



# The Current State and Future Trajectory of Switched Ethernet Services

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# In Theory VPLS is Attractive Because....

- Scalable
- Flexible
- Highly Configurable
- Predictable and Reliable
- More Secure than L3 Networks
- “Known,” “simple” Ethernet protocol
- Could be widely deployed to support both business and consumer requirements

# VPLS is Often Are Hemmed in by E-Line

- When asked, many providers have yet to distinguish successful E-Line applications from current/anticipated future Sw. Ethernet apps
- This perspective echoed in MEF's current focus
- Same problem with features—few providers offer all of these: VLAN tagging, jumbo frames, L2 broadcasting or multicasting, BoD, etc.
- Very few providers are set to truly scale right now on all these fronts -- sales/marketing, POPs and nodes, OSS for design, installation and maintenance, NNIs, etc.

# VPLS is also Hemmed in by MPLS

- Same or fewer CoS than MPLS
- Often priced the same as MPLS- some providers charge more for VPLS for larger size ports
- SLAs are no better than MPLS, which isn't saying anything earth-shaking.
- Many providers cite MPLS core as the defining factor of both VPLS services capabilities. But it's the edge where the customer experiences service functionality and ultimately is the problem (less resilient than MPLS core).

# What's Needed to Move Business Customers to SaaS and Cloud-Based B-B Architectures (1)?

- Simplified, all-in-one applications/packages
  - Many business customers still erroneously believe IP and Ethernet are simple and 'standard'
- Support for applications that work better as services and in a cloud based environment (than most customers can enable via traditional data-center architectures)
  - Already seen with BCDR
  - Could be the same with complex apps like FMC

## What's Needed to Move Business Customers to SaaS and Cloud-Based B-B Architectures (2)?

- Better installation and maintenance metrics
  - Hard to scale if provider can only cut over less than 10 sites/week/customer
  - 99.9-99.99% availability will deter migration
  - Automated, NRT MACs and maintenance
- Interworking, not islands: Make it transparent to the customer
- Far tighter and meaningful bundled warranties
  - Not isolated SLAs that essentially provide the customer with no meaningful assurance
  - One SLA -- (Access+ WAN+ application)

# Recommendations for the MEF to make VPLS a Great B-B Enabler

- Agree on a clear vision of where you want to take Switched Ethernet Services
  - Simplicity--don't proliferate types of end-user Ethernet services
  - Clear differentiation from other (legacy) services
- Continue work on UNIs (like VPLS Types 2.x and future 3.x)
- NGOSS Scalability and Reliability
  - Even without these services, IPv6 and RFID/sensor networks demand it
  - Increasingly aggressive SLAs ---- based on customer's viewpoint
  - Highly automated
- NNIs are essential
  - Must support e-e features and SLAs
  - Phase in complexity, don't tackle all problems on Day 1

# Thank You!

To the MEF,  
ATT, BT, Cox Business, Level 3, Qwest, Telcordia,  
Time Warner Cable, TW Telecom, Verizon Business --

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