

Internet Protocol Mixture (IPmix) Specification
draft-omar-ipmix-02

Abstract

This document specifies the Internet Protocol Mixture (IPmix). a solution that allows IPv4-only hosts to communicate with IPv6-only hosts and vice versa.

Status of This Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <https://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on April 20, 2021.

Copyright Notice

Copyright (c) 2020 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to [BCP 78](#) and the IETF Trust's Legal Provisions Relating to IETF Documents (<https://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Introduction	2
2.	Notational Conventions and Terminology	3
3.	Internet Protocol Mixture (IPmix)	3
4.	The Four Types of Communication	4
4.1.	IPmix: IPv6 Host to IPv4 Host	4
4.2.	IPmix: IPv4 Host to IPv6 Host	5
4.3.	IPmix: IPv6 Host to IPv6 Host	6
4.4.	IPmix: IPv4 Host to IPv4 Host	7
5.	Advantages of IPmix	8
6.	IPmix with DNS	8
7.	IANA Considerations	9
8.	Security Considerations	9
9.	Acknowledgements	9
10.	References	9
10.1.	Normative References	9
10.2.	Informative References	9
	Author's Address	9

This contribution has been withdrawn.

7. IANA Considerations

TBC.

8. Security Considerations

The security features of IPmix are described in the Security Architecture for the Internet Protocol [[RFC2401](#)].

9. Acknowledgements

The author would like to thank S. Krishnan, W. Haddad, L. Howard, C. Huitema, T. Manderson, J.C. Zuniga, J. Touch, A. Sullivan, K. Thomann, S. Bortzmeyer, J. Linkova, R. Bonica, F. Baker and T. Herbert for the useful inputs and discussions about IPmix.

10. References

10.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC2401] Kent, S. and R. Atkinson, "Security Architecture for the Internet Protocol", [RFC 2401](#), DOI 10.17487/RFC2401, November 1998, <<https://www.rfc-editor.org/info/rfc2401>>.
- [RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in [RFC 2119](#) Key Words", [BCP 14](#), [RFC 8174](#), DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.

10.2. Informative References

- [RFC0791] Postel, J., "Internet Protocol", STD 5, [RFC 791](#), DOI 10.17487/RFC0791, September 1981, <<https://www.rfc-editor.org/info/rfc791>>.

Author's Address

Khaled Omar
The Road
6th of October City,

Giza
Egypt

Phone: 2 01003620284

Email: eng.khaled.omar@hotmail.com