# 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?



## dhcpinform-clarify

- '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?