

# Mobile IPv6 Status

---

***David B. Johnson***

**The Monarch Project  
Carnegie Mellon University**

`http://www.monarch.cs.cmu.edu/`

`dbj@cs.cmu.edu`

44th IETF, Minneapolis, MN

March 15–19, 1999



**Carnegie  
Mellon**

## Current Status Summary

Most recent version of the draft is:

- `draft-ietf-mobileip-ipv6-07.txt`, Nov. 1998
- Not changed since before the last IETF meeting

This draft has completed Mobile IP Working Group Last Call

This draft is almost done with IESG Last Call

Also “Reserved IPv6 Subnet Anycast Addresses” draft is done:

- Published as RFC 2526, March 1999

## IANA and IESG Comments

Fix references to “Work in progress” Internet-Drafts:

- DHCPv6: ***Still an Internet-Draft***
- Generic packet tunneling in IPv6 specification: Now RFC 2473
- Internet Protocol version 6 (IPv6) specification: Now RFC 2460
- IP Version 6 addressing architecture: Now RFC 2373
- IP Authentication header: Now RFC 2402
- IP Encapsulating Security Payload (ESP): Now RFC 2406
- Security architecture for the Internet Protocol: Now RFC 2401
- Neighbor Discovery for IP version 6 (IPv6): Now RFC 2461
- Route optimization in Mobile IP: ***Still an Internet-Draft***
- IPv6 stateless address autoconfiguration: Now RFC 2462

## Other Minor Comments

SHOULD return Binding Acknowledgement when receive Binding Update with ***Acknowledge (A)*** bit set:

- Not MUST, in case for example, being flooded with Updates

When configure new care-of address, MUST register it with home agent to make it ***primary care-of address***:

- Can send other Binding Updates before or after to correspondend nodes
- Home agent registration sets the ***primary*** care-of address

MAX\_UPDATE\_RATE limits Binding Updates sent to ***same destination*** about ***same binding***

- Limits saying the same thing to same person too often

## Mobile Routers

Home agent sends *proxy Neighbor Advertisement* for mobile node:

- Neighbor Advertisement has a ***Router (R)*** bit indicating if node is a router
- Home agent doesn't know how to set this bit

Choices:

- Home agent always puts a 0 there
- Home agent always puts a 1 there
- Add a ***Router (R)*** bit to Binding Update to home agent

## **Interaction Between Mobile IPv6 and IPsec**

Many complex interactions are possible:

- AH vs. ESP
- Transport mode vs. tunnel mode
- Inbound and outbound security policy checks
- Security gateways
- ...

Basic usage is simple, but maybe needs clarification in draft:

- Clarifying text gladly accepted ([dbj@cs.cmu.edu](mailto:dbj@cs.cmu.edu))

More complex usage should wait until we have more experience:

- Possibly revise things before going to Draft Standard?