

Wired and Wireless Networks

- 1
- What is a network?
 - Types of network
 - Local Area Network [LAN]
 - Wide Area Network [WAN]
 - Personal Area Network [PAN]
 - Wired Vs Wireless
- Hardware Needed for a Network**
- Network Interface Card (NIC)
 - Switches
 - Router
 - Wireless Access Points
 - Cables
 - Fibre Optic Cable
 - CAT5 CAT6 Ethernet Cable
 - Coaxial Cables

Searching Algorithms

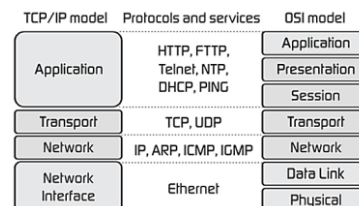
- 1
- The internet: The ultimate and biggest WAN in the world based around TCP/IP
 - Domain Name Server [DNS]
 - Web hosting
 - Benefits / Drawbacks
 - The cloud
 - Benefits / Drawbacks
 - Virtual networks
 - Benefits / Drawbacks

IP and MAC Addressing

- 2
- Network Protocols:
 - ❖ Transmission Control Protocol / Internet Protocol [TCP/IP]
 - ❖ Hyper Text Transfer Protocol Secure [HTTPS]
 - ❖ File Transfer Protocol [FTP]
 - ❖ Internet Message Access Protocol [IMAP]
 - ❖ Simple Mail Transfer Protocol [SMTP]
 - The concept of layers
 - TCP/IP stack
 - Packet Switching
 - Describe network
 - Network Security

Topologies

- 1
- Topologies
 - Star
 - Mesh
 - Bus
 - Ring



Key Vocabulary

1	Bandwidth	This is the amount of data that can be sent across a network
2	Latency	Is the delay of a bit leaving one device and arriving at another.
3	MAC Address	The physical address embedded within the device.
4	TCP/IP	A set of rules that governs the connection of computer systems to the Internet.

