PacketExchange™

PacketExchange deployment of Packet Optical Network Platforms

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www.packetexchange.net

PacketExchange™

Services are ***fast*** becoming packet-based

Residential

Circuit-switched voice
and
broadcast video

Digital broadcast
IPTV, VoIP
Internet video
gaming

Enterprise

Dedicated connections
T1/T3, FR, ATM
Digital PBX

Ethernet Services
Virtual circuits
IP PBX
VoIP

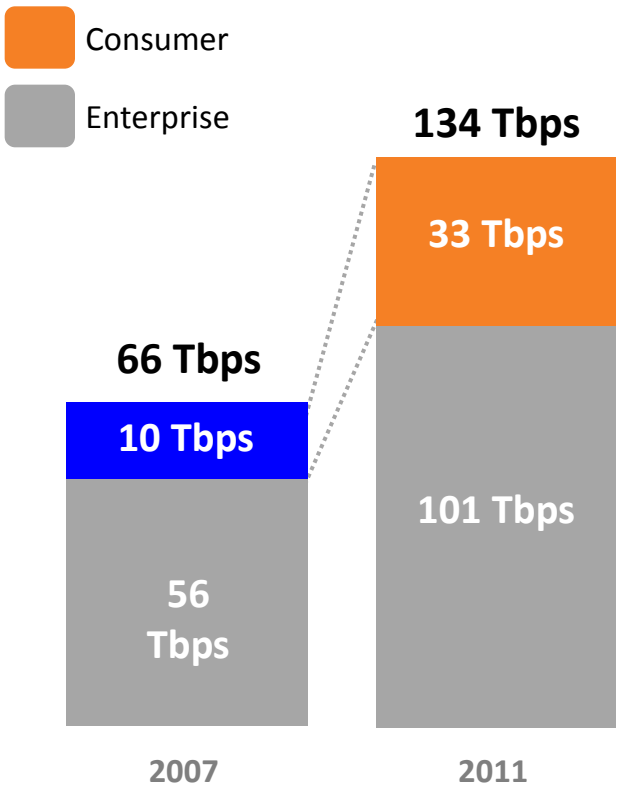
Wireless

Voice optimized
2G network

Data optimized
Video enabled
3G/4G/WiMax

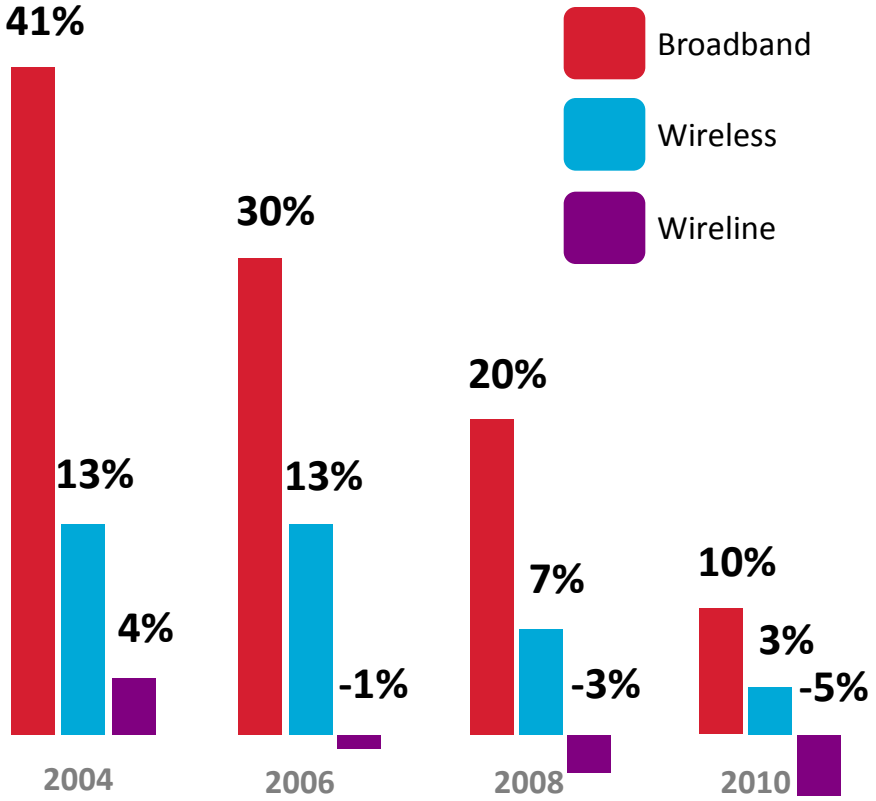
Service Provider Realities

Traffic keeps growing ...*



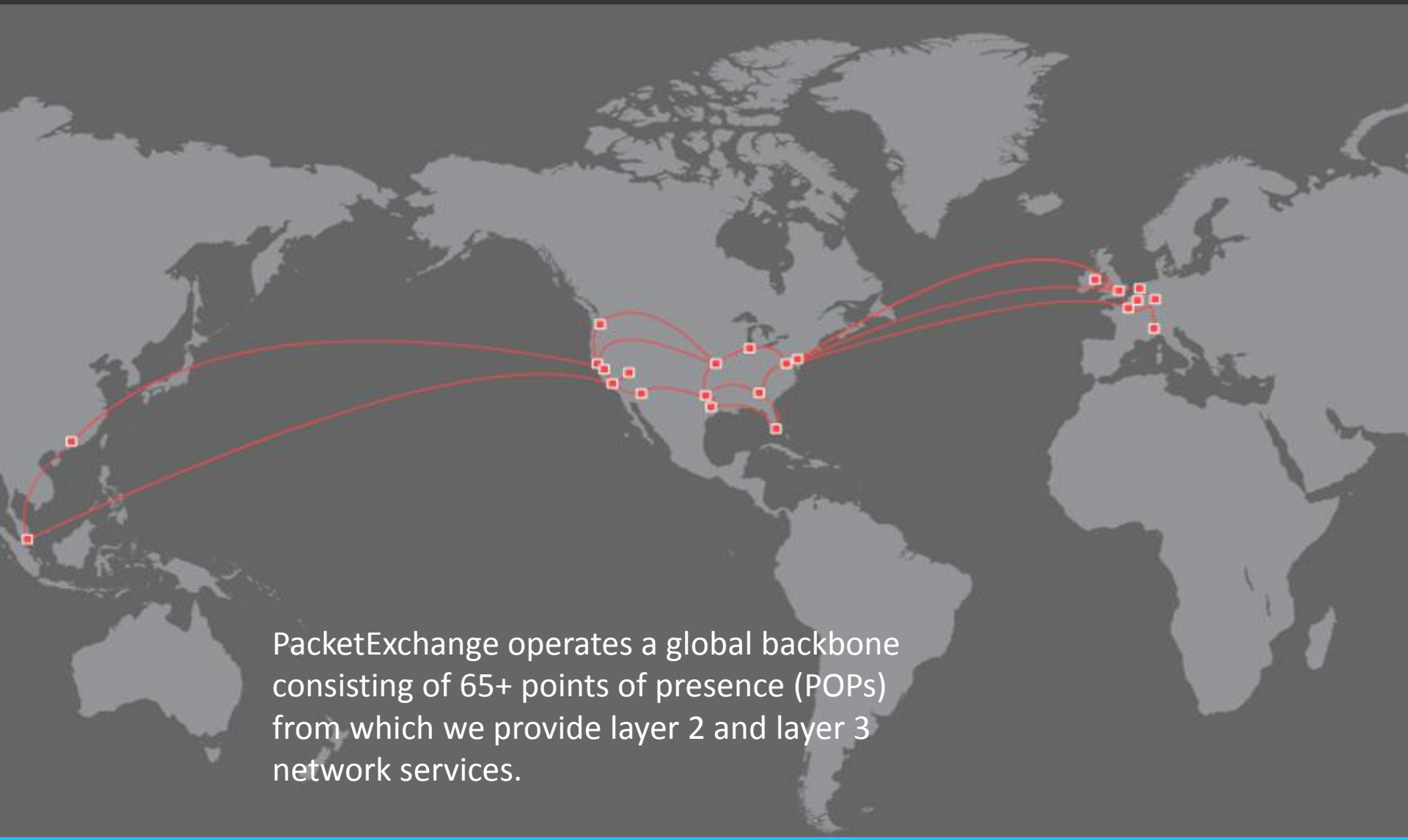
