

Network configuration and client commands for some OS

Layer	Windows	Linux	BSD/MacOS X	Sample	Description
1 & 2		ethtool		ethtool <i>eth0</i> **)	Display and configure Ethernet PHY+MAC settings
2		ifconfig	ifconfig	ifconfig -a	Configuration of interface and IPv4/IPv6 properties
		mii-tool		mii-tool <i>eth0</i>	Display and configure Ethernet MII settings
		iwconfig		iwconfig <i>wlan</i> **)	Display and configure WiFi interfaces
		iwlist		iwlist <i>wlan</i> channels	Display information about available WiFi nets
2 & 3	arp	arp	arp	arp -a	Display entries in ARP cache
	netsh int ipv6 sho neigh	ip neigh	ndp	ndp -a	Display IPv6 Neighbor cache
3	ipconfig	ifconfig	ifconfig	ipconfig -a	Configuration of interface and IPv4/IPv6 properties
	ipv6*)	ip		ip -6 n	Display and configure IPv4/IPv6 properties
	netsh				Windows net-shell
	ping	ping	ping	ping -v 192.168.1.1	ICMP echo command
	ping6	ping6	ping6	ping6 -I <i>eth0</i> ff02::1	ICMPv6 allows multicast pings (All-IPv6-Nodes)
	route	route	route	route print	Set/View IPv4 (IPv6) routes (different syntaxes!)
	tracert	tracert	tracert	tracert 10.0.0.1	Follow IP packet over router/hosts
	tracert6	tracert6	tracert6	tracert6 2003::1	Traceroute for IPv6
3 & 4	netstat	netstat	netstat	netstat -rn	Display routing table
	net			net user	Display and configuration of CFIS properties
DHCP	ipconfig	dhclient <i>eth0</i>	dhclient <i>bge0</i> **)	ipconfig/renew	Request new IPv4 address from DHCP server
DNS	nslookup	nslookup	nslookup	nslookup google.com	Query and display DNS information
		dig	dig	dig heise.de @8.8.8.8	Query and display DNS information
Appl	finger	finger	finger	finger root@192.168.1.2	Query user on a remote system
	telnet	telnet	telnet	telnet <i>hostname</i>	Unsecure interactive log-in
	ftp	ftp	ftp	ftp <i>hostname</i>	Unsecure interactive (or batch) file transfer
firewall		iptables	pf/pfctl		Set/manipulate firewall settings on local host

*) Windows XP only

**) Interface name may vary

IPv6 Privacy Exentions:

Windows: netsh interface ipv6 set privacy enable [Default: enable]

Linux: sysctl net.ipv6.conf.eth0.use_tempaddr=1|2 [Default: disable]

BSD/MacOS X: sysctl net.inet6.ip6.use_tempaddr=1 [Default: disable]

sysctl net.inet6.ip6.prefer_tempaddr=1 [Default: not preferred]