

# CISCO SYSTEMS



# **MSP Architecture & Services**

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**APAC Consulting Team**

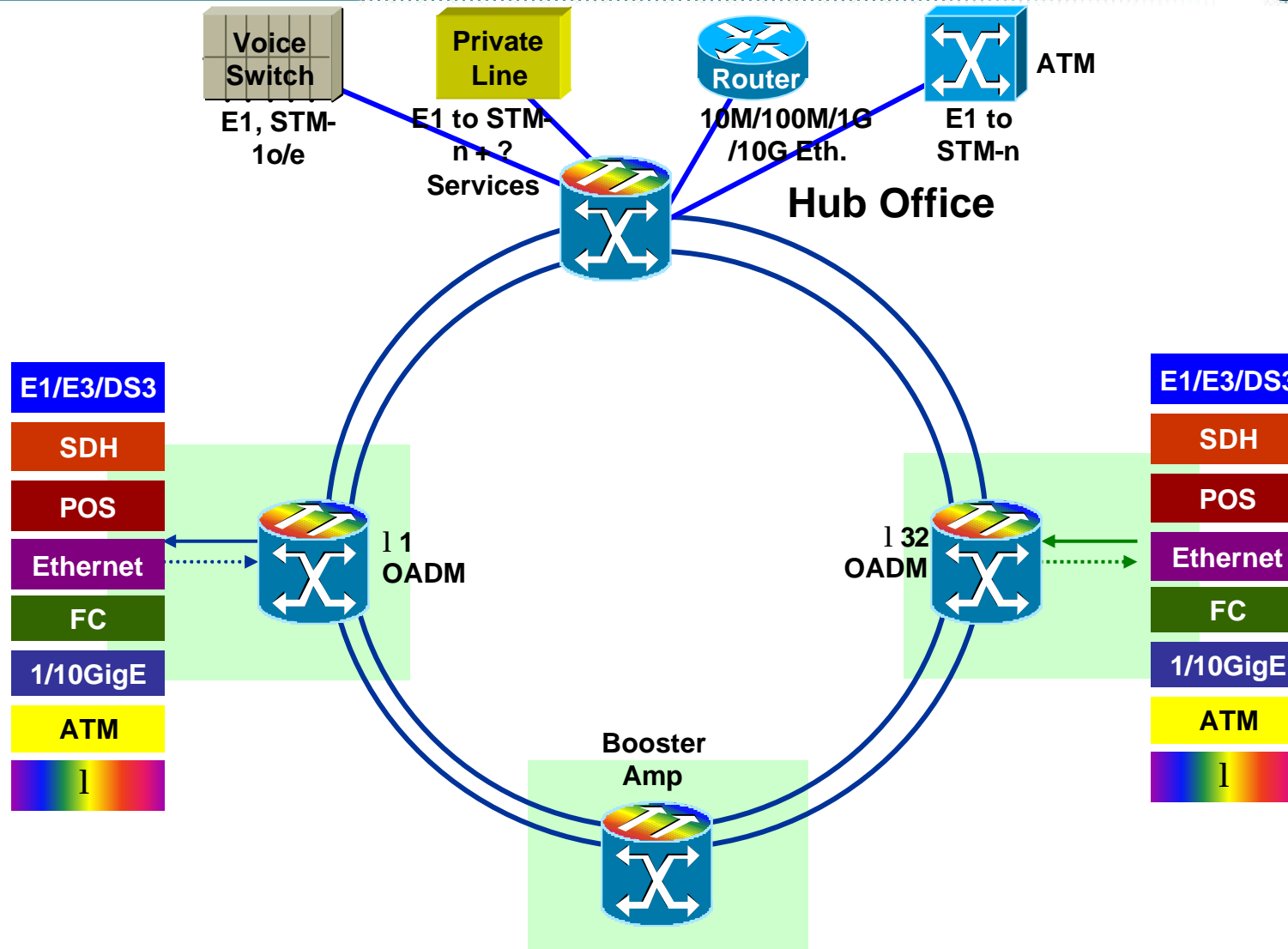
**limwong@cisco.com**

# What is MSPP?

- **TDM solutions**
  - **E1, E3 and DS3 Interface**
- **STM1 to STM64 optical transport bit rates**
- **DWDM and wavelength services**
- **Data solutions including 10/100/1000 Ethernet solutions**
- **Easy to use, end-to-end GUI based point-and-click provisioning**
- **Radical economics**
  - **Reduce OPEX and CAPEX**

# Multi-Service Provisioning Platform

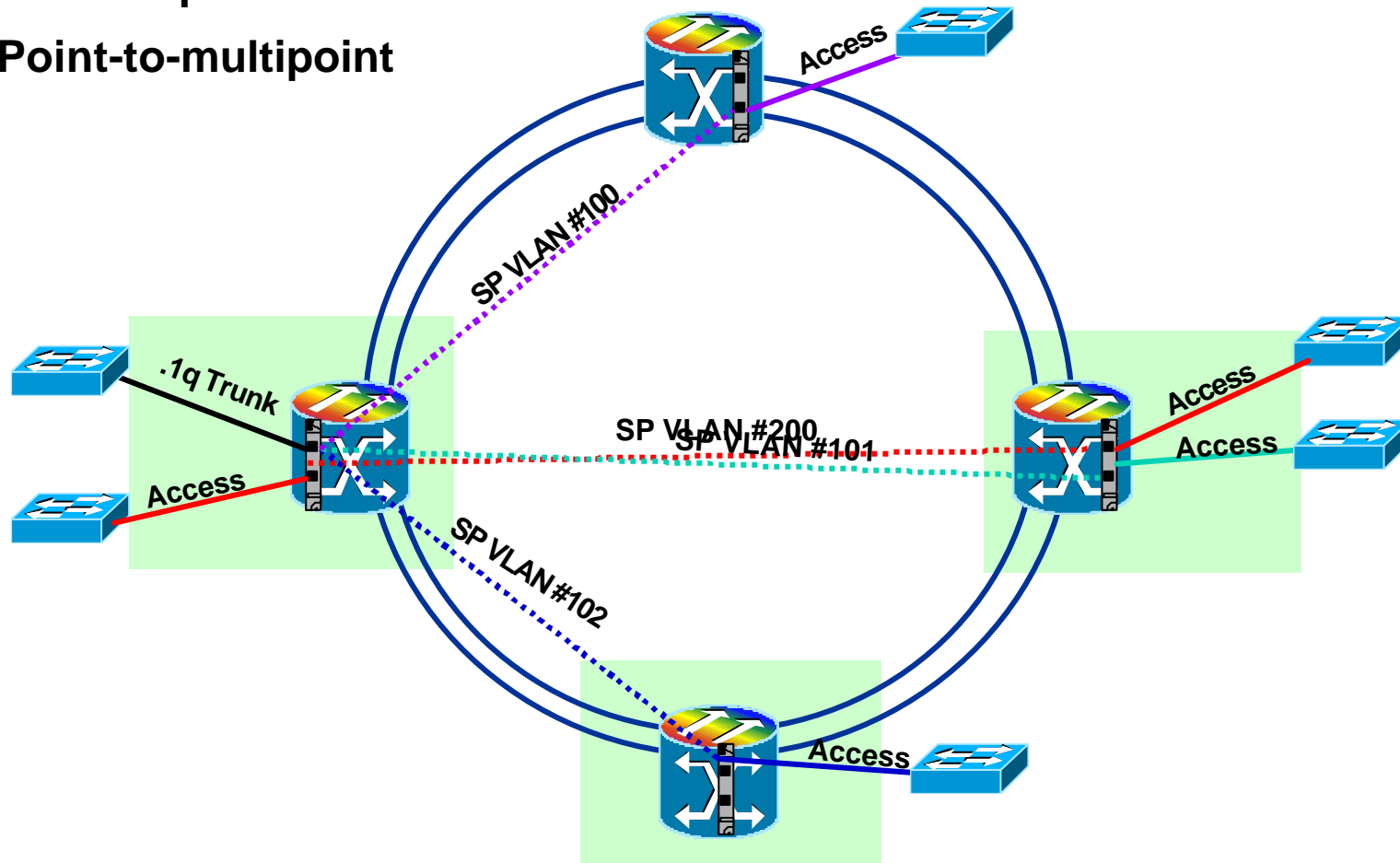
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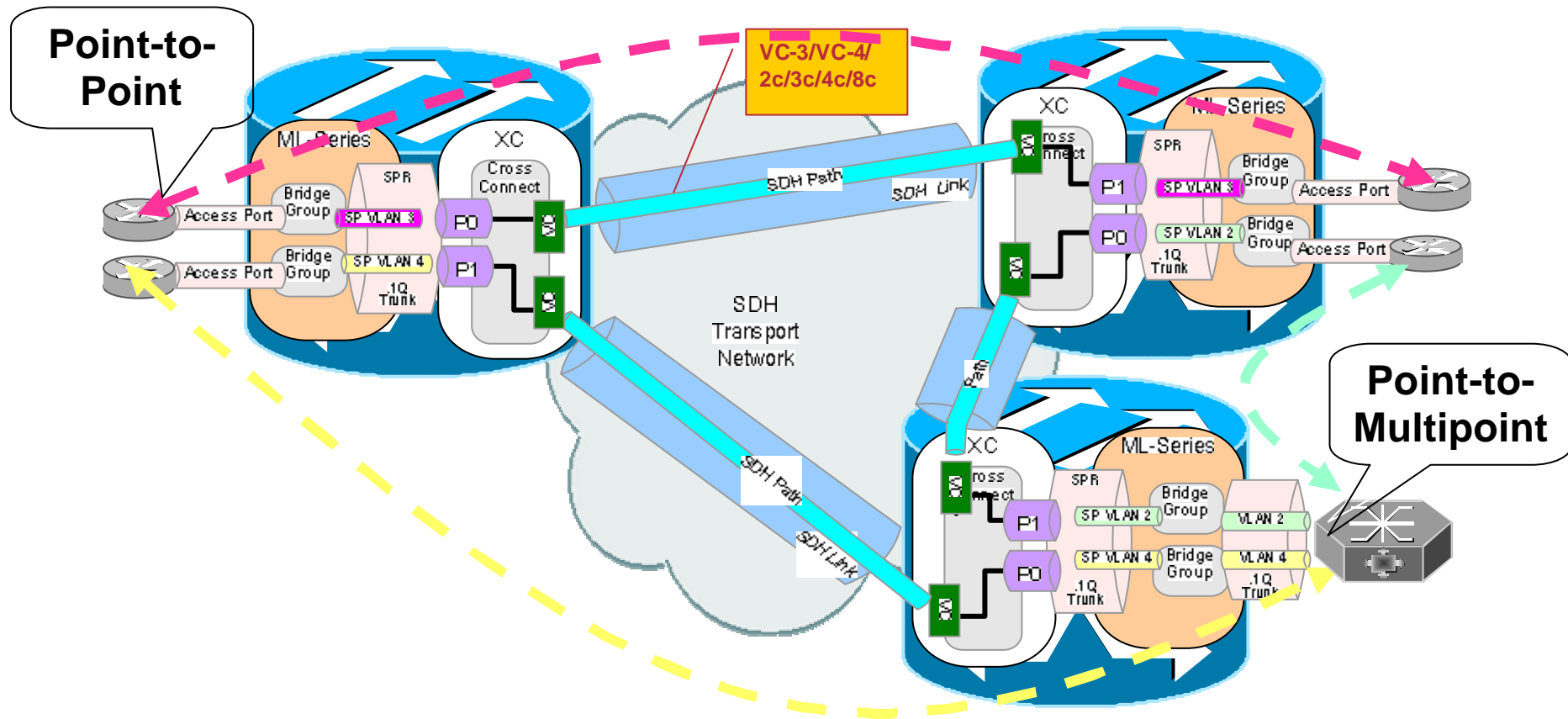
# L2 VPN Services

