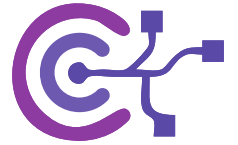




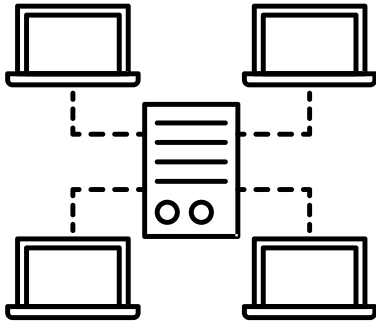
7.2 Computing

Networks



Networks

Connected devices that can communicate and share resources.



Protocols

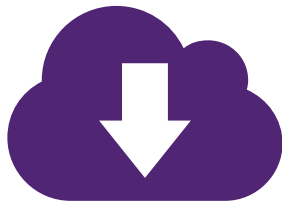
The rules of communication

- HTTP: Hyper-text Transfer Protocol
- HTTPS: HTTP Secure
- IP: Internet Protocol
- TCP: Transmission Control Protocol
- VoIP: Voice over IP

Bandwidth

Amount of data that can travel at one time over the Internet

- 3G - 100 Mbps
- 4G - 1GBps
- 5G - 20 GBps
- Cable - 10GBps
- Fibre - 60Tbps +



Network Hardware

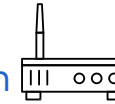
Server - Central store of files and data



Switch - Directs data between the server and connected devices



Router - Directs data between devices connected to the Internet.



Cables - Creates a wired connection between devices on a network.



Wired Vs. Wireless

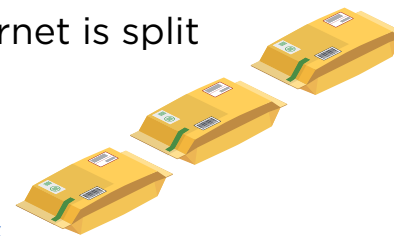
Wired	Wireless
Faster	No wires
More secure	Quick to set-up
Higher Bandwidth	Allows portability
No portability	Lower bandwidth
Expensive	Less secure

Packets

Data sent over the Internet is split into smaller packets.

Each packet contains:

- Packet Number
- Sender's IP address
- Recipient's IP address



The Internet

A worldwide network or networks.

World Wide Web

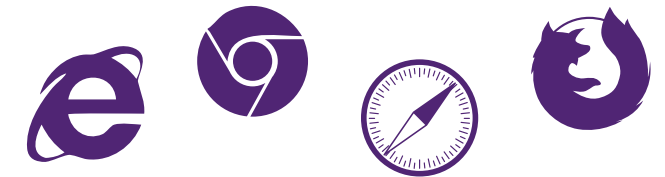
All of the information accessible online using a web browser. Uses The Internet in order to work.

<https://www>



Browsers

Software applications that are used to display the content on web pages.



IoT (Internet of Things)

Devices which are able to connect to The Internet.

