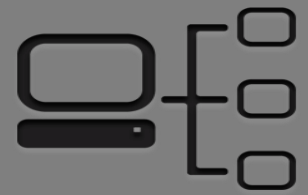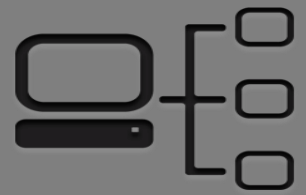# Ethernet Explained

- Ethernet is a network protocol that controls how data is transmitted over a LAN.

- It's referred to as the Institute of Electrical and Electronics Engineers (IEEE) 802.3 Standard.

- It supports networks built with thin and thick coaxial, twisted-pair, and fiber-optic cabling.

- The original Ethernet standard supported 10Mbps speeds, but the latest supports much faster speeds.

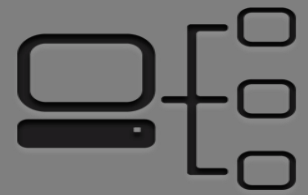- Ethernet uses CSMA/CD access methodology.

Ethernet xxBaseT Naming

- Ethernet uses a "xx Base T" naming convention.
  - xx: Speed of the cable.
  - Base: Baseband communication (single frequency).
  - T: Type of cable.

Ethernet xxBaseT Naming

xxBaseT Name	Description
10BaseT	10Mbps Twisted-Pair Standard Ethernet
10BaseF	10Mbps Fiber Optic Standard Ethernet
100BaseT	100Mbps Twisted Pair Fast Ethernet
100BaseF	100Mbps Fiber Optic Fast Ethernet
1000BaseT	1Gbps Twisted Pair Gigabit Ethernet
1000BaseF	1Gbps Fiber Optic Gigabit Ethernet