# Ethernet Relay Services

Point-to-point  
Point-to-multipoint

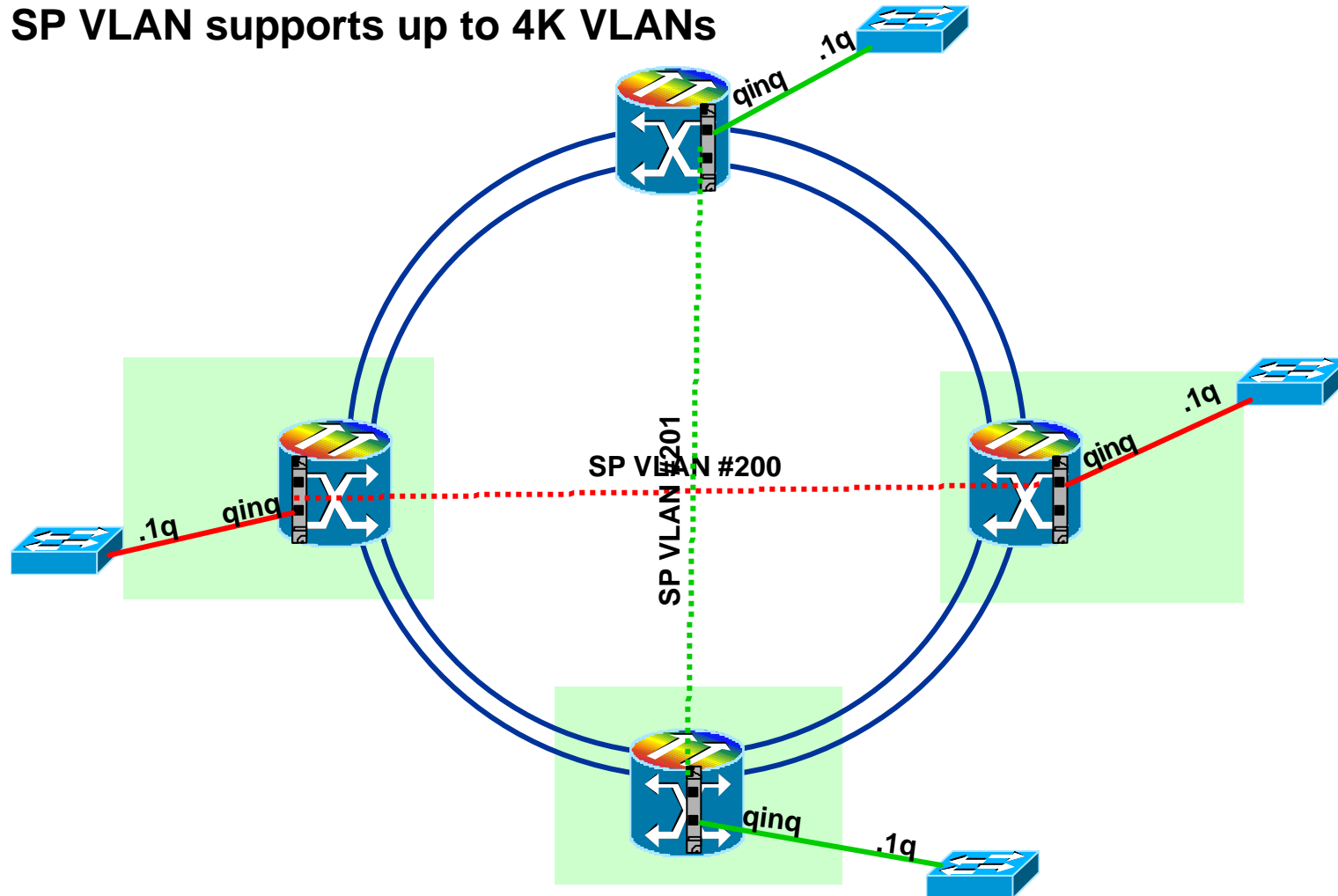


# Ethernet Relay Service



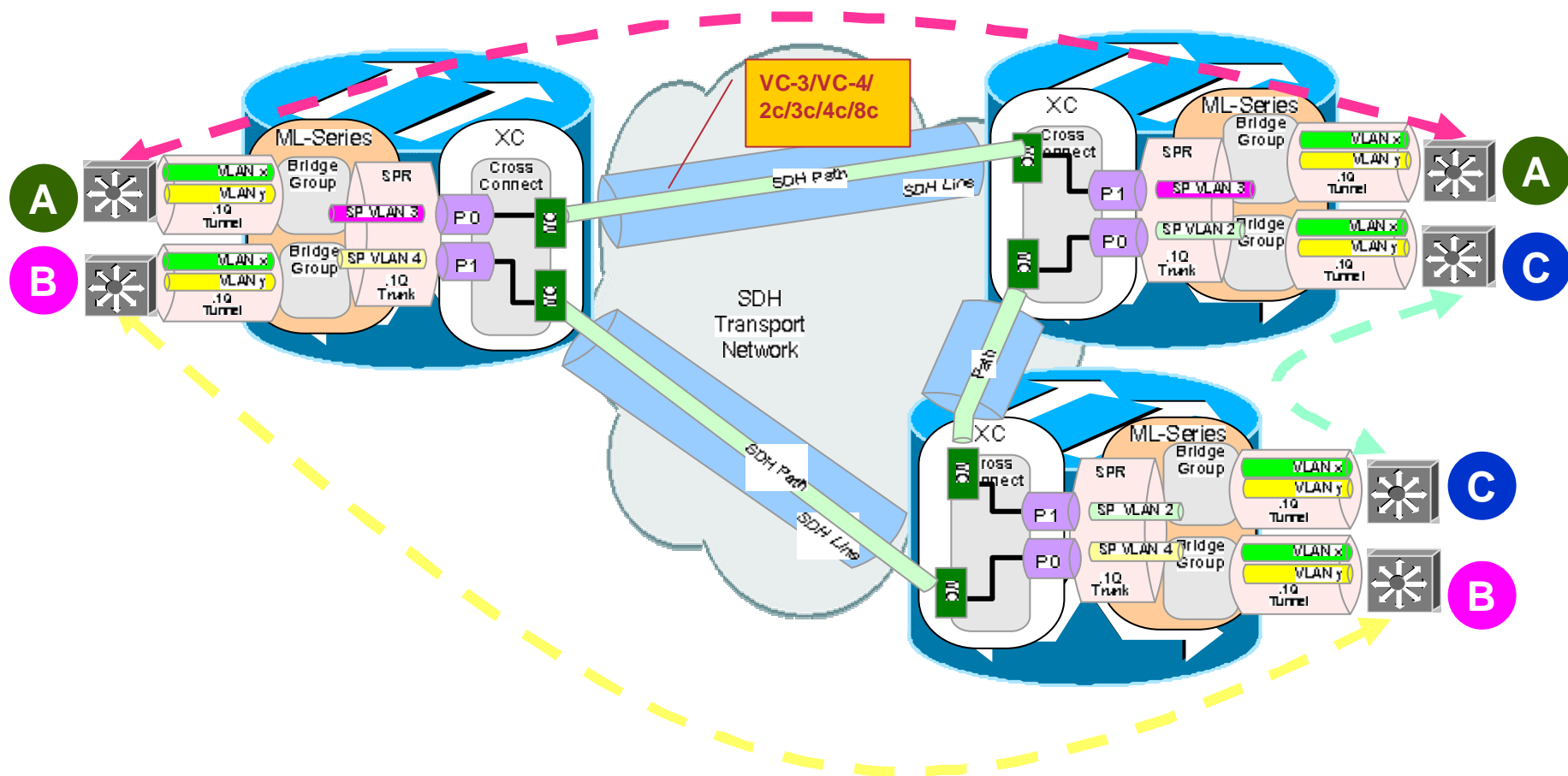
# Ethernet Wire Services

Each SP VLAN supports up to 4K VLANs

