

- To see the interfaces on the hosts use `ip link` command

```

[~]$ ip link
eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP mode
DEFAULT group default qlen 1000

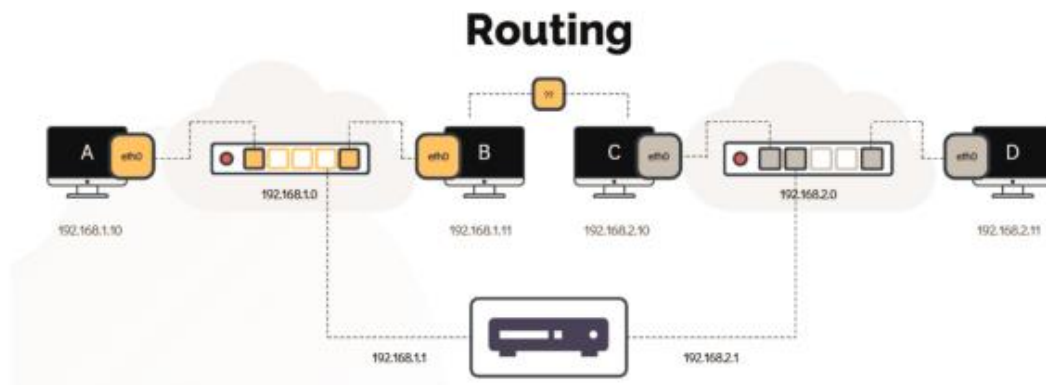
```

- To connect to the switch we use `ip addr add` command

```
[~]$ ip addr add 192.168.1.10/24 dev eth0
```

## Routing

- Router helps to connect to two separate networks together.



- To see the existing routing table configuration run the `route` command.

```
[~]$ route
```

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
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- To configure a gateway on system B to reach the system on other network run

```
[~]$ ip route add 192.168.2.0/24 via 192.168.1.1
```

```
[~]$ route
```

Kernel IP routing table

Destination	Gateway	Genmask	Flags	Metric	Ref	Use	Iface
192.168.2.0	192.168.1.1	255.255.255.0	UG	0	0	0	eth0

- To see the ip addresses assign to interfaces use

```
[~]$ ip addr
```

- 

```
[~]$ ip route
```

- To make this changes permanent you must set them in `/etc/network/interfaces` file.