draft-wang-ietf-efit-00.txt
  - Credits:D. Massey L. Wang B. Zhang L. Zhang

frontier COMMUNICATIONS SOLUTIONS

marla.azinger@frontiercorp.com