



MPLS Networks for Broadcast

WBU-ISOG

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“IP isn't reliable enough for
broadcast contribution - is it?”

BT Global Media Network: 10 years of broadcast networking



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- Fully managed media network, with video, audio and data carriage
- Permanent and Occasional Use services
- Customer-controlled switching system: ScheduleIP
- 1+0 and 1+1 services, upto 99.999% availability
- Shared Gateways at many satellite earthstations and interconnect sites

- Hundreds of global channels and services are carried, including:
 - UK Digital Terrestrial TV distribution
 - BT TV Outside Broadcast service, carrying Premiership Football and many other events

BT GMN: Not all MPLS networks are the same



- How did BT set up its media MPLS network?
 - Underlying Ethernet, SDH circuits with FEC
 - Core and Edge Juniper MPLS Switches
 - Traffic Engineering for predictable latency and jitter
 - Classes of Service for video, voice, data
 - MPLS Point to Multipoint for efficient distribution
- What about the media edge devices?
 - BT IVNP, Slipless Switching, ASI and SDI handoffs historically
 - Nevia VS902 and SMPTE 2022-5/6/7, ASI/SDI/IP handoffs today
 - End to end IP tomorrow

BT GMN: Not all MPLS networks are the same



- How do you manage media path setup, switching and scheduling?
 - BT ScheduleIP today
 - 'SDN'-based solution tomorrow
- So how do you gateway with other networks?
 - Historically: ASI handoffs, IP for data only
 - Now: IP for everything, allowing SMPTE 2022-7 across domains
 - Operational alignment
- And what do you see in the future?
 - The end of SDI and ASI
 - End to end IP
 - Path orchestration using SDN, cross-domain service orchestration



Thank You!

Please stay in touch

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