

1. ipconfig: Displays basic IP configuration address for network adapters

```
C:\Users\Softlaptop>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::39c3:e640:72dd:84a0%6
    IPv4 Address. . . . . : 192.168.1.4
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :
```

2. `ipconfig /all`: Shows detailed IP settings for all network adapters, including MAC-addresses.

```
C:\Users\Softlaptop>ipconfig/all

Windows IP Configuration

Host Name . . . . . : DESKTOP-3Q1TDSR
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No


Ethernet adapter Ethernet:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) Ethernet Connection (7) I
219-LM
Physical Address. . . . . : E4-E7-49-40-3F-AD
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes


Wireless LAN adapter Local Area Connection* 1:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft Wi-Fi Direct Virtual Ada
pter
Physical Address. . . . . : F4-D1-08-9D-23-D1
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes


Wireless LAN adapter Local Area Connection* 2:

Media State . . . . . : Media disconnected
Connection-specific DNS Suffix . :
Description . . . . . : Microsoft Wi-Fi Direct Virtual Ada
pter #2
Physical Address. . . . . : F6-D1-08-9D-23-D0
DHCP Enabled. . . . . : No
Autoconfiguration Enabled . . . . : Yes


Wireless LAN adapter Wi-Fi:

Connection-specific DNS Suffix . :
Description . . . . . : Intel(R) Wireless-AC 9560 160MHz
Physical Address. . . . . : F4-D1-08-9D-23-D0
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
Link-local IPv6 Address . . . . . : fe80::39c3:e640:72dd:84a0%6(Preferred)
```

3. getmac /v: Displays the MAC addresses of network devices with detailed output.

```
C:\Users\Softlaptop>getmac/v

Connection Name Network Adapter Physical Address Transport Name
=====
Ethernet Intel(R) Ethern E4-E7-49-40-3F-AD Media disconnected
Wi-Fi Intel(R) Wirele F4-D1-08-9D-23-D0 \Device\Tcpip_{1EE179
67-4935-446D-91C2-C62B0590E137}
Bluetooth Netwo Bluetooth Devic F4-D1-08-9D-23-D4 Media disconnected

C:\Users\Softlaptop>
```

4. nslookup google.com: Queries the DNS to get the IP address of google domain

```
C:\Users\Softlaptop>nslookup google.com
Server: UnKnown
Address: fe80::1

Non-authoritative answer:
Name: google.com
Addresses: 2a00:1450:4006:813::200e
          216.58.212.110

C:\Users\Softlaptop>_
```

4. `ipconfig /release`: Releases the current IP address assigned to my device by DHCP.

```
C:\Users\Softlaptop>ipconfig/release

Windows IP Configuration

No operation can be performed on Ethernet while it has its media disconnected.
No operation can be performed on Local Area Connection* 1 while it has its media disconnected.
No operation can be performed on Bluetooth Network Connection while it has its media disconnected.

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::39c3:e640:72dd:84a0%6
    Default Gateway . . . . . :

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

C:\Users\Softlaptop>
```

6. ipconfig /renew: Requests a new IP address from the DHCP server for my device:

```
C:\Users\Softlaptop>ipconfig/renew
```

```
Windows IP Configuration
```

```
No operation can be performed on Ethernet while it has its media disconnected.
```

```
No operation can be performed on Local Area Connection* 1 while it has its media disconnected.
```

```
No operation can be performed on Local Area Connection* 2 while it has its media disconnected.
```

```
No operation can be performed on Bluetooth Network Connection while it has its media disconnected.
```

```
Ethernet adapter Ethernet:
```

```
Media State . . . . . : Media disconnected
```

```
Connection-specific DNS Suffix . :
```

```
Wireless LAN adapter Local Area Connection* 1:
```

```
Media State . . . . . : Media disconnected
```

```
Connection-specific DNS Suffix . :
```

```
Wireless LAN adapter Local Area Connection* 2:
```

```
Media State . . . . . : Media disconnected
```

```
Connection-specific DNS Suffix . :
```

```
Wireless LAN adapter Wi-Fi:
```

```
Connection-specific DNS Suffix . :
```

```
Link-local IPv6 Address . . . . . : fe80::39c3:e640:72dd:84a0%6
```

```
IPv4 Address. . . . . : 192.168.1.4
```

```
Subnet Mask . . . . . : 255.255.255.0
```

```
Default Gateway . . . . . : 192.168.1.1
```

```
Ethernet adapter Bluetooth Network Connection:
```

```
Media State . . . . . : Media disconnected
```

```
Connection-specific DNS Suffix . :
```

```
C:\Users\Softlaptop>
```