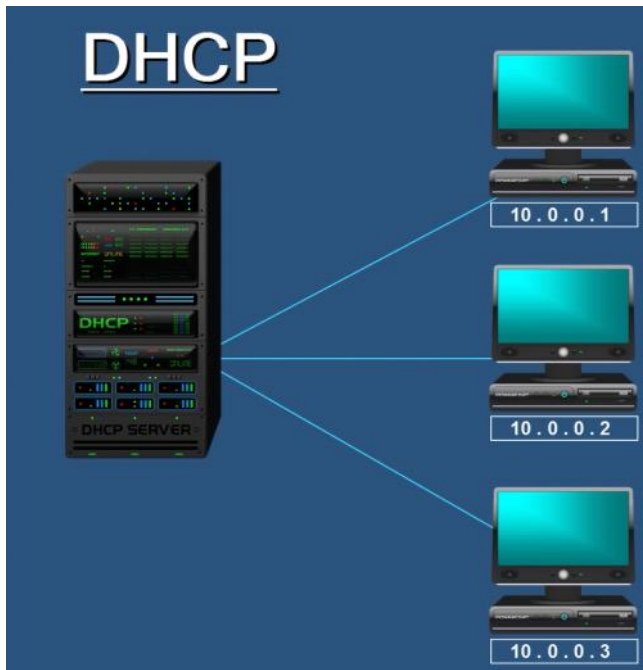


DHCP

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.



The screenshot shows a DHCP server configuration interface. On the left is a rack-mounted unit labeled 'DHCP SERVER'. To its right is a 'DHCP SETTINGS' window. The 'SCOPE' section is highlighted, showing 'Start IP Address' set to 10.0.0.1 and 'End IP Address' set to 10.0.0.100. Below the settings window is a list of IP addresses from 10.0.0.1 to 10.0.0.100, arranged in a grid.

DHCP

DHCP SETTINGS

SCOPE

Start IP Address: 10 . 0 . 0 . 1

End IP Address: 10 . 0 . 0 . 100

10.0.0.1	10.0.0.11	10.0.0.21	10.0.0.31	10.0.0.41	10.0.0.51	10.0.0.61	10.0.0.71	10.0.0.81	10.0.0.91
10.0.0.2	10.0.0.12	10.0.0.22	10.0.0.32	10.0.0.42	10.0.0.52	10.0.0.62	10.0.0.72	10.0.0.82	10.0.0.92
10.0.0.3	10.0.0.13	10.0.0.23	10.0.0.33	10.0.0.43	10.0.0.53	10.0.0.63	10.0.0.73	10.0.0.83	10.0.0.93
10.0.0.4	10.0.0.14	10.0.0.24	10.0.0.34	10.0.0.44	10.0.0.54	10.0.0.64	10.0.0.74	10.0.0.84	10.0.0.94
10.0.0.5	10.0.0.15	10.0.0.25	10.0.0.35	10.0.0.45	10.0.0.55	10.0.0.65	10.0.0.75	10.0.0.85	10.0.0.95
10.0.0.6	10.0.0.16	10.0.0.26	10.0.0.36	10.0.0.46	10.0.0.56	10.0.0.66	10.0.0.76	10.0.0.86	10.0.0.96
10.0.0.7	10.0.0.17	10.0.0.27	10.0.0.37	10.0.0.47	10.0.0.57	10.0.0.67	10.0.0.77	10.0.0.87	10.0.0.97
10.0.0.8	10.0.0.18	10.0.0.28	10.0.0.38	10.0.0.48	10.0.0.58	10.0.0.68	10.0.0.78	10.0.0.88	10.0.0.98
10.0.0.9	10.0.0.19	10.0.0.29	10.0.0.39	10.0.0.49	10.0.0.59	10.0.0.69	10.0.0.79	10.0.0.89	10.0.0.99
10.0.0.10	10.0.0.20	10.0.0.30	10.0.0.40	10.0.0.50	10.0.0.60	10.0.0.70	10.0.0.80	10.0.0.90	10.0.0.100

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