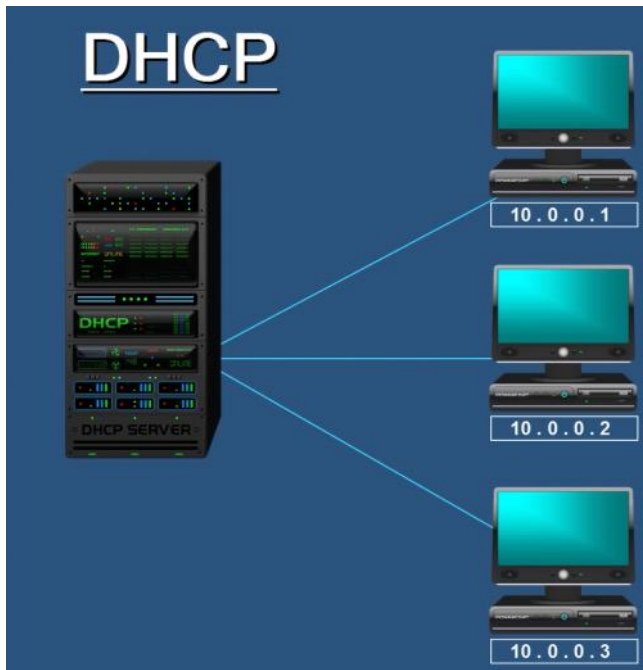# DHCP

Friday, February 20, 2026   11:28 PM

DHCP (Dynamic Host Configuration Protocol) automates the assignment of IP addresses and other network configurations to devices, which is a more efficient method than manual static IP addressing. DHCP servers lease IP addresses from a predefined range called a scope, ensuring efficient use and preventing IP conflicts. Devices periodically renew their leases, and if a device leaves the network, its IP address eventually returns to the pool for reuse. Reservations can be created on the DHCP server to assign a consistent IP address to specific devices, like network printers or servers, based on their MAC address. DHCP is a service that runs on servers and is also built into many routers.

DHCP

Reservations are typically given to special devices or computers, such as network printers, servers, routers, etc.