Network Tools Cheatsheet

Task	New	Legacy
IP/Netmask/MAC		
Set IP address	ip addr add 192.168.1.100/24 dev eth0	ifconfig eth0 192.168.1.100
Set netmask	ip addr add 192.168.1.100/24 dev eth0	ifconfig eth0 netmask 255.255.255.0
Set MAC	ip link set dev interface address 00:07:e9:0c:ec:5e	ifconfig eth0 hw ether 00:07:e9:0c:ec:5e
Request DHCP address	dhclient eth0	
Set default gateway	ip route add default via 192.168.1.1	route add default gw 192.168.1.1
Show default gateway	ip route	route
Show network device settings	ip link	ethtool eth0
Show IP address	ip addr show	ifconfig
Show Netmask	ip addr show	ifconfig
Check routing	traceroute 4.2.2.2	
ARP, Connectivity and Ports		
Check connectivity	ping 192.168.1.100	
Check connectivity (broadcast)	ping -b 192.168.1.255	
Show ARP table	arp	
Set static ARP entry	arp -s 192.168.1.100 00:07:e9:0c:ec:5e	
Deleting an ARP entry	arp -d 192.168.1.100	
Show network connections	ss -ltn	netstat -platune
Scan network ports	nmap -sT -sU -P0 -O 192.168.1.100	
DNS		
Resolve DNS name (address record)	nslookup google.com	dig google.com A
Resolve DNS using server	nslookup google.com 4.2.2.2	dig @4.2.2.2 google.com