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Multicast Addresses for Documentation draft-venaas-mboned-mcaddrdoc-00.txt

Abstract

This document reserves IPv4 and IPv6 multicast addresses for use in documentation, RFCs etc. Some multicast addresses are derived from AS numbers or unicast addresses. This document also explains how these can be used for documentation purposes by deriving them from AS numbers and unicast addresses that are reserved for such purposes.

Status of this Memo

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1. Introduction

Often it is useful in documentation to give examples containing IP multicast addresses. To prevent conflicts or confusion, one should avoid using multicast addresses that may be in actual use. For unicast there are both IPv4 and IPv6 addresses reserved for this, see [RFC5737] and [RFC3849] respectively. There are however no multicast addresses available for such purposes. This document reserves such addresses.

There are also some multicast addresses that are derived from AS numbers of unicast addresses. For examples where such addresses are desired, one should derive them from AS numbers and unicast addresses reserved for documentation purposes. This document also lists these.

2. Documentation IPv4 and IPv6 multicast addresses

For documentation where examples of general purpose multicast addresses are needed, one should use multicast addresses that never will be in actual use.

The IPv4 multicast address allocated for documentation purposes is TBD. The IPv6 multicast address allocated for documentation purposes is TBD.

3. GLOP multicast addresses

GLOP [RFC3180] is a method for deriving IPv4 multicast group addresses from 16 bit AS numbers. For examples where GLOP addresses are desired, the addresses should be derived from the AS numbers reserved for documentation use. See [RFC5398].

4. Unicast prefix based multicast addresses

IPv6 multicast addresses can be derived from IPv6 unicast prefixes. The two ways currently defined are unicast-prefix based addresses $[{\tt RFC3306}]$ and Embedded-RP addresses $[{\tt RFC3956}]$. There is also a proposal for doing this with IPv4 [<u>I-D.ietf-mboned-ipv4-uni-based-mcast</u>]. For examples where these types of addresses are desired, the addresses should be derived from unicast addresses reserved for documentation purposes. For IPv4, see [RFC5737]. For IPv6, see [RFC3849].

5. Other multicast addresses

For both IPv4 and IPv6, multicast address ranges have been defined for link-local, SSM, admin scoped etc. It may be considered to reserve a multicast address from these ranges for the purpose of documentation. For IPv6 this can be done by assigning a Group ID, see [RFC3307].

6. Security Considerations

The use of specific multicast addresses for documentation purposes has no impact on security.

7. IANA Considerations

IANA is requested to assign both an IPv4 multicast address and an IPv6 multicast address for documentation purposes.

8. Informative References

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