Tutorial: MPLS-based Metro Ethernet Services

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Abstract:

This tutorial is aimed towards participants who have some knowledge of MPLS and would like to gain an understanding of how to build Metro Ethernet networks using existing or new MPLS networks. The first part of the tutorial will focus on the following:
- Basics Metro Ethernet services, as specified by the Metro Ethernet Forum
- A detailed look at pseudowire technology and how it can be used to provide emulation of Ethernet services.
- A detailed discussion of Ethernet Virtual Private Wire Services (VPWS) and Virtual Private LAN Services (VPLS).
- Providing resiliency for VPLS services.
- Scaling VPLS and VPWS-based services using hierarchical concepts.
- OAM capabilities in Metro Ethernet networks.   The second part of the tutorial will consider a few case studies:
-    A basic Metro Ethernet network
-    Extension of the basic Metro Ethernet network to provide inter-Metro services
Abstracts

- Network Management and NOC Workshop
 Hervey Allen (NSRC), Phil Regnauld (NSRC), Chris Evans (Delta-Risk)

- VOIP Deployment Workshop
 Jonny Martin (PCH), Vicky Shrestha (PCH), Daniel Griggs (FX Networks)

- Network Security Workshop
 Damien Holloway (Juniper Networks), Kunjal Trivedi I(Cisco), Merike Kaeo (Doubleshot Security)

- ISP Routing Workshop using IPv4 and IPv6
 Gaurab Raj Upadhaya(PCH), Amante Alvaran (APNIC), Shankar Vridhagiri

- Advanced Routing - BGP Multihoming with IPv4 and IPv6
 Philip Smith (Cisco), Mark Tinka (Global Transit)

- Toward The Internet 2.0
 Hiroshi Esaki, Ph.D.

- Advancing the Philippines' Internet Infrastructure
 William Torres, Ph.D.

- Integrating IP Wireless Sensor Networks
 PatrickÂ Grossetete, Archrock

- Lessons Learnt from the Beijing Olympic Games Website Measurement
 Rocky K. C. Chang, The Hongkong Polytechnic University

- A technical demo and overview of .tel
    Jim Reid (Telnic)

- BGP IN 2008 - what's changed Â
 Geoff Huston (APNIC)

- IPv6 Traffic levels on Hurricane Electric's backbone
 Martin Levy (Hurricane Electric)

- JANET's 40Gbps backbone
 Rob Evans (JANET)

- From IPv4 only to v4/v6 Dual Stack
 Shin Miyakawa (NTT)

- How to Keep CGNs from Breaking the Internet
 Randy Bush (IIJ)

- IPv6 Deployment at IIJ

Yoshinobu Matsuzaki (IIJ)

- Session aware NAT
  David Miles (Alcatel-Lucent)

- IANA and DNSSEC at the root
  Richard Lamb (IANA)

- IPv6 at Google: lessons learned, state of the art, and the road to deployment
  Lorenzo Colitti(Google)

- Euro-IX update
  Serge Radovcic (Euro-IX)

- IPv6 at Monash University
  John Mann(Monash University)

- What can IXPs do for IPv4/IPv6 route exchange?
  Takabayashi Takejiro (Japan Internet Exchange Co., Ltd.) and Mawatari Masataka (Co-author)

- What can IXPs do about IPv4 exhaustion?
  MAWATARI Masataka (Japan Internet Exchange Co., Ltd.) and TAKABAYASHI Takejiro

- DNS-OARC's Open DNSSEC Validating Resolver
  Duane Wessels(DNS-OARC)

- AMS-IX Update
  Cara Mascini(AMS-IX)

- DNSSEC in 6 minutes
  Joao Damas (ISC)

- NIXI - Internet Exchanges in India
  Amitabh Singhal,NIXI
- IPv6 - IPv4 Co-Existence: IETF Report
  Jari Arkko, Ericsson Research, IETF
- Rogue DNS servers - a case study
  Feike Hacquebord,Trend Micro
- Building a very large scale compute system for organizing the worlds information and making it universally accessible
  Vijay Gill
- Mobile Backhaul Architecture Options
  Rishi Mehta ,Redback Networks
- Membership Development
  Tomas Marsalek, NIX.CZ
- Broadband Forum v6 Home Networks
  David Miles, Alcatel-Lucent
- BGP Routing Scalability Considerations
  Danny McPherson,Arbor Networks, Inc. Co-author: Shane Amante, Lixia Zhang
- 2008 Infrastructure Security Report
  Danny McPherson,Arbor Networks, Inc.
- 32-bit ASNs
  Chris Malayter, Switch&Data, Co-author: Greg Hankins , Force10 Networks
- The Internet Regulatory Environment in Saudi Arabia
  Dr. Ibraheem S. Al-Furaih (CITC)
- Tutorial: Introduction to IPv6
  Kurtis Lindqvist (NetNod)

- Tutorial: BGP Multihoming Techniques
  Philip Smith (Cisco)

- Tutorial: BGP Techniques for Service Providers
  Philip Smith (Cisco)

- Tutorial: Troubleshooting BGP
  Philip Smith (Cisco)

- Tutorial: Network Core Infrastructure - Best Practices
 Yusuf Bhaiji (Cisco)

- Tutorial: Anatomy of a network attack, network forensics, network attack and defense
 APNIC Training Team and Team Cymru

- Tutorial: Internet Routing Registry
 APNIC Training Team

- Tutorial: MPLS Service, Applications & Deployment Best Practices
 Santanu Dasgupta (Cisco Systems) and Kasu Venkat Reddy

- Tutorial: Layer 2 Attacks and Mitigation Techniques
 Yusuf Bhaiji (Cisco)

- Tutorial: Managing Voice Quality in Converged IP Networks
 Faisal Chaudhry (Cisco Systems)

- Tutorial: Internet Resource Management Essentials (IRME)
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- Tutorial: DNSSEC Deployment
 Phil Regnauld and Hervey Allen (Network Startup Resource Center)

- Tutorial:MPLS-based Metro Ethernet Services
 Paresh Khatri(Alcatel-Lucent)

- Tutorial:IPv6 Deployment
 Mark Tinka(Global Transit International)

- Tutorial:IS-IS Deployment (Dual-Stack)
 Mark Tinka(Global Transit International)