

Hubs

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In hub-based ethernet, all devices share a single communication line.

CSMA - Carrier Sense Multiple Access

Devices listen before sending (baseband)

CD - Collision Detection

Collision: Two devices send at the same time. Collision Handling: Stop transmitting immediately. Wait a random time, then retry. Double wait time with each collision.

Switches forward frames in local networks efficiently.

Source Address Learning Switch observes source MAC addresses and associates it with the port.

Forwarding Checks the destination MAC address