# Dynamic Home Address Assignment

draft-paulkandasamy-mobileip-nai-based-home-addres-02.txt

**Naveen Paulkandasamy, Kent Leung**
**68th IETF**
**Prague, Czech Republic**
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# Background

- Original draft was published in Mar. 2004; presented at 60$^{th}$ IETF on Aug. 2004
- Version -01 was published in Jan. 2006; presented at 65$^{th}$ IETF on Mar. 2006
  - Problem statement and solution overview discussed
- Version -02 was published on Mar 8, 2006
  - Updated RFC 2794 with contents in version -01
  - Converted text to xml format
  - Targeted for RFC2794-bis WG draft

# Changes since RFC 2794

- Added a new skippable Dynamic-HoA extension and new error code for address assignment in addition to the NAI extension introduced in RFC 2794 (to allow backward compatibility) [section 3.2]
- Added HA, FA and MN behavior specification on address assignment scenarios like:
  - Allow the Mobile Node (MN) to request a particular address to be assigned as the home address. This allows the MN to continue using its old address across a Home Agent (HA) reboot.
  - Also Specify the HA, FA (Foreign Agent) and the MN behavior for the scenarios where the HA rebooted and/or the MN rebooted after the MN was successfully registered.
  - Specify that re-registrations MUST have the NAI extension, if the initial registration had one. Also, the re-registrations MUST have the assigned home address in the home address field, unless the MN rebooted.

# Changes since RFC 2794

- Added a detailed table of various registration and deregistration scenarios during address allocation and specifies HA, FA, MN behaviors in those situations. [section 6]
- Added new sections for MN and HA considerations specifying validity checks and other behaviors for initial and re-registrations and de-registrations. [sections 7 and 8]
- Expanded the FA considerations section from RFC 2794 by adding a sub-section for FA behavior while receiving registration replies. [section 9.1]
- Added a new error code (ADDR_ALLOC_FAILED) for the HA in addition to the FA error codes specified by RFC 2794. [section 11.2.1]
- Added new section for Backward compatibility considerations where scenarios related to using a legacy HA, FA and MN are mentioned. [section 13]

# Next Step

Seeking WG decision:
- Consensus to select this draft as 2794bis for RFC 2794 to advance to Draft Standard level
- If approved, then renamed as draft-ietf-mip4-rfc2794bis-00.txt