

## Networking Basics

<code>ifconfig</code>	Show or configure network interfaces.
<code>ifconfig eth0 up</code>	Activate eth0 network interface.
<code>ip addr</code>	Show or change IP addresses.
<code>ip addr show</code>	Show network interfaces and associated IP addresses.
<code>ip addr add 192.168.1.1/24 dev eth0</code>	Add IP address with subnet mask to network interface.
<code>ip link</code>	Show or configure network interfaces.
<code>ip link show</code>	Show network interface information.
<code>ip link set eth0 down</code>	Deactivate eth0 network interface.
<code>ip route</code>	Show or change routing table.
<code>ip route show</code>	Show current routing table.
<code>ip route add default via 192.168.1.1</code>	Add default gateway on 192.168.1.1.

## Advanced Networking

<code>route</code>	Show or configure routing table.
<code>route -n</code>	Show routing table (numeric addresses).
<code>route add default gw 192.168.1.1</code>	Add default route to routing table.
<code>arp</code>	Show or change ARP cache.
<code>arp -n</code>	Show ARP cache (numeric addresses).
<code>arp -d 192.168.1.100</code>	Remove 192.168.1.100 from the ARP cache.
<code>iwconfig</code>	Manage wireless network interfaces.
<code>iwconfig wlan0</code>	Show informationn for wlan0 network interface.
<code>curl</code> <code>wget</code>	Download files from the internet.
<code>curl -o [link]</code> <code>wget [link]</code>	Download file and save in current directory.

## Network Monitoring

<code>netstat</code>	Network statistics.
<code>netstat -tuln</code>	Show active network sockets.
<code>netstat -r</code>	Show kernel routing table.
<code>ss</code>	Socket statistics.
<code>ss -tuln</code>	Show active network sockets.
<code>ss -i</code>	Show network interface packet statistics.
<code>iftop</code>	Real time badwidth usage.
<code>iftop -n</code>	Real time bandwidth usage (numeric addresses).
<code>iftop -i eth0</code>	Real time bandwidth usage for eth0 network interface.
<code>tcpdump</code>	Network packet analyzer.
<code>tcpdump -i eth0</code>	Show network traffic on eth0 network interface.
<code>tcpdump -n port 80</code>	Show network traffic on port 80 (numeric addresses).

## DNS and Host Resolution

<code>dig example.com</code>	Perform DNS lookup.
<code>nslookup example.com</code>	Query DNS servers.
<code>host example.com</code>	Perform DNS lookup.
<code>hostname</code>	Display hostname.
<code>hostname myhost</code>	Change hostname.

## Network Troubleshooting

<code>ping example.com</code>	Send ICMP echo requests.
<code>traceroute example.com</code>	Trace route to destination.
<code>tracepath example.com</code>	Simplified traceroute.
<code>mtr example.com</code>	Combines ping and traceroute functionalities.
<code>whois example.com</code>	Lookup information for IP or domain.

## Connectivity

<code>ifplugstatus eth0</code>	Check if ethernet cable is plugged in eth0.
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