SPB Futures

March 2012

Ben Mack–Crane
János Farkas
Paul Unbehagen
Don Fedyk
Service abstraction

- Client is not PBN (S–VLAN)
  - E.g., IP, industrial control protocol, etc.
- Client may be ISIS–SPB participant
- Client may not be ISIS–SPB participant
Service abstraction features

- Advertise reachable client addresses
- Endpoint address registration protocol
- Client virtualization tag ("short I–TAG")
SPB traffic engineering

- Constrained shortest path routing
- Meet additional connectivity requirements
  - Bandwidth, delay, diversity, etc.
SPB traffic engineering features

- Advertise service routing constraints
- Constrained shortest path routing algorithm
- Advertise explicit service route
Dual attachment

- End station attached to diverse Bridges
- Active-active or active-standby
  - DRNI option
  - Support without intra-portal link
  - Support for ECMP

*Similar work is being done in IETF*
Support for very large data centers
Support for scalable DC interconnect

*Similar work is being done in IETF
Support for multi-access links

- Shared media LANs
- E-LAN services (e.g., VPLS)
Food for thought

- Are these the only potential enhancements?
- What are the most useful enhancements?
- What are the use cases/requirements

- What do we want to do next on SPB (if anything)?