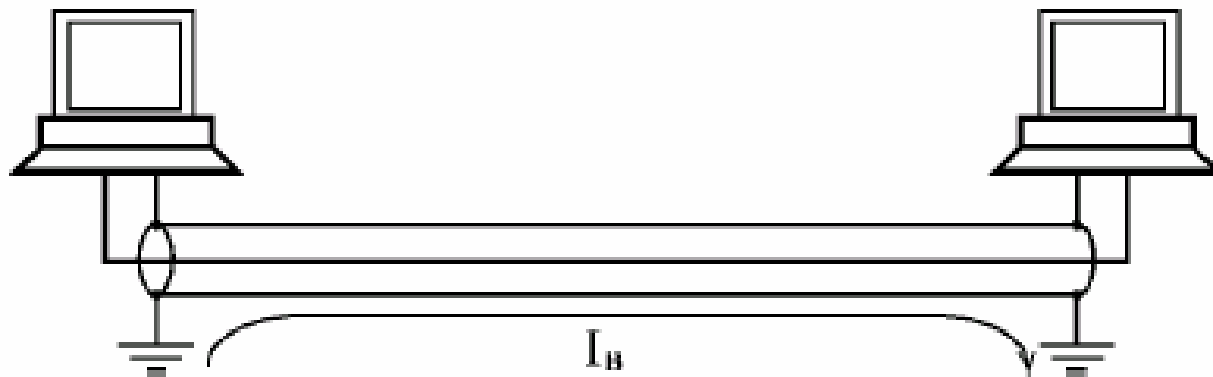
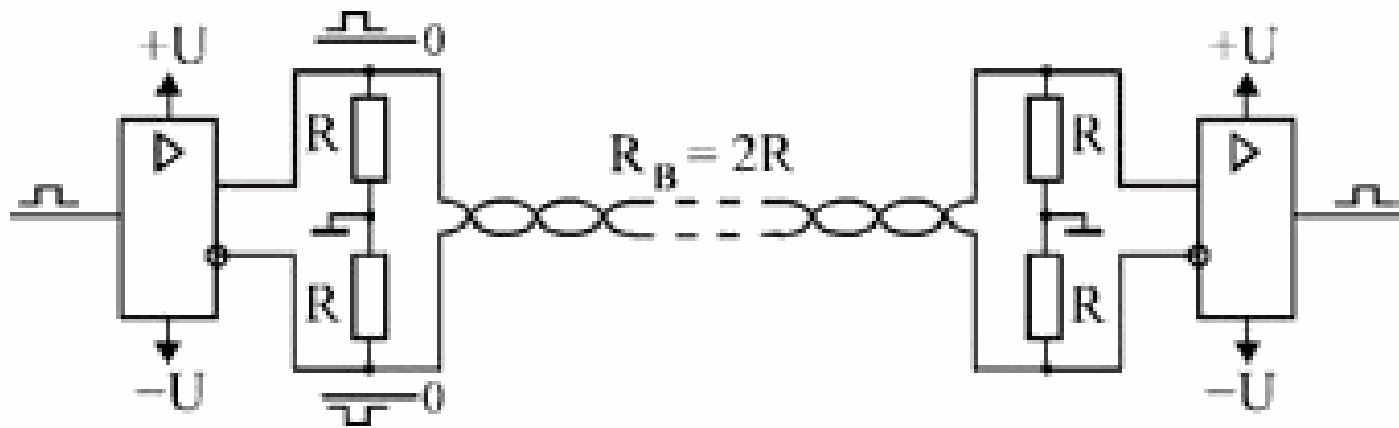
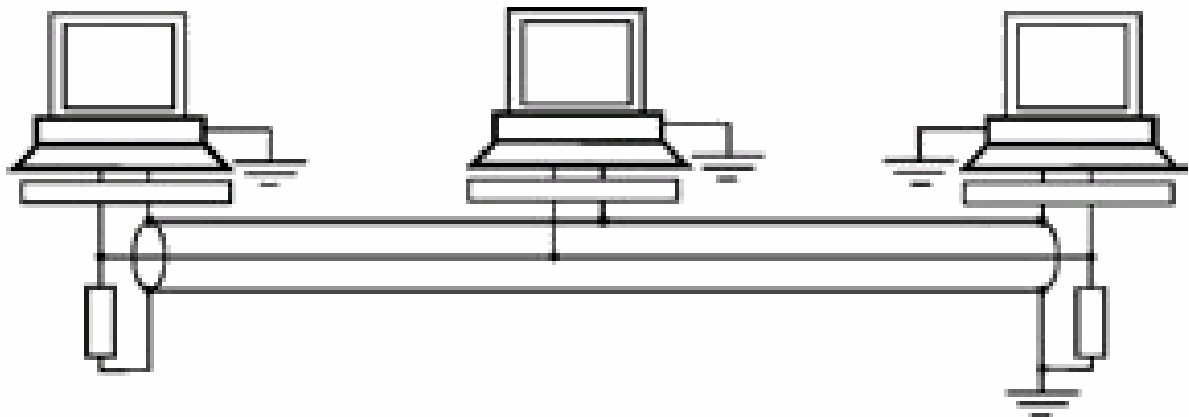


