

8/8/24

STUDY OF NETWORK COMPONENTS

AIM:-

To study different types of Network cables and understand their applications.

A) DIFFERENT TYPES OF NETWORK CABLES:-

1. Unshielded Twisted Pair (UTP) cable.

-Advantage:-

Cheaper in cost.
Easy to install

DisAdvantage:-

More prone to (EMI) Electromagnetic interference and noise.

Applications:- 10Base-T Ethernet, Fast Ethernet.

2. Shielded Twisted Pair cable (STP).

Advantage:- Faster than UTP

DisAdvantage:- Expensive

Application:- Gigabit Internet.

3. Coaxial cable:-

Advantage: High bandwidth.

DisAdvantage: limited Distance.

Application: High speed internet connection.

4. Fibre Optics cable.

Advantages:- High speed

DisAdvantages: Expensive.

Application:- Maximum distance of fibre.

b) Make your own Ethernet cross-over cable:-

Step 1:- Start construction of device.
Begin By threading shields.

Step 2:- Strip 1.5 cm of cable shielding from both ends.

Step 3:- Untangle the wires, should be twisted Pairs

Step 4:- Once order is correct, bunch them in a line and if there are any stick.

Step 5:- Next push the cable right in. The end of the plug needs to be just over the cable shielding.

Step 6:- After the wires are securely sitting inside the plug, insert it into the crimping tool and push down -

Step 7:- Repeat for the other end using diagram B (to make a cross over cables)

RESULT:-

To test it, plug it in and attempt to connect two device directly

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