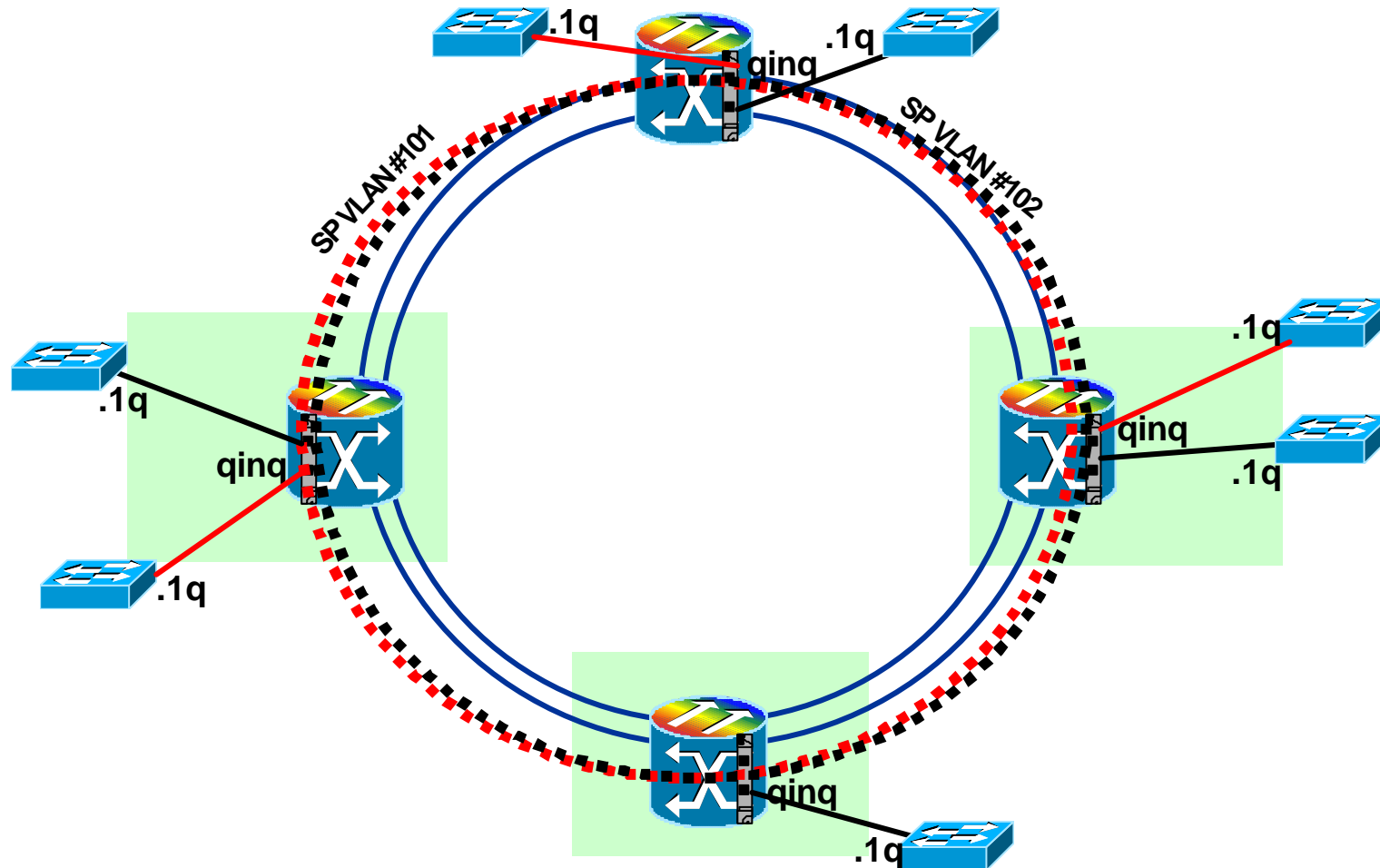




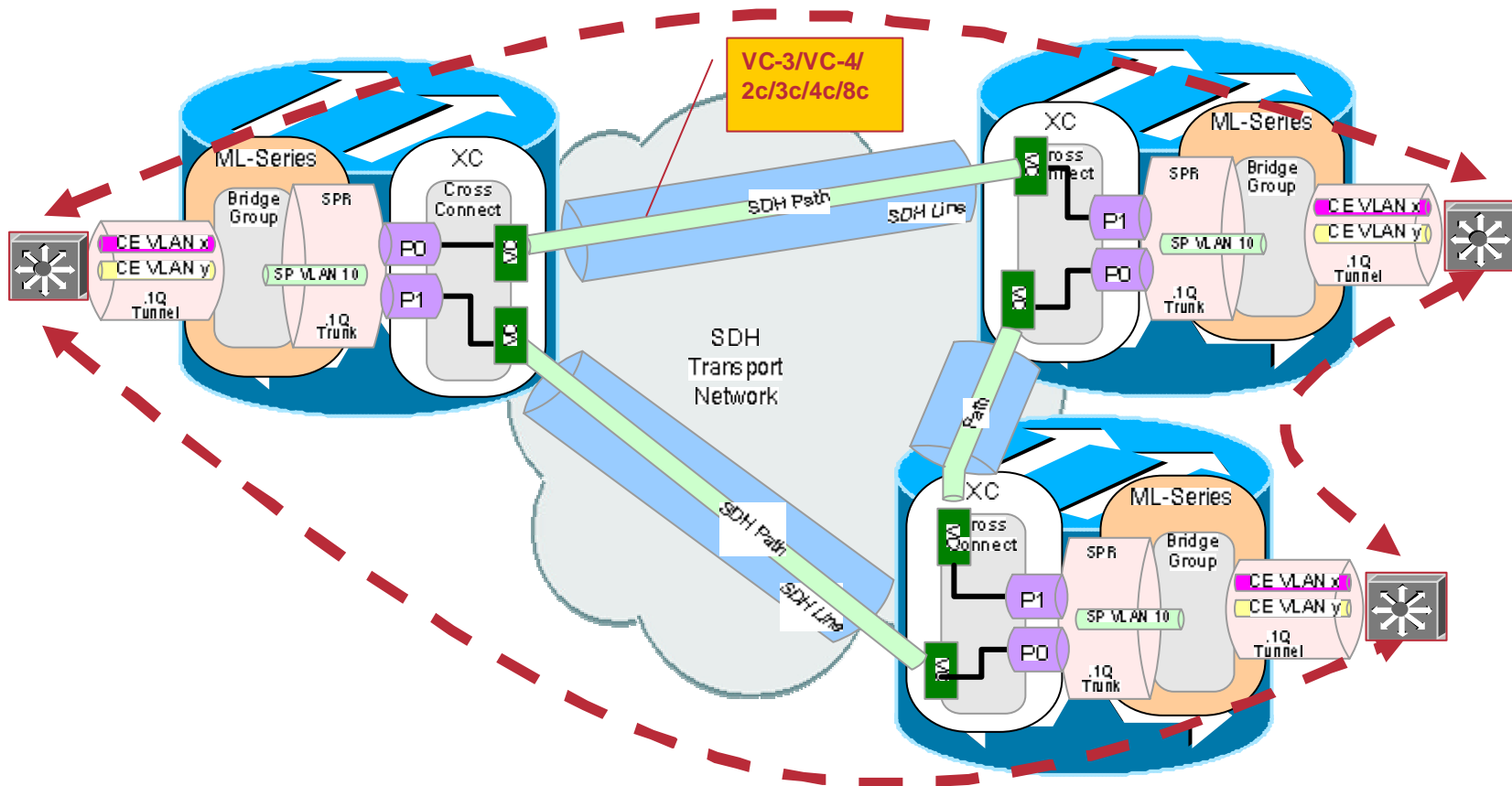
# Ethernet Wire Service



# Ethernet Multipoint Service

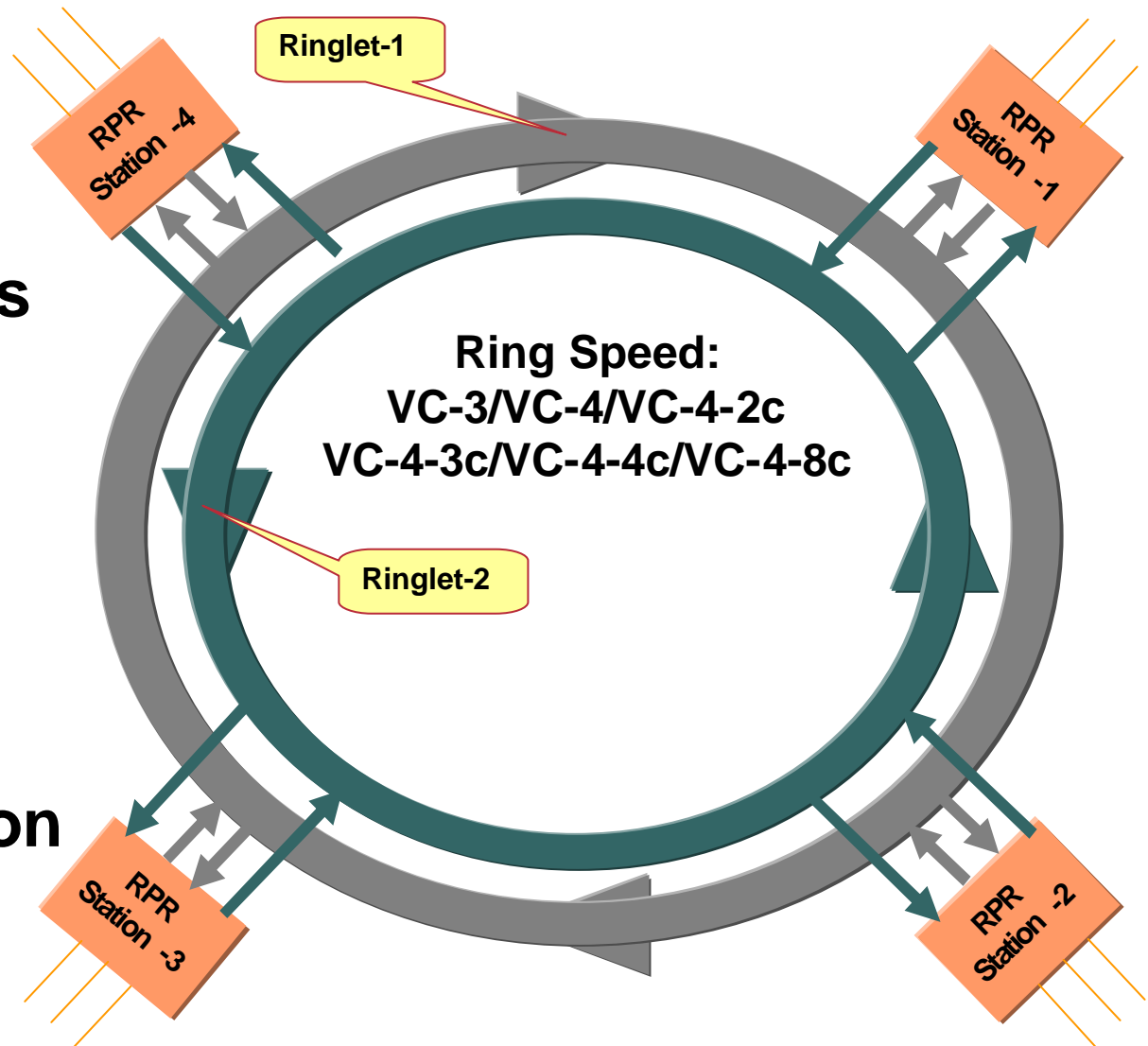


