Windows Networking Commands

Command Prompt (CMD) Networking Commands

1)ipconfig: Displays the computer's IP configuration (IP address, subnet mask, default gateway).

2)ping: Tests the reachability of a host on a network, helping diagnose network issues.

3)tracert: Traces the route that packets take to reach a destination, showing the intermediate hops.

4)netstat: Displays active connections and listening ports, along with network statistics.

5)nslookup: Queries DNS servers to resolve domain names into IP addresses.

6)route: Displays or modifies the routing table in Windows.

7)arp: Displays or modifies the Address Resolution Protocol (ARP) cache, mapping IP addresses to MAC addresses.

8)netsh: Configures network interfaces and network-related settings, including IP addresses and firewall rules.

9)net use: Connects, disconnects, or displays network connections to shared resources.

10)nbtstat: Displays NetBIOS over TCP/IP statistics and connections.

PowerShell Networking Commands

1)Get-NetIPAddress: Retrieves the IP address configuration of the computer.

2)Test-Connection: Tests the connectivity to a remote host (similar to ping in CMD).

3)Resolve-DnsName: Resolves a domain name to an IP address (similar to nslookup in CMD).

4)Get-NetRoute: Displays the routing table of the system (similar to route print in CMD).

5)Get-NetTCPConnection: Lists all active TCP connections on the system.

6)Set-NetIPAddress: Configures the IP address on a network interface.

7)Get-NetAdapter: Retrieves the network adapter configuration, including status (up/down), interface name, and more.

8)New-NetIPAddress: Assigns a new IP address to a network interface.

9)Set-DnsClientServerAddress: Configures the DNS servers for a network adapter.

10)Get-NetFirewallRule: Displays the firewall rules that are configured on the system.

11)Get-NetIPInterface: Displays the network interfaces and their associated configurations.

12)Get-NetAdapterStatistics: Retrieves the network statistics for all network adapters.