

DHCP Options for TEAP

draft-lear-teap-config-options

Alan Dekok, Eliot Lear

IETF 123

DHCP configures a lot of things

- IP addresses and subnet masks
- Routers
- DNS
- Printers
- Device names
- Device configuration information
- Various extra services

DHCP configures a lot of things

- IP addresses and subnet masks
- Routers
- DNS
- Printers
- Device names
- Device configuration information
- Various extra services



TEAP can do most of these too!

Why TEAP?

- Provides a secure substrate
 - Better understood than DHCP security by most
 - It's mostly just TLS
- Can provide for consolidation of administrative service functions over time
 - And that reduces operational complexity

draft-lear-teap-config-options

- Creates a new inner TLV for transport of DHCPv6 options
- Option format is unchanged, down to the binary level

And that's it.

This raises some questions

- Is DHCPv6 the right option stack to choose?
 - Good: IPv6 is **the future** (or so we hope)
 - Bad: There's still a lot more v4 out there
- Why not do both?
 - Eliot's not smart enough to work out which bit to steal such that we don't end up shifting bits all over the place
- Why binary?
 - It's compact
 - It doesn't require new data models to describe what's there
 - It might be possible to reuse some parsing code (but it's not that hard)

But the bigger question

- What happens if a client is doing both DHCP **and** TEAP?
 - If DHCP server and TEAP server don't send the same options, no big deal.
 - If DHCP server and TEAP server send the same options with the same values, no big deal.
 - If DHCP server and TEAP server send **different** options, **that's** a big deal.

Whatdayathink?
Discussion

Some additional particulars

- Draft name: draft-lear-teap-config-options
- Github repo: <https://github.com/elear/teap-config-options>

Collaborators welcomed