Abstract

48-bit Extended Unique Identifiers (EUI-48) and 64-bit Extended Unique Identifiers (EUI-64) are address formats specified by the IEEE for use in various layer-2 networks, e.g. ethernet.

This document describes an allocation of EUI-48 and EUI-64 addresses under the IANA Organisationally Unique Identifier (OUI) to be used for the purposes of documentation.

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 http://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 September 22, 2013.

Copyright Notice

Copyright (c) 2013 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 (http://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
Internet-Draft  EUI-48 and EUI-64 Documentation Addresses     March 2013

the Trust Legal Provisions and are provided without warranty as
described in the Simplified BSD License.

Table of Contents

1. Introduction ........................................... 3
2. Terminology ........................................... 4
3. EUI-48 Addresses for use in Documentation .............. 5
4. EUI-64 Addresses for use in Documentation .............. 6
5. Guidance for Document Authors .......................... 7
6. Operational Implications ............................... 8
7. IANA Considerations ..................................... 9
   7.1. IANA Unicast 48-bit MAC Addresses ................ 9
   7.2. IANA Multicast 48-bit MAC Addresses ............... 9
   7.3. IANA 64-bit MAC Addresses ........................ 9
8. Security Considerations ................................. 10
9. Acknowledgements ...................................... 11
10. Normative References ................................. 12
Appendix A. Editorial Notes ............................. 13
    A.1. EUI-48/EUI-64 Identifier or Identifier Block Template .. 13
    A.2. Change History .................................... 13
Author’s Address ........................................ 15

Abley                  Expires September 22, 2013               [Page 2]
1. Introduction

48-bit Extended Unique Identifiers (EUI-48) [EUI48] and 64-bit Extended Unique Identifiers (EUI-64) [EUI64] are address formats specified by the IEEE for use in various layer-2 networks, e.g. ethernet.

This document describes an allocation of EUI-48 and EUI-64 addresses under the IANA Organisationally Unique Identifier (OUI) to be used for the purposes of documentation, in accordance with the guidelines and requirements for such allocations described in [RFC5342].

As noted in [RFC5737], the use of designated address ranges for documentation and examples reduces the likelihood of conflicts and confusion arising from the use of addresses assigned for some other purpose.
2. Terminology

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 [RFC2119].
3. EUI-48 Addresses for use in Documentation

The 256 unicast identifiers from 00-00-5E-XX-XX-XX to 00-00-5E-XX-XX-XX have been allocated for use in documentation.

The 256 multicast identifiers from 01-00-5E-XX-XX-XX to 01-00-5E-XX-XX-XX have been allocated for use in documentation.
4. EUI-64 Addresses for use in Documentation

The 256 unicast identifiers from 00-00-5E-XX-XX-XX-XX-XX to 00-00-5E-XX-XX-XX-XX-XX have been allocated for use in documentation.

The 256 multicast identifiers from 01-00-5E-XX-XX-XX-XX-XX to 01-00-5E-XX-XX-XX-XX-XX have been allocated for use in documentation.
5. Guidance for Document Authors

Documents which include literal EUI-48 or EUI-64 addresses, as examples or for other reasons, SHOULD choose addresses within the ranges described in Section 3 and Section 4.

Where literal EUI-48 or EUI-64 addresses in a document are required to be part of a different allocation, e.g. for reasons specific to a particular protocol, authors MAY use addresses from ranges other than those specified in Section 3 and Section 4.
6. Operational Implications

Addresses within the ranges described in Section 3 and Section 4 SHOULD NOT be used for any purpose other than documentation.
7. IANA Considerations

The IANA is directed to document the allocations described in Section 3 and Section 4 in the appropriate IANA Ethernet Numbers subregistry.

7.1. IANA Unicast 48-bit MAC Addresses

<table>
<thead>
<tr>
<th>Addresses</th>
<th>Usage</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX-XX-XX to XX-XX-XX</td>
<td>Documentation</td>
<td>this document</td>
</tr>
</tbody>
</table>

7.2. IANA Multicast 48-bit MAC Addresses

<table>
<thead>
<tr>
<th>Addresses</th>
<th>Usage</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX-XX-XX to XX-XX-XX</td>
<td>Documentation</td>
<td>this document</td>
</tr>
</tbody>
</table>

7.3. IANA 64-bit MAC Addresses

<table>
<thead>
<tr>
<th>Addresses</th>
<th>Usage</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX-XX-XX-XX-XX to XX-XX-XX-XX-XX</td>
<td>Documentation</td>
<td>this document</td>
</tr>
</tbody>
</table>
8. Security Considerations

The specification presented in this document presents no additional threat to the Internet.
9. Acknowledgements

[ RFC5737 ], concerning the allocation of IPv4 address blocks for
documentation, provided a useful reference in the preparation of this
document.

“EUI-48” and “EUI-64” are registered trademarks of the Institute of
Electrical and Electronics Engineers (IEEE).
10. Normative References

[EUI48]  IEEE, "Guidelines for use of a 48-bit Extended Unique Identifier (EUI-48)".

[EUI64]  IEEE, "Guidelines for use of a 64-bit Extended Unique Identifier (EUI-64)".


Appendix A. Editorial Notes

This section (and sub-sections) to be removed prior to publication.

A.1. EUI-48/EUI-64 Identifier or Identifier Block Template

Applicant Name:

Joe Abley

Applicant Email:

jabley@teksavvy.ca

Applicant Telephone: (starting with country code)

+1 519 670 9327

Use Name: (brief name of Parameter use such as "Foo Protocol")

Documentation

Document: (ID or RFC specifying use to which the identifier or block of identifiers will be put.)

draft-jabley-eui48-eui64-doc-addr

Specify whether this is an application for EUI-48 or EUI-64 identifiers:

Both EUI-48 and EUI-64

Size of Block requested: (must be a power-of-two-sized block, can be a block of size one (2**0))

256 EUI-48 addresses
256 EUI-64 addresses

Specify multicast, unicast, or both:

Both

A.2. Change History
00 Initial idea, circulated for the purposes of entertainment.
Author's Address

Joe Abley
TekSavvy Solutions, Inc.
470 Moore Street
London, ON N6C 2C2
Canada

Phone: +1 519 670 9327
Email: jabley@teksavvy.ca