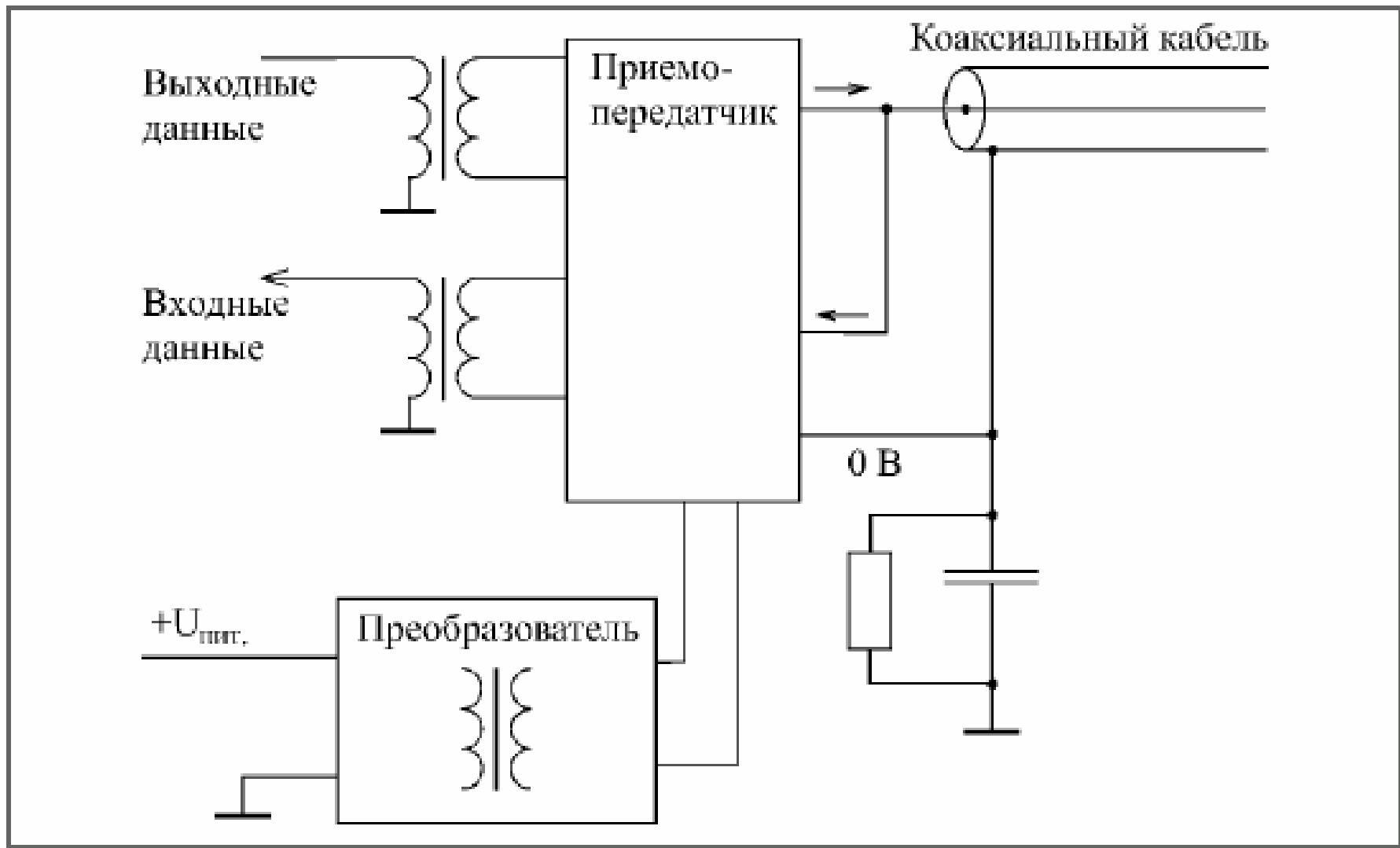
Передатчик

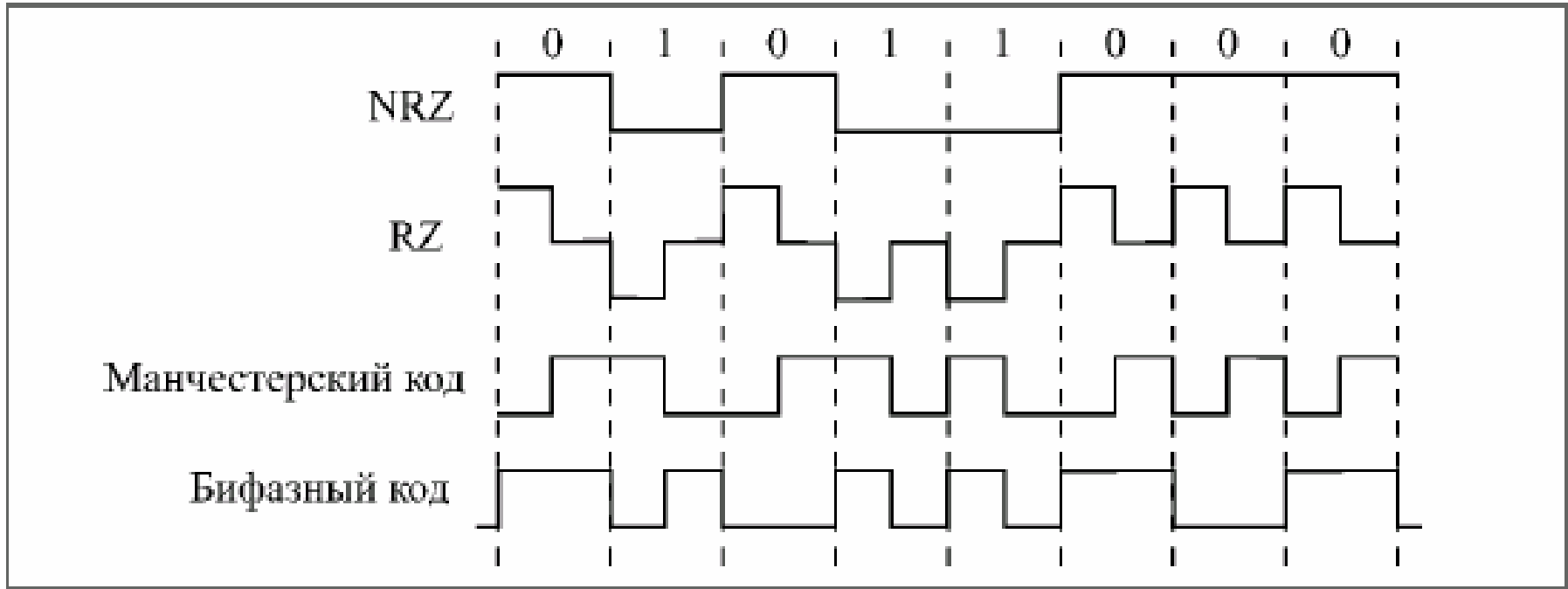
Приемник

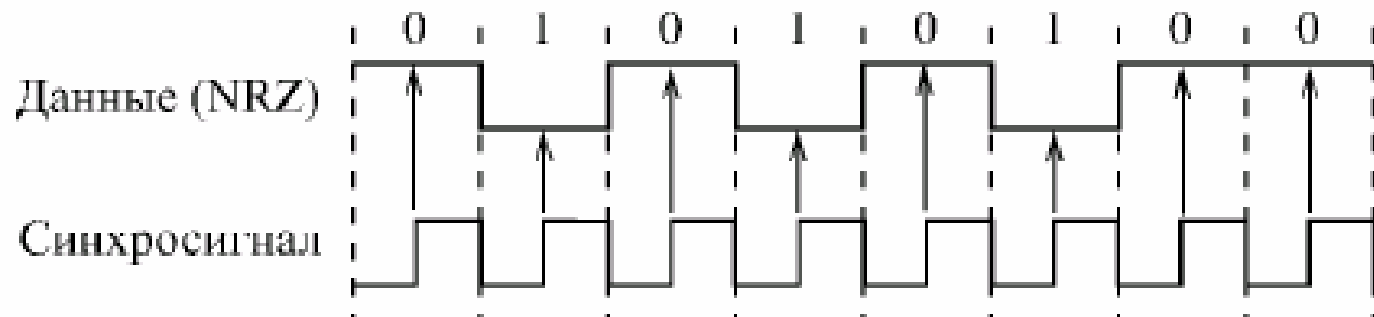
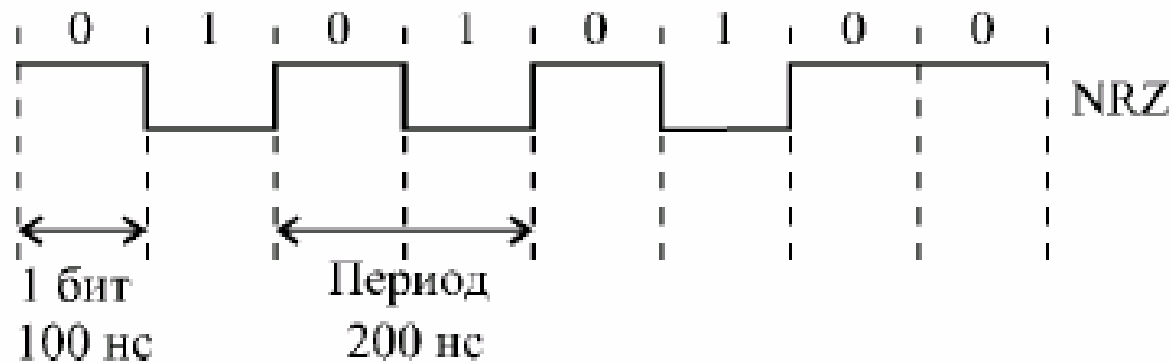


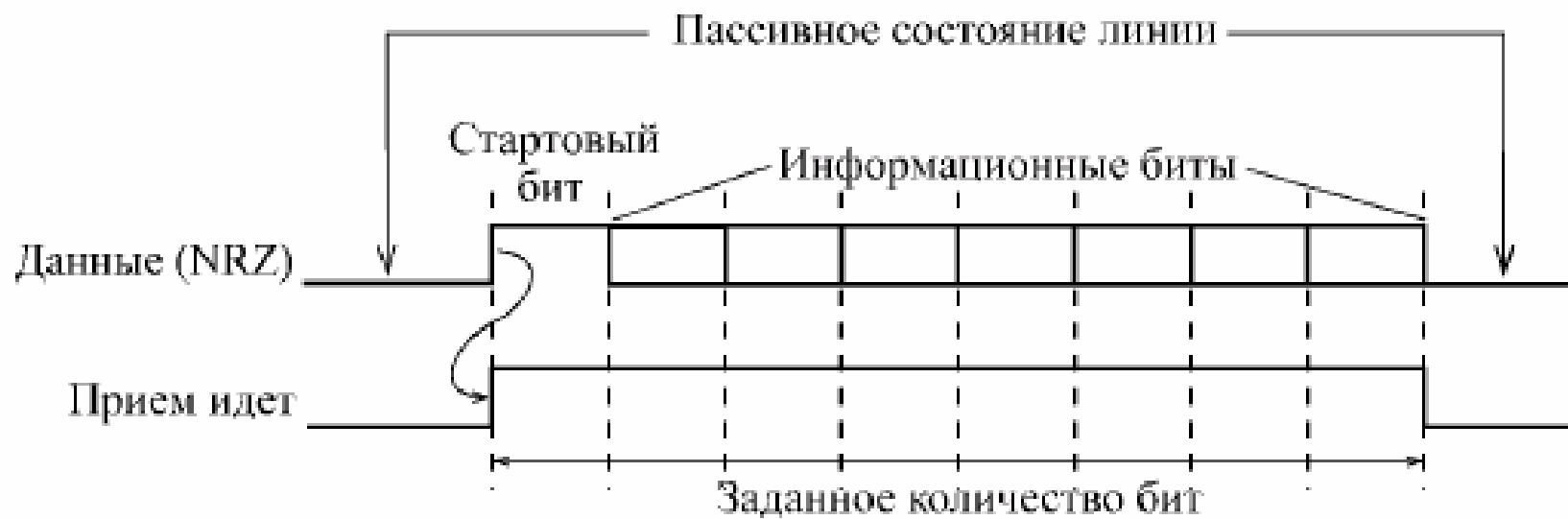




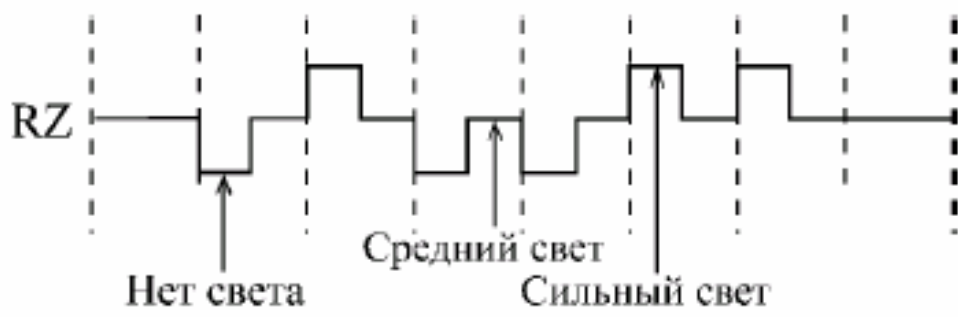
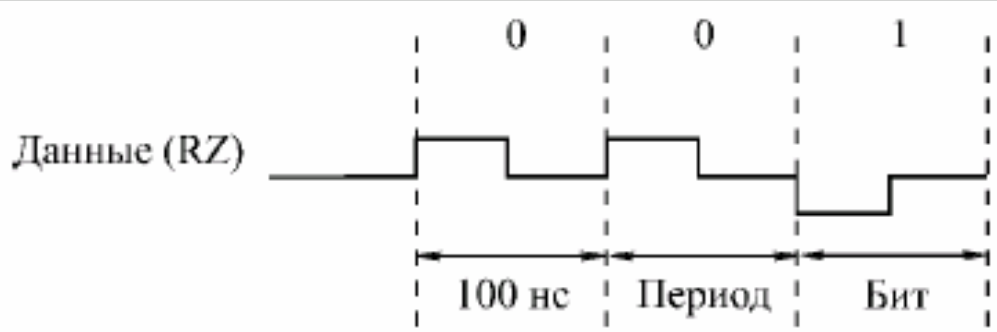




