

ipconfig

Ipconfig is a Console Command which can be issued to the Command Line Interpreter (or command prompt) to display the network settings currently assigned to any or all network adapters in the machine. This command can be utilised to verify a network connection as well as to verify your network settings.

www.computerhope.com/ipconfig.htm

For Windows 95,98,ME use winipcfg

<http://support.microsoft.com/default.aspx?scid=kb;en-us;141698>

netstat

Displays active TCP connections, ports on which the computer is listening, Ethernet statistics, the **IP** routing table, IPv4 statistics (for the IP, ICMP, TCP, and UDP protocols), and IPv6 statistics (for the IPv6, ICMPv6, TCP over IPv6, and UDP over IPv6 protocols). Used without parameters, netstat displays active TCP connections.

<http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/netstat.mspx>

tracert

The tracert command is used to visually see a network packet being sent and received and the amount of hops required for that packet to get to its destination.

Users with Microsoft Windows 2000 and Windows XP who need additional information network latency and network loss should also consider using the pathping command.

www.computerhope.com/tracert.htm

ping

Helps in determining TCP/IP Networks IP address as well as determine issues with the network and assists in resolving them.

www.computerhope.com/pinghlp.htm

pathping

Provides information about network latency and network loss at intermediate hops between a source and destination. Pathping sends multiple Echo Request messages to each router between a source and destination over a period of time and then computes results based on the packets returned from each router.

[www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/pathping.mspx?
mfr=true](http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/pathping.mspx?mfr=true)

telnet

Telnet is software that allows users to remotely access another computer such as a server, network device, or other computer. With telnet users can connect to a device or computer, manage a network device, setup a device, transfer files, etc.

www.computerhope.com/software/telnet.htm#03

ftp

FTP is short for File Transfer Protocol, this page contains additional information about the FTP command and help using that command in Unix and MS-DOS (Windows).

www.computerhope.com/software/ftp.htm

route

The function and syntax of the Windows ROUTE command is similar to the UNIX or Linux route

command. Use the command to manually configure the routes in the routing table.

www.computerhope.com/routehelp.htm

arp

Displays, adds, and removes arp information from network devices.

www.computerhope.com/arphlp.htm

nslookup

Displays information that you can use to diagnose Domain Name System (DNS) infrastructure. Before using this tool, you should be familiar with how DNS works. The Nslookup command-line tool is available only if you have installed the TCP/IP protocol.

<http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/nslookup.mspx>

nbtstat

MS-DOS utility that displays protocol statistics and current TCP/IP connections using NBT.

www.computerhope.com/nbtstat.htm

netsh

<http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/netsh.mspx>

One common way of using netsh is to reset the TCP/IP in Windows 2k/XP

Type this in Run or DOS Window – "netsh int ip reset"

In Windows XP you can run a graphical diagnostics by typing "netsh diag gui" into the run dialogue box. (This may take a little time to startup)

getmac

DOS command used to show both local and remote MAC addresses. When run with no parameters (ie. getmac) it displays MAC addresses for the local system. When run with the /s parameter (eg. getmac /s \\foo) it displays MAC addresses for the remote computer. When the /v parameter is used, it also displays the associated connection name and network adapter name.

Included with Windows XP, Windows 2003 Server, and Windows 2000 Resource Kit. Can be downloaded for the Windows 2000 here: <http://www.microsoft.com/windows2000/techinfo/reskit/tools/existing/getmac-o.asp>

<http://www.microsoft.com/resources/documentation/windows/xp/all/proddocs/en-us/getmac.mspx>