T3 Protocols and Reference Models

Contents

0.1   Data access

In IPv4:

In 192.168.1.110, 192.168.1 bits are the network part of the address while 110 is the host part of the address.

$$\underbrace{192.168.1.110}_{\text{Network part of address}} \quad \underbrace{110}_{\text{host}}$$

In a local network, the network of the address should not be differentbut the same. Only th ehost part changes.

Segement is encapsulate in Layer 3 info. This is encapsulated in layer 2 info.

0.1.1   Data Link Addresses

Each port of a routeer has different MAC addresses

0.1.2   Role of the Data Link Layer Addresses: Different IP Networks

IP address is used for end to end connection, while mac address is used for connectivity in a segment of a network

MAC Addresses are kept locally in local network. It's not visible from another network

- MAC Addresses are a layer 2 address
- IP Addresses are a layer 3 address

MAC	IP
Layer 2 address	Layer 3 address
Local source to destination communication	Source to remote device communication