DHCPv4 Relay Agent Flags Suboption

draft-ietf-dhc-relay-agent-flags-00

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Background
Review of Server Override

- Relay agent tells DHCP server to put a particular address of the relay agent in the dhcp-server-identifier option when talking to a DHCP client.
- This causes the DHCP client to unicast renews to the relay agent, which will forward it on to the DHCP server
- DHCP server can’t tell if the packet forwarded by the relay agent was broadcast to the relay agent or unicast to the relay agent.

Background
Issues

- RFC 2131 guidance on when to NAK based on network connectivity can't be followed – may NAK when DHCP client unicast a renew. This makes every renew a rebind, more or less.
- When using load balancing can't tell renew from rebinding – generates two ACK's, makes load balancing less valuable
- DHCP client gets two ACK's whenever failover is used (regardless of load balancing).

Background
Discussion

- Consensus in Dallas to add new suboption to relay-agent-info option to indicate unicast/broadcast receipt.
- Adds value beyond server-id-override suboption.
- Low overhead in relay agent, allows servers to deal intelligently with forwarded packets.

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- Extensible definition that allows the DHCP relay to specify flags for the forwarded packet.
- First flag is unicast flag, to indicate unicast/broadcast receipt.
- Ready for last call?