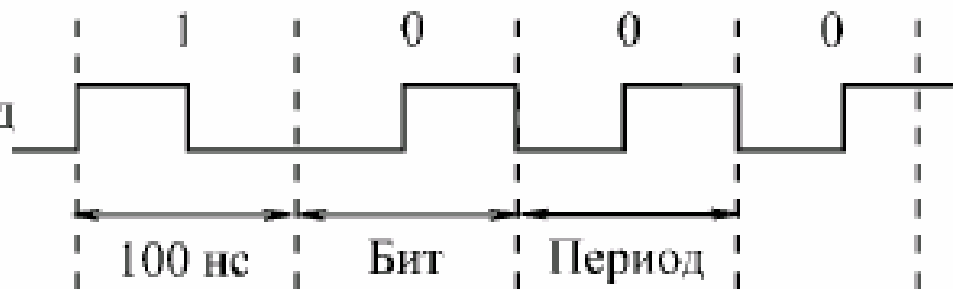






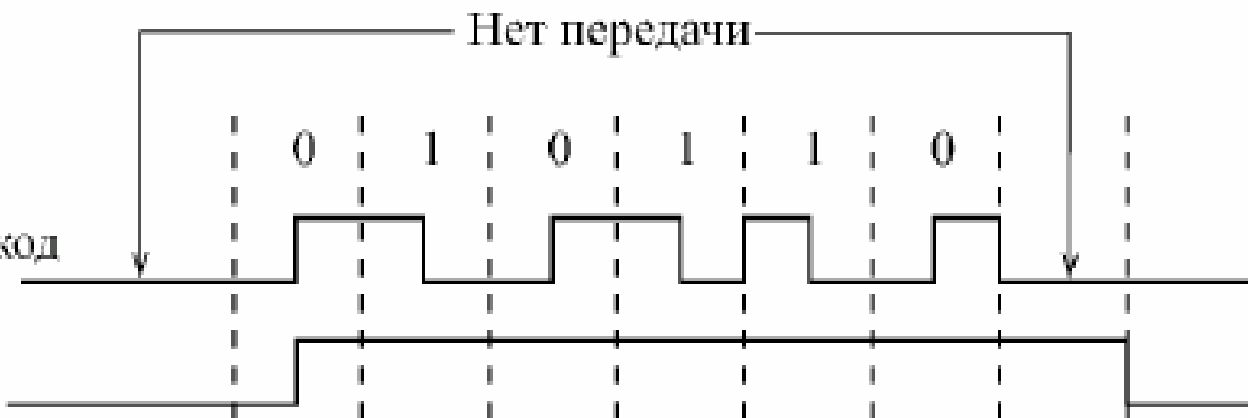


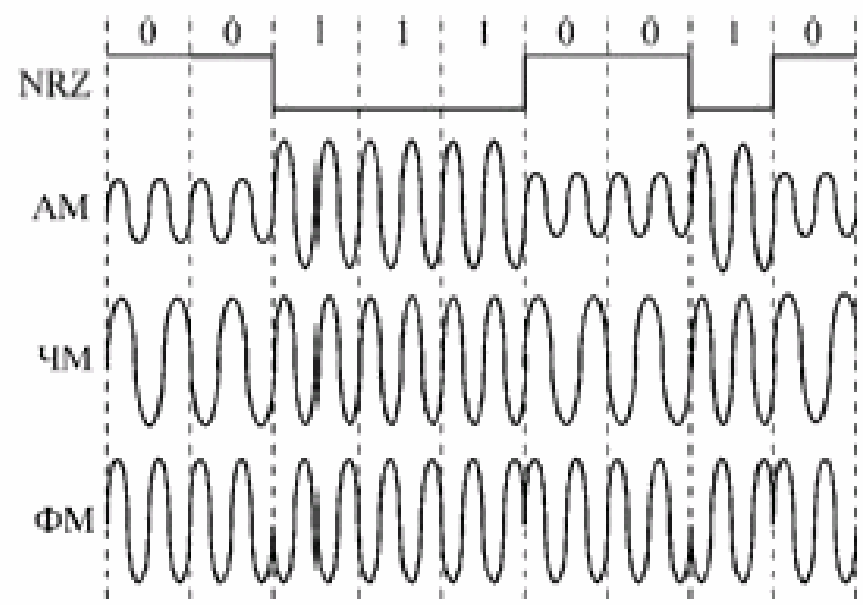
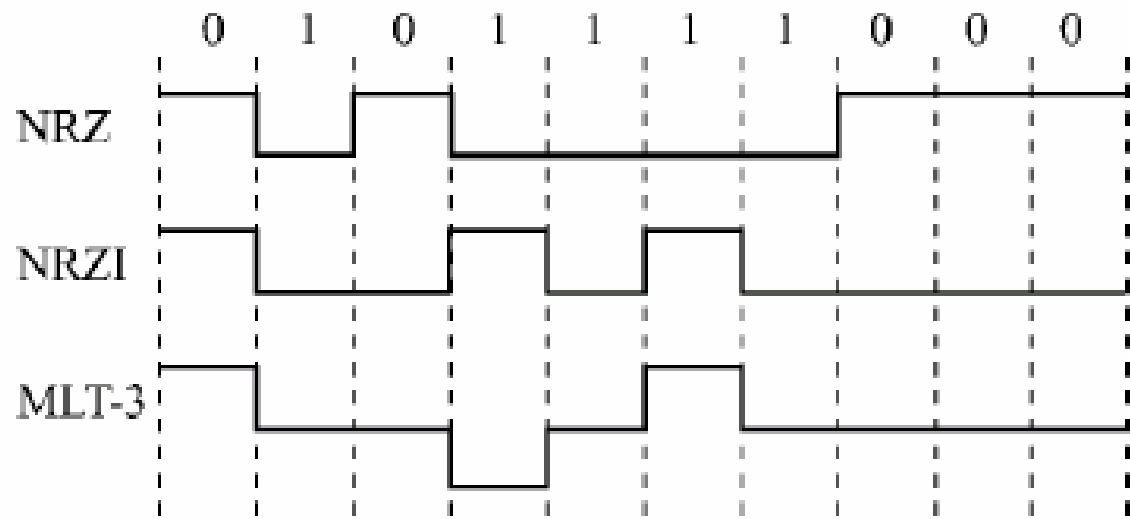
Манчестерский код