# Ethernet Multipoint Service

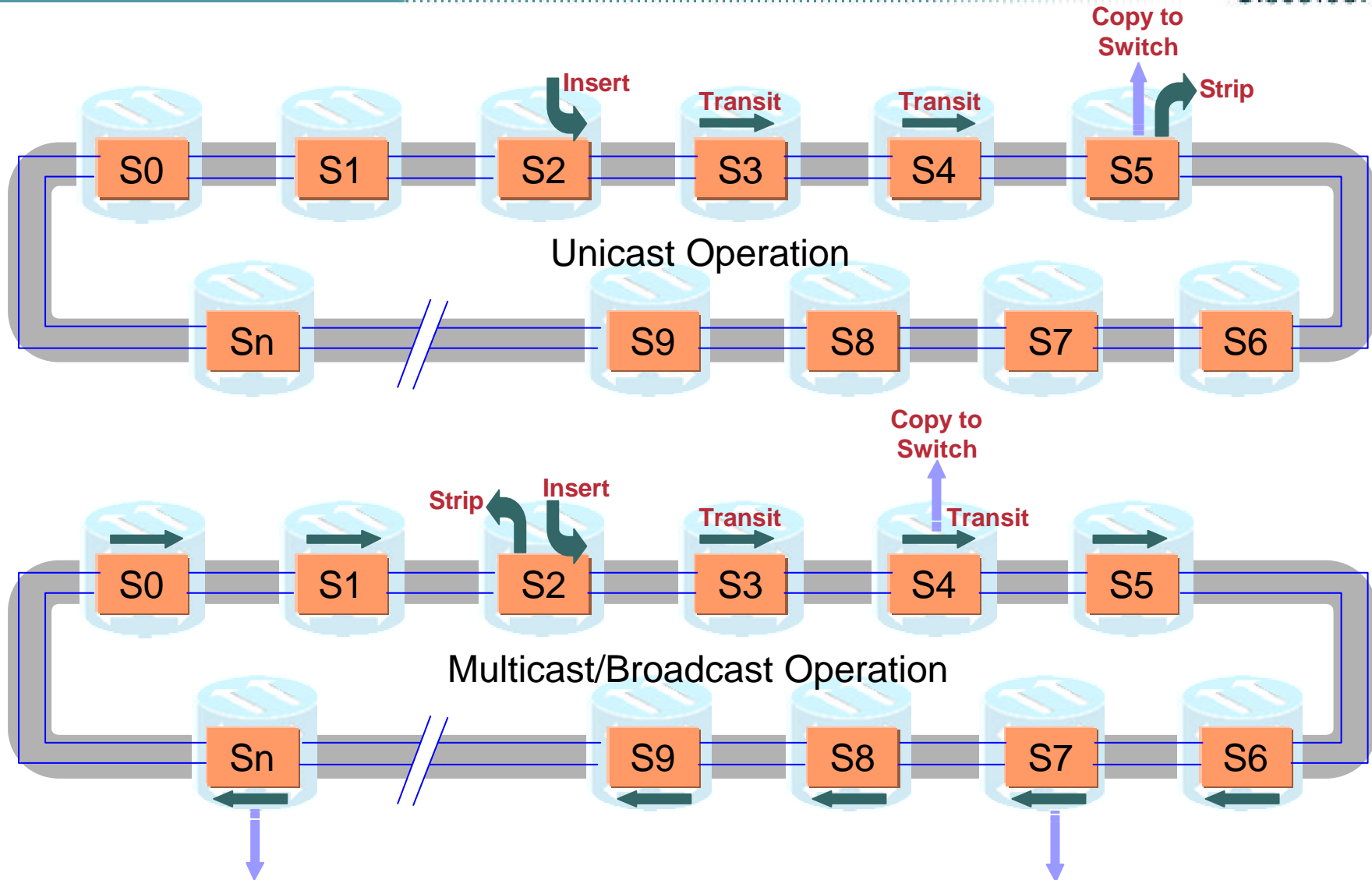


# RPR Over SDH

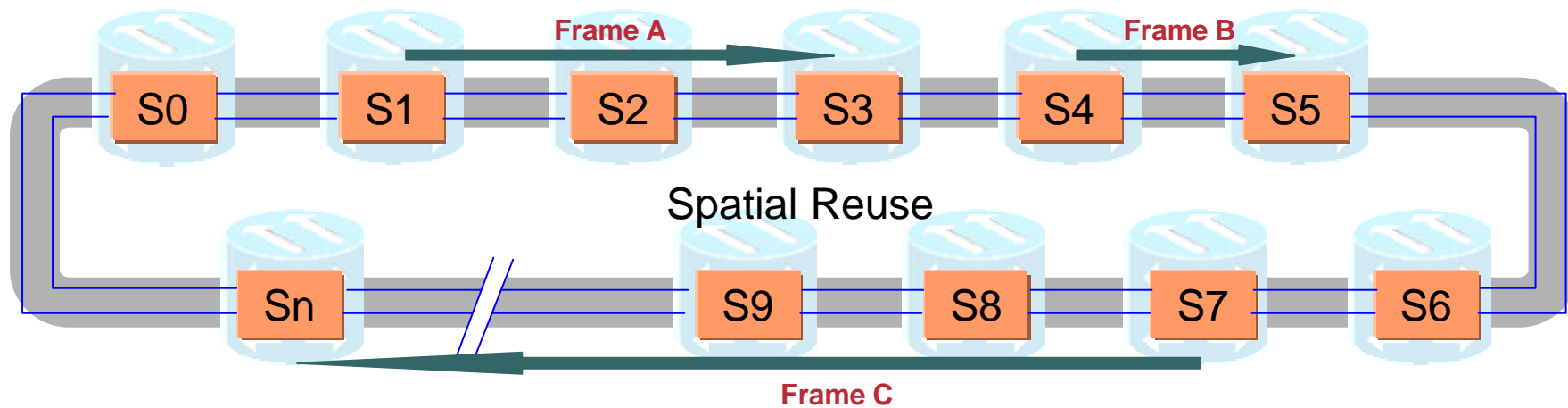
- Each Ethernet Module is treated as a separate RPR Station
- Dual Counter rotating ring (2 ringlet)
- < 50msec restoration



