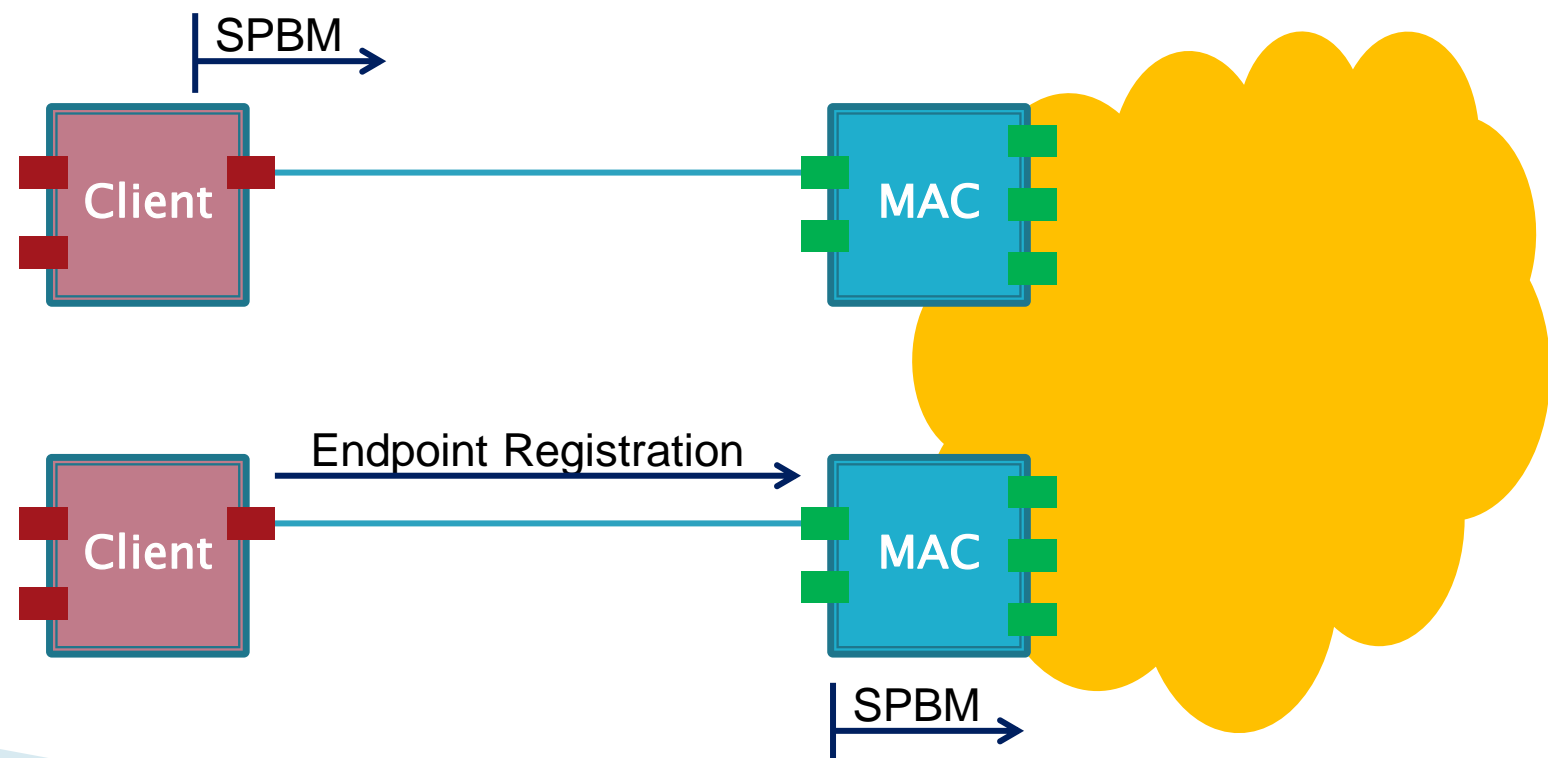# SPB Futures

March 2012

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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