* Source: McKinsey & Company

But revenue growth is slowing**



** Sources: Yankee Group and Pyramid Research

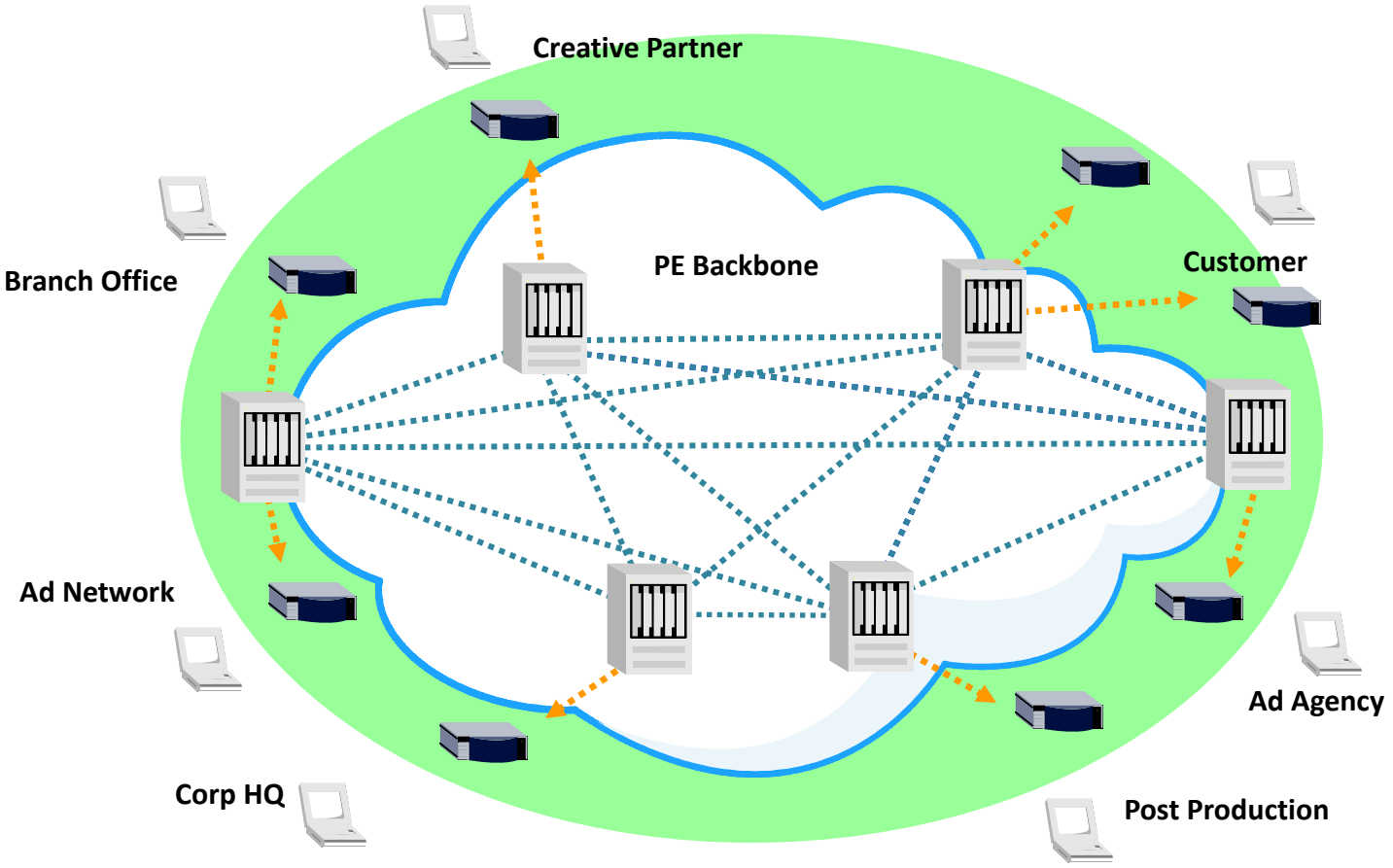
Global Backbone Network



PacketExchange operates a global backbone consisting of 65+ points of presence (POPs) from which we provide layer 2 and layer 3 network services.

