

1 DHCP Client Commands

Command	Function
ip address dhcp	Enable an Ethernet, Point-to-Point Protocol (PPP), High-Level Data Link Control (HDLC), or frame relay (FR) interface to obtain IP addresses through Host Configuration Protocol (DHCP).
show dhcp lease	Display lease information of a DHCP client.

1.1 ip address dhcp

Function

Run the **ip address dhcp** command to enable an Ethernet, Point-to-Point Protocol (PPP), High-Level Data Link Control (HDLC), or frame relay (FR) interface to obtain IP addresses through Host Configuration Protocol (DHCP).

Run the **no** form of this command to remove this configuration.

Run the **default** form of this command to restore the default configuration.

No interface can obtain an IP address through DHCP by default.

Syntax

ip address dhcp

no ip address dhcp

default ip address dhcp

Parameter Description

N/A

Command Modes

Interface configuration mode

Default Level

14

Usage Guidelines

When a DHCP client requests an IP address from a DHCP server, it also requires the DHCP server to provide the following configuration parameters:

- **DHCP Option 1:** Subnet mask of the client
- **DHCP Option 3:** Gateway in the same subnet
- **DHCP Option 6:** Domain name server (DNS) information
- **DHCP Option 15:** Host domain name
- **DHCP Option 44:** Windows Internet Name Service (WINS) server information

Examples

The following example enables GigabitEthernet 0/1 to obtain an IP address automatically.

```
Hostname> enable
Hostname# configure terminal
Hostname(config)# interface gigabitethernet 0/1
Hostname(config-if-GigabitEthernet 0/1) ip address dhcp
```

Notifications

N/A

Common Errors

The DHCP Client function is enabled on an L2 interface.

Related Commands

N/A

1.2 show dhcp lease

Function

Run the **show dhcp lease** command to display lease information of a DHCP client.

Syntax

```
show dhcp lease
```

Parameter Description

N/A

Command Modes

All modes except the user EXEC mode

Default Level

14

Usage Guidelines

N/A

Examples

The following example displays lease information of a DHCP client.

```

Hostname> enable
Hostname# show dhcp lease
Temp IP addr: 192.168.5.71 for peer on Interface: FastEthernet0/0
Temp sub net mask: 255.255.255.0
DHCP Lease server: 192.168.5.70, state: 7 Bound
DHCP transaction id: 337beed
Lease: 600 secs, Renewal: 300 secs, Rebind: 525 secs
Temp default-gateway addr: 192.168.5.1
Next timer fires after: 00:04:29
Retry count: 0 Client-ID: 0100d0f82233e34769676162697445746865726E6574302F31

```

Table 1-1 Output Fields of the show dhcp lease Command

Field	Description
Temp IP addr	IP address assigned to a DHCP client
for peer on Interface	Interface over which an IP address is applied for
Temp sub net mask	Subnet mask of an interface address

Field	Description
DHCP Lease serve	Server IP address
state	Lease status
DHCP transaction id	Packet transaction ID
Lease	Lease time
Renewal	Lease renewal time
Rebind	IP address rebinding time
Temp default-gateway addr	Gateway address
Next timer fires after	Next time for triggering the timer

Notifications

N/A

Common Errors

N/A

Related Commands

N/A