

How to Change MTU Value on Windows

Before you begin, please make sure that:

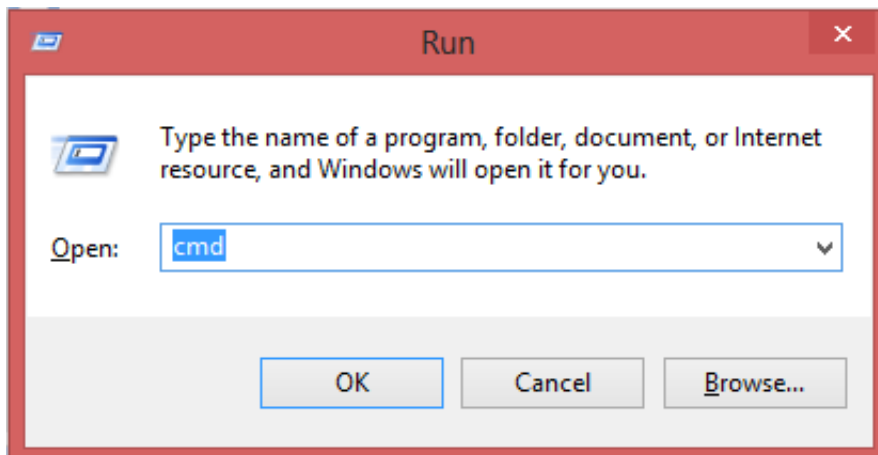
- You have a working internet connection
- Connected VPN on Windows supported device
- A Premium PureVPN account (if you haven't bought it yet, [click here](#) to buy)

To set the best MTU value and optimize VPN speed, please perform the following steps:

First connect VPN. If you are using PureVPN Client then it will automatically create VPN connection named **PureVPN**. If you created the connection manually then it will appear in Step 3 and you need to modify the command given in Step 4.

1 Open **“Command Prompt”**. Make sure that you have Admin privileges.

On Windows XP, Vista and 7, Click on Start button and click on **“Run”**, type **“cmd”** and click **“OK”**.

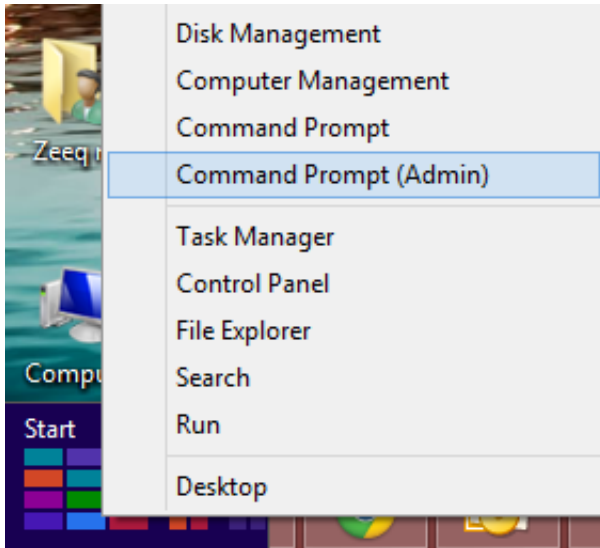


On Windows 8, right click at bottom left corner and select **“Command Prompt (Admin)”**.

PureVPN Support

Solution of Your Problems

<https://support.purevpn.com>



2 Type the below command and hit enter to check current MTU value . Note down the current MTU value in case you want to revert changes.

