

CER ID Option

draft-donley-dhc-cer-id-option-01

Chris Donley

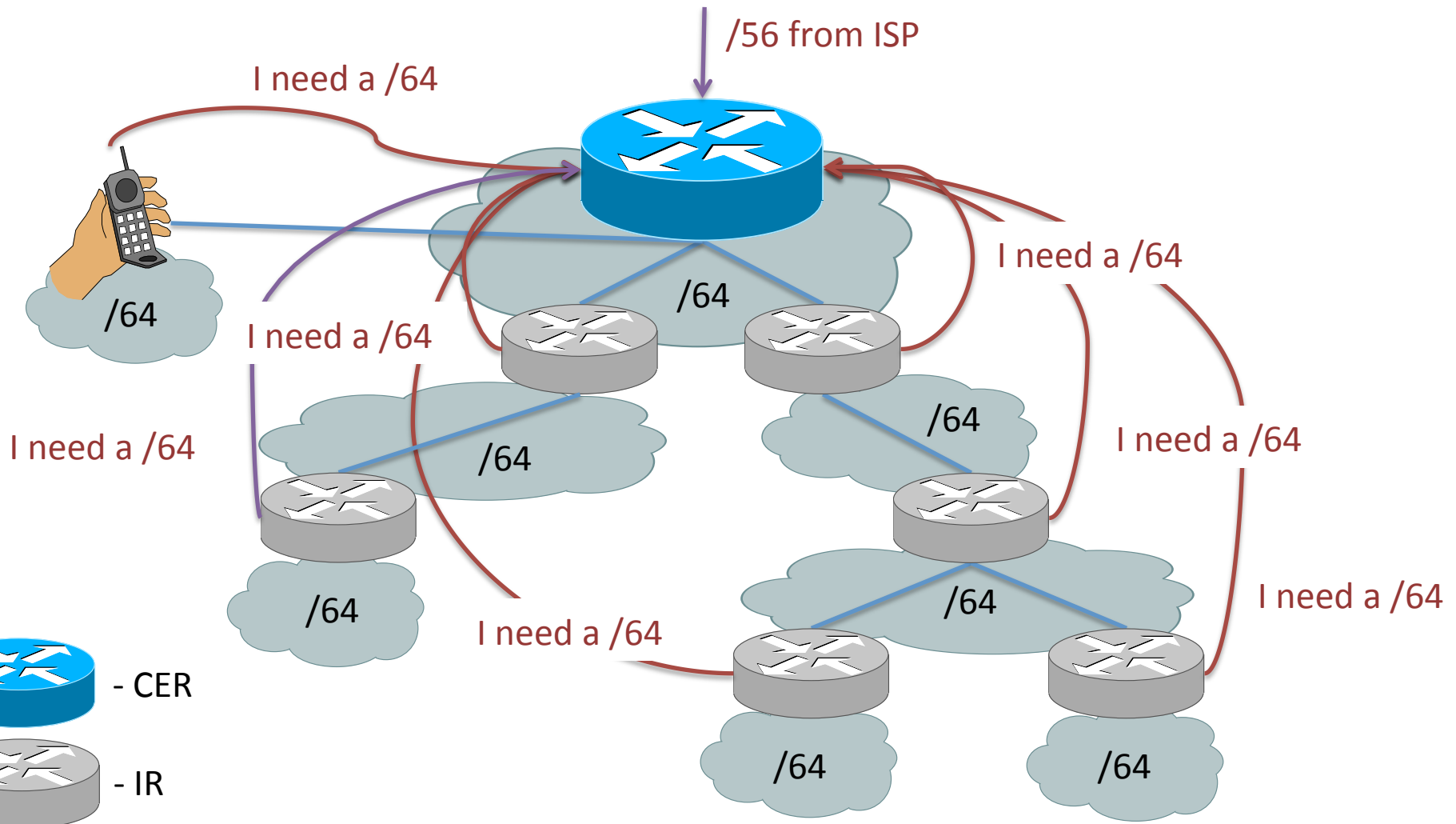
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CableLabs