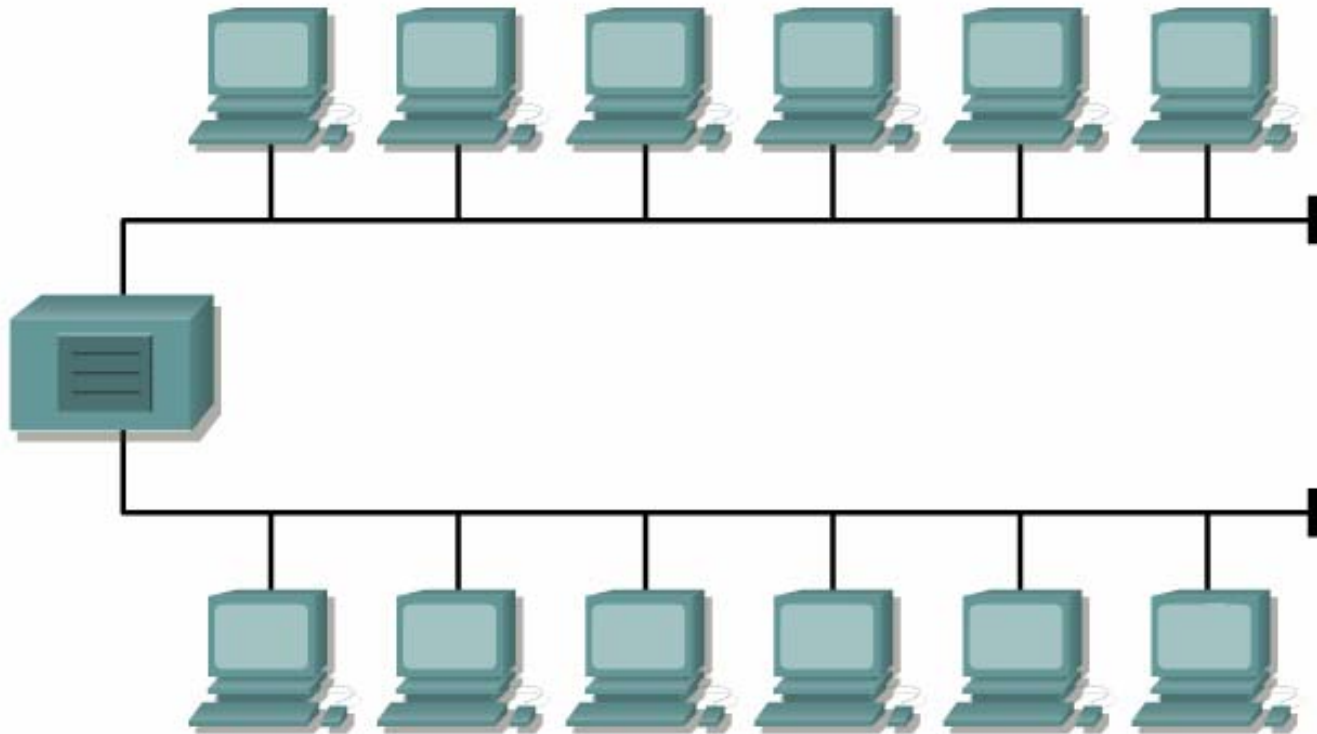
Манчестерский код

Прием идет

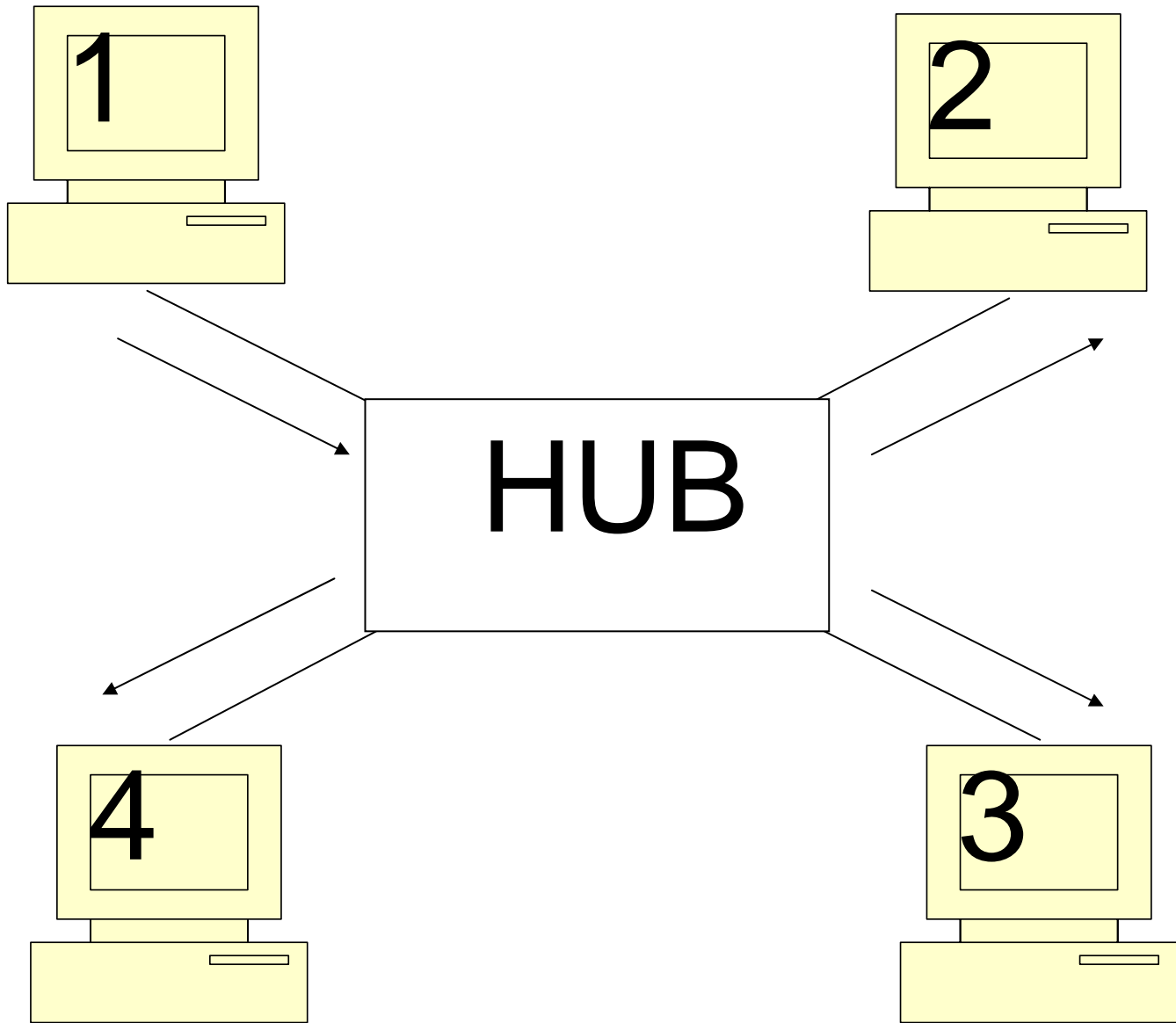




## Repeaters



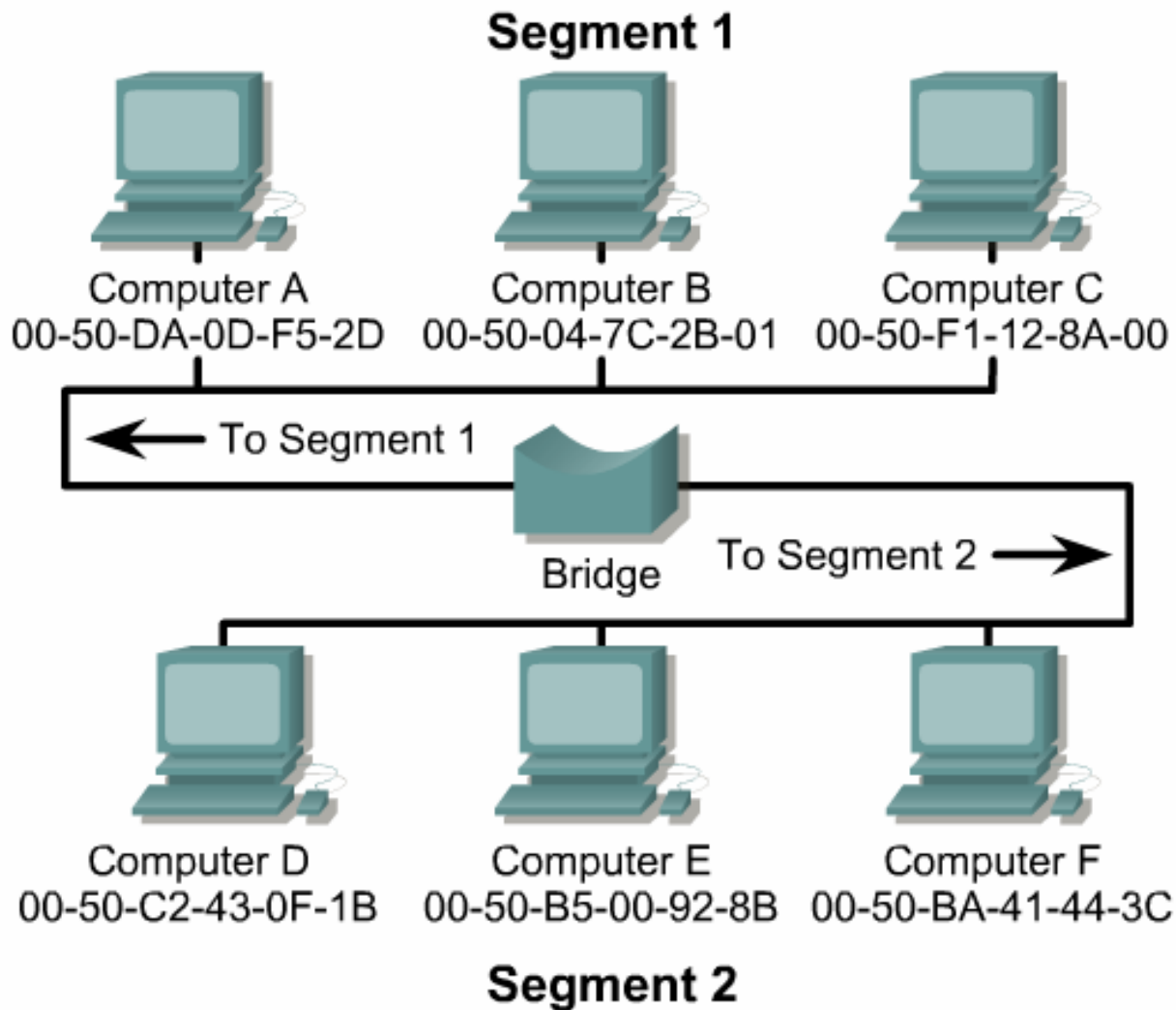
The purpose of a repeater is to regenerate and retime network signals at the bit level. This allows them to travel a longer distance on the media.