SPBM

Client

MAC

Endpoint Registration

Client

MAC

SPBM

Service abstraction features

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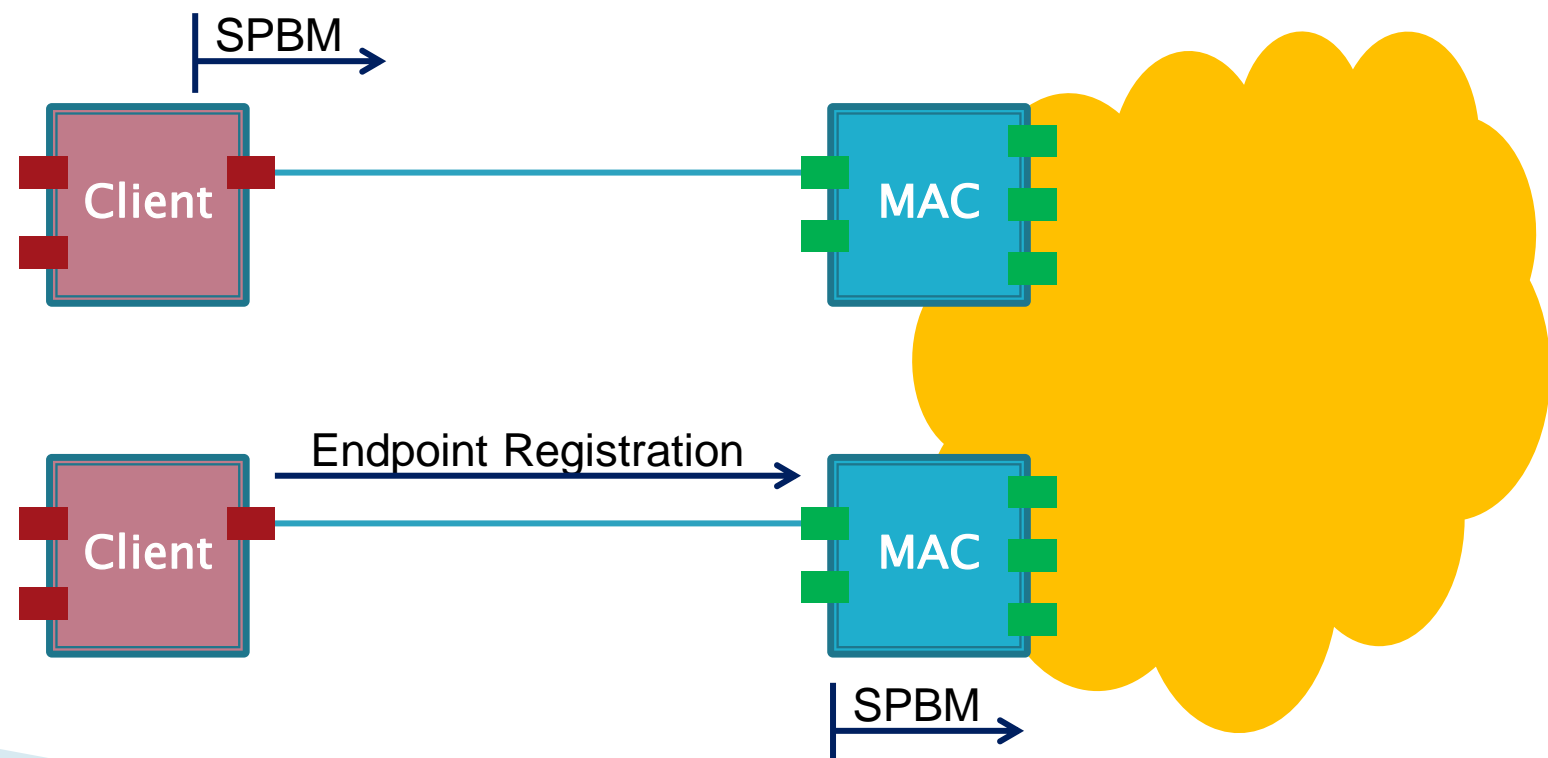
SPB traffic engineering

- Constrained shortest path routing
- Meet additional connectivity requirements
 - Bandwidth, delay, diversity, etc.

