

Bridge Interoperability

(draft-sajassi-l2vpn-vpls-bridge-interop-02.txt)

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L2VPN WG

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Cisco Systems

Co-Authors

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History

- **First presented at IETF 61st (Nov/04)**
- **Following the first presentation, had a series of discussions on the mailing list in regard to get better clarifications and understanding of the issues**
- **Second time was presented at IETF 63rd (Aug/05)**
- **Had a good support for it during IETF 63rd**
- **Was asked to partition the issues into mandatory and optional categories**

Objectives

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- To identify issues associated with the use of IEEE bridges as CE devices
- To illustrate and elaborate on how one of the PE models in L2VPN-FR draft can be used to address majority of these issues
- To describe this PE model based on its sub-components
- To demonstrate how this PE model facilitates the interoperability between VPLS and IEEE 802.1ad Bridges

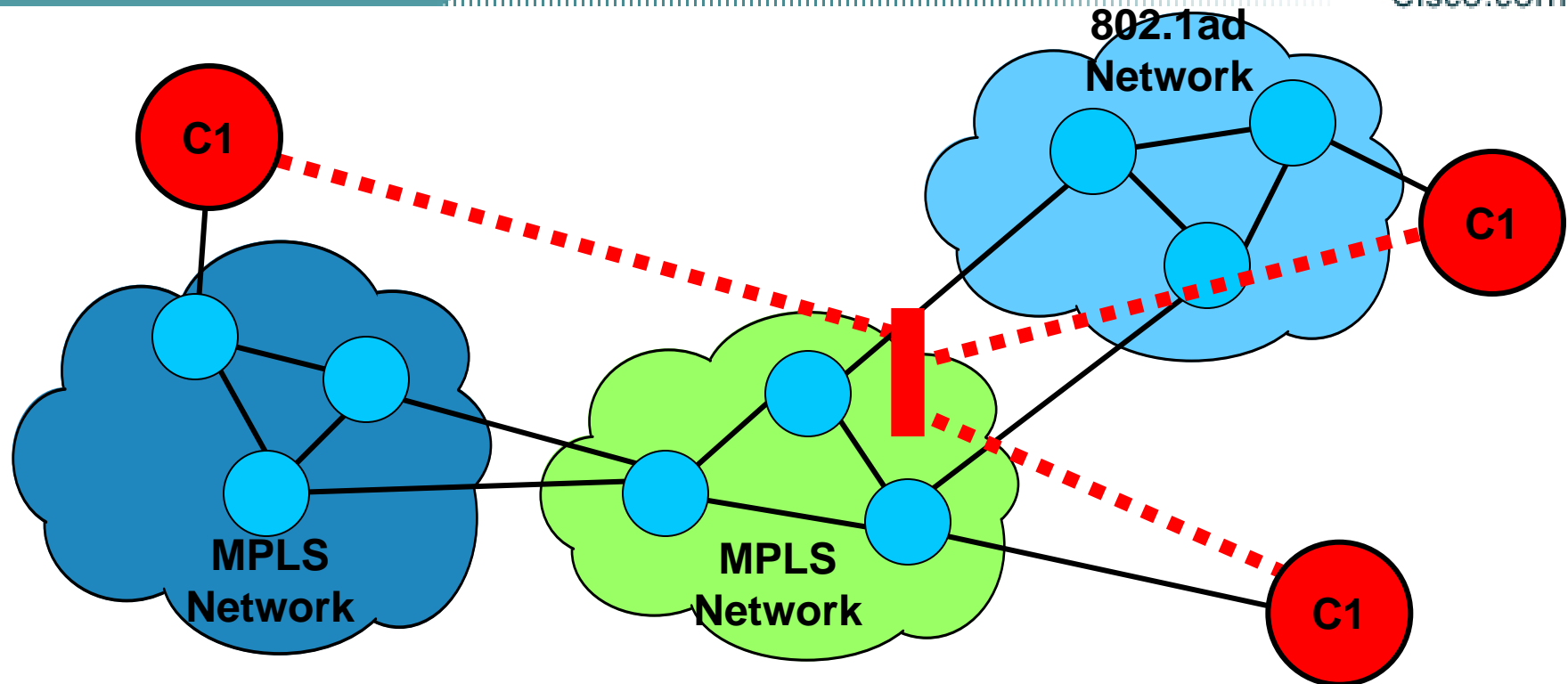
Re-categorization of Issues

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- **Mandatory Issues**
 - Service mapping at ACs
 - CE bridge protocol handling
 - Partial Mesh of PWs
 - Multicast handling
- **Optional Issues**
 - Customer network topology changes
 - Redundancy and dual-homing
 - MAC address scalability
 - Ease of inter-operability w/ Provider Bridges

