adrs = address, adrses = addresses

Dynamic **H**ost **C**onfiguration **P**rotocol

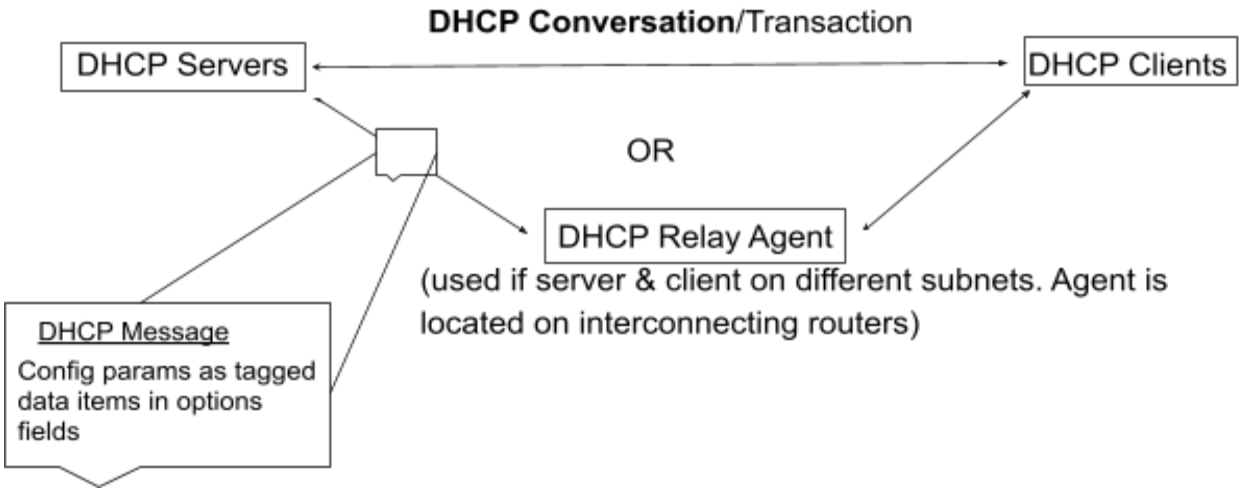
WHAT Standardised client/server network protocol for assigning IP adrses & other config info

WHY Every device on TCP/IP net needs unique unicast IP adrs. Without DHCP new devices on subnet manually configured; DHCP provides ‘plug and play’. Quicker, more reliable, less config errors (e.g. adrs conflict), & helps conserve adrs space.

These dudes just got some adrses off a DHCP server

Leases mean we don’t have to rely on devices to vacate their adrs. In a café we’d use 1 day leases so adrses are quickly recycld, and in an office we’d use 100 day leases so there’s not loads of net traffic from reallocations. Leases usually renewed at 50% of lease time and given same adrs again.

Reservations are DHCP’s static adrses. Handy when device is not intended to move e.g. printers & routers. Done by associating a MAC address to an IP adrs



Config Params/control info:
IP adrs, lease time for adrs, primary & secondary DNS server, default gateway adrs, and subnet mask.

DHCP Conversation

1. **Discover**: New net device asks router to ask DHCP server(s) for IP adrs
2. **Offer**: If server(s) have available address in their adrs scope, they/it sends response containing config parameters

Sources

www.alliedtelesis.com/sites/default/files/documents/feature-guides/dhcp_feature_overview_guide.pdf