

IEEE 802.3 Ethernet Bandwidth Assessment Ad hoc

Nov 22 Meeting Notes

Prepared by John D'Ambrosia, Dell

Chaired by John D'Ambrosia, Dell

Presentation #1 – Agenda and General Information, John D'Ambrosia, Dell

http://www.ieee802.org/3/ad_hoc/bwa/public/nov11/agenda_02_1111.pdf

Presentation #2 – The European Peering Scene, Henk Steenman, AMS-IX / Euro-IX

http://www.ieee802.org/3/ad_hoc/bwa/public/nov11/steenman_01_1111.pdf

Discussion

- Asia / South America setting up their own IXP organizations
- Carriers are typically customers of IXPs
- Different ways to connect to IXPs
- AMS-IX knows its growth and can predict its inward needs based on that
- Rule of thumb for traffic planning
 - Streaming instances
 - Scales up before events to allow ix's to scale accordingly
 - There are unexpected events, but usually utilization is low enough to account for demand
 - IX's are keeping aware of access technologies to allow for appropriate planning as well.
- A lot of traffic is video, but Europe is different than US (services like Netflix – not available in Europe – European profile is similar to US a few years ago). Digital rights having an impact on traffic profile.
- Difference between IXPs / locations – IXPs may be at different data centers – large trunks needed between locations – in Europe reach is 10 to 30km – needed for customer connections / IXP networks
 - AMS-IX: Using 10G lags up to 160G , migration to 100G started

Next Call – Dec 13, ESNNet

Attendees

Alexander Umnov, Huawei; Andy Moorwood, Infinera; Beth (Donnay) Kochuparambil, Cisco; Bijal Sanghani, Euro-IX; David Chalupsky Intel; David Ofelt, Juniper Networks ; Gary Nichol, Cisco; Henk Steenman , AMS-IX; Herbert Endres, Molex; Hirotake Iwadate, Sumitomo; HuangXi, Huawei; Hugh Barrass, Cisco; Jim Innis, Freescale Semiconductor ; Jim Theodoras, ADVA Optical Networking ; John Petrilla, Avago; Mark Gustlin, Cisco; Mark Nowell, Cisco; Mike Dudek, QLogic; Mike Li, Altera; Mike Ressler, Hitachi Cable America; Nathan Tracy, TE Connectivity; Pat Zabinski, Mayo Clinic; Pete Anslow, Ciena; Peter Stassar, Huawei; Piers Dawe, IPtronics; Randy Perrie, OneChip Photonics; Sam Sambasivan, AT&T; Scott Kipp, Brocade; Stephen Alie, Cortina Systems; Ted Sprague, Infinera, Tim Webster, Cisco; Tom Palkert Luxtera/Xilinx; Wael Diab, Broadcom