

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	IP address for Secondary Management connection
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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
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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 an address for the secondary management connection**, 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.