# Resilient Packet Ring (RPR)

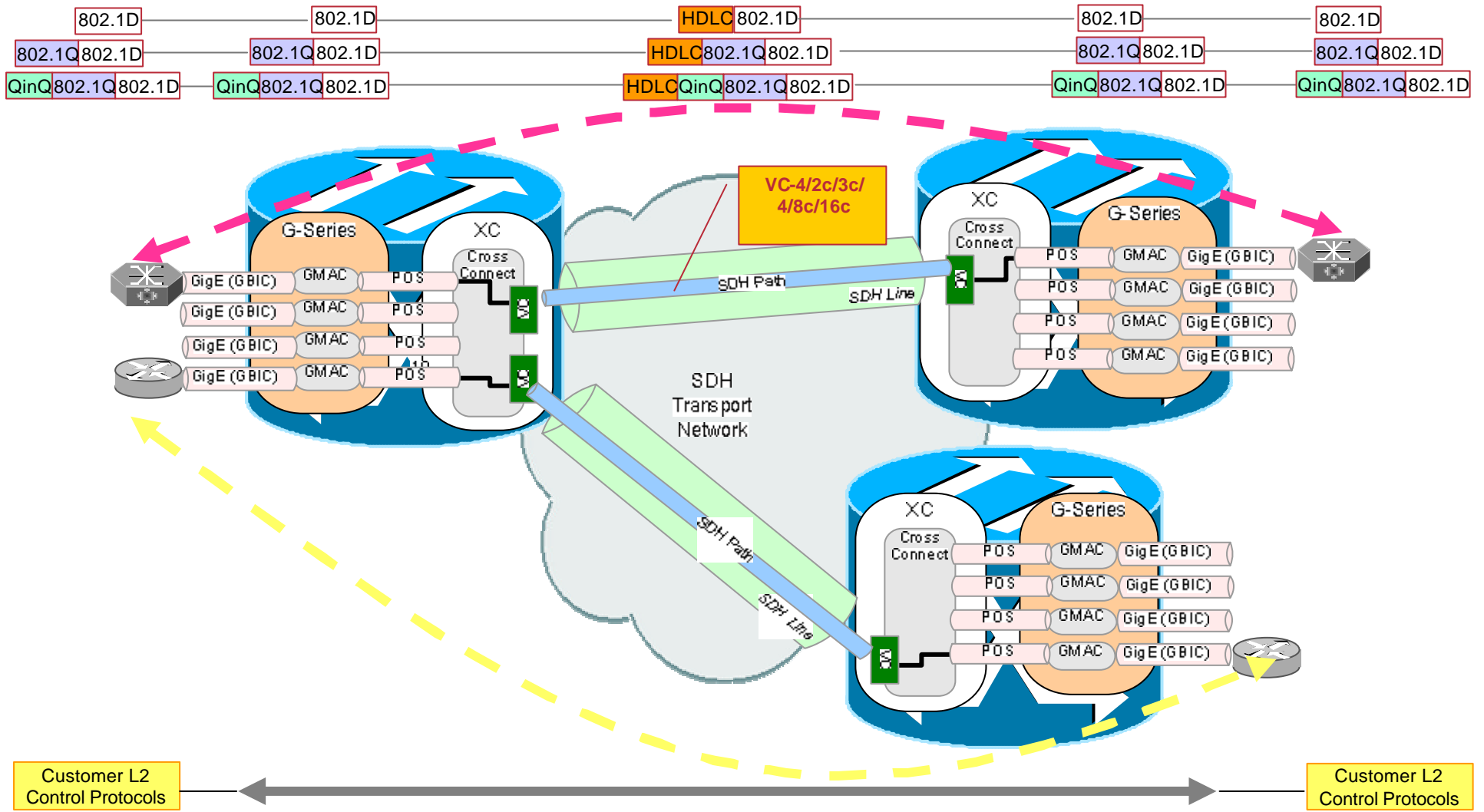


# RPR - Spatial Reuse

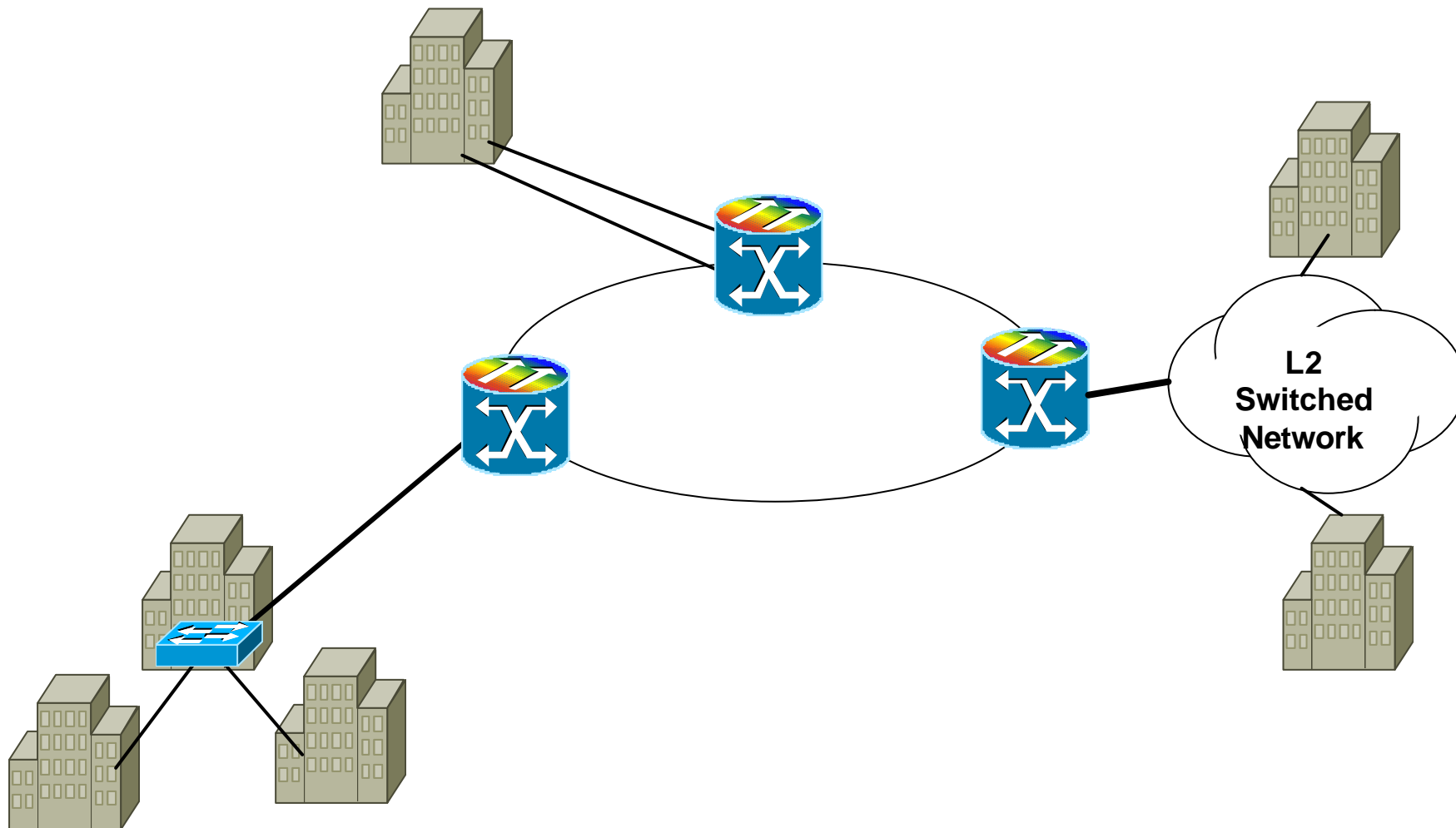


# Ethernet Private Line Service

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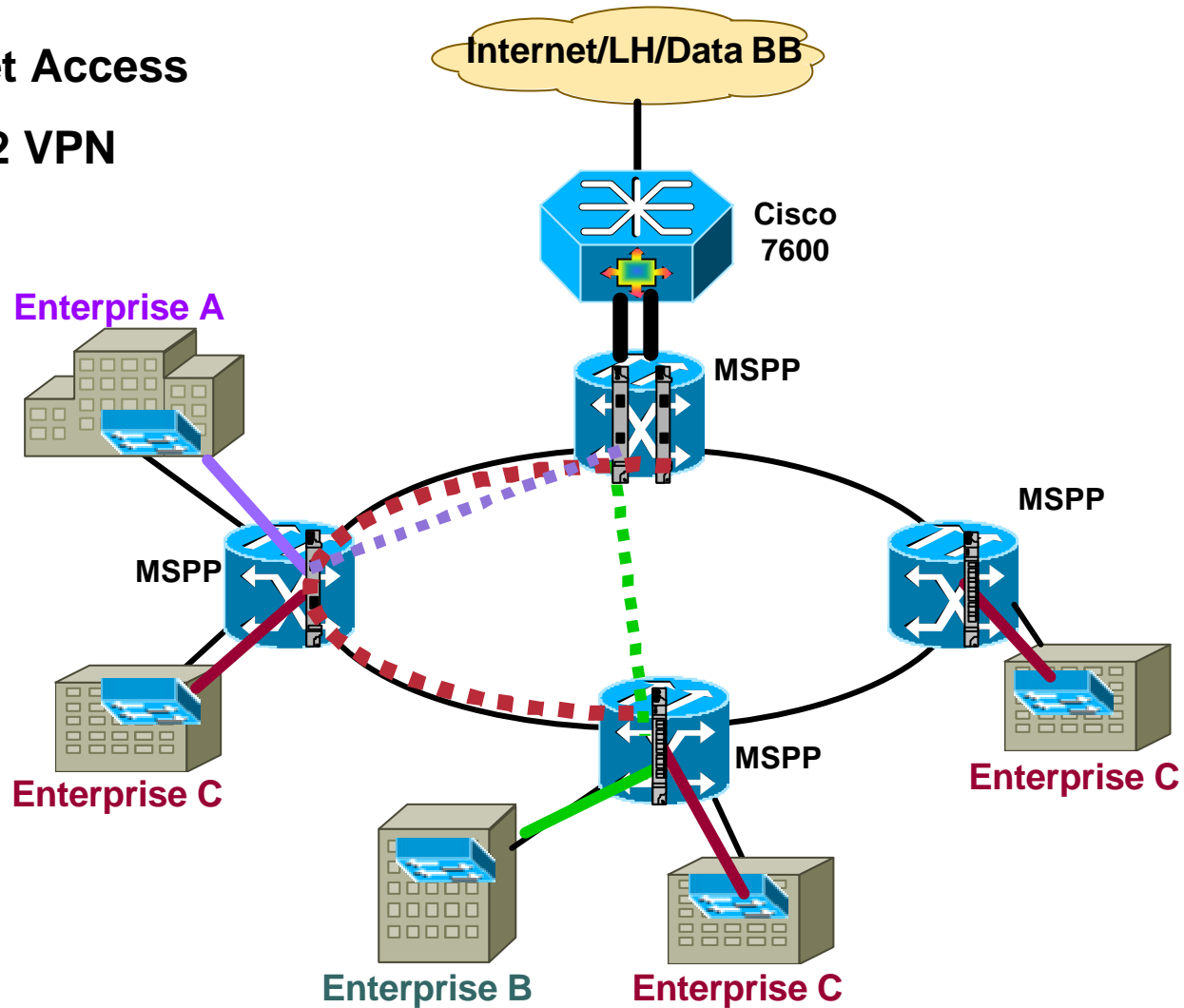
# MSPP Based L2 VPN Architecture





