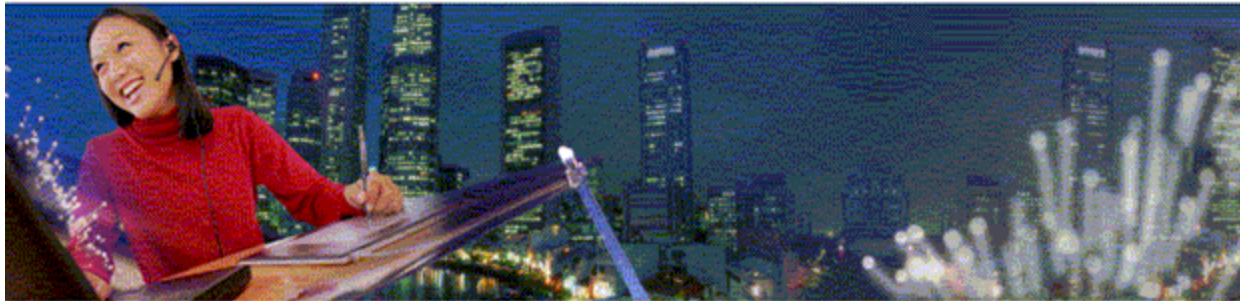


IPTV Technologies and Deployment Challenges



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Outline

What is IPTV?