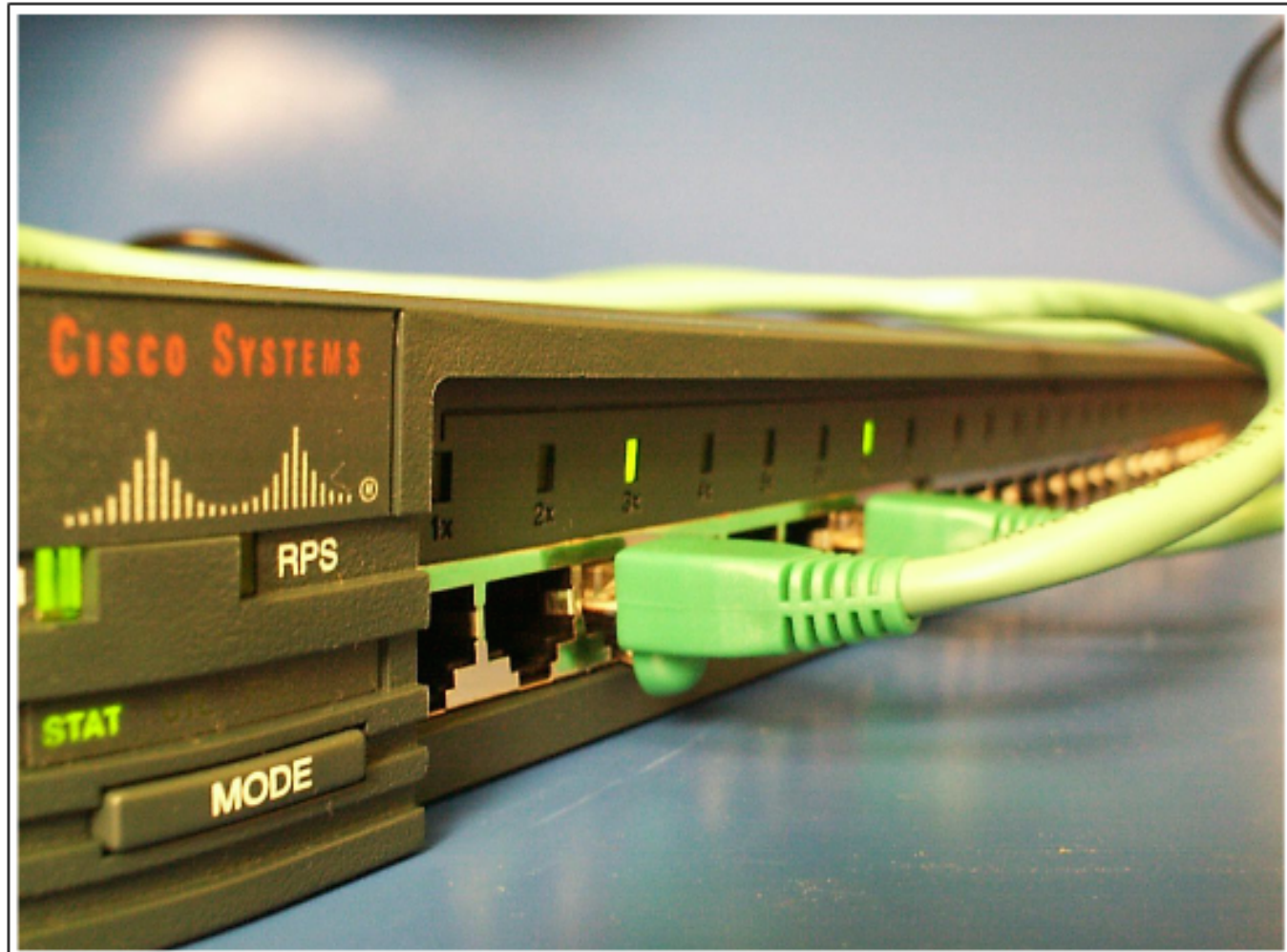
## 8 Port Hub



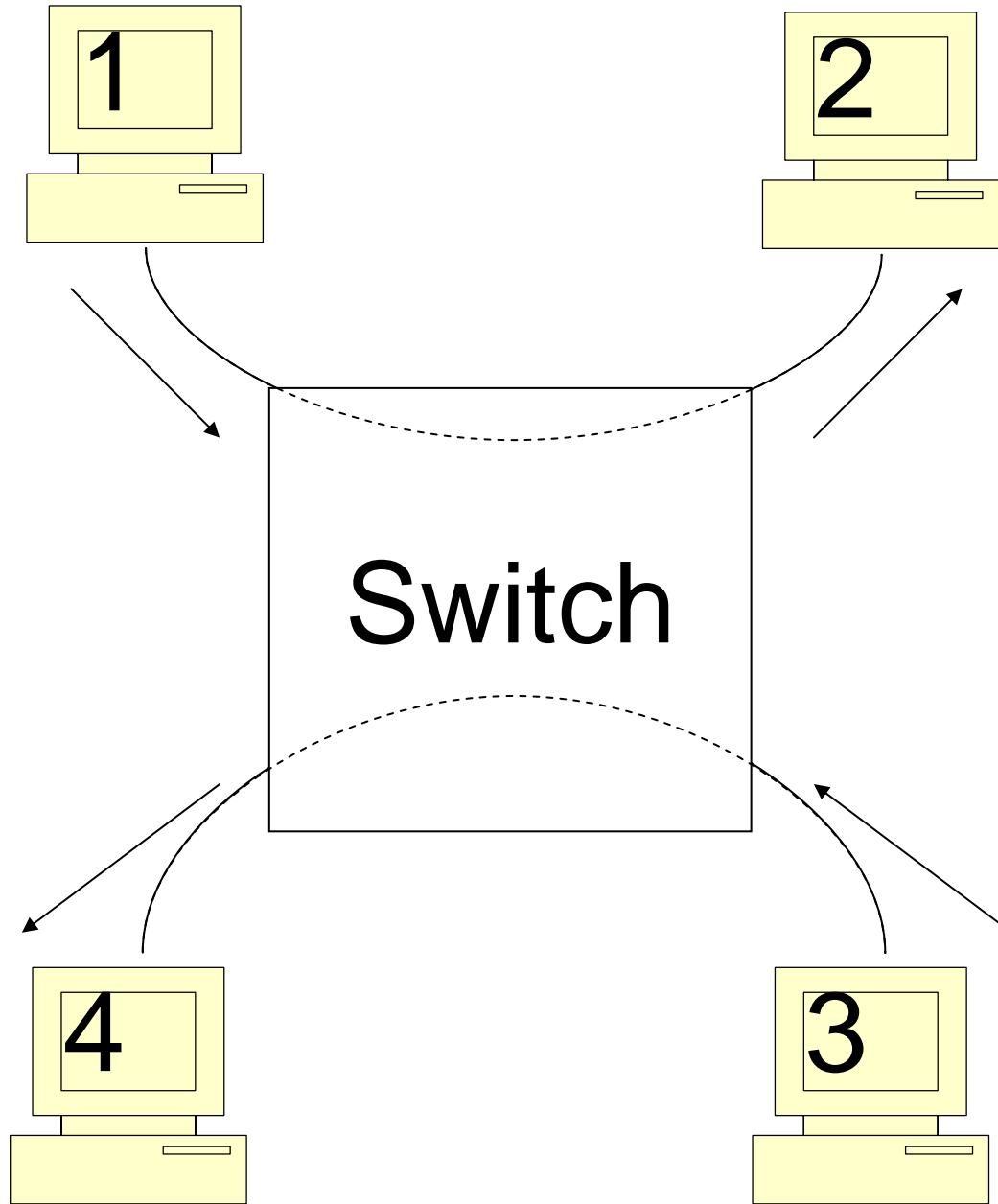
## Bridges Segmenting a Network



## Cisco 2900 Series Switch

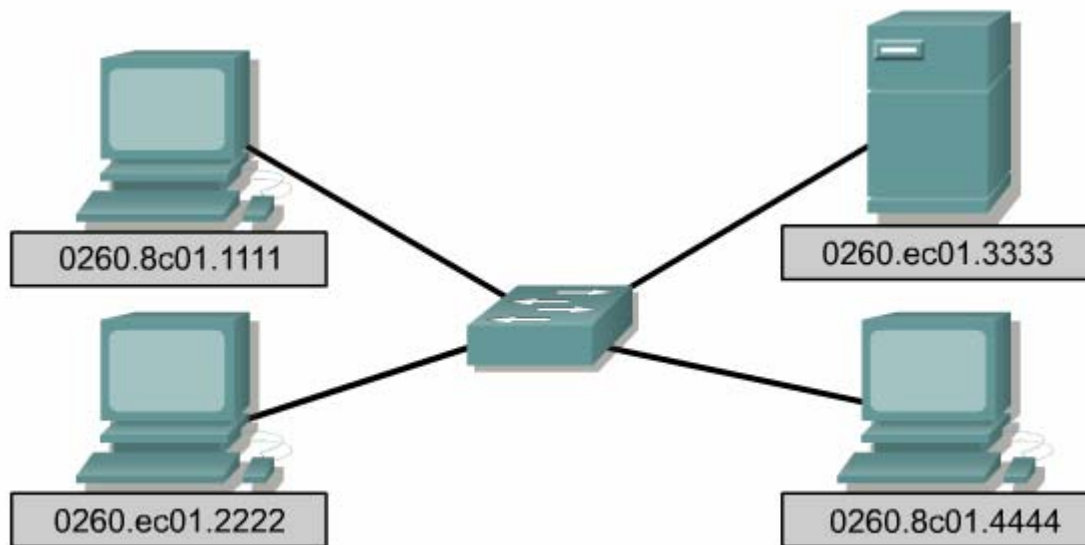




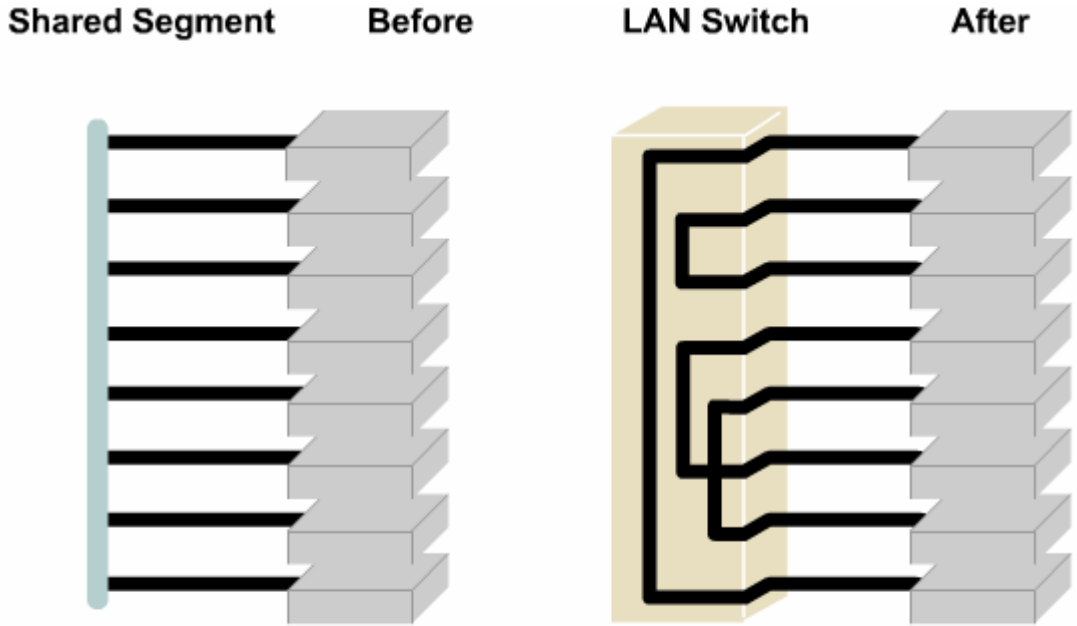


# Switching Table

Interface	MAC Address
E0	0260.8c01.1111
E1	0260.ec01.2222
E2	0260.ec01.3333
E3	0260.8c01.4444