Purpose of this draft

- Several home network addressing mechanisms require identification of Customer Edge Router (CER)
- One such mechanism is Home Network Autoconfiguration via DHCPv6 Relay
 - <http://tools.ietf.org/html/draft-gmann-homenet-relay-autoconf-01>

DHCPv6 Relay Prefix Delegation



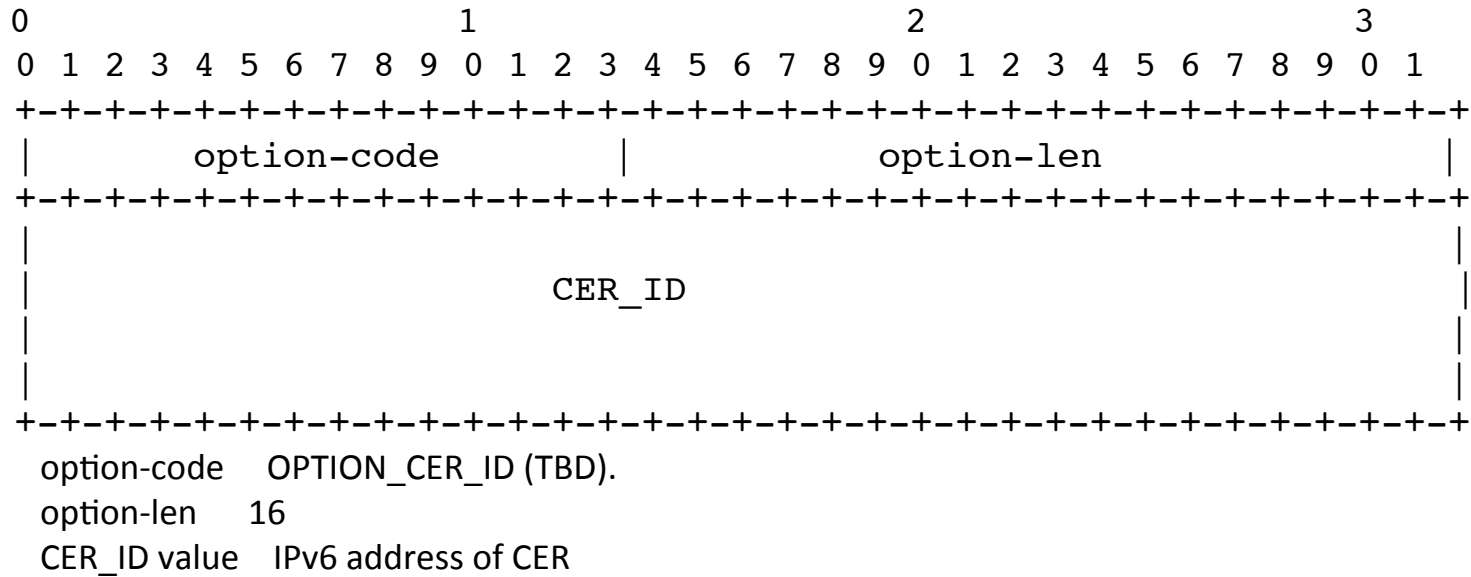
Example: DHCPv6 Relay

- CER determines that it is the CER
- IRs determine that they are IRs
- IRs respond to IA_NA requests directly but relay all IA_PD requests “up” towards root of tree
- CER responds to all IA_PD requests
- Routing can be handled by snooping relayed DHCP messages to install routes

CER ID via DHCPv6 Option

- CER could be identified via a DHCP option
- ISP indicates that it isn't the CER
 - By setting the CER ID option to ::
 - By not returning the CER ID option
- CER identifies itself as CER and populates the CER ID option with its IPv6 address
- Internal Routers (IRs) learn the CER ID option and pass it to other

CER ID Option



Applicability

- Developed along with <http://tools.ietf.org/html/draft-gmann-homenet-relay-autoconf-01>
- Also could be used for other addressing mechanisms that require CER identification
- Could be extended to include other information (e.g. size of prefix delegated by the ISP) for distribution in the home

Next Steps

- Looking for WG feedback
 - Should this option be extended?
 - Should this draft become a WG document?