Internet Protocol and Ethernet

# What is Internet Protocol?

The base idea of what Internet Protocol or IP, is your virtual address much like the real world address you’re living at. This means we use the IP to communicate via the internet sending packets of data from the source machine to the receiving machine, using these virtual addresses. Also when sending packets we send them through the router, the route makes sure the packets is sent the fastest way possible to the desired destination. This shows that IP is used every day to transfer data between all sort of machines.

Ipv4 and Ipv6

The current IP version we use today is Ipv4 which is built on a 32 bit system which limits the amount of IP addresses to about 4 billion, this is becoming a problem because we have more than 4 billion devices that require an IP address. Therefore, the Ipv6 has been invented this IP is working of a 128-bit system generating an almost infinite amount of addresses available. Only problem is it has no backwards compatibility, meaning everything running off Ipv4 will need to be updated.

# What is Ethernet

Ethernet is what we use for the LAN technology, the local area networks. This means we connect all the machines via a cable, this makes it possible to reach a high speed data transfer of packets from one IP to another.

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