# Microsegmentation of the Network

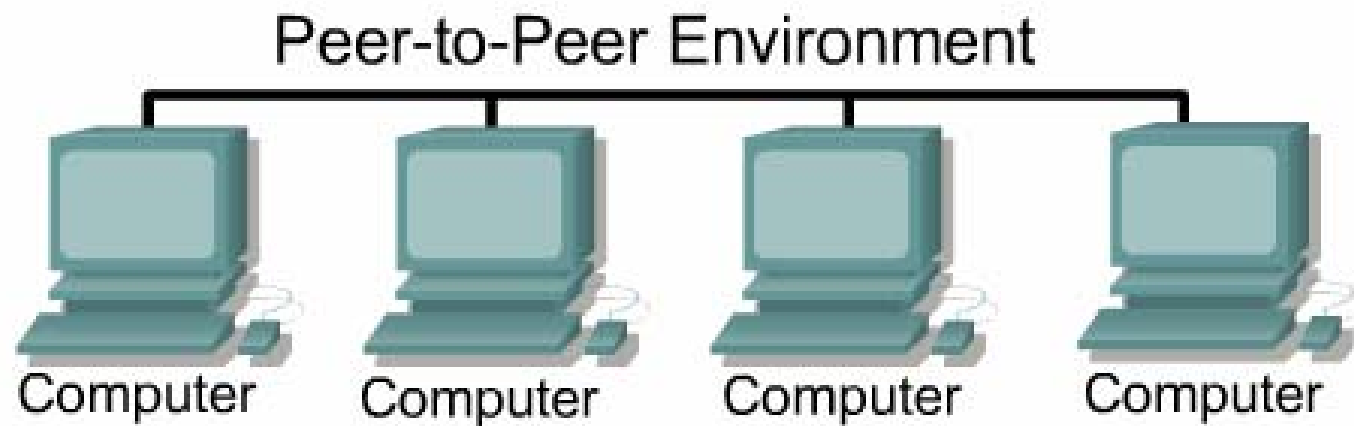


**All Traffic Visible on Network Segment**

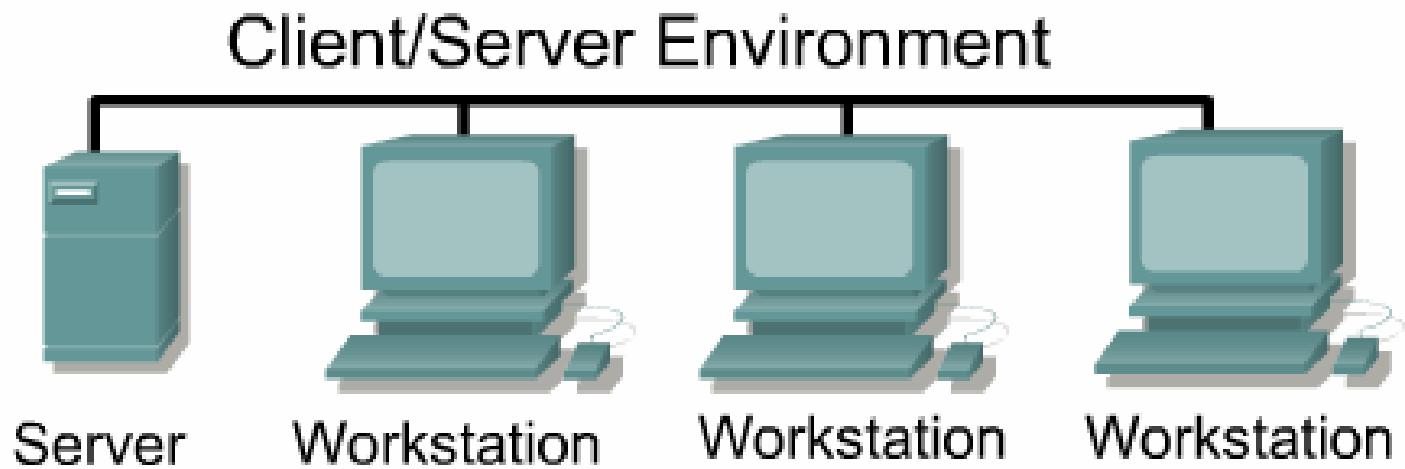
**Multiple Traffic Paths within Switch**

Dedicated paths between sender and receiver hosts.

