

Panel: Inter-Carrier MPLS Issues

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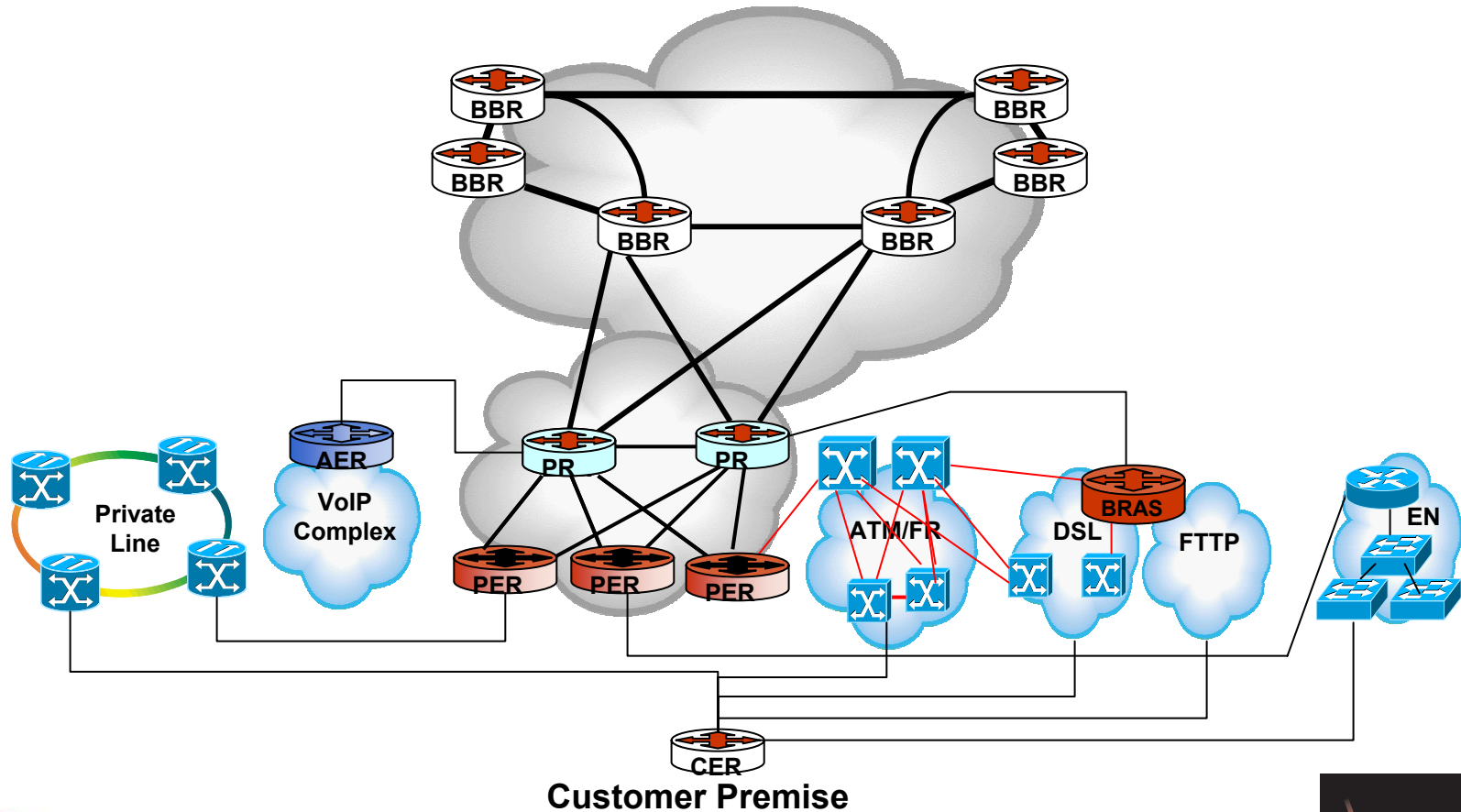
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MPLS Diverse Network Requirements

- Multi-service support
 - Packet Telephony, Ethernet VLANs, IP-VPN, DSL, FTTP, ATM, FR, and Private Line services
- Support L3 IP-VPN across all L1/L2 access technologies
- Support L2 VPN transport for L2 services across common MPLS backbone
- Must provide (selectively?) ultra-high availability

IP-MPLS Network Architecture



Inter-Carrier MPLS

- Two scenarios
 - InterProvider L3 VPN: Two carriers are peer L3 VPN providers who interconnect two or more customer L3 VPN islands
 - Carrier of Carriers: One Carrier provides IP-MPLS transport of another Carrier's L3 VPN services
- Address providing VoIP services over both scenarios
- Issues, Requirements, Obstacles

Elements of the InterProvider Agreement

Preservation of QoS marking and high level behavior

- Number of classes
- Marking - EXP, DSCP, p bits
- Type of traffic in each class and behavior
- Noncompliance treatment (drop, mark down)

Performance apportioning

- Latency
- Packet loss
- Jitter bounds
- Availability

Performance reporting

- Report content/ format
- Report delivery – web site, paper...

Settlements