RIFT Applicability
draft-wei-rift-applicability-01

RIFT WG

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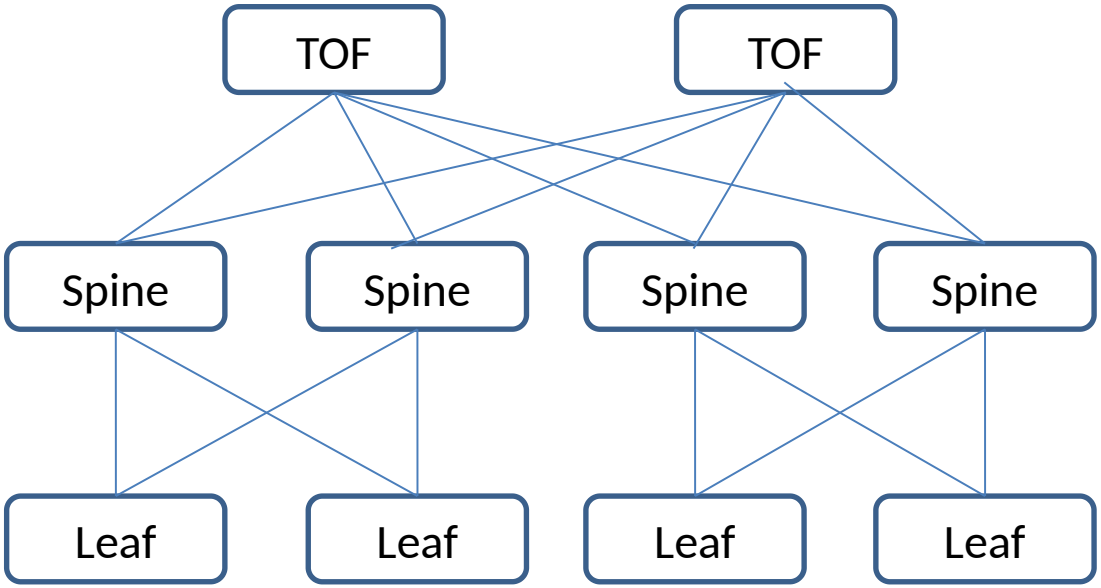
Background

- Clos and Fat-Tree topologies have gained prominence in today's networking
- Key points from deployment experiences :
  - extensive configuration
  - leaf node simplification
  - flooding duplication



RIFT

- A dynamic routing protocol for Clos and fat-tree network topologies

- Different advertisements
  - link-state protocol while “point north”,
  - path-vector protocol while “point south”
- fully automated construction based on detection of link, supports ZTP (Zero Touch Provis ion)
- minimizes the amount of routing state held at each level
- automatically prunes and load balances topology flooding exchanges over a sufficient su bset of links
- automatic disaggregation of prefixes
  - avoid suboptimal routing
  - avoid black-holing
- allows traffic steering and re-routing policies
- allows loop-free non-ECMP forwarding
- automatically re-balances traffic towards the spines based on bandwidth available
- provides mechanisms to synchronize a limited key-value data-store that can be used afte r protocol convergence

Applicability

- Applicable Topologies
  - Horizontal Links
  - Vertical Shortcuts

- Use cases
  - DC fabrics
  - Metro fabrics
  - Building Cabling
  - Internal Router Switching Fabrics
  - CloudCO

- Thanks Tony Przygienda!
- Comments are welcome ᵚ

Thanks!