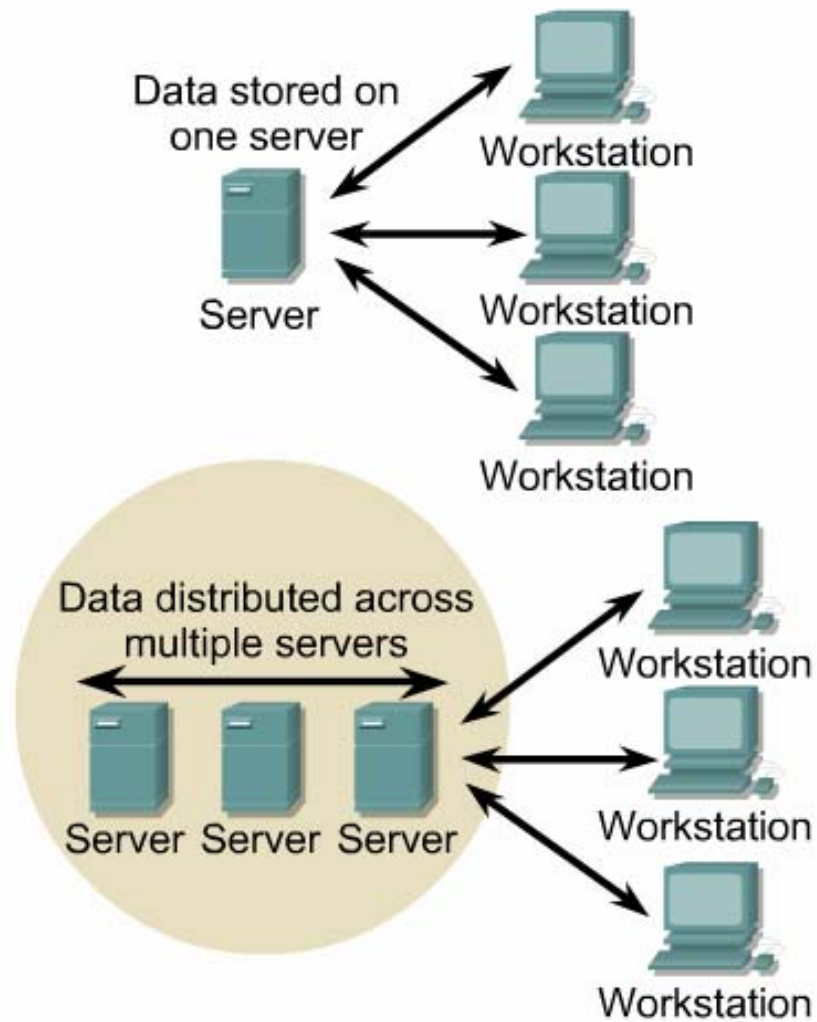
## Peer-to-Peer Network



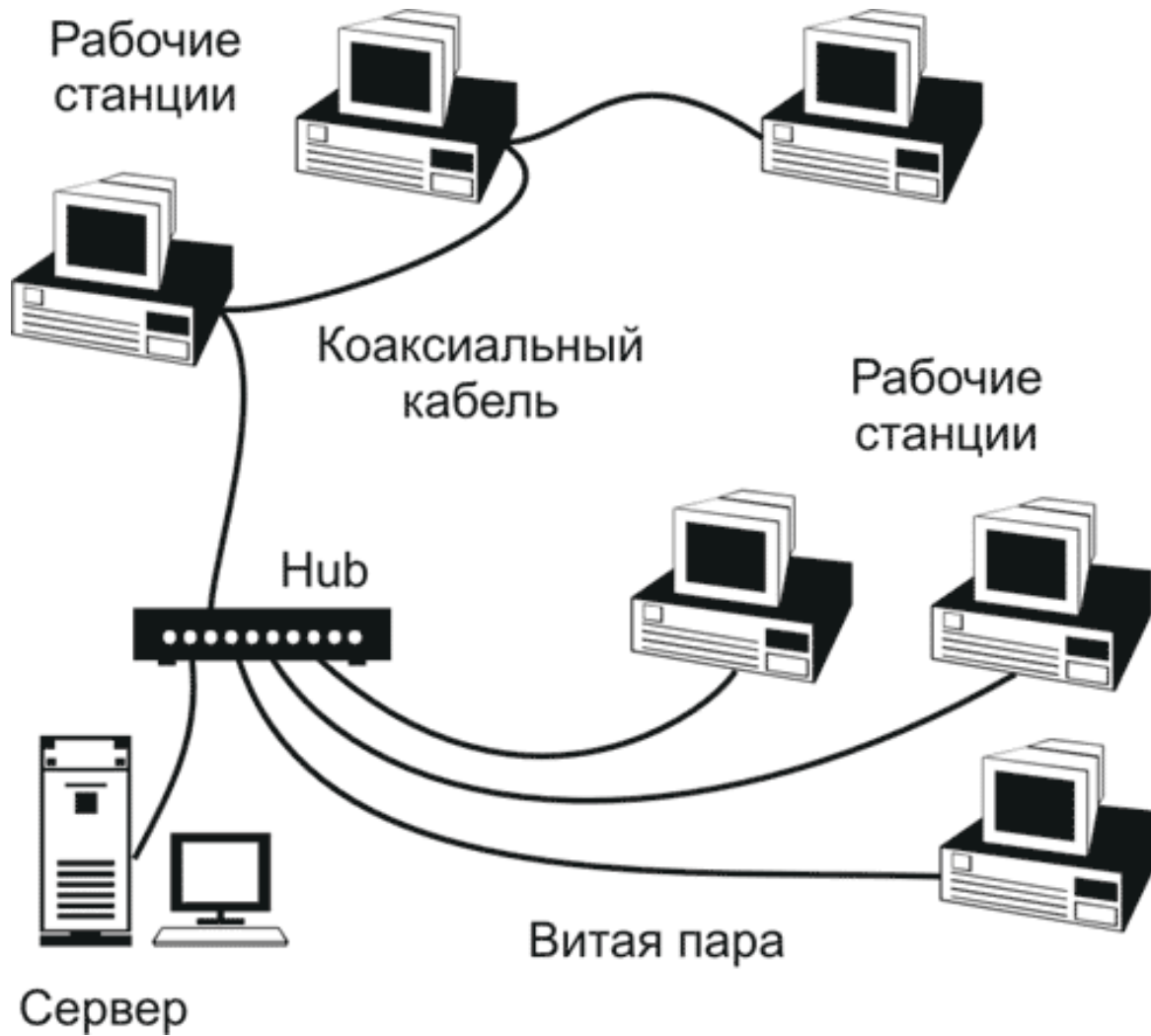
## Client/Server



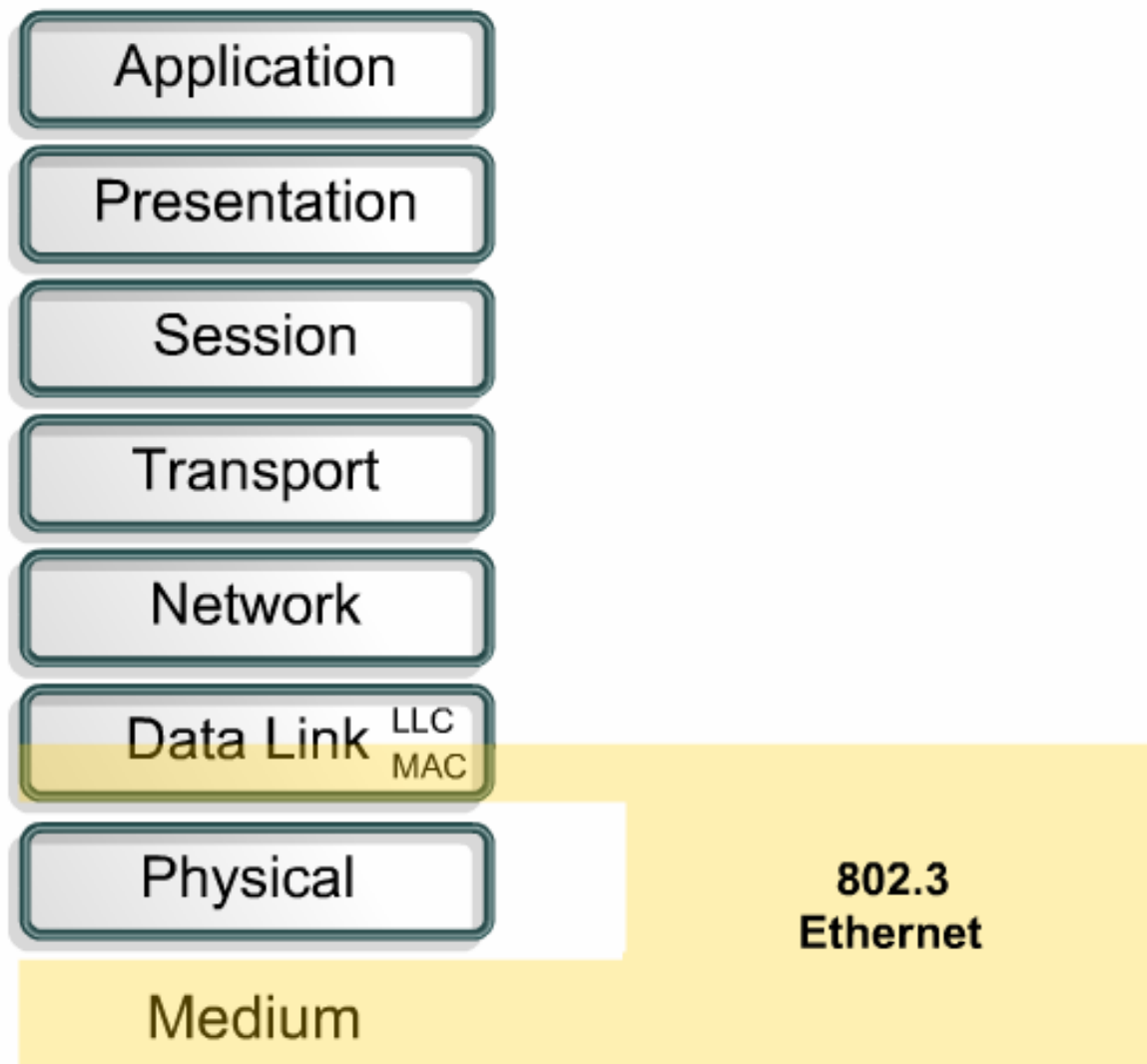
# Client/Server



# Схема "классического Ethernet"



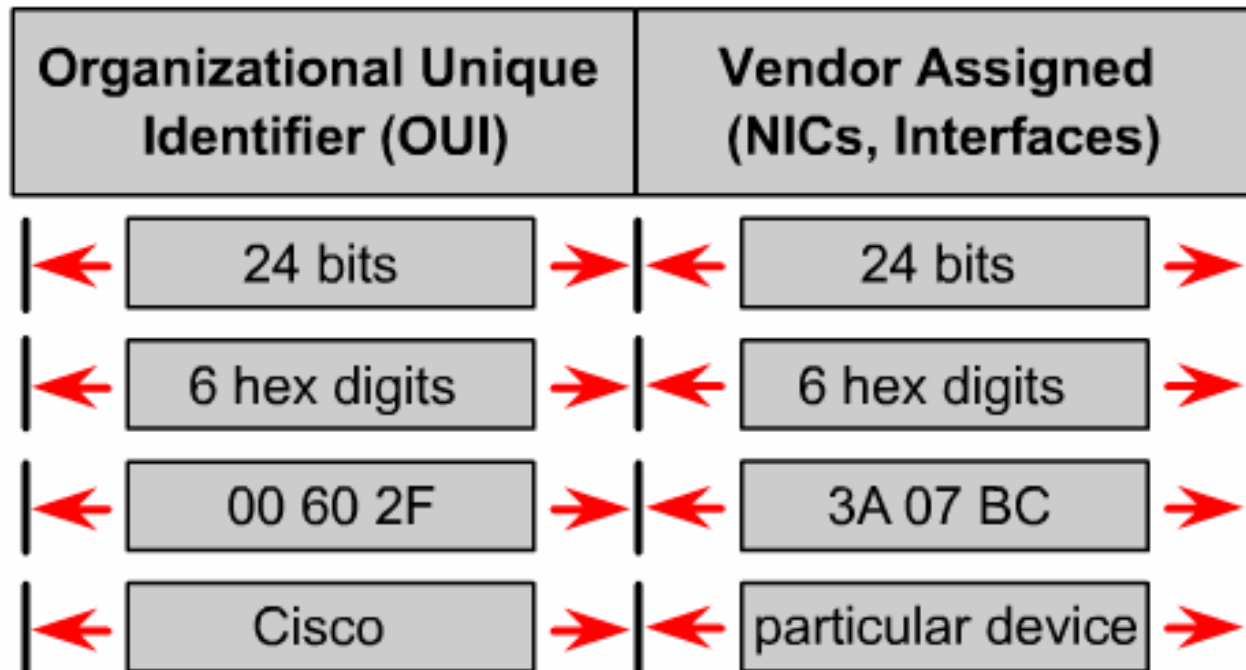
## 802.3 Ethernet in Relation to the OSI Model



