



DAY 02

KICK-OFF



* apprendre autrement

DAY 02

What is a network ?

Linking of two or more computer systems by means of a cable or wireless connection.

The main advantages of networks are:

- ✓ Sharing of data ;
- ✓ Sharing of resources ;
- ✓ Centralized management of programs and data ;
- ✓ Centralized storage and backup of data ;
- ✓ Shared computing power and storage capacity ;
- ✓ Simple administration of permissions and responsibilities.

Types of network

It is possible to differentiate and categorize networks, depending on the size and scope of the computer network:

- ✓ **L**ocal **A**rea **N**etwork
- ✓ **M**etropolitan **A**rea **N**etwork
- ✓ **W**ide **A**rea **N**etwork

IP

Internet **P**rotocol

An IP address is an identification number assigned to a device connected to a network.

Having an IP address allows that device to communicate with other devices that have an IP address themselves.

IPv4: 192.168.0.1
IPv6: 2001:db8:0:85a3::ac1f:8001

Gateway

A gateway is a hardware and software system for linking two networks, in order to interface between different network protocols.

DHCP

Dynamic **H**ost **C**onfiguration **P**rotocol

Protocol allowing a computer that connects to a network to obtain its network configuration dynamically, i.e. without any particular intervention.

DNSx

Domain **N**ame **S**ystem

The DNS is like the telephone directory of the Internet. Internet users access online information via domain names (e.g. intra.epitech.eu), while browsers interact via IP addresses.

The DNS translates domain names into IP addresses so that browsers can load web resources.

Tips & Tricks

- ✓ Use **netstat** to get information such as routing tables, ...
- ✓ Use **tcpdump** or **wireshark** to analyse packets

Questions

#imageCenterCorners(./img/questionmark.png, 110px, 0)

#center(Do you have any questions?)



{EPITECH}
LEARN DIFFERENT*

* apprendre autrement