Manage and Display Network Interfaces

See link-layer information for all devices:
```
ip link show
```

See a list of running interfaces:
```
ip link ls up
```

See information for one specific device:
```
ip link show dev [device]
```

View interface statistics:
```
ip -s link [interface]
```

VIew more statistics:
```
ip -s -s link [interface]
```

Enable interface:
```
sudo ip link set [interface] up
```

Disable interface:
```
sudo ip link set [interface] down
```

Modify transmit queue:
```
sudo ip link set txqueuelen [number] dev [interface]
```

Set MTU:
```
sudo ip link set mtu [number] dev [interface]
```

Change MAC address:
```
ip link set dev [interface] down
ip link set dev [interface] address [mac_address]
ip link set dev [interface] up
```

Monitor and Configure IP Addresses

List all network interfaces and IP addresses:
```
ip addr
```

List IPv4 addresses only:
```
ip -4 addr
```

List IPv6 addresses only::
```
ip -6 addr
```

Add an IP address to an interface:
```
sudo ip addr add [ip_address] dev [interface]
```

Add a broadcast address to an interface:
```
sudo ip addr add brd [ip_address] dev [interface]
```

Delete an IP address from an interface:
```
ip addr del [ip_address] dev [interface]
```

View and Manage Routing Tables

View all the route entries:
```
ip route
```

Narrow down the search by adding the SELECTOR object:
```
ip route list [selector]
```

Available selectors:
```
root [prefix]
match [prefix]
exact [prefix]
table [table_id]
proto [rt_proto]
type [type]
scope [scope]
```

Add a static routing table entry to a specific device:
```
ip route add [ip_address] dev [interface]
```

Add a new route using a gateway address:
```
ip route add [ip_address] via [gateway_IP] dev [interface]
```

Delete an existing entry in a routing table:
```
ip route del [ip_address]
```

Manage Neighbor Entries

Display the available neighbor tables:
```
ip neigh show
```

Neighbor entry states:
REACHABLE. A valid, reachable entry until the timeout expires.
PERMANENT. An entry that remains in the cache indefinitely unless removed by an administrator.
STALE. A valid but unreachable entry. Before sending packets to a stale neighbor, the system verifies the reachability.
DELAY. The kernel is still waiting for the stale entry validation.

Manually add an ARP table entry:
```
ip neigh add [ip_address] dev [interface]
```

Manually delete an ARP table entry:
```
ip neigh del [ip_address] dev [interface]
```