Unicast-Prefix-based IPv4 Multicast Addresses
draft-ietf-mboned-ipv4-uni-based-mcast-03.txt

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Current Status

• “BGP Support for Four-octet AS Number Space” (draft-ietf-idr-as4bytes-13.txt) now in RFC-editor queue as a Proposed Standard

• Draft-03 submitted with no change from -02 other than updated boilerplate and references

• One open issue on the list
Is space delegated to the subnet, or to the superblock?

• Currently draft implies to subnet, is this too restrictive?

• Comparison with IPv6:
  – RFC 3306 allows both by embedding the subnet prefix length in the multicast address, but not enough bits to do so in IPv4
Subnet vs Superblock

• Subnet:
  – Allows for possible allocation procedures/protocols that only require coordination within the subnet
  – For debugging, can easily identify owner down to subnet granularity
  – No ambiguity of granularity
  – More convenient for BIDIR PIM

• Superblock:
  – More flexible allocation within a multi-subnet org
    • Means more usable addresses without constraining the topology
  – Allows use within an org using subnet prefixes longer than /24

• So far feedback has been in favor of superblocks rather than subnets

• Proposal: reword to delegate to (smallest) superblock owner and leave it to superblock owner whether it is delegated to subnets or not