Active Leasequery for DHCPv4

draft-kinnear-dhc-dhcpv4-active-leasequery-00.txt

Authors:

Kim Kinnear
Bernie Volz
Mark Stapp
Neil Russell
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.
Discussion
Next Steps

• Should we accept this as DHC WG work item?