Shortest path

Shortest path satisfying constraints
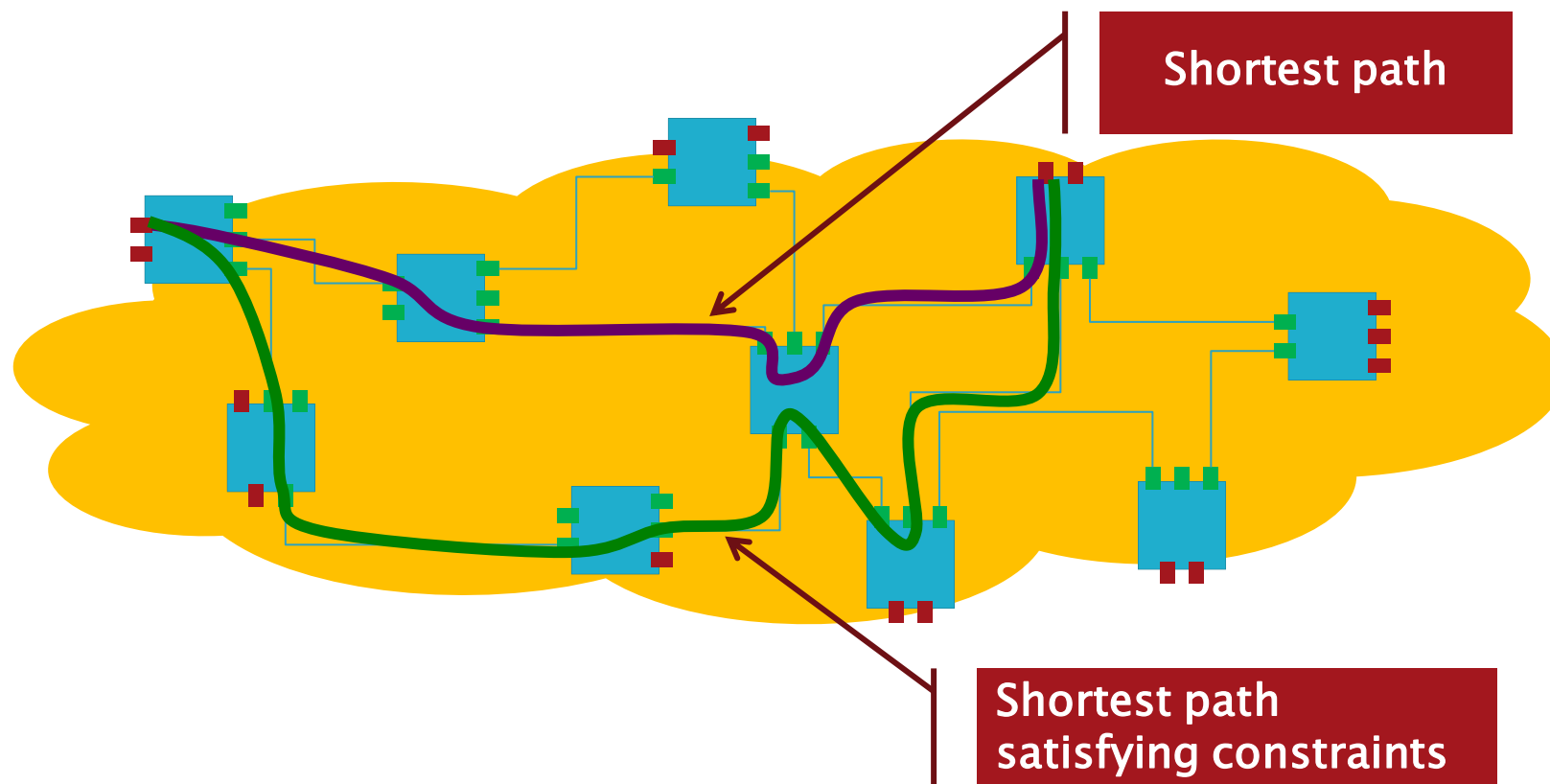
SPB traffic engineering features

