IETF 77 DHC

draft-ietf-dhc-option-guidelines draft-ietf-dhc-dhcinfoem-clarify

David W. Hankins
Internet Systems Consortium, Inc.
March, 2010
Mainly editorial changes from -05.

- Does expand on option size discussion, enhancing the expression of differences between DHCPv4 and DHCPv6.

Draft author's primary goal was to give 'deployability' guidelines. Effort was extended to 'DHCP Option Author Better Practices'.
So what's the Better Practice?

- Differentiates between 'protocol' and 'data' options.
- Stresses the re-use of 'Option Format Fragments', existing well-deployed field types.
- Criminalizes conditional-formatting.
- Advises against aliasing.
So what's the Better Practice? (cont'd)

• When 'well deployed fragments' are insufficient, recommends towards 'general' new fragments.
• Discusses the pros and cons of a sub options space.
• Discusses option size limitations.
• Discusses PRL/ORO mechanics.
So what's the Better Practice?

(security)

• Points out clear-text nature of DHCP.
• Advises validation of option content length and content as part of new option drafts.
• Points out that a DHCP client can be a “willing Trojan” in a user's system.
Next Steps

• Currently formatted as “a list of mantras.” Should it be reformatted as a walk-through or step-by-step?
  ▪ A “template” on v4 and v6 definitions?

• Should PRL discussion recommend a boilerplate?

• Q&A?

• Ready for Last Call?
Mainly editorial changes from -03.

Does simplify discussion of 'permitting a server to inspect a lease'
Draft's main points.

• Acknowledge DHCPINFORM is not just for manually configured hosts.
• Document “de facto standard” of clients that zero htype/chaddr/ciaddr.
• Prohibit use of 'chaddr' for vendor identification. “To ARP or not to…”
• Clarify strange situation with 'giaddr'.
• Permits server to interrogate lease.
One Minor Point

• One of the DHCPINFORM clients we're discussion broadcasts a DHCPINFORM after completing DHCPREQUEST/DHCPACK.
  ▪ It clarifies the behaviour as undesired, (“SHOULD”) asking the client to contact the server-identifier'd server rather than broadcast.
  ▪ Is that correct?
Next Steps?

• The draft is currently organized as a set of overlays. Should it be a complete start-to-finish?
  ▪ This clarification is useful if you already have a DHCPv4 implementation to compare it against.
  ▪ Is it useful if you're writing a new server?

• Q&A? Last call?