Market Drivers

Triple Play/IPTV – A Quick Introduction

Technology Enablers

Network Transport Architectures

Challenges

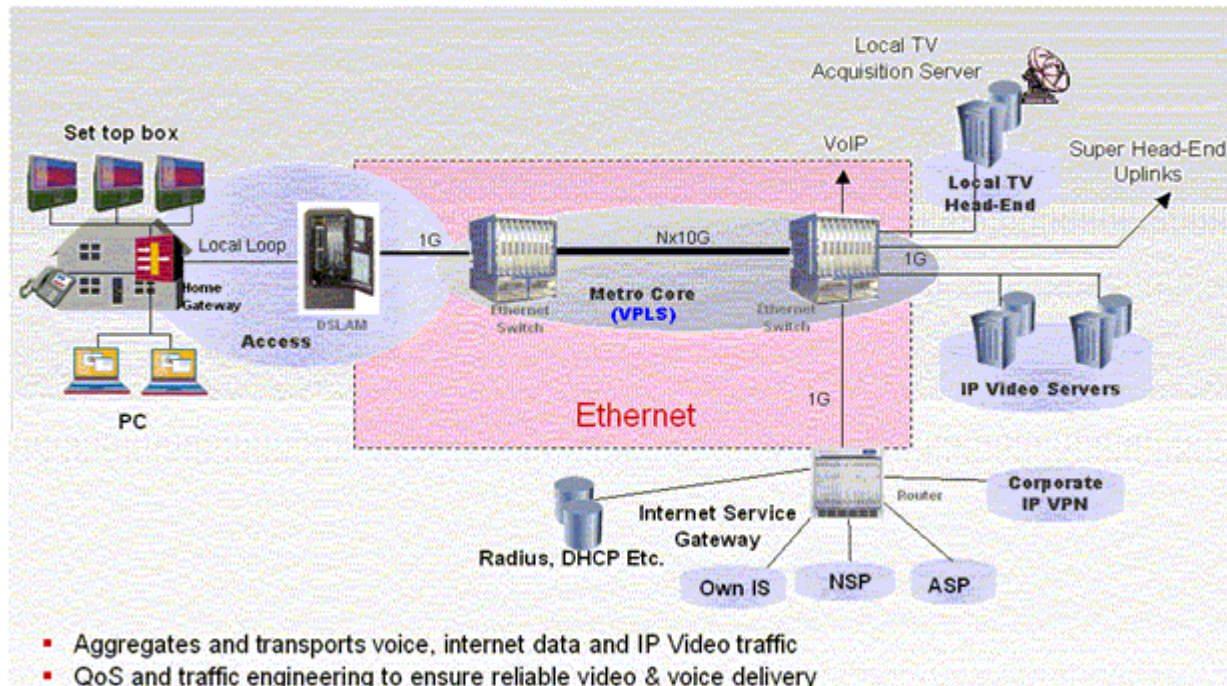
Competitive Threat

IPTV Vendors and Service Provider Strategies

Conclusion

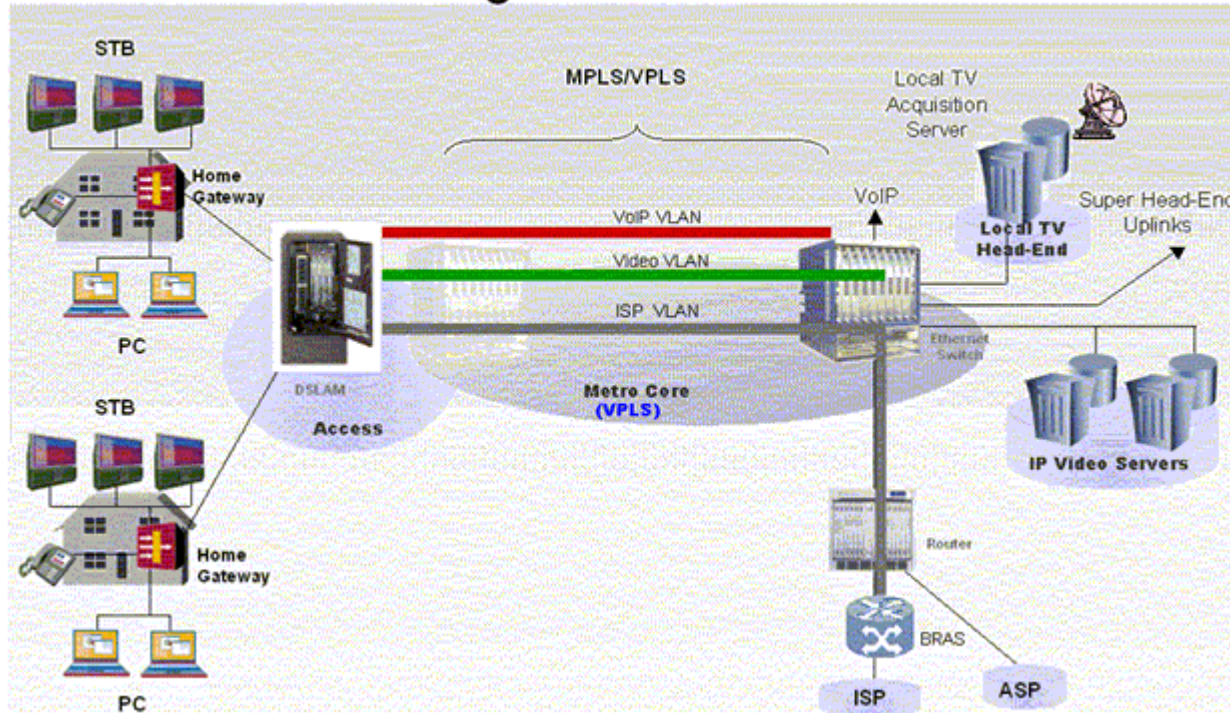
Network Transport Architectures