E2E Ethernet service spanning across different networks

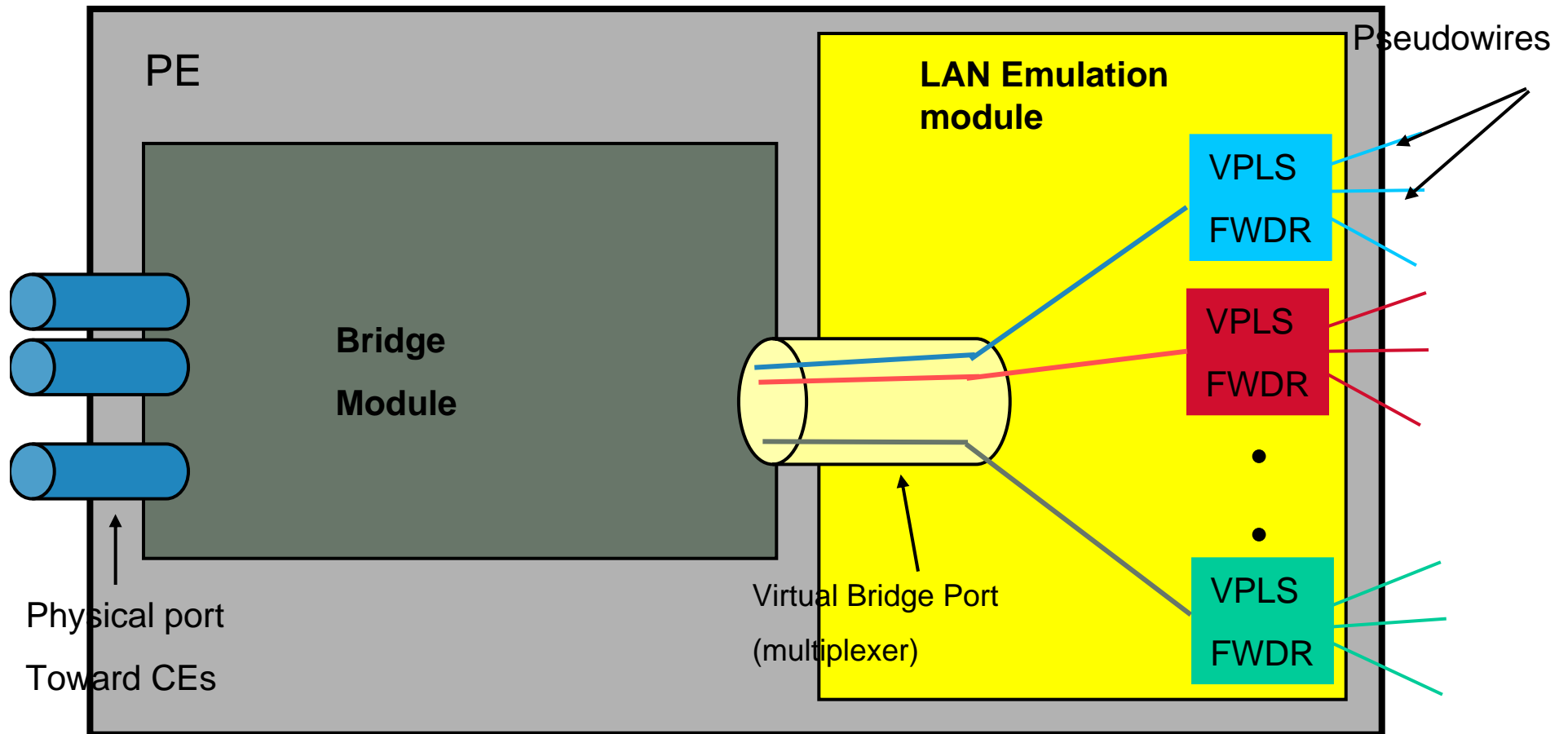
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- ESI – E2E service provided to C1
- VPLS Instance: LAN Emulation portion of ESI (as defined in L2VPN FRWK)