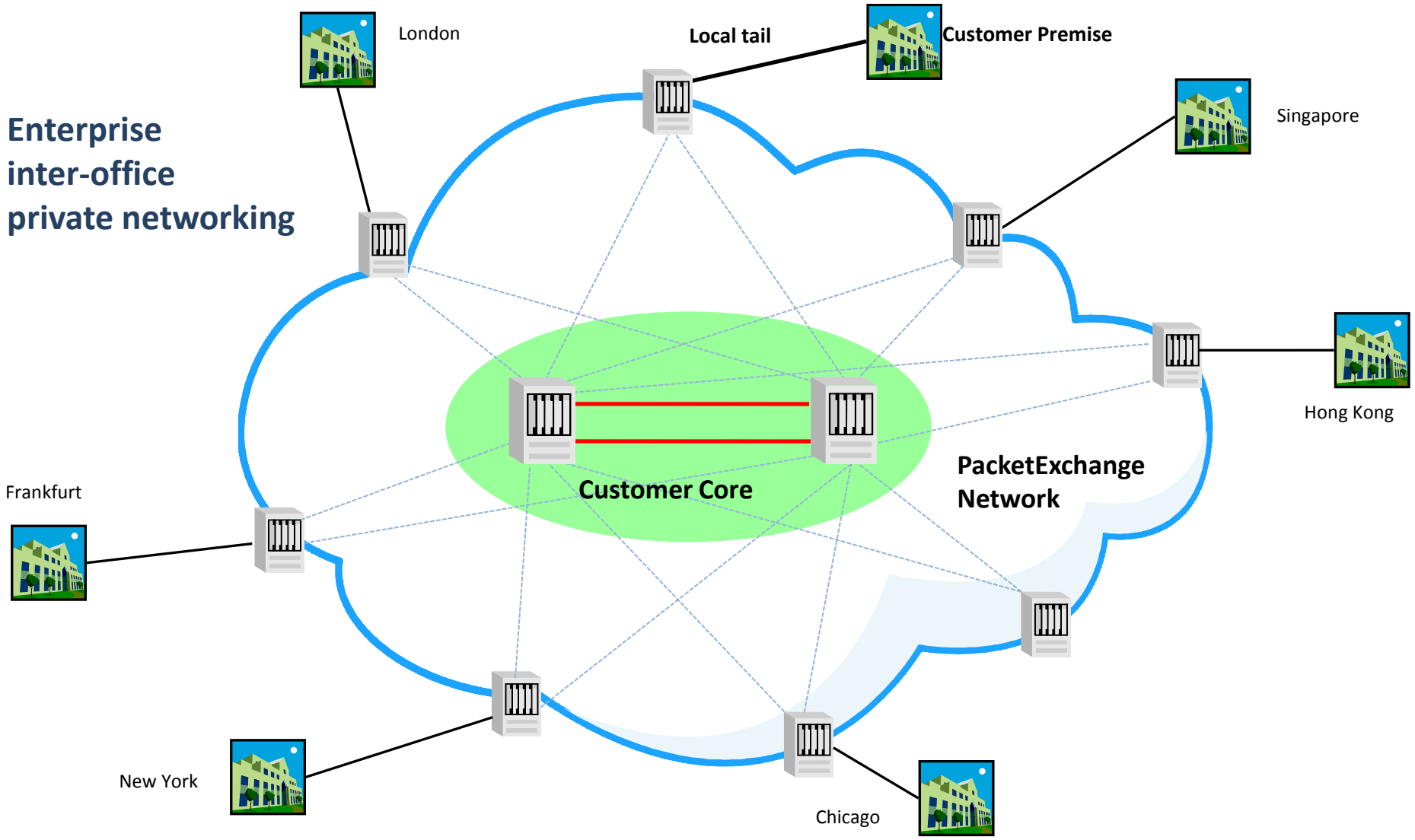
PacketExchange™

What we provide



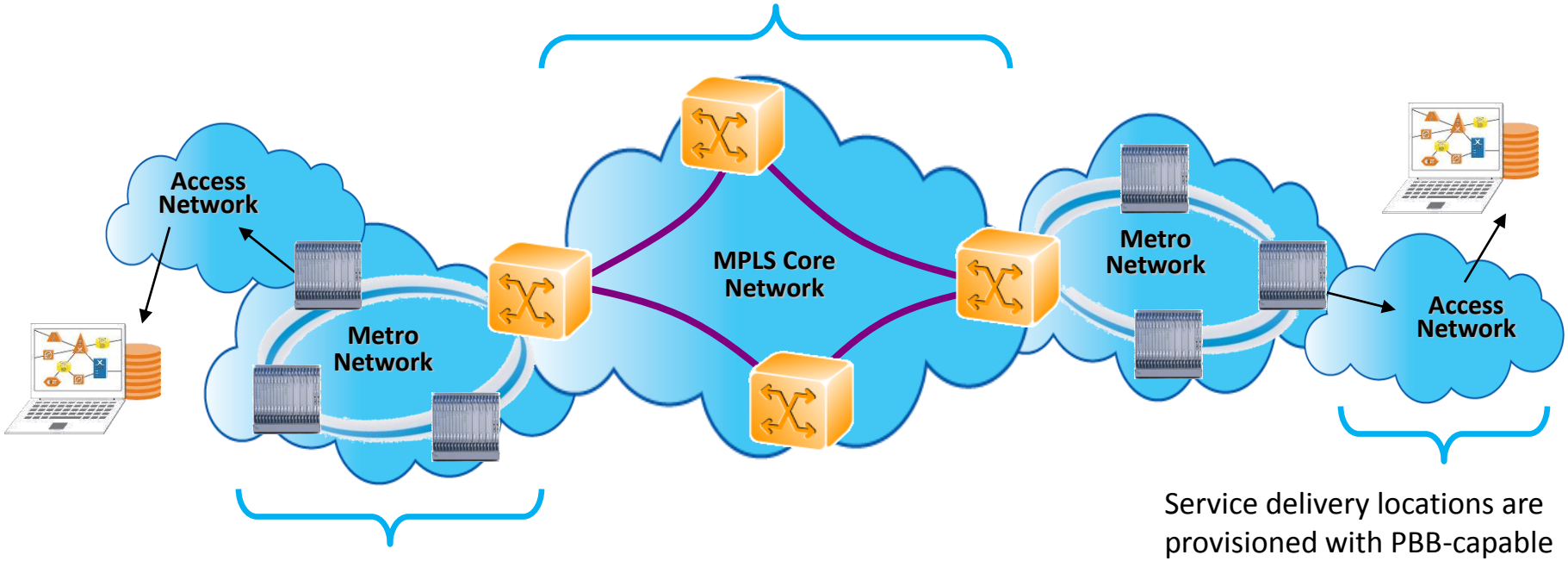
Global Community of Interest Network (COIN)

What we provide



PE Network Architecture

The core network is managed with MPLS traffic engineering and path resiliency.