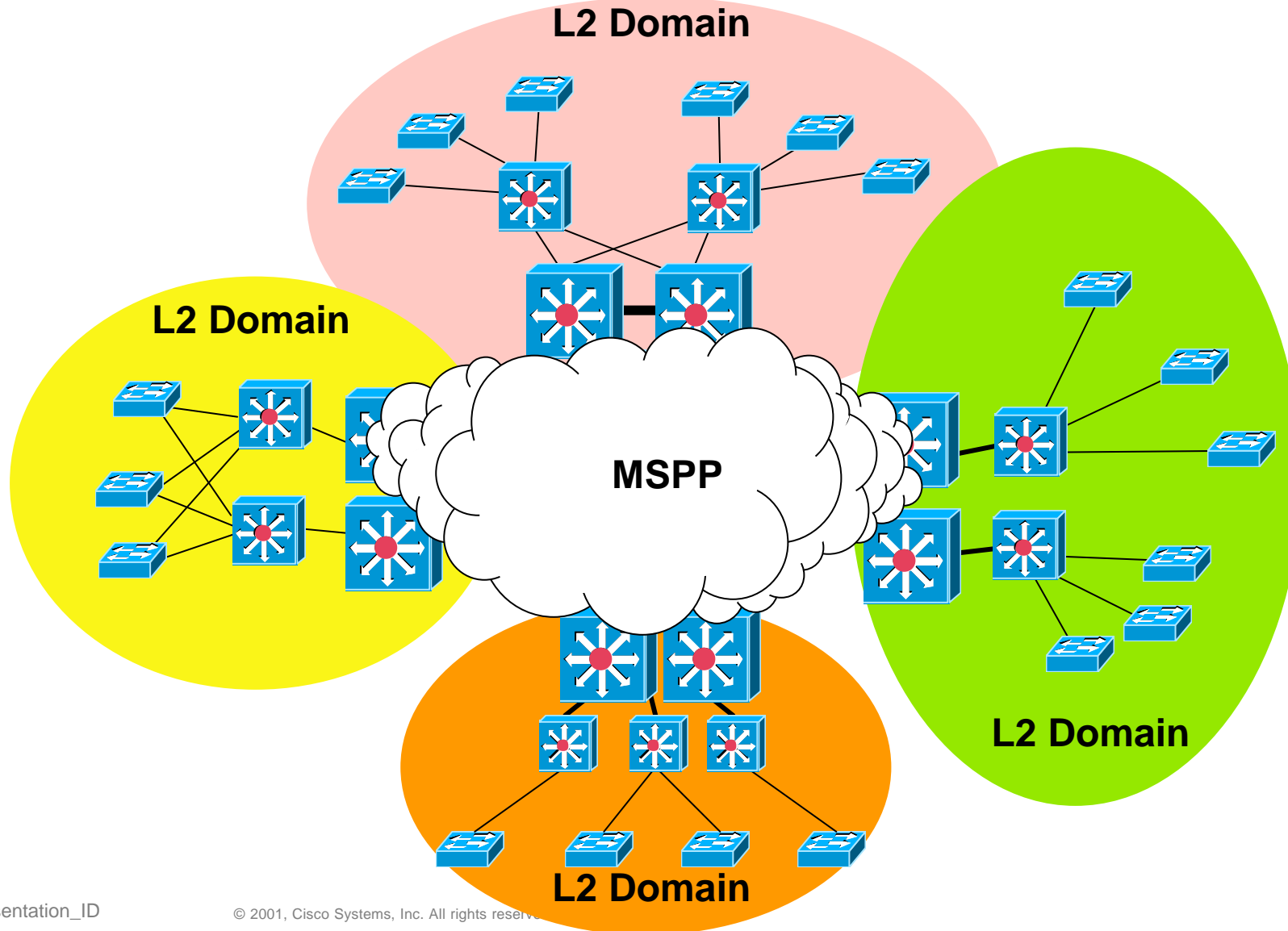
# Ethernet Over SDH Applications

- Internet Access
- Layer 2 VPN



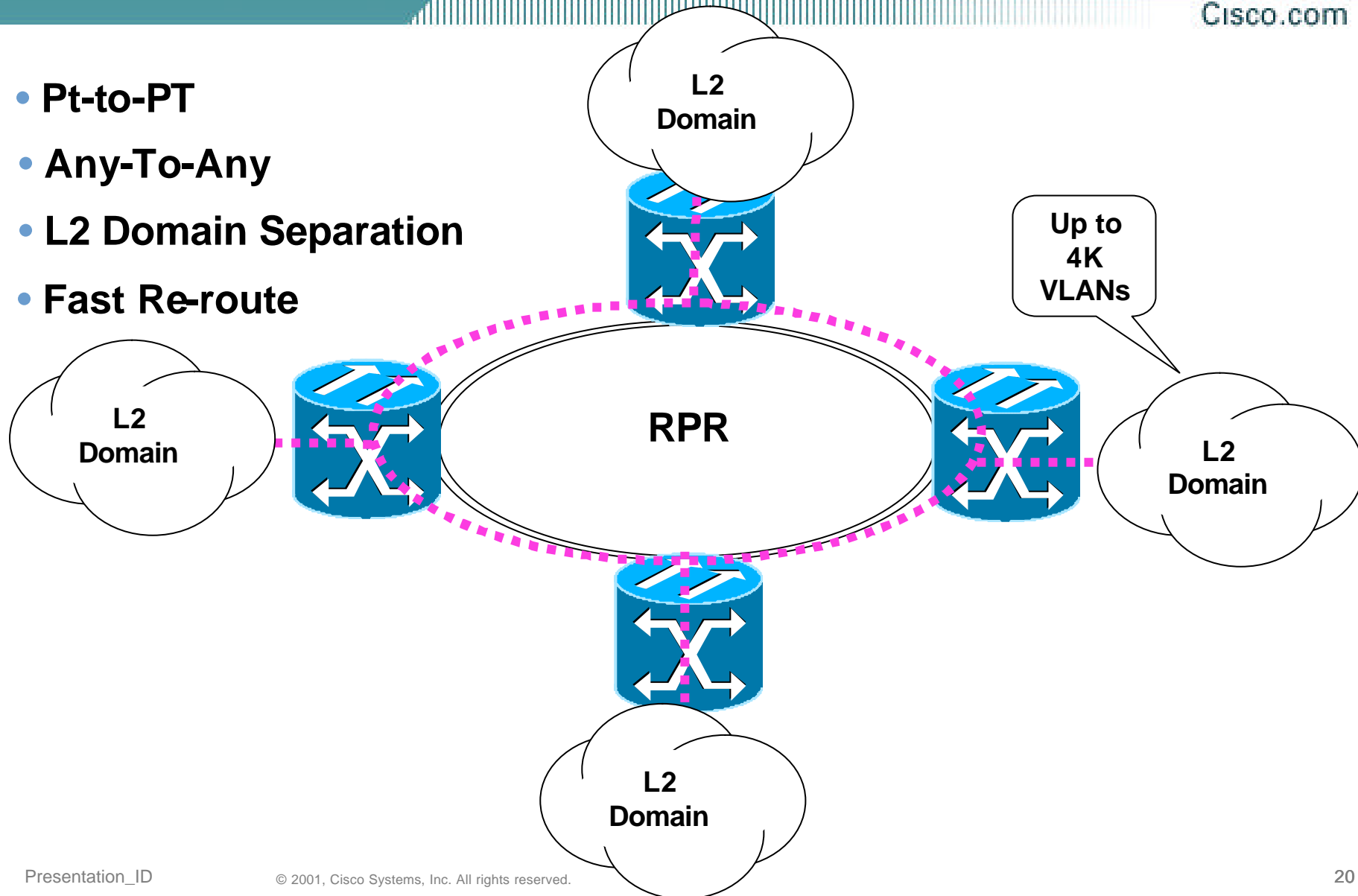
# Scaling the Network

# Scaling the Network With MSPP



# MSPP L2 VPN Services cont.

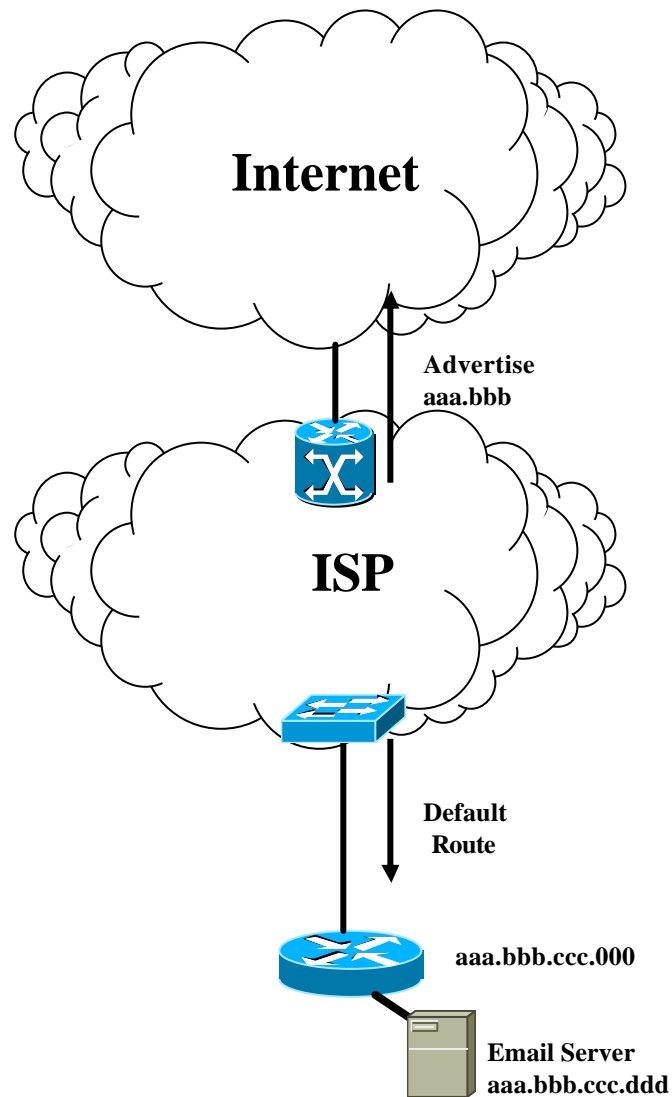
- Pt-to-PT
- Any-To-Any
- L2 Domain Separation
- Fast Re-route



