

draft-dhankins-softwire-tunnel-option

IETF 73

Softwire WG Presentation

Mark Andrews

ISC



IPv4 Softwire: How it Works

- The client starts its DHCP client(s).
 - This MUST include RA and DHCPv6 (with this option on the “ORO”), but MAY include DHCPv4.
- A server replies with the DHCPv6 Softwire Tunnel Endpoint option.
- The client terminates further attempts to perform IPv4 configuration.
 - IFF the client was not “IPv4-lite”.
- A Softwire tunnel is established with the identified IPv6 address.



Draft Status: Initial

- The option format is only the tunnel endpoint binary IPv6 address.
 - “There is nothing left to remove.”
 - Should there be multiple (a list of) IPv6 addresses? What would that mean (try-in-order, parallel-connections)?
- The presence of this option suggests its use.
 - It is a little unusual that this DHCPv6 option might cause the client to stop performing DHCPv4, or revoke other IPv4 behaviours, if it were doing so to start with.
 - The author requests feedback on this.

Discussion: WG Item?

- Tunnel type and port numbers?
 - It seems like if there were multiple tunnel types, clients would be required to implement all tunnel types in order to cope with arbitrary DHCPv6 server replies.
 - If multiple tunnel types MAY be supported, perhaps there should be a mechanism for the client to advertise supported types (the obvious mechanism is the ORO – suggesting a DHCPv6 option for each type), so the server can choose appropriately.
 - Port numbers only really seem useful if you want to permit Software tunnel collectors to SMP load balance clients by port.
- IPv6-over-IPv4 Software?
 - Would suggest a DHCPv4 option, so the client need not implement RA/DHCPv6 (IPv6-lite). Is one needed?