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◆ CN Assignment - 8 ◆

DHCP: Dynamic Host Configuration Protocol (DHCP).

DHCP Protocol info:

It is a network management protocol used to automate the process of configuring devices on IP networks, thus allowing them to use network services such as DNS, NTP, and any communication protocol based on UDP or TCP.

- The DHCP server and DHCP client must be connected to the same network link. In larger networks, each network link contains one or more DHCP relay agents.
- These DHCP relay agents receive messages from DHCP clients and forward them to DHCP servers. DHCP servers send responses back to the relay agent, and the relay agent then sends these responses to the DHCP client on the local network link.

DHCP is used for IPv4 and IPv6. While both versions serve the same purpose, the details of the protocol for IPv4 and IPv6 are sufficiently different that they should be considered separate protocols.

## For getting the DHCP settings on windows 11:

Start-> settings-> network and internet-> Advanced network settings-> Under more settings-> hardware and connection properties-> scroll down to the DHCP settings.

Name:	Wi-Fi
Description:	Intel(R) Wi-Fi 6 AX200 160MHz
Physical address (MAC):	ae:db:f7:ee:0d:75
Status:	Operational
Maximum transmission unit:	1500
Link speed (Receive/Transmit):	130/144 (Mbps)
DHCP enabled:	Yes
DHCP servers:	192.168.1.1
DHCP lease obtained:	Thursday, November 25, 2021 02:08:54 PM
DHCP lease expires:	Friday, November 26, 2021 02:08:54 PM
IPv4 address:	192.168.1.11/24
IPv6 address:	fe80::89fb:6095:d7a0:4419%4/64
IPv4 default gateway:	192.168.1.1
IPv6 default gateway:	
DNS servers:	8.8.8.8 (Unencrypted) 8.8.4.4 (Unencrypted)
DNS domain name:	
DNS connection suffix:	
DNS search suffix list:	
Network name:	Kau_shal_09 2
Network category:	Public
Connectivity (IPv4/IPv6):	Connected to Internet / Connected to unknown network