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

Shortest path

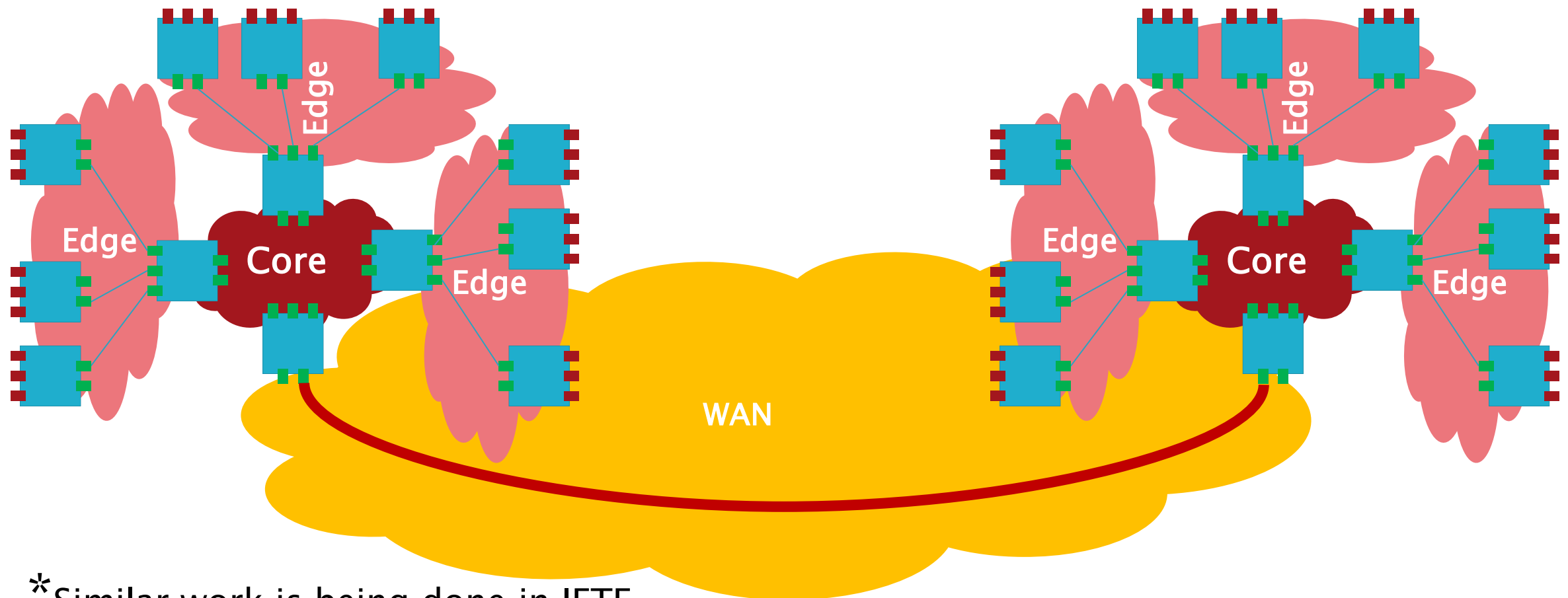Shortest path
satisfying constraints
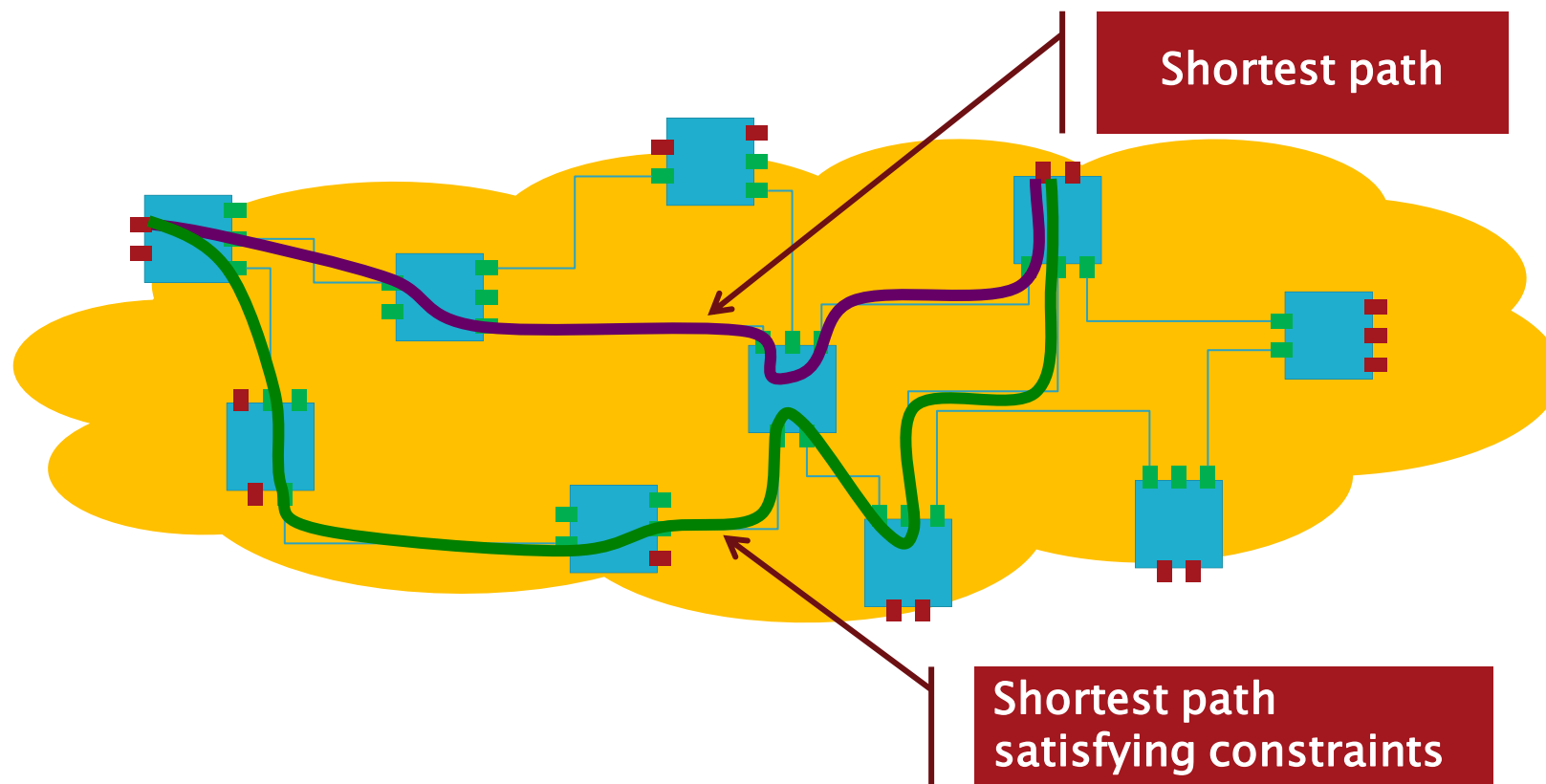
Dual attachment

