How to determine the device IP address on the local network

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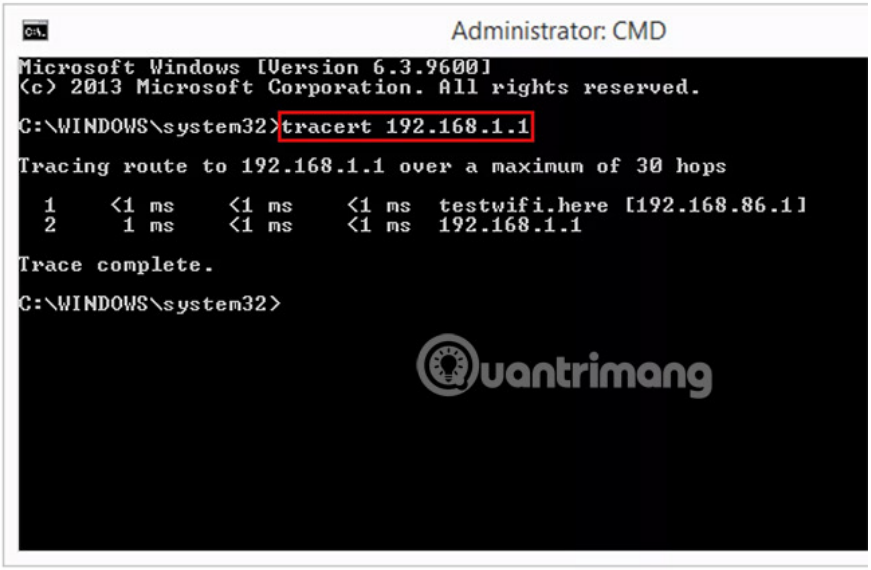
Most troubleshooting steps involve using commands and other tools, requiring you to know the IP address of the device. For example, you will definitely need to know the private IP address for the router and if you use them on your network, then the IP address of the switches (switches), access points, bridges, repeater and hardware What is another network.

Note: Most network devices are preconfigured at the factory to operate on a default IP address and most people do not change the default IP address when they install the device.

Before you complete the following steps, first check your device in Linksys, NETGEAR, D-Link and Cisco default password lists.

If you know the IP address has been changed or your device is not listed, continue and follow the instructions below.

Determine the IP address of the hardware on your network



It only takes a few minutes to determine the IP address of the hardware on your network.

1. Find the default gateway IP address for the computer's network connection.

1. In most cases, this will be the private IP address for the router, the most important point on your local network.
2. Now that you know the router's IP address, you can use it in the following steps to determine the IP addresses of devices between the computer you are using and the router on your local network.

Note : The router's IP address in this context, is the private IP address, not the public address. Public or external IP addresses are what are used to communicate with external networks and cannot apply to the instructions outlined here.

2. Open Command Prompt.

Note : The Command Prompt works very similarly between Windows operating systems, so these instructions can apply similarly to any Windows version including Windows 10, Windows 8, Windows 7, Windows Vista, Windows XP, etc. .

3. At the prompt, execute the tracert command as shown below and then press Enter:

```
tracert 192.168.1.1
```

Note : Replace 192.168.1.1 with the IP address of the router you specified in step 1, which may resemble this sample IP address or not.

Using the tracert command in this way will show you all devices connected to your router. Each hop represents a network device between the computer you are running your tracert command and router.

4. Immediately below the prompt you will see the results found.

1. When the command completes and you return to the prompt, you will see a message similar to **Tracing route to 192.168.1.1 over a maximum of 30 hops** and then a separate line for each hardware between your computer. you and the router.

2. For example, the first line in this example indicates:

```
1
```

1. The second line indicates:

```
2 1 ms
```

1. Any IP address that you foresee the router's IP, listed as number 2 in the tracert command result in this example, is part of the network hardware located between your computer and the router.

What if you see more or less results in the example?

1. If you see multiple IP addresses before the router's IP address, you have multiple network devices between the computer and the router.
2. If you only see the router's IP address, then you don't have any managed network hardware between your computer and your router, although you can have simple devices like unmanaged hubs and switches. .

5. You must now match the IP address you found with the hardware in your network.

This is not too difficult, as long as you are aware of physical devices (such as switches, access points, etc.) that are also part of the network you are connecting to.

Note: Devices located at the end of the network, such as other computers, wireless printers, wireless smartphones, etc., will not be displayed in the results of the tracert command, as they are not located between your computer and the router, as in this example.

It can help you know that the tracert command returns hops in the order they were found. This means, by using the example in step 4, the device has an IP address of 192.168.86.1 which is, physically, between the computer you are using and the next device, In other words, the router.

6. You now know the IP address of the hardware on the network.

Note : This is a very simple method to determine the IP address of hardware in the intranet and requires basic knowledge about the type of hardware you have installed. Therefore, it is only possible to provide clear information about your IP address only on simple networks, such as home or network networks in small businesses.

Good luck!

See more:

1. How to identify an IP address
2. Find all devices connected to your network on your phone easily
3. Use static IP address in network