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J. Arkko
Ericsson
S. Bradner
Harvard University
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IANA Allocation Guidelines for the IPv6 Routing Header

Abstract

This document specifies the IANA guidelines for allocating new values for the Routing Type field in the IPv6 Routing Header.

Status of This Memo

This is an Internet Standards Track document.

This document is a product of the Internet Engineering Task Force (IETF). It represents the consensus of the IETF community. It has received public review and has been approved for publication by the Internet Engineering Steering Group (IESG). Further information on Internet Standards is available in [Section 2 of RFC 5741](#).

Information about the current status of this document, any errata, and how to provide feedback on it may be obtained at <http://www.rfc-editor.org/info/rfc5871>.

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[1.](#) Introduction

This document specifies the IANA guidelines [[RFC5226](#)] for allocating new values for the Routing Type field in the IPv6 Routing Header [[RFC2460](#)]. Previously, no IANA guidance existed for such allocations.

[2.](#) IANA Considerations

New Routing Type values are allocated through IETF Review or IESG Approval [[RFC5226](#)].

Note that two experimental values (253 and 254) are already available for use [[RFC4727](#)].

[3.](#) Security Considerations

This specification does not change the security properties of the Routing Header. However, past experience shows that it is easy to design routing headers that have significant problems [[RFC5095](#)].

[4.](#) References

[4.1.](#) Normative References

- [RFC2460] Deering, S. and R. Hinden, "Internet Protocol, Version 6 (IPv6) Specification", [RFC 2460](#), December 1998.
- [RFC5226] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [BCP 26](#), [RFC 5226](#), May 2008.

[4.2.](#) Informative References

- [RFC4727] Fenner, B., "Experimental Values In IPv4, IPv6, ICMPv4, ICMPv6, UDP, and TCP Headers", [RFC 4727](#), November 2006.
- [RFC5095] Abley, J., Savola, P., and G. Neville-Neil, "Deprecation of Type 0 Routing Headers in IPv6", [RFC 5095](#), December 2007.

[RFC 5871](#)

IPv6 RH IANA Rules

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[Appendix A](#). Changes from [RFC 2460](#)

This document specifies only the IANA rules associated with the Routing Type field.

Authors' Addresses

Jari Arkko
Ericsson
Jorvas 02420
Finland

E-Mail: jari.arkko@piuha.net

Scott Bradner
Harvard University
Cambridge, MA 02138
US

Phone: +1 617 495 3864
E-Mail: sob@harvard.edu