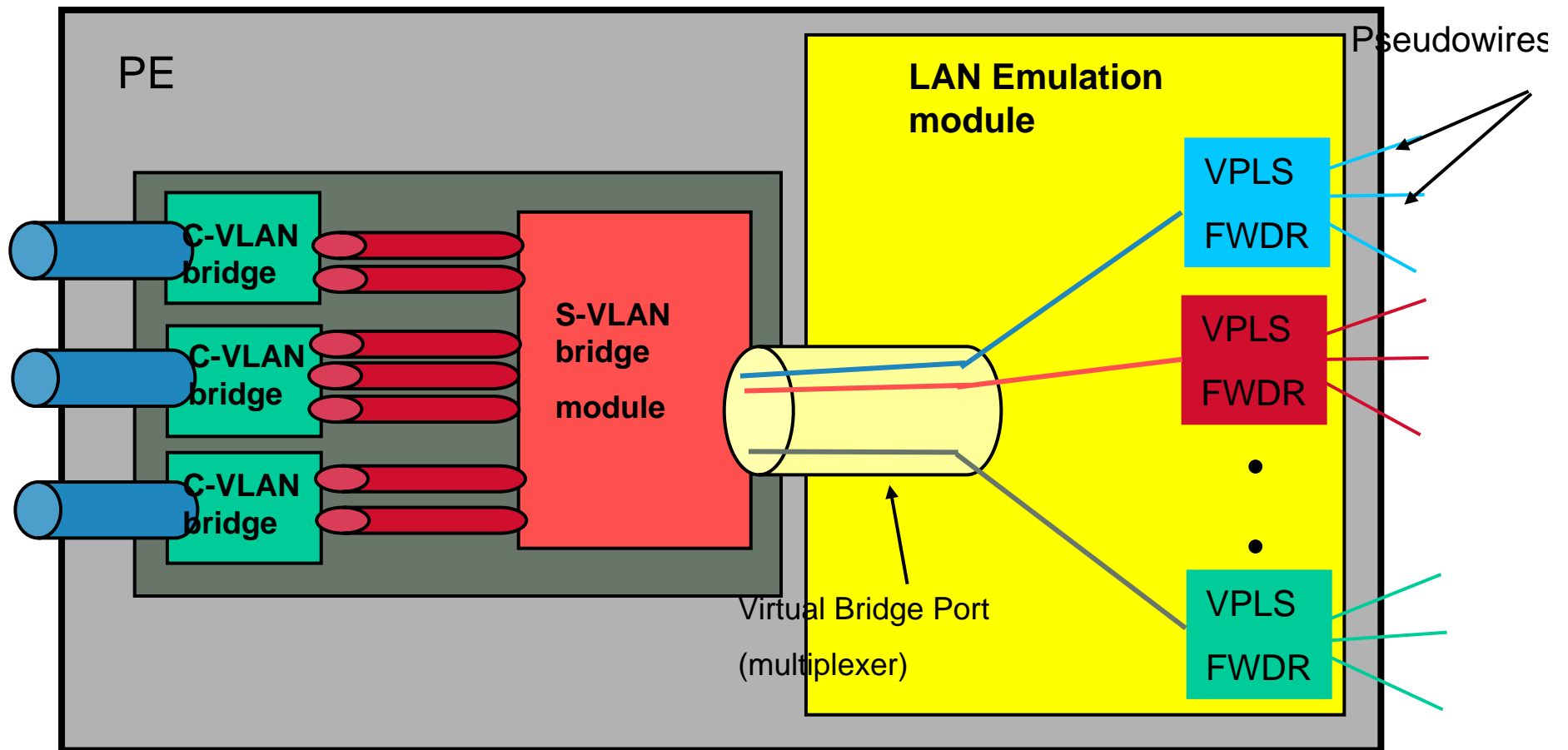
VPLS PE Model as Defined in L2VPN Framework

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VPLS PE Model as Defined in L2VPN Framework – Continue