- 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
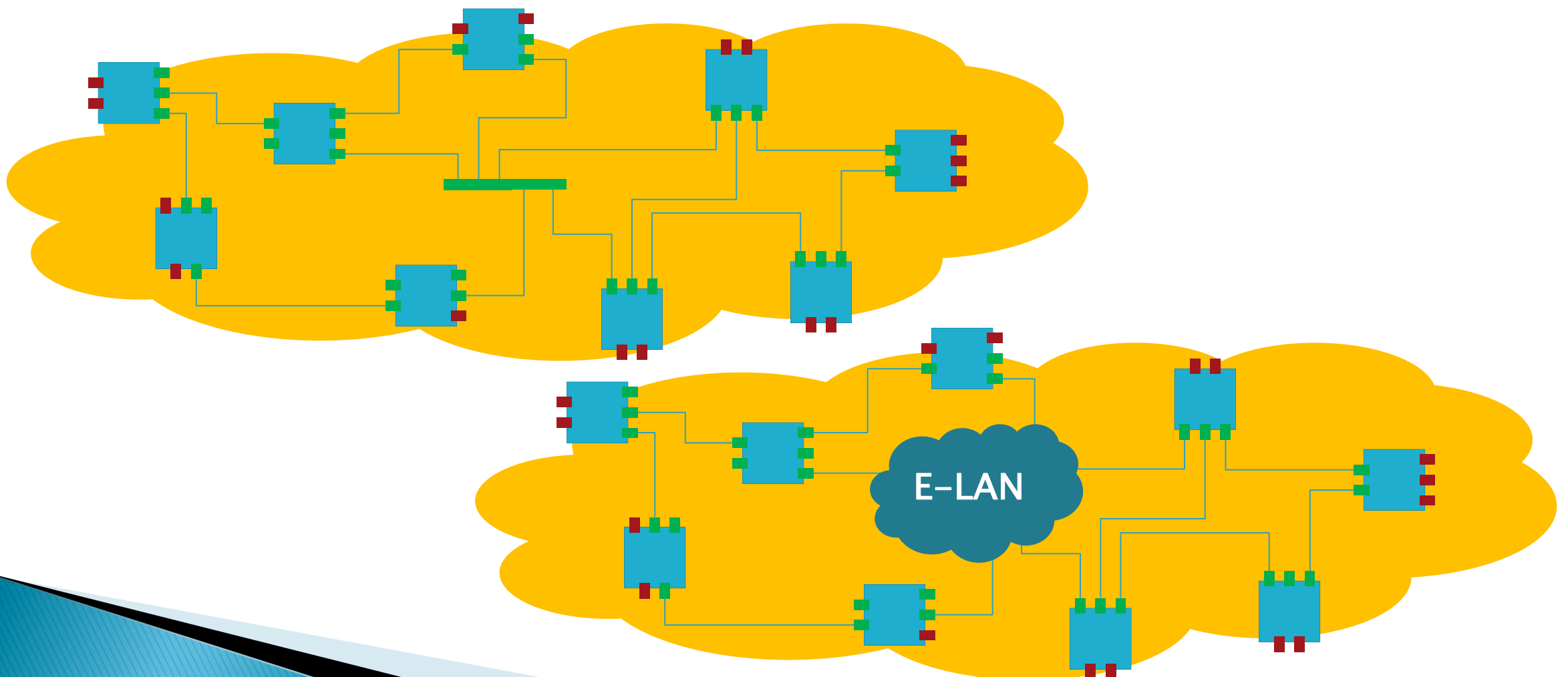
Client

