

Distributed Mobility Management [dmm]
Internet-Draft
Expires: March 27, 2015

C. Perkins
Futurewei
V. Devarapalli
Vasona Networks
September 23, 2014

**MN Identifier Types for [RFC 4283](#) Mobile Node Identifier Option
draft-perkins-dmm-4283mnids-00.txt**

Abstract

Additional Identifier Types are proposed for use with the Mobile Node Identifier Option for MIPv6 ([RFC 4283](#)).

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 March 27, 2015.

Copyright Notice

Copyright (c) 2014 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 the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Introduction	2
2.	New Mobile Node Identifier Types	2
3.	Security Considerations	2
4.	IANA Considerations	3
5.	References	3
5.1.	Normative References	3
5.2.	Informative References	3
	Authors' Addresses	4

[1.](#) Introduction

The Mobile Node Identifier Option for MIPv6 [[RFC4283](#)] has proved to be a popular design tool for providing identifiers for mobile nodes during authentication procedures with AAA protocols such as Diameter [[RFC3588](#)]. To date, only a single type of identifier has been specified, namely the MN NAI. Other types of identifiers are in common use, and even referenced in [RFC 4283](#). In this document, we propose adding some basic types that are commonly in use in various telecommunications standards, including the IMSI, P-TMSI, IMEI, GUTI, and IEEE MAC-layer addresses. In addition, we include the IPv6 address itself as a legitimate mobile node identifier.

[2.](#) New Mobile Node Identifier Types

The following types of identifiers are commonly used to identify mobile nodes. For each type, references are provided with full details on the format of the type of identifier.

- o IPv6 Address [[RFC2373](#)]
- o IMSI [[ThreeGPP-IDS](#)]
- o P-TMSI [[ThreeGPP-IDS](#)]
- o EUI-48 address [[IEEE802](#)]
- o EUI-64 address [[IEEE802](#)]
- o GUTI [[ThreeGPP-IDS](#)]

[3.](#) Security Considerations

This document does not introduce any security mechanisms, and does not have any impact on existing security mechanisms. Insofar as the selection of a security association may be dependent on the exact form of a mobile node identifier, additional specification may be

necessary when the new identifier types are employed with the general AAA mechanisms for mobile node authorizations.

4. IANA Considerations

The new mobile node identifier types defined in the document should be assigned values from the "Mobile Node Identifier Option Subtypes" registry. The following values should be assigned.

New Mobile Node Identifier Types

Identifier Type	Identifier Type Number
IPv6 Address	2
IMSI	3
P-TMSI	4
EUI-48 address	5
EUI-64 address	6
GUTI	7

Table 1

See [Section 2](#) for details about the identifier types.

5. References

5.1. Normative References

- [RFC2373] Hinden, R. and S. Deering, "IP Version 6 Addressing Architecture", [RFC 2373](#), July 1998.
- [RFC4283] Patel, A., Leung, K., Khalil, M., Akhtar, H., and K. Chowdhury, "Mobile Node Identifier Option for Mobile IPv6 (MIPv6)", [RFC 4283](#), November 2005.
- [RFC4285] Patel, A., Leung, K., Khalil, M., Akhtar, H., and K. Chowdhury, "Authentication Protocol for Mobile IPv6", [RFC 4285](#), January 2006.

5.2. Informative References

- [IEEE802] IEEE, , "IEEE Std 802: IEEE Standards for Local and Metropolitan Networks: Overview and Architecture", 2001.
- [RFC3588] Calhoun, P., Loughney, J., Guttman, E., Zorn, G., and J. Arkko, "Diameter Base Protocol", [RFC 3588](#), September 2003.

[ThreeGPP-IDS]

3rd Generation Partnership Project, , "3GPP Technical Specification 23.003 V8.4.0: Technical Specification Group Core Network and Terminals; Numbering, addressing and identification (Release 8)", March 2009.

Authors' Addresses

Charles E. Perkins
Futurewei Inc.
2330 Central Expressway
Santa Clara, CA 95050
USA

Phone: +1-408-330-4586
Email: charliep@computer.org

Vijay Devarapalli
Vasona Networks
2900 Lakeside Drive, Suite 180
Santa Clara, CA 95054
USA