# Business Internet Services

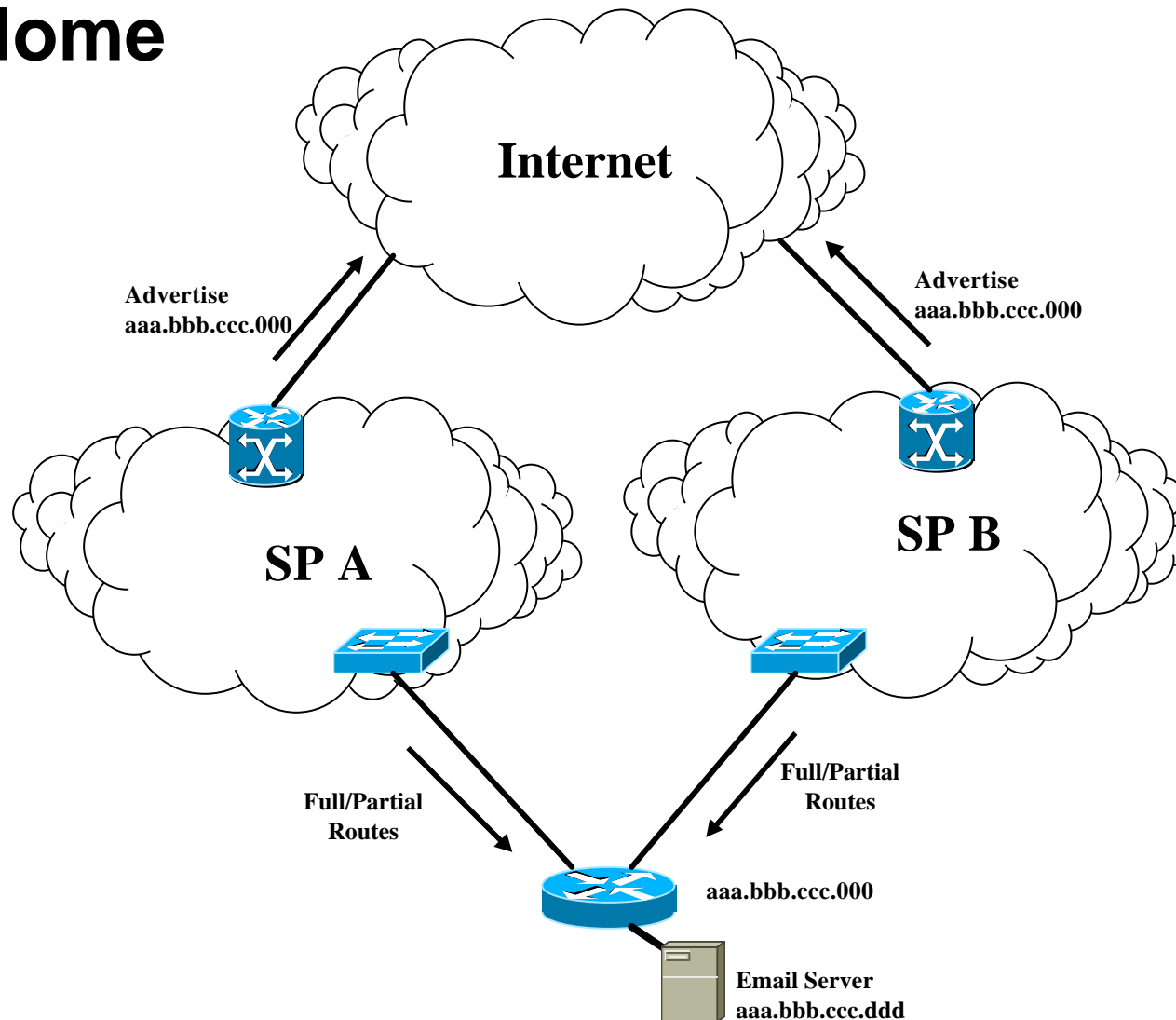
# Business Internet Service

## Single Home

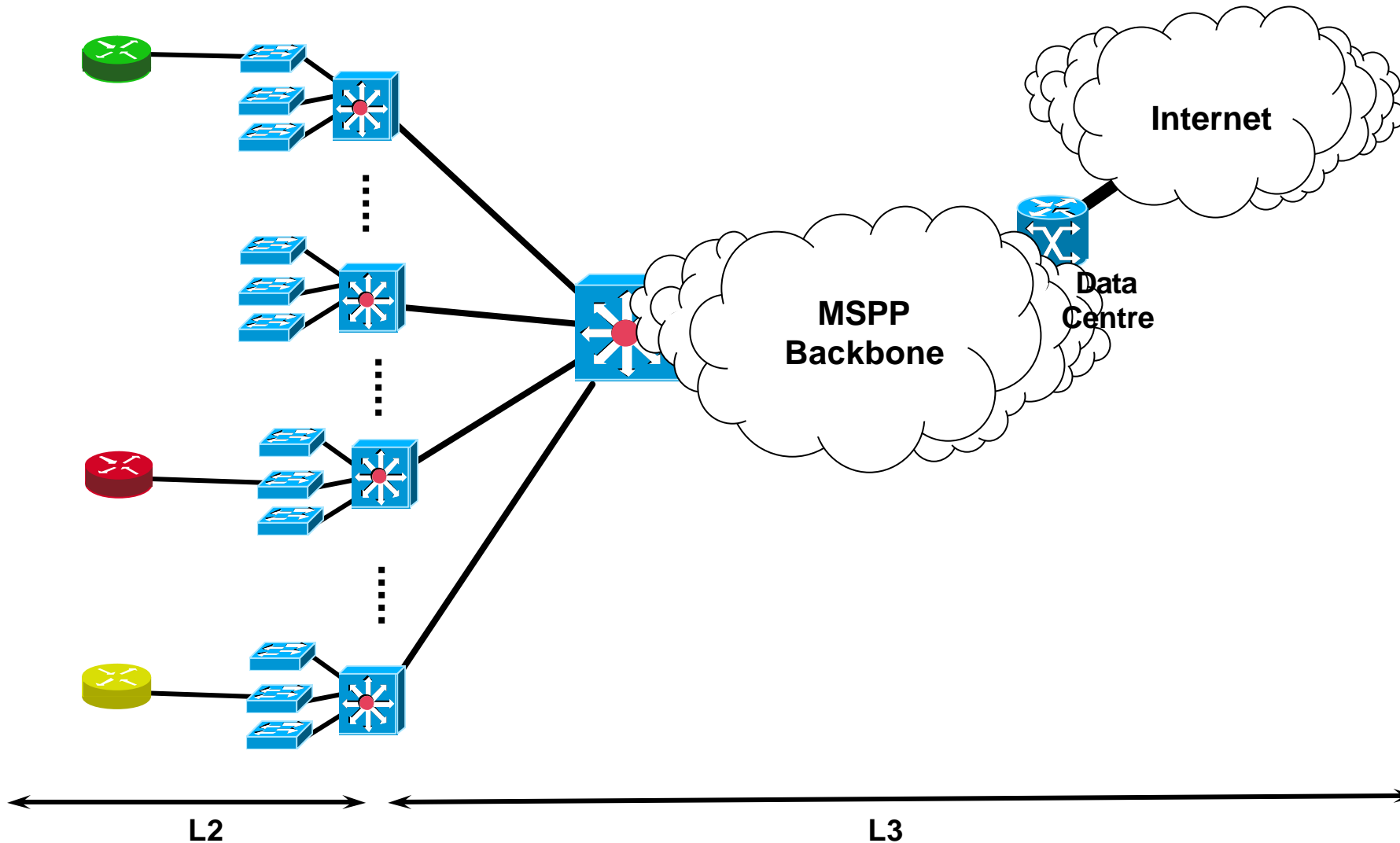


# Business Internet Service

## Dual Home

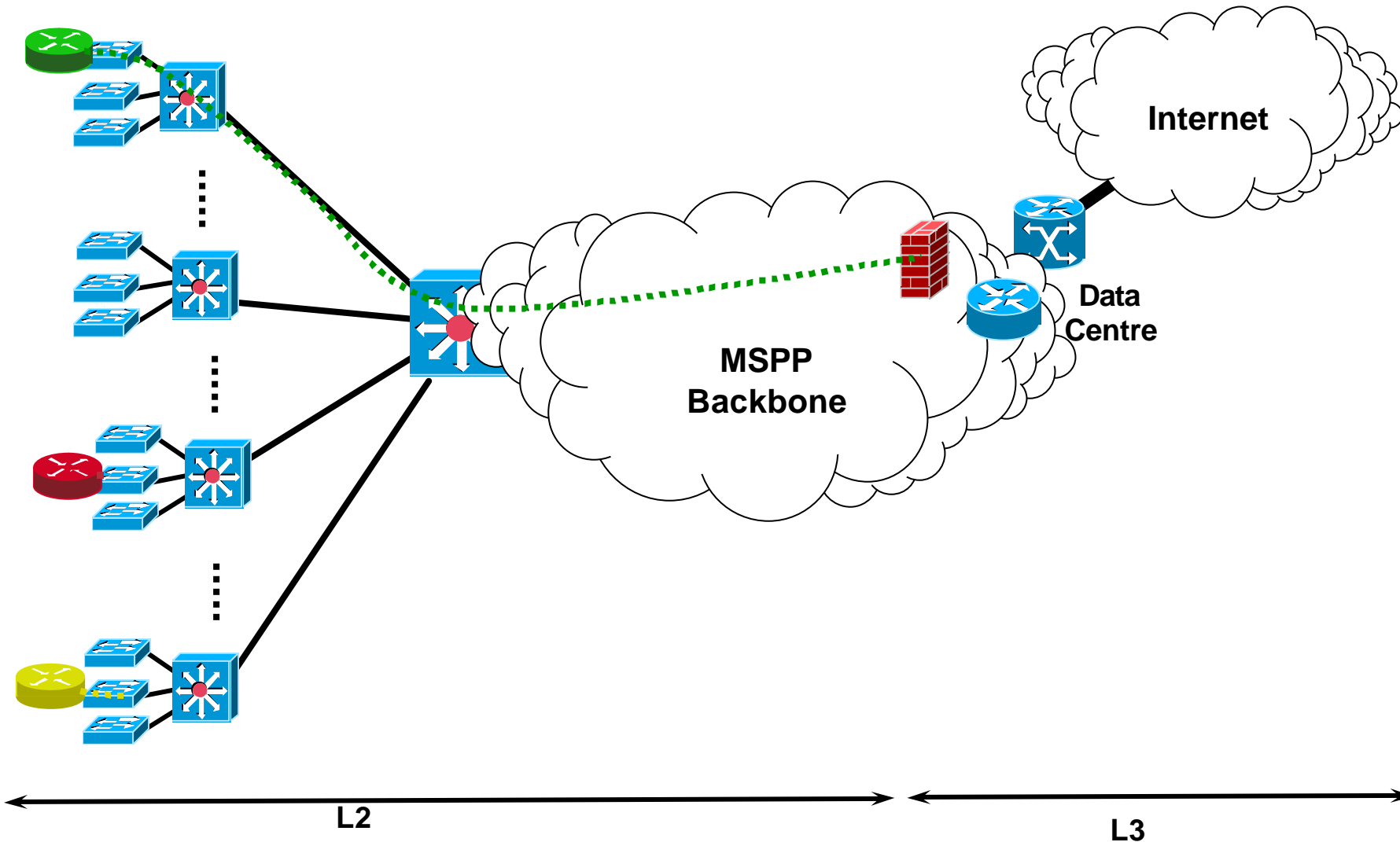


# MSPP Business Internet Service



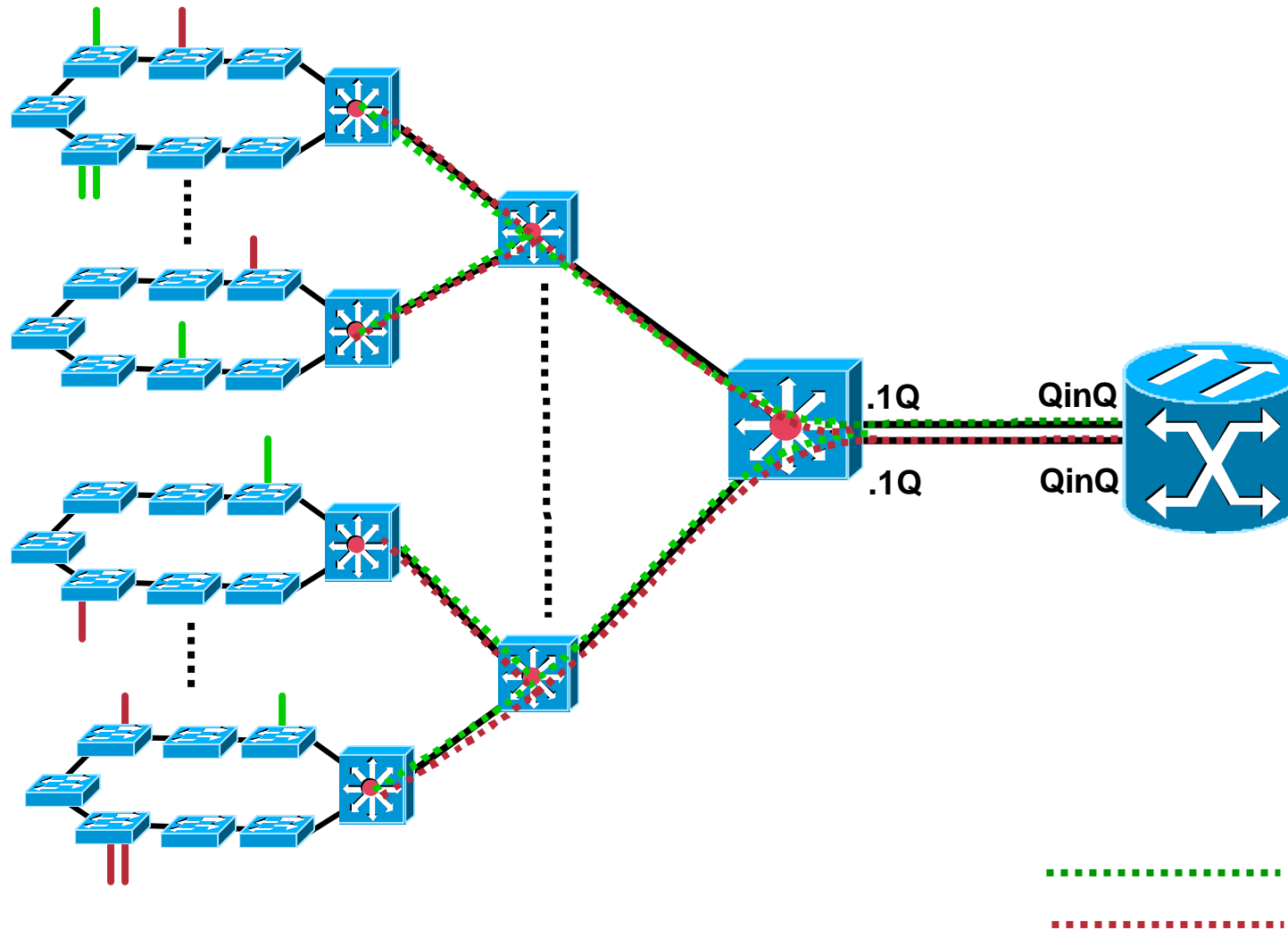


