draft-tarapore-mbone-multicast-cdni-03

Percy S. Tarapore, AT&T
Robert Sayko, AT&T
Greg Shepherd, Cisco
Toerless Eckert, Cisco
Ram Krishnan, Brocade

Scope of Document

- Develop ***Best Current Practice*** (BCP) for Multicast Delivery of Applications Across Peering Point Between Two Administrative Domains (AD):
  - Describe Process & Establish Guidelines for Enabling Process
  - Catalog Required Information Exchange Between AD's to Support Multicast Delivery
  - Limit Discussion to "Popular Protocols" (PIM-SSM, IGMPv3, MLD)
- Identify "Gaps" (if any) that may Hinder Such a Process
- Gap Rectification (e.g., New Protocol Extensions) is Beyond the Scope of this BCP Document

Revision History

- Vancouver 2012 - Revision 0 Proposed as a BCP Describing Process for Delivering Content by Multicast Across Content Distribution Network Interconnections (CDNi):
  - Feedback Received:
    - Specific case for CDNi only & Would Require Descriptions of CDN Interconnection Architectures
    - Possible Conflict with CDNi WG
- Atlanta 2012 – Revision 1 Preempted due to Hurricane Sandy
- Orlando 2013 – Revision 2 Proposed as General Case for Multicast Delivery of Any Application Across two AD's:
  - CDNi Case is One Example of this General Scenario
- *Berlin 2013 – Revision 3 provides detailed text for Use Cases in section 3*

End-to-End Native Multicast
(Section 3.1)

- Use Case with AD-1, AD-2, & Peering Point Enabled with Native Multicast.

- New Draft Text:
  - Illustrative Figure
  - Pros and Cons for this Implementation
  - Four Requirements for this Implementation

Peering Point Enabled with GRE Tunnel (Section 3.2)

- ## Use Case:
  - AD-1 and AD-2 Enabled with Native Multicast.
  - Peering Point Enabled with Generic Routing Encapsulation (GRE) Tunnel

- ## New Draft Text:
  - Pros and Cons for this Implementation
  - Four Generic Requirements (same as Use Case 3.1)
  - Two Requirements Specific to GRE

Peering Point Enabled with AMT Tunnel (Section 3.3)

- Use Case:
  - AD-1 and AD-2 Enabled with Native Multicast.
  - Peering Point Enabled with Automatic Multicast Tunnel (AMT)
- New Draft Text:
  - Pros and Cons for this Implementation
  - Four Generic Requirements (same as Use Case 3.1)
  - One Requirement Specific to AMT

Only AD-1 is Native Multicast (Section 3.4)

- Use Case:
  - AD-1 Enabled with Native Multicast.
  - Automatic Multicast Tunnel (AMT) Established Across Peering Point to End User Device (Unicast Session Starting at Edge of AD-1 Through Peering Point and AD-2 Terminating at EU Device)

- New Draft Text:
  - Pros and Cons for this Implementation
  - Three Generic Requirements (same as 1st Three Requirements from Use Case 3.1)
  - Two Requirements Specific to AMT Setup and Data Collection

Proposal

- Request Comments on New Draft Text
- Request Approval for Accepting draft I-D as an MBONE Working Group Draft

Thank You