These tools are using in command prompt, some commands will only work on an elevated command prompt and some tools may only work in the Windows RE *Recovery Environment*.

I have just listed basic functionality. Please note there is many different switches and you may want to do a /? Switch to find out what a certain switch does on a certain command. I’m splitting these command line tools up to the different sections that we have to learn.

**PING**

- Checks if you can connect to another server / computer
- It basically sends a couple of packets that get bounced or echoed off the computer back to your computer. It will then tell you how long it take normally in ms (Milli-seconds)

**TRACERT**

- Shows the user the route that a packet takes to get to it’s destination computer.
- Each server it bounces off to get to it’s destination is called a hop

**NETSTAT**

- Shows all current connections using your network connection
- To stop it tracking active connections hold CTRL + C

**IPCONFIG**

- Shows all of your network settings (If you use the /all switch), really handy to check if you have an APIPA address or a DHCP address and easy to diagnose what the problem with your network configuration is.
- You can release a DHCP address using ipconfig /release
- You can request a new IP from DHCP using ipconfig /renew
- If your having issues trying to access files / websites / connecting to computers it could be that your or their hostname is cached in the DNS and the DNS cache has to be refreshed by using: ipconfig /flushdns

**NET**

- Allows you to view a network quickly from CMD.
- Typing net view will return a list of all the Windows Computers on the network.
- If you know the computer name you can type net view followed by the computer name to show the shared folders and files on a computer

**NSLOOKUP**

- Enables you to determine exactly what information the DNS server is giving you about a certain hostname or website URL
- To leave this application use CTRL + C or type exit.
NBTSTAT

➤ Is an old command line utility that was introduced before Windows.
➤ Stands for NetBIOS over TCP/IP Statistics.
➤ Outdated but great for finding anything window’s on your network. Such as other workgroups / domains, also checks to see what your connected to. You can do this with: nbtstat -s