Active Leasequery for DHCPv4

draft-kinnear-dhc-dhcpv4-active-leasequery-01.txt

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What is Active Leasequery

- A way to get near real-time updates regarding lease activity performed by a DHCPv4 server.

- Multiple clients can connect to multiple DHCPv4 servers.

- One client can (and should) connect to both DHCPv4 servers which are associated to provide high availability (or load balancing).

Why do we need Active Leasequery?

- People want to know what the DHCPv4 Server knows, and they want to know it in near real-time. (*This need drives many purists crazy, but this need isn't going away.*)

- Our customers keep writing extensions to do this themselves (and not getting it *quite* right).

- Alternatives certainly exist (e.g., database access to DHCPv4 server's database), but difficult to standardize, not always available.

- Seems useful to standardize approach.

How does Active Leasequery work?

- Builds on techniques defined for Bulk Leasequery.

- Client creates TCP session to DHCPv4 Server.

- Client sends in Active Leasequery request.

- Server sends response packets (which look like bulk leasequery packets) until connection is dropped.

Next Steps

- Should we accept this as DHC WG work item?

We brought this up at IETF 77 in Anaheim, March 2010, but to my knowledge, we've not decided one way or the other…