Ethernet Aggregation using VPLS

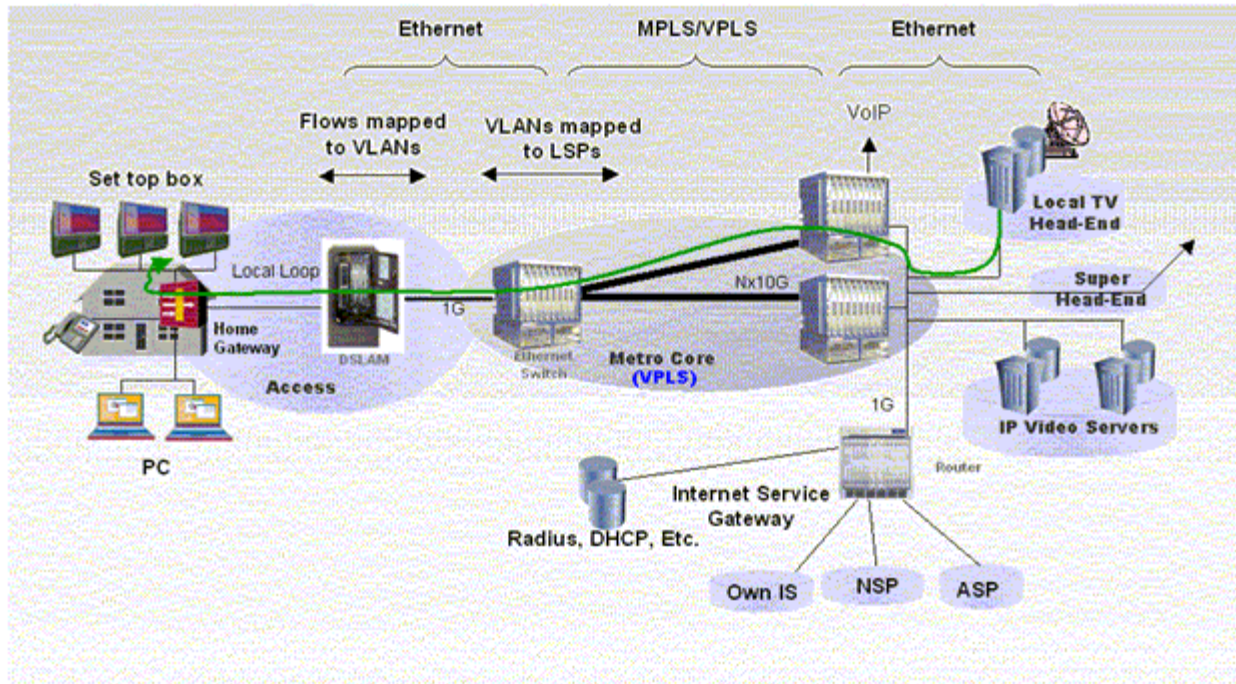


- Aggregates and transports voice, internet data and IP Video traffic
- QoS and traffic engineering to ensure reliable video & voice delivery
- Use Diff-Serv AF queuing, VLAN tagging, MPLS EXP bits, or 802.1p marking to ensure delivery of video and voice traffic

