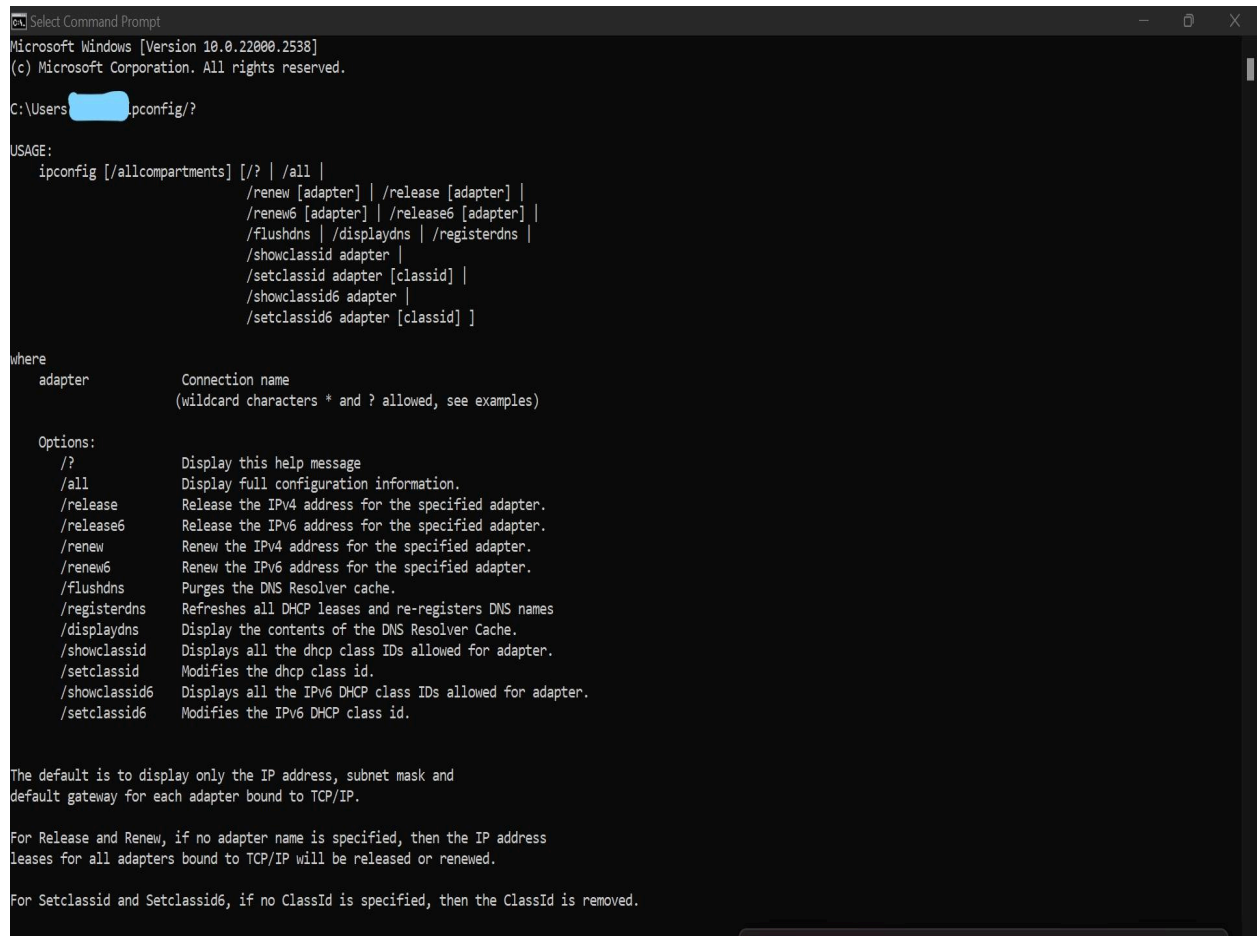# USING IPCONFIG TO VIEW AND MODIFY NETWORK INFORMATION

Tools : IPCONFIG AND VARIANTS
Site : no site

ipconfig, which is a command used in Windows operating systems to display network configuration information. When run in Command Prompt, **ipconfig** shows details such as the IP address, subnet mask, default gateway, and other network settings for your network interfaces.

Input from ipconfig :

For Release and Renew, if no adapter name is specified, then the IP address
leases for all adapters bound to TCP/IP will be released or renewed.

For Setclassid and Setclassid6, if no ClassId is specified, then the ClassId is remo
ved.