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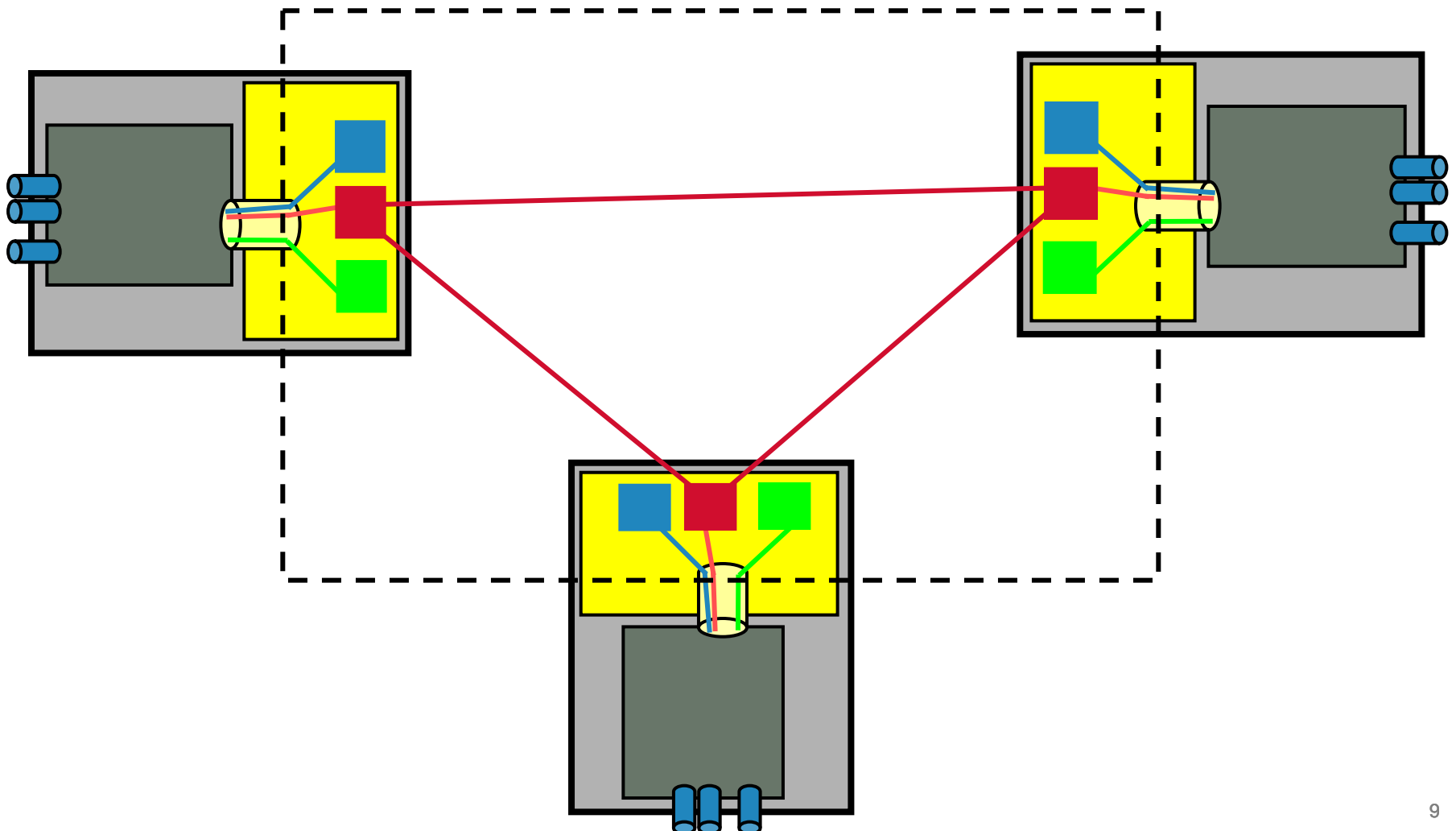


If a PE is modeled as such, then it can handle all of the previously mentioned services

VPLS as LAN (VLAN) Emulation

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VPLS as (V)LAN Emulation



Next Step

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- **Is there any section that needs further clarifications ?**
- **Moving this draft to WG status**

Thank you!

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