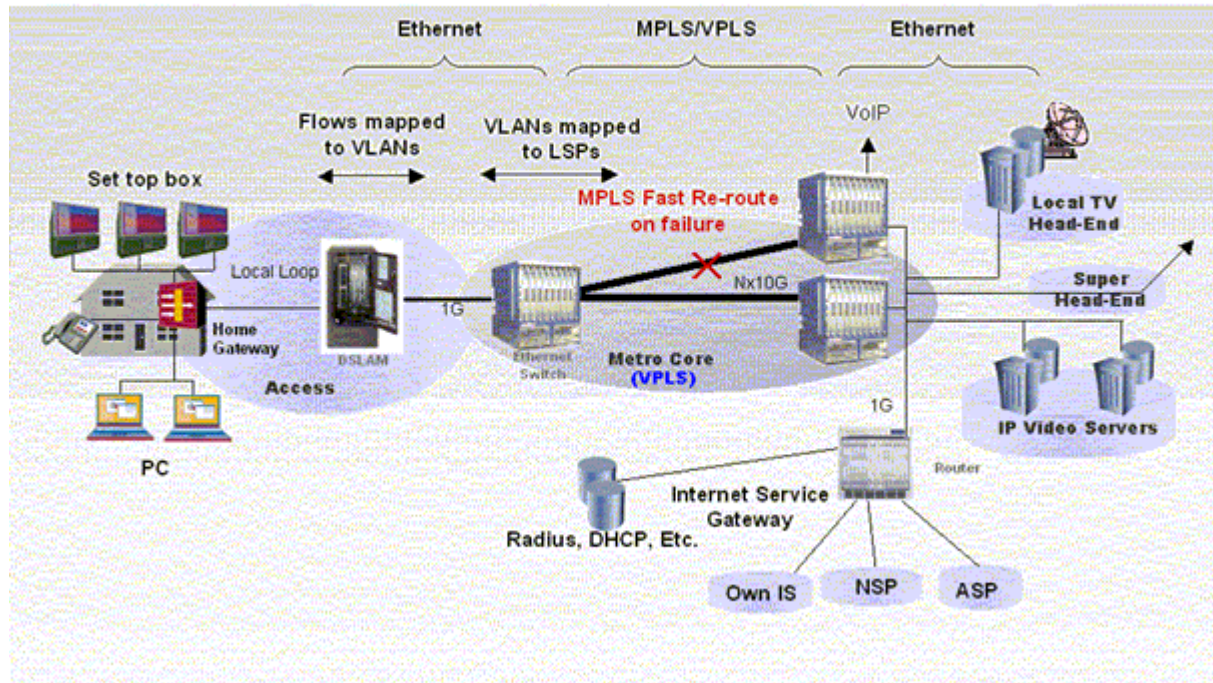
Data Flows – Logical View



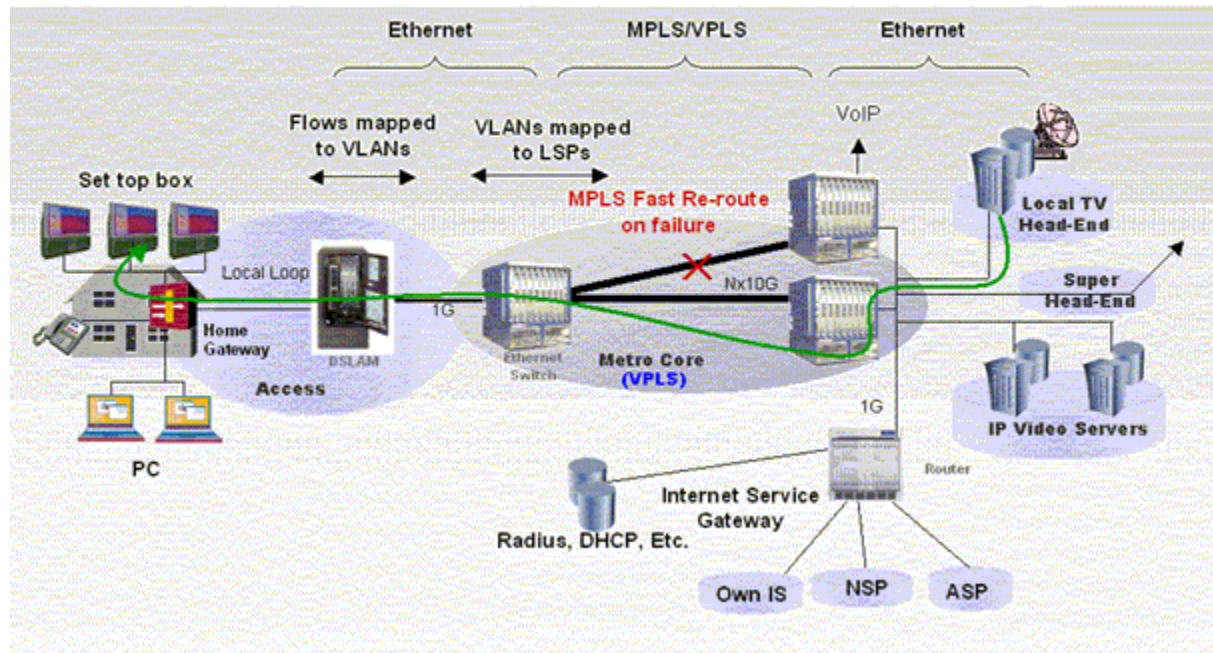
Redundancy using MPLS/VPLS overlay



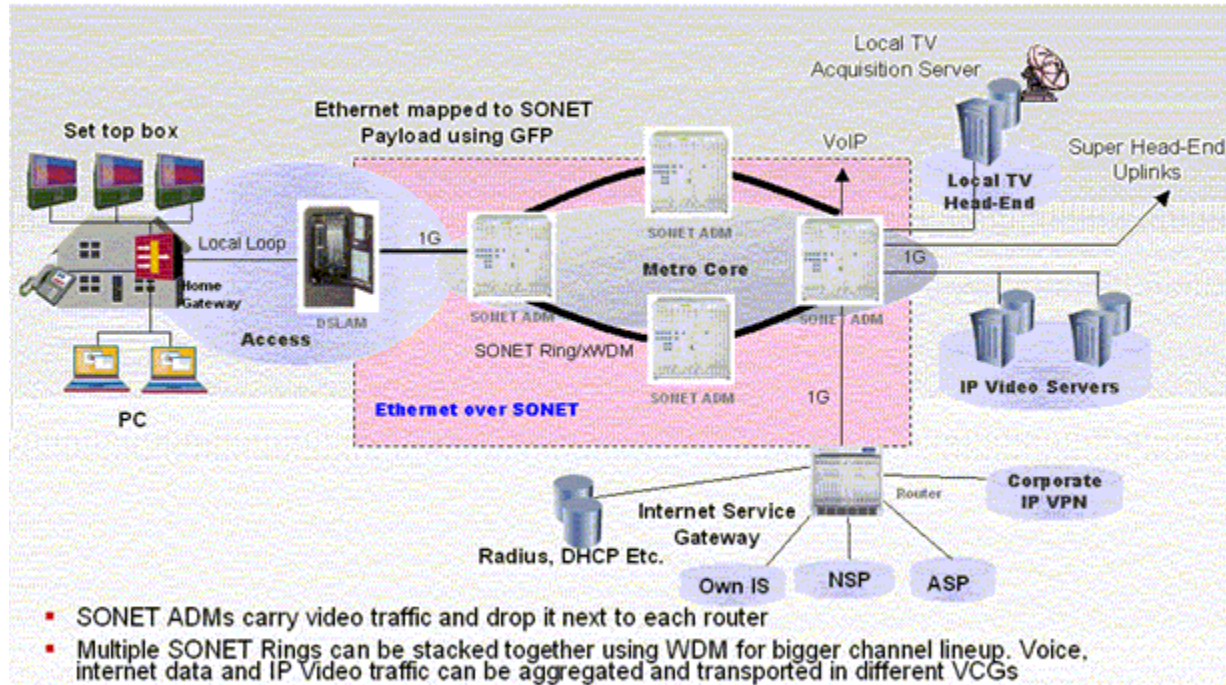
Redundancy using MPLS/VPLS overlay



Redundancy using MPLS/VPLS overlay



Ethernet over SONET Transport



- SONET ADMs carry video traffic and drop it next to each router
- Multiple SONET Rings can be stacked together using WDM for bigger channel lineup. Voice, internet data and IP Video traffic can be aggregated and transported in different VCGs
- Circuit switched nature of SONET ensures QoS, and traditional protection schemes such as BLSR or LCAS can be used for protection/restoration