draft-ietf-dhc-options-guidelines
draft-ietf-dhc-dhcpinform-clarify

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options-guidelines

• Confused over boilerplate at IETF 77.
  ▪ RFC 5223 has a nice bit of text describing RFC 3315 domain name format (which is very brief in RFC 3315).
  ▪ Not PRL boilerplate.
  ▪ Decided we don't need boilerplate for either.
• Ready for last call?


- 'Relevant Address Selection'
  - Tied to return address selection.
- 'Return address:port selection'
  - 'ciaddr' **first**
    - Section 3.4, 4.3.5, and 'yiaddr' is zero.
  - 'giaddr' **second**
    - Section 4.1 – generic DHCP message.
  - IPv4-src **third**
  - limited-broadcast **last resort**
'Relevant address' selection

• If you reply to 'ciaddr' but source config from 'giaddr', is the client correctly configured?
  ▪ Probably the client will not receive the reply, because it will be routed to another network.
  ▪ If it does receive the reply, surely the 'ciaddr' subnet is more specific than 'giaddr' (different subnet in the same broadcast domain).
  ▪ If it doesn't receive the reply, what is the harm? Conversely, a client that does receive a reply but has config sourced from 'giaddr' could be misconfigured.
  ▪ But now what to do with subnet-select/link-select?

• Note that in other messages, lease address is often final say in 'relevant address' selection.
Back where we started.

- 'subnet selection option' **first**
  - Un-overloads 'ciaddr'
- That makes 'ciaddr' **second**
- 'link selection sub-option' **third**
  - Un-overloads 'giaddr'
- That makes 'giaddr' **fourth**
- IPv4 source address **fifth**
- Server's ingres interface address **last resort**
Issues.

• I need you to look at your code and verify that no one replies to 'giaddr' first (Section 4.1 theory).
  ▪ While you are there, also check if you set or use 'yiaddr'.
  ▪ I'll go first: ISC DHCP has always replied to 'ciaddr' first, and grudgingly added others (source addr 1999, 'giaddr' 2008). We zero 'yiaddr'.

• ISC DHCP's DHCPINFORM does not inspect subnet/link selection options at all (for INFORM).
  ▪ I am an implementer, please tell me what to do.

• In the current draft revision, subnet-select trumps link-select, which is curious. Is this where we want to leave this?