Multiservice Networks Panel

Moderator: Nina Bargisen, TDC
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The panelists and their networks

• Who are you and in what respect do you consider your network “multiservice”?

• Ted Seely, Sprint
• Joe Provo, ITA Software
• Chris Luke, Easynet
• Walt Magnussen, Texas A&M University
Multiservice Keywords

- Mobile Voice
- Mobile Signalling
- VoIP
- Video streaming
- Multicast
- Video Conference services
- TDM
- Telemetry
What challenges does operating a Multi service Network introduce?
Network Tuning

• What additional demands do multiple services put on your network?
• What measures do you take to meet the additional demands if there are any?
Requirements keywords

• Lower convergence times
• Lower BER thresholds
• Large Buffers
• Low jitter
• Low Latency (no timeouts allowed)
Tools of the trade

- QoS
- MPLS FRR
- Buffersizing
- BGP timers
- Over subscription
- BFD
- Physical Segmentation
- Logical Overlays
- Addressing Tricks
- IGP Fast Convergence
- Spanning Tree Optimization
- Session Border Controller
Monitoring

• Have the demands for network monitoring changed with the introduction of these new services?
  – What are acceptable detection times for Operations intervention and resolution for real time services?
• How does performance monitoring of the services work....
• …and network monitoring....
• …and do they work together - or not?
Change Management and Day to Day Operation

• Have operational procedures been changed, and if so where?
  – Core?
  – Edge?

• Is there still such thing as a maintenance evolution with no customer impact?
Day to Day Operations
Keywords
• Change management methodology
• Automation
• Planned work outside public events
• Certifications
• Audits
The Future

- Traffic volume is still growing, and projected to continue growing at a significant rate.
- Can low volume real time sensitive traffic mixes co-exist with high volume best effort traffic on the same infrastructure peacefully?
Q & A