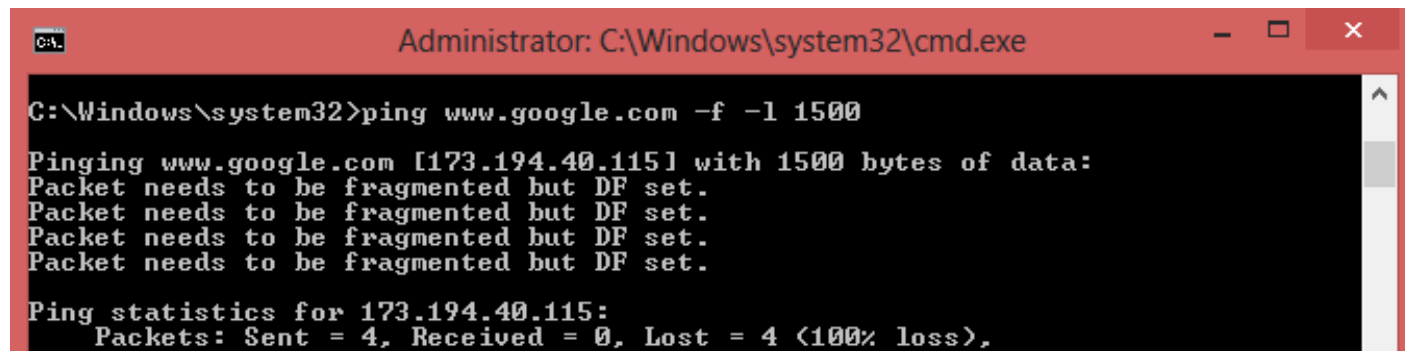
netsh interface ipv4 show subinterfaces

```
Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.
C:\Windows\system32>netsh interface ipv4 show subinterfaces

  MTU  MediaSenseState  Bytes In  Bytes Out  Interface
-----
4294967295      1      1      0      699283  Loopback Pseudo-Interface 1
1500            1 1597928967 50039142  Wi-Fi
1500            1    240144    143255  PureUPN
1500            5           0    340464  Local Area Connection* 12
1500            5           0     47232  Ethernet
1500            5           0           0  Bluetooth Network Connection
1500            5           0    337512  Hotspot
1500            1           0    205128  VMware Network Adapter VMnet1
1500            1    17269    215912  VMware Network Adapter VMnet8
```

3 Type the command below and hit enter.

ping www.google.com -f -l 1500



```
Administrator: C:\Windows\system32\cmd.exe
C:\Windows\system32>ping www.google.com -f -l 1500
Pinging www.google.com [173.194.40.115] with 1500 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 173.194.40.115:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

If the reply you get is **“Packet needs to be fragmented but DF set.”**, then you have to try a lower MTU value. Keep decreasing the value by 10, i.e. 1490, 1480, 1470 until you get a successful reply. Start increasing the MTU value with small increments after you get a successful reply. Eventually, you will arrive on a value on which packets will not fragment, add 28 to that value (IP / ICMP headers). For instance, if you got the last successful reply on **1470**, then add **28** to it, **1470+28 = 1498**.

4This number is your MTU value.

If you are using a LAN connection, then type the following command:

```
netsh interface ipv4 set subinterface PureVPN mtu=1498 store=persistent
```

OR

```
netsh interface ipv4 set subinterface “PureVPN” mtu=1498 store=persistent
```

where PureVPN is the VPN Connection name.

Recommended:

If some websites are not loading while connected to VPN then please do the following

```
netsh interface ipv4 show interfaces
```

```
C:\Users\ >netsh interface ipv4 show interfaces
```

Idx	Met	MTU	State	Name
6	35	1500	connected	VMware Network Adapter VMnet1
24	25	1500	disconnected	Local Area Connection* 3
13	65	1500	disconnected	Bluetooth Network Connection
1	75	4294967295	connected	Loopback Pseudo-Interface 1
2	6	1500	disconnected	Ethernet
10	25	1500	disconnected	Wi-Fi 2
5	25	1500	disconnected	Local Area Connection* 13
17	25	1500	connected	Ethernet 3
14	35	1500	connected	VMware Network Adapter VMnet8
21	6	1500	disconnected	Ethernet 5

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

netsh interface ipv4 set subinterface "X?" mtu=1432 store=persistent (where 'x' is the ID of the interface)

Please use the **comment box** for your suggestions & feedback. For additional help, please **submit [support ticket](#)** with errors and screen shots (if possible) or contact our 24/7 live chat.