Examples:
    > ipconfig   ... Show information
    > ipconfig /all   ... Show detailed information
    > ipconfig /renew   ... renew all adapters
    > ipconfig /renew EL*   ... renew any connection that has its
                                           name starting with EL
    > ipconfig /release *Con*   ... release all matching connections,
                                           eg. "Wired Ethernet Connection 1" or
                                                "Wired Ethernet Connection 2"
    > ipconfig /allcompartments   ... Show information about all
                                           compartments
    > ipconfig /allcompartments /all ... Show detailed information about all
                                           compartments

C:\Users\   .pconfig

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 . :

Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix . :

C:\Users\   ipconfig /all

Windows IP Configuration

    Host Name . . . . :
    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 . . . . :
    Physical Address. . . . . :
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . :
    Physical Address. . . . . :
    DHCP Enabled. . . . . :
    Autoconfiguration Enabled . . . . : Yes

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . : Media disconnected
    Connection-specific DNS Suffix . :
    Description . . . . :
    Physical Address. . . . . :
    DHCP Enabled. . . . . : Yes
    Autoconfiguration Enabled . . . . : Yes

Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix . :
    Description . . . . :
    Physical Address. . . . . :
    DHCP Enabled. . . . . : Yes

Command Prompt — □ ×

```
Ethernet adapter VMware Network Adapter VMnet1:

   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . :
   Physical Address. . . . . . . . . :
   DHCP Enabled. . . . . . . . . . . :
   Autoconfiguration Enabled . . . . :
   Link-local IPv6 Address . . . . . :
   IPv4 Address. . . . . . . . . . . :
   Subnet Mask . . . . . . . . . . . :
   Lease Obtained. . . . . . . . . . :
   Lease Expires . . . . . . . . . . :
   Default Gateway . . . . . . . . . :
   DHCP Server . . . . . . . . . . . :
   DHCPv6 IAID . . . . . . . . . . . :
   DHCPv6 Client DUID. . . . . . . . :
   NetBIOS over Tcpip. . . . . . . . :

Ethernet adapter VMware Network Adapter VMnet8:

   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . :
   Physical Address. . . . . . . . . :
   DHCP Enabled. . . . . . . . . . . :
   Autoconfiguration Enabled . . . . :
   Link-local IPv6 Address . . . . . :
   IPv4 Address. . . . . . . . . . . :
   Subnet Mask . . . . . . . . . . . :
   Lease Obtained. . . . . . . . . . :
   Lease Expires . . . . . . . . . . :
   Default Gateway . . . . . . . . . :
   DHCP Server . . . . . . . . . . . :
   DHCPv6 IAID . . . . . . . . . . . :
   DHCPv6 Client DUID. . . . . . . . :
   Primary WINS Server . . . . . . . :
   NetBIOS over Tcpip. . . . . . . . :

Wireless LAN adapter Wi-Fi:

   Connection-specific DNS Suffix  . :
   Description . . . . . . . . . . . :
   Physical Address. . . . . . . . . :
   DHCP Enabled. . . . . . . . . . . :
```

Command Prompt — □ ×

```
C:\User          .pconfig/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 dis
connected.
No operation can be performed on Local Area Connection* 2 while it has its media dis
connected.

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  . :

Ethernet adapter VMware Network Adapter VMnet1:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . :
   IPv4 Address. . . . . . . . . . . :
   Subnet Mask . . . . . . . . . . . :
   Default Gateway . . . . . . . . . :

Ethernet adapter VMware Network Adapter VMnet8:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . :
   IPv4 Address. . . . . . . . . . . :
   Subnet Mask . . . . . . . . . . . :
   Default Gateway . . . . . . . . . :

Wireless LAN adapter Wi-Fi:
```

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

C:\Users\          >ipconfig/flushdns

Windows IP Configuration

Successfully flushed the DNS Resolver Cache.

C:\Users\          >
```

```
Select Administrator: Command Prompt                                    —    □    ✕

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C:\Windows\system32>ipconfig/registerdns

Windows IP Configuration

Registration of the DNS resource records for all adapters of this computer has been
initiated. Any errors will be reported in the Event Viewer in 15 minutes.

C:\Windows\system32>ipconfig/displaydns

Windows IP Configuration

    dcg.microsoft.com
    ----------------------------------------
    Record Name . . . . . : dcg.microsoft.com
    Record Type . . . . . : 5
    Time To Live  . . . . : 13
    Data Length . . . . . : 8
    Section . . . . . . . : Answer
    CNAME Record  . . . . : dcg.microsoft.com.b-          b-          .net


    Record Name . . . . . : dcg.microsoft.com.b-          b          net
    Record Type . . . . . : 5
    Time To Live  . . . . : 13
    Data Length . . . . . : 8
    Section . . . . . . . : Answer
    CNAME Record  . . . . : b-0005.b-msedge.net


    Record Name . . . . . : b-0005.b-msedge.net
    Record Type . . . . . : 1
    Time To Live  . . . . : 13
    Data Length . . . . . : 4
    Section . . . . . . . : Answer
    A (Host) Record . . . :


C:\Windows\system32>
```

Results of ipconfig and some commands under it.

We will begin by viewing the help information screen by executing the following command: ipconfig /?

Open a command prompt to begin, and type "ipconfig" to view your networking information. As you will see, there will be a lot of information shown, including your local IP addresses.

To display the fill TCP/IP configuration information for all network adapters, we can use the following command: ipconfig /all

Assume that our machine has an IP address with DHCP. To release our current IPv4 or IPv6 address, we can use the following commands: ipconfig /release6

Renew our IP addresses via DHCP: ipconfig /renew

If we want to purge the DNS resolver cache, we can do that using the following command: ipconfig /flushdns This will essentially get rid of the local cache of DNS information.

We can also refresh all DHCP leases and re-register DNS names using the following command: ipconfig /registerdns

You will need to run the command prompt as administrator to execute this command.

We can display the content of the DNS Resolver Cache using the following command: ipconfig /displaydns