Network media types

Network media types video

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Three media types

**Data on network is transmitted on media**

Media provides channel over which the message travels from and to

There are mainly 3 types, those are:

- Metal wires within cables

**Data is encoded into electrical impulses**

- Glass or plastic fibers within cables

**Data is encoded into pulses of light**

- Wireless transmission

**Data is encoded via modulation of specific frequencies of electromagnetic waves**

4 main criteria for choosing network media are:

- what is maximum distance that the media can successfully carry a signal

- what is the environment in which the media will be installed

- what is the amount of data and at what speed must it be transmitted

- what is the cost of the media and installation

Common network cables

3 most common network cables are:

Twisted-Pair Cable

- **ethernet technology**

- wires are grouped in pairs and twisted together to reduce interference

Coaxial cable

- **used by cable TV companies**

- also used in **connecting components which make up satellite communication** systems

- copper core, surrounded by a layer of insulation, braided metal shielding and a protective jacket

Fiber-Optic cable

- **glass or plastic with a diameter about the same as human hair**

- **very high speeds over long distances**

- many uses as well as communications

- **high bandwidth**