

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	IP address for Secondary Management connection
Date Submitted	2006-11-12
Source(s)	Peretz Feder - Lucent Technologies [mailto: pfeder@lucent.com]
Re:	
Abstract	Changes to section 9.1.2 in 802.16e-2005 clarifying section 14.2.4.1.2 in 802.16g
Purpose	Adoption
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.
Patent Policy and Procedures	<p>The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) <http://ieee802.org/16/ipr/patents/policy.html>, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard."</p> <p>Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair <mailto:r.b.marks@ieee.org> as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site <http://ieee802.org/16/ipr/patents/notices>.</p>

SS IP Addressing, 2nd management connection

Peretz Feder - Lucent Technologies

Problem Definition

Section 9.1.2 needs clarification when dealing with IP addressing used by the secondary management connection. The Mobile IP payload is referenced in section 14.2.4.1.2 of 802.16g/D5 and requires the following clarifications

Remedy

Text to be added in 802.16e-2005

Proposed Text Changes in Red

Editor: Please amend section 9.1.2 in 802.16e-2005 as indicated below:

9.1.2 Mobile IP v4 fields used by the MS

If Mobile IP v4 is used **to obtain secondary management address**, the following fields shall be present in the Mobile IP registration request **sent** from the **Client MIP residing in the MS** and shall be set as described below and encoded according to IETF RFC 3344.

- a) When the MS (or Mobile Node) attempts to obtain an IP address dynamically, the home address field shall be set to "0.0.0.0".
- b) When the MS attempts to obtain an IP address in the visited network, the home agent address field shall be set to "0.0.0.0". On the other hand, when the MS attempts to obtain an IP address in the home network, the home agent address field shall be set to "255.255.255.255".
- c) The Network Access Identifier (NAI) extension [IETF RFC 2789] shall be included for identifying the Mobile IP user.
- d) The Challenge extension shall be included [IETF RFC 3012], if the Challenge extension is included in the Agent Advertisement message.
- e) A 128-bit key may be shared between an MS and an ASA server during the initial Mobile IP registration, and the MS-ASA Authentication extension may be generated based on the shared key [IETF RFC 3012].

The following fields are expected in the Mobile IP registration response returned to the **Mobile IP Client residing in the MS**. The MS shall

configure itself based on the Mobile IP registration response

- The home address to be used by the MS.
- The MS's NAI extension to identify a Mobile IP user [IETF RFC 2789]
- The challenge extension if the foreign agent supports more strong security.
- The MS and home agent authentication extension for authenticating the home agent.
- The key reply extensions for security between the MS and the home agent, and between the MS and foreign agent, if the MS requests keys between the MS and the home agent, and between the MS and the foreign agent.