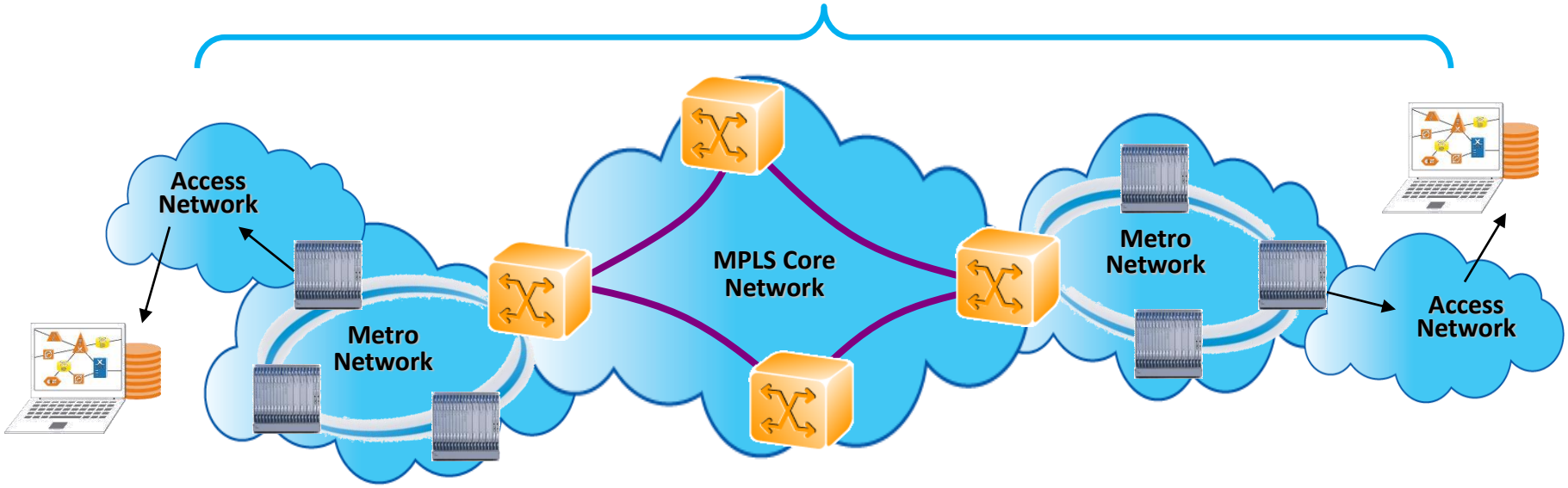


Combined packet/optical systems transport core services to customer delivery networks. PacketExchange utilizes PBB-TE over metro WDM to provide path resiliency.

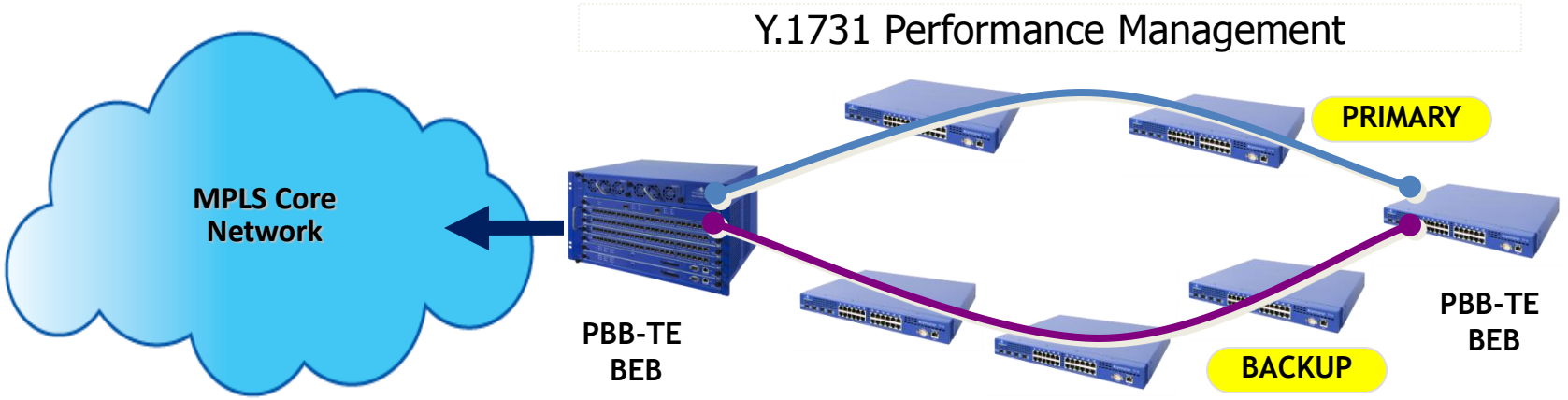
Service delivery locations are provisioned with PBB-capable endpoints to ensure end-to-end service delivery and visibility.

PE Network Architecture

By combining the core traffic engineering and resiliency features of MPLS with the metro packet optical network platform, PacketExchange has the advantages of advanced long-haul backbone management as well as customer- and service-level endpoint visibility.