MAC

MAC

SPB
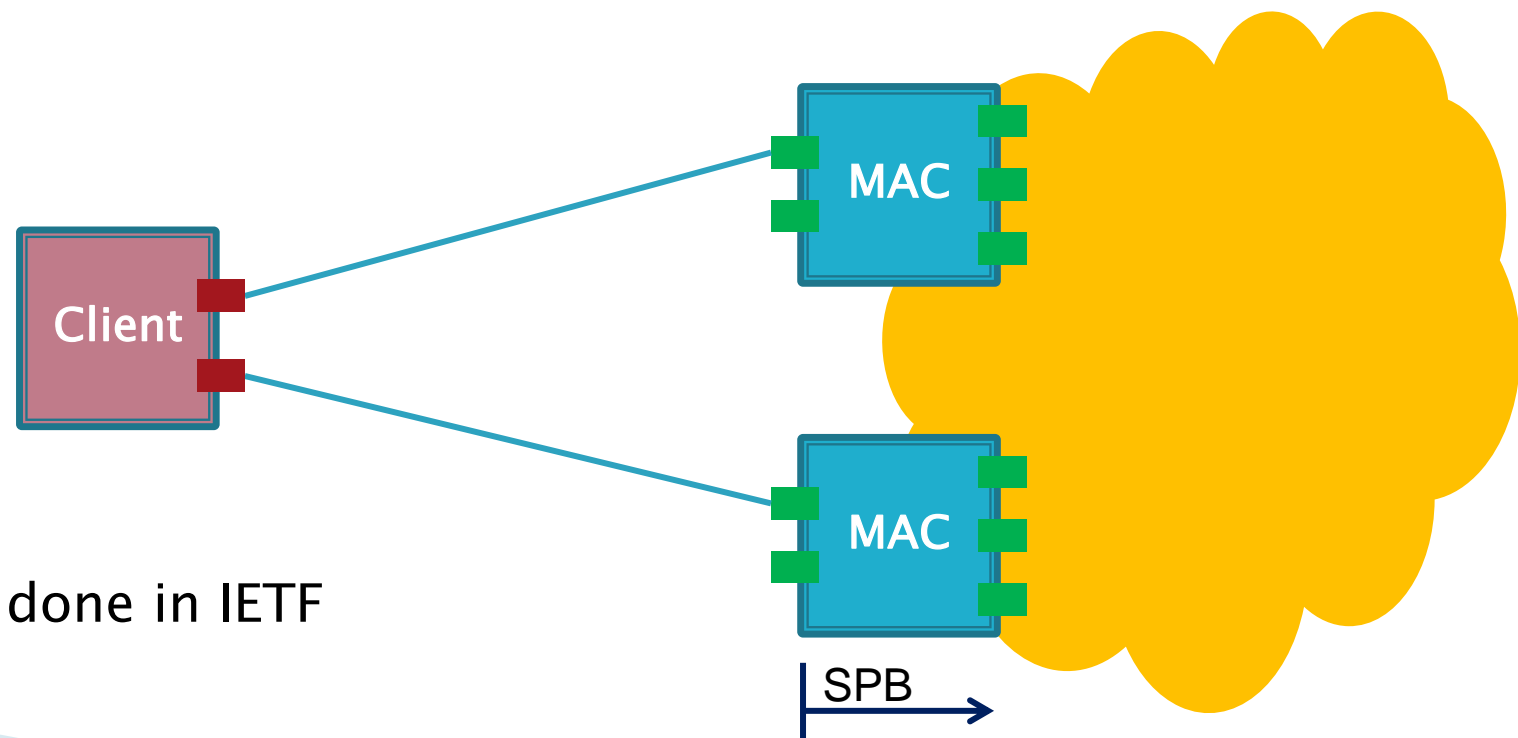
DC scaling and interconnect

- 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)?