# MSPP Business Internet Service cont.



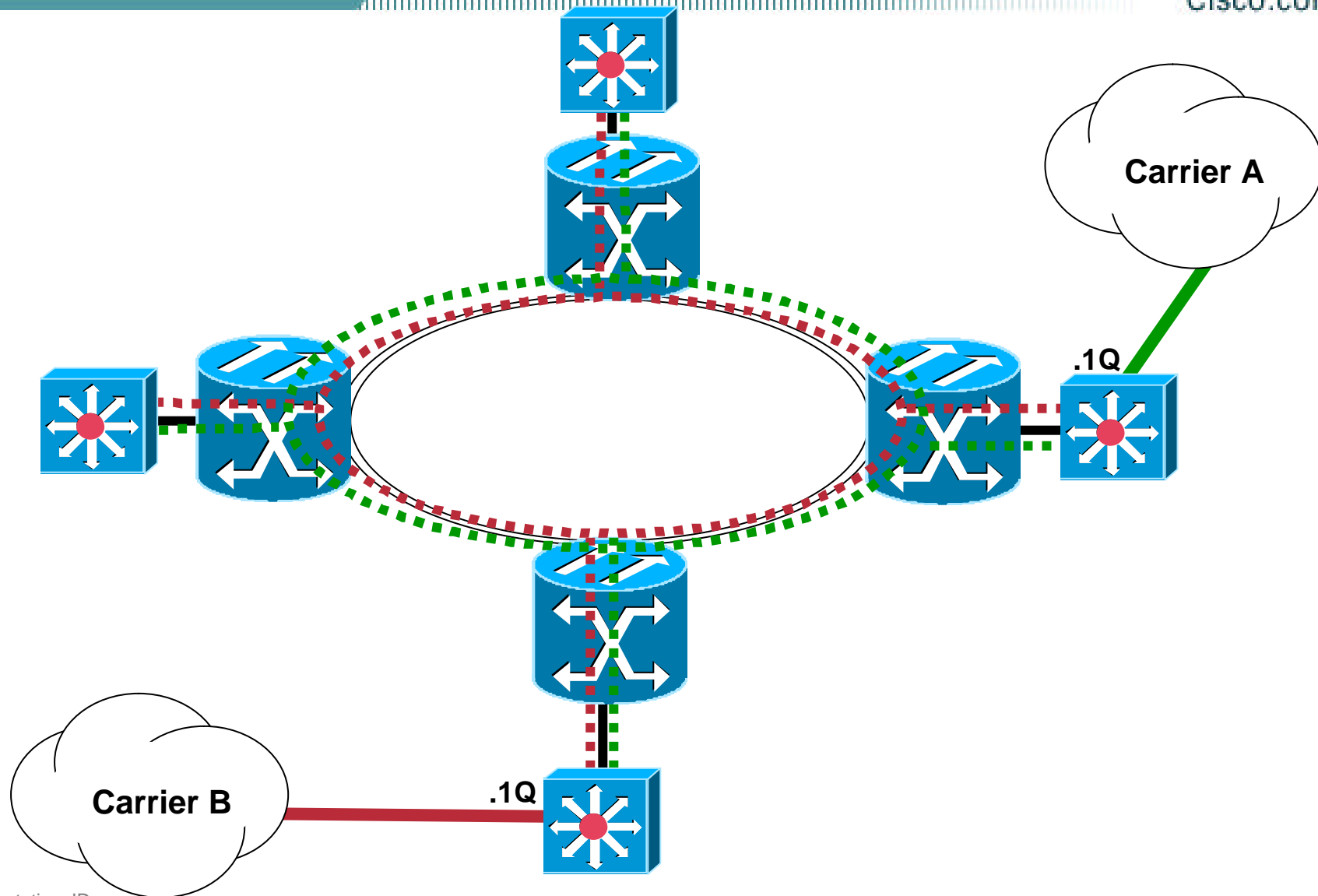
# Residential Wholesale Services

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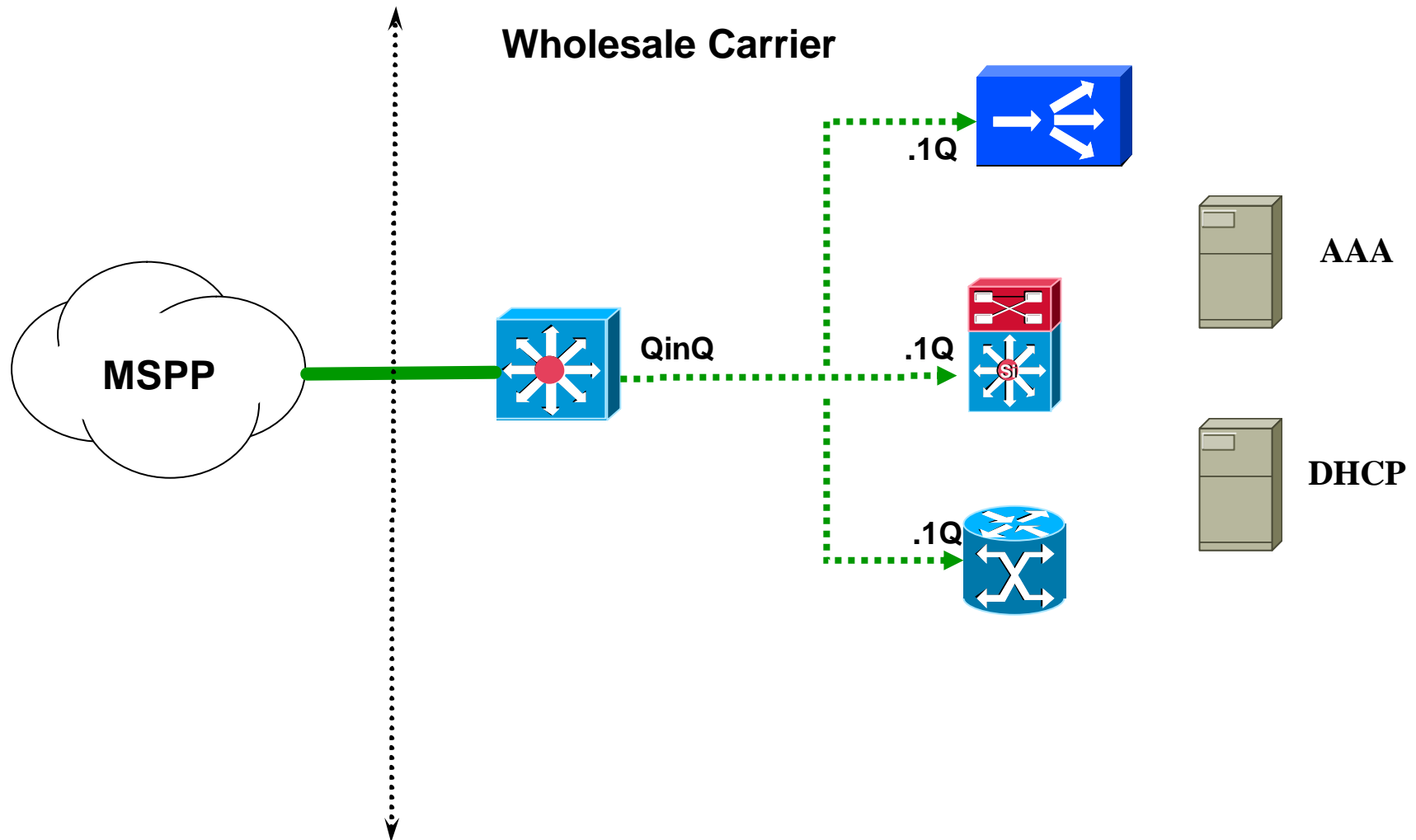


# Residential Wholesale Service cont.

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# Residential Wholesale Service cont.



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