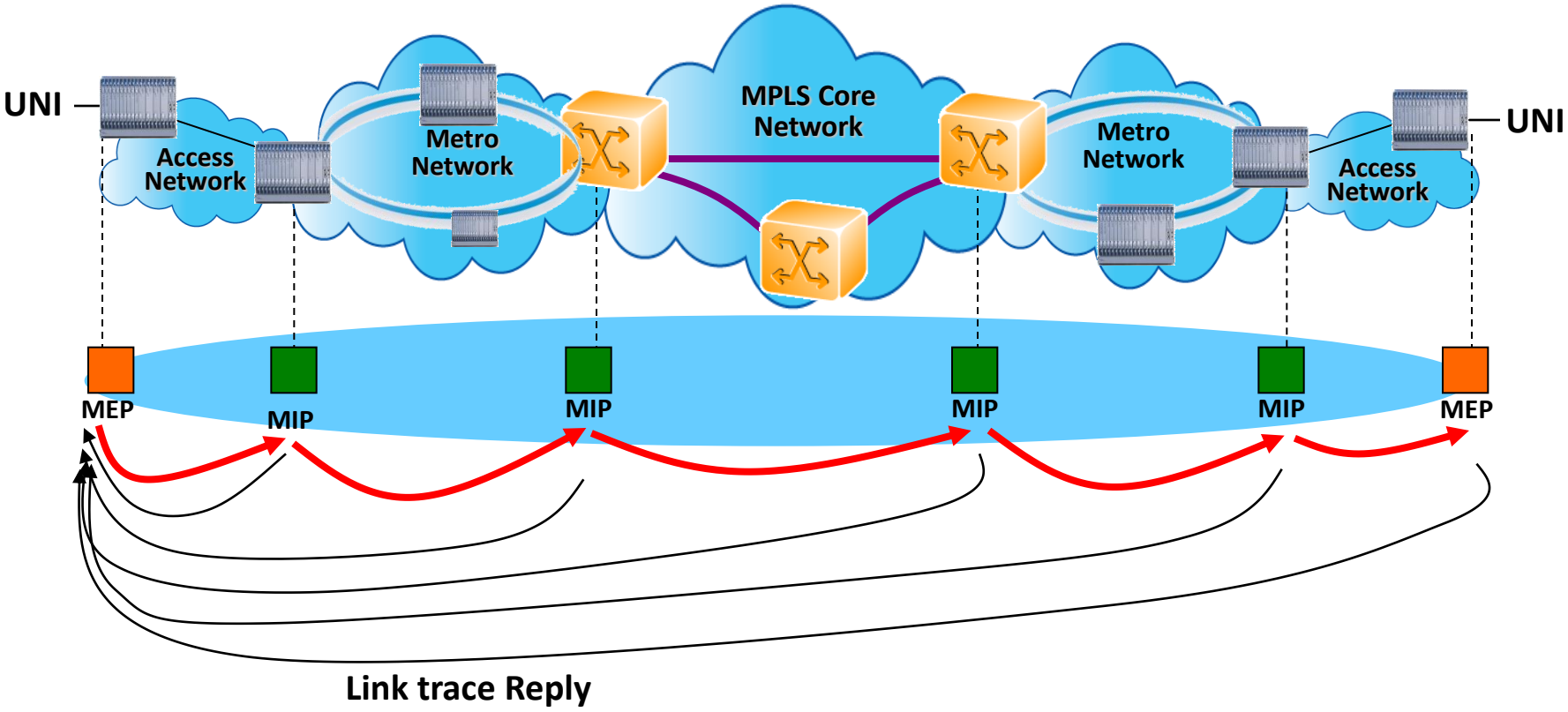
PE Network Architecture



PBB-TE with Y.1731 Performance Management

- Performance Management between Tunnel Endpoints
  - Provides Service Independent Tunnel Monitoring
  - Enhanced Scalability as 1,000s of services may traverse the tunnel without the need to monitor every service
  - Leverages 802.1ag frames for reduced overhead
- Multiple packets sent at 100ms interval to perform the test
  - Frame Delay / Frame Delay Variation / Loss Measurement
  - 2-way Delay Roundtrip Measurement
  - 1-way Delay Measurement (requires common time base)
  - Single Ended Frame-Loss (MEP to MEP)

PE Network Architecture



By transporting metro packet/optical protocols over an MPLS core network, PE has MEP-to-MEP service visibility while having the flexibility of MPLS core traffic engineering and management.

Thank you!

For more information please visit our website:

www.packetexchange.net