DHCPv6 Address Confirmation

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DHCPv6 has prefix confirmation

- DHCPv6 contains Confirm Message
- Not available in DHCPv4
- Previous discussion on DHC list in May 2002 about removal from DHCPv6
- Timers different than for Renew, Request
- Maintained in spec. because of timer differences

DHCPv6 Address confirmation

- Confirm message sent by a host which thinks it may have moved
- Sends request to all-dhcp-relays-and-servers
- If a server knows prefix is on link, respond with Success (prefix valid)
- NotOnLink reply is an indication to start address configuration
- A Server which is not aware of all prefixes may not reply: NotOnLink

Retransmissions and Timeouts

- Random Delay 0 to CNF_MAX_DELAY (1 sec)
- Maximum Retransmission Duration = 10 Seconds
- Exponential backoff with initial randomization
- In the case the host has moved, Failure takes 10-11 seconds if no reply
- With relays/servers having prefix knowledge, response in RTT + Random Delay.

Issues with DHCPv6 Address Confirmation

- Need to know DHCPv6 server availability (prior RA)
- Need for configuration of link-instance prefix knowledge in routers or DHCP servers (for NotOnLink).
- Failure on non-response may occur if no DHCP server on new link.