Mobility for IP version 6

- Mobile Node may notify its correspondents when it moves
- Correspondents put care-of address in routing headers
- Home Agent encapsulates packets if it gets them (i.e, from correspondents having no current care-of address)
- Binding updates are carried in a Destination Option
- Acknowledgments (usually only sent by a home agent) carried in an ICMP message, with status codes
- Foreign agents, when present, have to know that the mobile node has become a neighbor
- Mobile nodes should receive packets at multiple addresses
- Do home addresses need lifetimes (in Acknowledgments)?

Binding Update Option

							Option Type	Option Length
A	C	I	S	E	B	Reserved	Lifetime	
Care–of Address								
Identification								

Acknowledge (A) Set if acknowledgment requested

Co-location (C) Mobile receives datagrams @ care-of address

Identification Present (I)

Simultaneous (S) If set, add new binding to current list

Encapsulation (E) Don't use routing headers.

Broadcast (B) Asks home agent to send broadcasts (???)

Lifetime 16(??) bits: how long the binding is valid

Care-of Address i.e, "where" the mobile host is

Identification 64-bits, for replay protection

Binding Acknowledgement ICMP message

Type	Code	Checksum
Reserved		Lifetime
Identification		

Type 192 (?)

Code Status code from Binding Update Destination Option

Lifetime 16(??) bits: how long the binding is valid

Identification 64-bits, for replay protection

Requirements for Routers that are Mobility Agents

- Support for encapsulation and decapsulation
- Binding Acknowledgment
- proxy Neighbor Advertisements for departed Mobile Hosts

Question: Are there foreign agents?

- Busy Bit?
- Care-of Address option to Router Advertisement?

Question: Can mobile node construct a "care-of address" from Router Advertisements?