**Instrumente soft pentru testare şi configurare reţele**

În mediul Windows din linia de comenzi DOS (cmd) sunt disponibile o serie de comenzi pentru aflarea de informaţii despre reţea.

C:\Users\Praoveanu>help

For more information on a specific command, type HELP command-name

ASSOC Displays or modifies file extension associations.

ATTRIB Displays or changes file attributes.

BREAK Sets or clears extended CTRL+C checking.

BCDEDIT Sets properties in boot database to control boot loading.

CACLS Displays or modifies access control lists (ACLs) of files.

CALL Calls one batch program from another…………..etc

netsh>? Sau help

The following commands are available:

Commands in this context:

.. - Goes up one context level.

? - Displays a list of commands.

abort - Discards changes made while in offline mode.

add - Adds a configuration entry to a list of entries.

advfirewall - Changes to the `netsh advfirewall' context.

alias - Adds an alias.

branchcache - Changes to the `netsh branchcache' context.

bridge - Changes to the `netsh bridge' context.

bye - Exits the program.

commit - Commits changes made while in offline mode.

delete - Deletes a configuration entry from a list of entries.

dhcpclient - Changes to the `netsh dhcpclient' context.

dnsclient - Changes to the `netsh dnsclient' context.

dump - Displays a configuration script.

exec - Runs a script file.

exit - Exits the program.

firewall - Changes to the `netsh firewall' context.

help - Displays a list of commands.

………..

Etc.

Comanda **netsh>interface ip show**

În acest context sunt disponibile următoarele comenzi:

show **address** - Displays IP address configuration.

show **config** - Displays IP address and additional information.

show **dns** - Displays the DNS server addresses.

show **icmp** - Displays ICMP statistics.

show **interface** - Displays IP interface statistics.

show **ipaddress** - Displays current IP addresses.

show **ipnet** - Displays IP net-to-media mappings.

show **ipstats** - Displays IP statistics.

show **joins** - Displays multicast groups joined.

show **offload** - Displays the offload information.

show **tcpconn** - Displays TCP connections.

show **tcpstats** - Displays TCP statistics.

show **udpconn** - Displays UDP connections.

show **udpstats** - Displays UDP statistics.

show **wins** - Displays the WINS server addresses.

De exemplu, comanda **netsh>interface ip show config** afişează următoarele informaţii:

*Configuration for interface "VMware Network Adapter VMnet8"*

*DHCP enabled: No*

*IP Address: 192.168.116.1*

*SubnetMask: 255.255.255.0*

*InterfaceMetric: 0*

*Statically Configured DNS Servers: None*

*Statically Configured WINS Servers: None*

*Register with which suffix: Primary only*

*Configuration for interface "VMware Network Adapter VMnet1"*

*DHCP enabled: No*

*IP Address: 192.168.0.1*

*SubnetMask: 255.255.255.0*

*InterfaceMetric: 0*

*Statically Configured DNS Servers: None*

*Statically Configured WINS Servers: None*

*Register with which suffix: Primary only*

*Configuration for interface "Local Area Connection"*

*DHCP enabled: Yes*

*InterfaceMetric: 0*

*DNS servers configured through DHCP: 10.222.6.10*

*WINS servers configured through DHCP: None*

*Register with which suffix: Primary only*

netsh>

De exemplu, comanda **netsh>interface ip show address** afişează următoarele informaţii:

*Configuration for interface "VMware Network Adapter VMnet8"*

*DHCP enabled: No*

*IP Address: 192.168.116.1*

*SubnetMask: 255.255.255.0*

*InterfaceMetric: 0*

*Configuration for interface "VMware Network Adapter VMnet1"*

*DHCP enabled: No*

*IP Address: 192.168.0.1*

*SubnetMask: 255.255.255.0*

*InterfaceMetric: 0*

*Configuration for interface "Local Area Connection"*

*DHCP enabled: Yes*

*InterfaceMetric: 0*

netsh>



[**10 comenzi utile din command prompt**](http://www.itstuff.ro/articole/195-10-comenzi-utile-din-command-prompt.html)

Iata cateva comenzi DOS in sistemul de operare Windows XP care se pot dovedi utile:

 Start / Run / cmd

 In fereastra DOS :

**ipconfig /all** - pentru XP - arata informatii pretioase de genul : ip, mac, dns, gateway, winserver pentru toate placile de retea

**ipconfig /release** – cand se foloseste DHCP – face un “release” al IP-ului primit de la serverul de DHCP

**ipconfig /renew** – trimite un  fel de "refresh" catre serverul de DHCP

**winipcfg** - pentru Windows 98, 2000, ME - face acelasi lucru ca ipconfig/all pentru XP  
**getmac** - afiseaza doar mac-ul placii de retea  
**ping x.y.z.t** – testezi conectivitatea cu un alt IP prin trimiterea unor pachete ICMP(de forma x.y.z.t) (fie el alt PC sau server)

Poate avea  diferite “nuante” :

Cele mai uzuale :

**ping x.y.z.t –t**  - da ping continuu, pana il opreste tu cu Ctrl^C

**ping x.y.z.t  -l**- poti sa setezi dimensiunea pachetelor

**tracert x.y.z.t** - afiseaza “hopurile” prin care trece pingul ca sa ajunga la IP-ul destinatie (x.y.z.t)

**tracert x.y.z.t -d** - este indicat sa se foloseasca pentru ca optiunea "-d" renunta la rezolvarea numelor router-elor prin care pachetul trece - daca este folosit doar tracert IP operatiunea dureaza f mult

**arp -a** - iti arata tabela cu corespondenta IP - MAC pe care PC-ul a completat-o utilizant pachete ARP (se stie IP-ul si se doreste aflarea adresei MAC) sau RARP (Reverse ARP - se stie mac-ul si se doreste a afla IP)

**netstat** - afiseaza o lista cu sesiunile deschise de computer - poti afla din tabela : portul local utilizat, TCP sau UDP, nume/IP al celeilalte masini cu care s-a deschis o sesiune, status-ul curent al sesiunii

**netstat –rn** sau **route print**  - afiseaza tabela de rutare a PC-ului

**net share** - vezi ce share ai in retea