

Extended Allocations in 233/8
<[draft-ietf-mboned-glop-extensions-00.txt](#)>

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3. Abstract

This memo provides describes the mapping of the GLOP addresses [[RFC2770](#)] corresponding to the private AS space [[RFC1930](#)].

4. Introduction

[RFC 2770](#) [[RFC2770](#)] describes an experimental policy for use of the class D address space using 233/8. The technique described there maps 16 bits of Autonomous System number (AS) into the middle two octets of 233/8 to yield a /24. While this technique has been successful, the assignments are inefficient in those cases in which a /24 is too small or the user doesn't have its own AS.

[RFC 1930](#) [[RFC1930](#)] defines the private AS space to be 64512 through 65535. This memo expands on [RFC 2770](#) to allow routing registries to allocate multicast addresses from the GLOP space corresponding to the [RFC 1930](#) private ASes. This space will be referred to as the EGLOP (Extended GLOP) address space.

This memo is a product of the Multicast Deployment Working Group (MBONED) in the Operations and Management Area of the Internet Engineering Task Force. Submit comments to <mboned@ns.uoregon.edu> or the authors.

The terms "Specification Required", "Expert Review", "IESG Approval", "IETF Consensus", and "Standards Action", are used in this memo to refer to the processes described in [[RFC2434](#)]. The keywords MUST, MUST NOT, MAY, OPTIONAL, REQUIRED, RECOMMENDED, SHALL, SHALL NOT, SHOULD, SHOULD NOT are to be interpreted as defined in [RFC 2119](#) [[RFC2119](#)].

5. Overview

<http://www.iana.org/cgi-bin/multicast.pl> defines a mechanism for allocation of multicast addresses that are generally for use in network control applications (a more general description of these policies can be found in [\[GUIDELINES\]](#)). It is envisioned that those addresses allocated from the ELOOP space (233.242.0.0/24 - 233.255.255.0/24) will be used by applications that cannot use Administratively Scoped Addressing [\[RFC2365\]](#), GLOP Addressing [\[RFC2770\]](#), or Source Specific Multicast (SSM) [\[SSM\]](#).

6. Assignment Criteria

An application for a globally scoped IPv4 multicast addresses issued by a Regional Registry (RIR). The applicant MUST

- (i). Show that the request cannot be satisfied using Administratively Scoped addressing, GLOP addressing, or SSM.
- (ii). Request IP address space from upstream provider
- (iii). Request IP address space from provider's provider

If the request cannot be satisfied by (i)-(iii) above, the RIR MAY consider allocation from the range 233.242.0.0 - 233.255.255.0.

Address space allocation size is the responsibility of the allocating RIR. The blocks MUST BE be issued on appropriate CIDR boundaries. Prefixes shorter than /21 should not be allocated.

Because the number of available IPv4 multicast addresses on the Internet is extremely limited, many factors must be considered in the determination of address space allocations. Therefore, multicast address space MUST be allocated using a slow-start model. Allocations SHOULD be based on justified need, not solely on a predicted customer base. In particular, delayed deployment of a given technology (e.g. SSM) is not a basis for assignment of addresses from the ELOOP space.

7. Security Considerations

Security issues are not discussed in this memo.

8. Acknowledgments

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[GUIDELINES] IANA Guidelines for IPv4 Multicast Address
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Work in progress.

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