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Multi link PPP Support for an ipv6 address class identifier draft-vautrin-6man-ipv6-mlppp-id-00

Abstract

This document specifies a new multi link protocol address class identifier. This new class will be able to contain an ipv6 address.

Status of this Memo

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Table of Contents

<u>1</u> .	Introduction	3
<u>2</u> .	Requirements Language	3
<u>3</u> .	New IPv6 Endpoint Discriminator address class	3
<u>4</u> .	Acknowledgements	4
<u>5</u> .	IANA Considerations	5
<u>6</u> .	Security Considerations	5
<u>7</u> .	Normative References	5
Auth	hors' Addresses	5

1. Introduction

RFC 1990 [RFC1990] defines 6 different classes in its Endpoint Discriminator Option (from Class 0 to class 5). If a Multilink PPP is created in an ipv6 environment it would be possible to use the Class 1 address space and place the IPv6 address there as the MLPPP session ID. But the Class 1 has been deprecated and is thus not the right vehicle for an ipv6 address. This document propose the creation of a class 6 dedicated to ipv6 addresses.

2. Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

3. New IPv6 Endpoint Discriminator address class

Per RFC1990], the Endpoint Discriminator Option is defined as such:

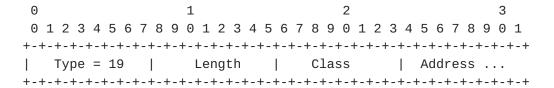


Figure 1

Internet-Draft IPv6 MLPPP ID August 2010

The Endpoint Discriminator Option represents identification of the system transmitting the packet.

The specification of the subfields are:

Type

19 = for Endpoint Discriminator

Length

3 + length of Address

Class

The Class field is one octet and indicates the identifier address space. Current values are assigned as follows:

- 0 Null Class
- 1 Locally Assigned Address
- 2 Internet Protocol (IPv4) Address
- 3 IEEE 802.1 Globally Assigned MAC Address
- 4 PPP Magic-Number Block
- 5 Public Switched Network Directory Number

This document defines a new class of endpoint discreminator address:

6 Internet Protocol (IPv6) Address defined as:

Class 6 - Internet Protocol (IPv6) Address

Fixed Length: 16

Content:

An address in this class contains an IPv6 host address as defined in $\frac{RFC\ 2460}{RFC\ 2460}$.

4. Acknowledgements

None

5. IANA Considerations

None

6. Security Considerations

To be defined.

7. Normative References

[RFC1990] Sklower, K., Lloyd, B., McGregor, G., Carr, D., and T.
Coradetti, "The PPP Multilink Protocol (MP)", RFC 1990,
August 1996.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", <u>BCP 14</u>, <u>RFC 2119</u>, March 1997.

[RFC2460] Deering, S. and R. Hinden, "Internet Protocol, Version 6 (IPv6) Specification", RFC 2460, December 1998.

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