

## DHCP Reservation

A [DHCP](#) reservation is a permanent IP address assignment. It is a specific IP address within a [DHCP scope](#) that is permanently reserved for leased use to a specific DHCP client.

Users can configure a DHCP reservation in their DHCP server when they need to reserve a permanent IP address assignment. Reservations are used for DHCP enabled devices like print and file servers or other application servers that always have the fixed IP address on the network.

A reservation consists of the following information:

Element	Description
Reservation name	Name that the administrator assigns
<a href="#">IP Address</a>	IP address from the scope for the client
<a href="#">MAC Address</a>	Client's Media <a href="#">Access Control</a> (MAC) address
Description	Description that the administrator assigns
Supported	DHCP reservation, Boot Protocol ( <a href="#">BOOTP</a> ), or both

## Working with DHCP Reservations in the Microsoft DHCP Server

### Configuring a DHCP Reservation

- Open the DHCP console.
- In the console tree, click reservations.
- On the action menu, click new reservation.
- In the new reservation dialog box, provide the values for the following fields:
  - Reservation name.
  - IP address.
  - MAC address (without hyphens).
  - Description.



The screenshot shows the 'New Reservation' dialog box with the following values:

- Reservation name: DomainPrinter01
- IP address: 192.168.1.21
- MAC address: 000000000000
- Description: Main Printer
- Supported types:  DHCP only

- Under supported types, select one of the following options:
  - Both
  - DHCP only
  - [BOOTP](#) only
- In the new reservations dialog box, click add then close.

## Verifying the DHCP Reservation

- On the client computer, release the client's IP address at the command prompt with the ipconfig/release command.
- On the server computer, in the DHCP console under address leases, verify that the reservation displays as inactive.
- On the client computer, renew the client's IP address at command prompt with the ipconfig/renew command.
- On the server computer, in the DHCP console under address leases, verify that the reservation displays as active.

## Client Verification

- To verify the client's IP address, set obtain IP address automatically from [TCP/IP](#) properties.
- Use the ipconfig/all command. Verify that the DHCP server IP address for the partner network connection is the IP address of the DHCP server's partner network connection.
- Use the ipconfig/release command to release the IP address from the DHCP server.
- Use the ipconfig/renew command to renew the IP address from DHCP server.

Source: <http://www.tech-faq.com/dhcp-reservation.html>