IPv4-IPv6 Multicast Address Conversion

draft-tsao-mboned-v4v6mcast-dynamic-conversion

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Y.Cao, C. Wang, W. Meng & B. Khasnabish

Motivations

- Increasing the network security
 - By parameter Ruled_IPv4_M_Prefix
- Differentiating the IPv6 network using different IPv6 multicast prefix
 - By defining different Ruled_IPv6_M_Prefix
- Not limited the IPv6 multicast prefix to /96
 - By flexible configuring Ruled_IPv4_Offset&Ruled_IPv4_Type

Scope & Context

- Defines the rule for stateless conversion of IPv4-IPv6 multicast address
- Rule includes following parameters:
 - Rule_IPv6_M_Prefix/Length (mandatory)
 - Rule_IPv4_M_Prefix/Length (optional)
 - Rule_IPv4_Offset (optional)
 - Rule_IPv4_Type (optional)
- This mechanism can be used in various contexts
 - IPv4-initiated communication
 - IPv6-initiated communication
 - IPv4-IPv6 translation or encapsulation

Summary

- More flexible than constant format
- Need some companion documents
 - DHCP extension
 - RADIUS extension
 - Comments are welcome!

Next Step

Adopt the document as a WG item?