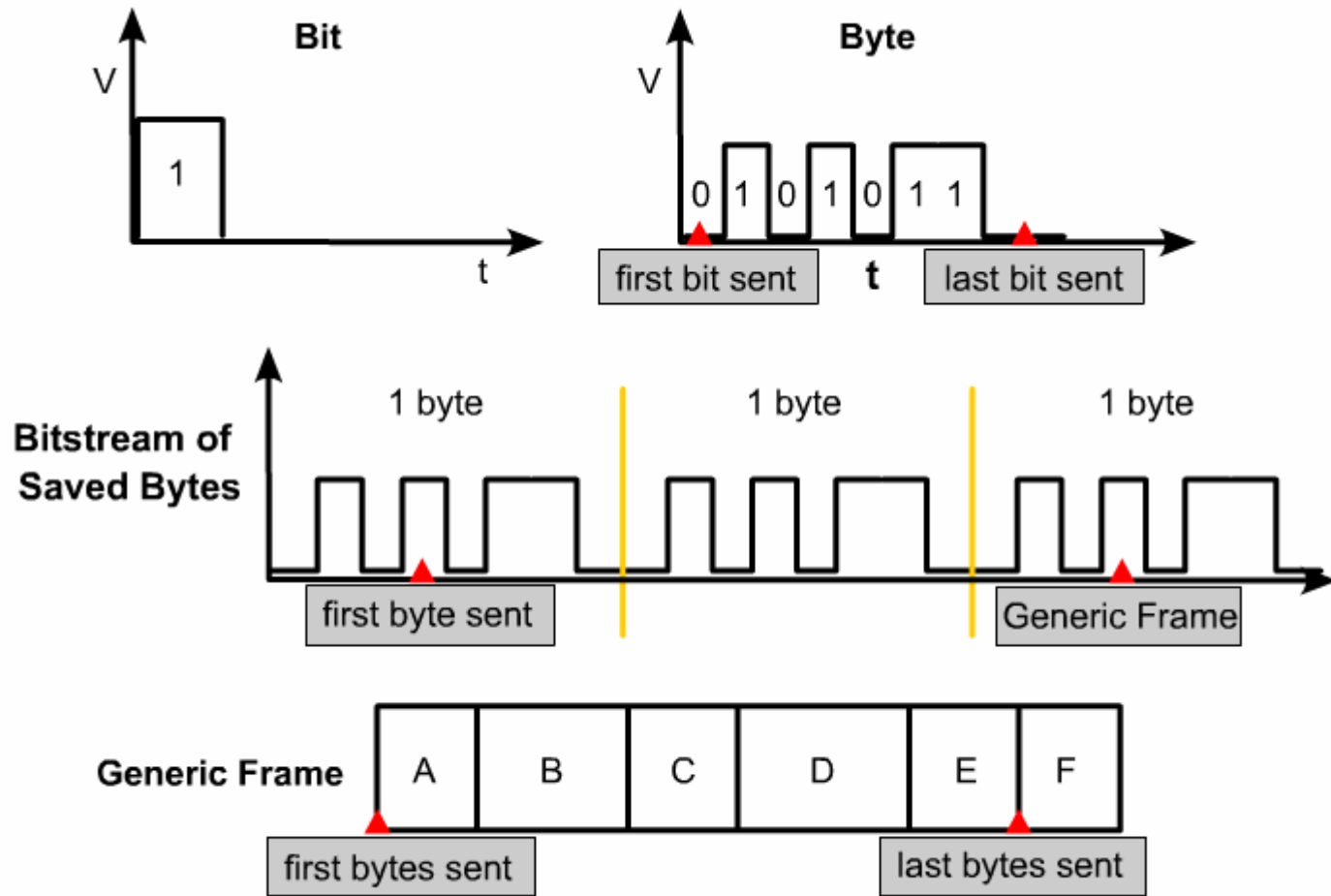




## MAC Address Format



# From Frames to Bits



A, B, C, D, E, F multiple, often many, bytes

## Generic Frame Format

Field Names				
A	B	C	D	E
Start Frame Field	Address Field	Type/Length Field	Data Field	FCS Field

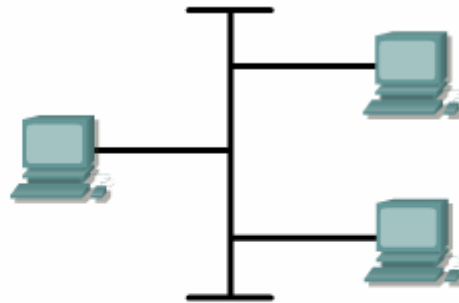
## Ethernet II and IEEE 802.3 Frame Formats

IEEE 802.3						
7	1	6	6	2	64 to 1500	4
Preamble	Start of Frame Delimiter	Destination Address	Source Address	Length Type	802.2 Header and Data	Frame Check Sequence

Ethernet II						
8	6	6	2	64 to 1500	4	
Preamble	Destination Address	Source Address	Type	Data	Frame Check Sequence	

# Common LAN Technologies

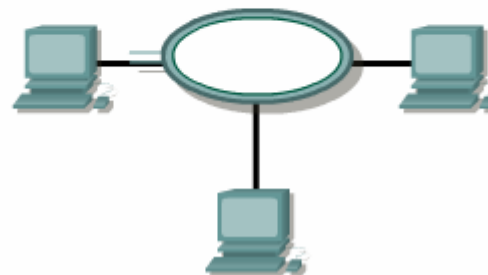
**Ethernet**



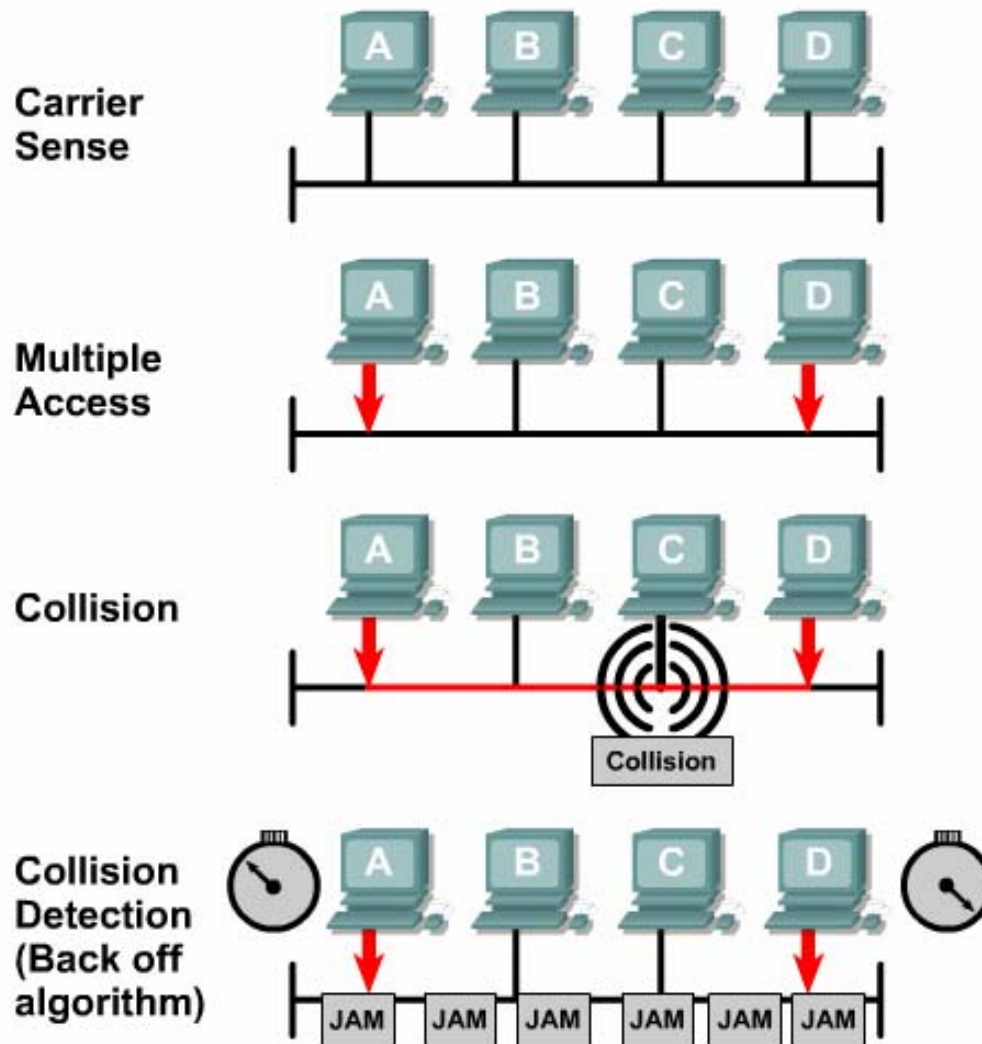
**Token Ring**

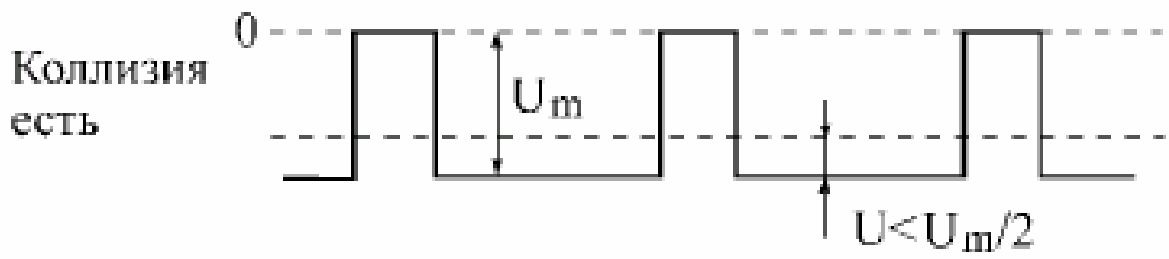
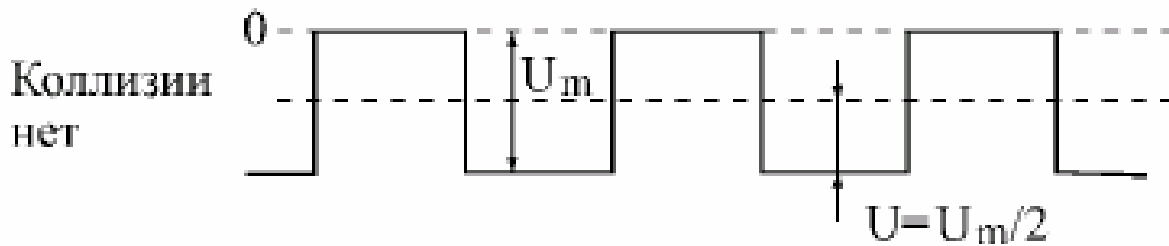
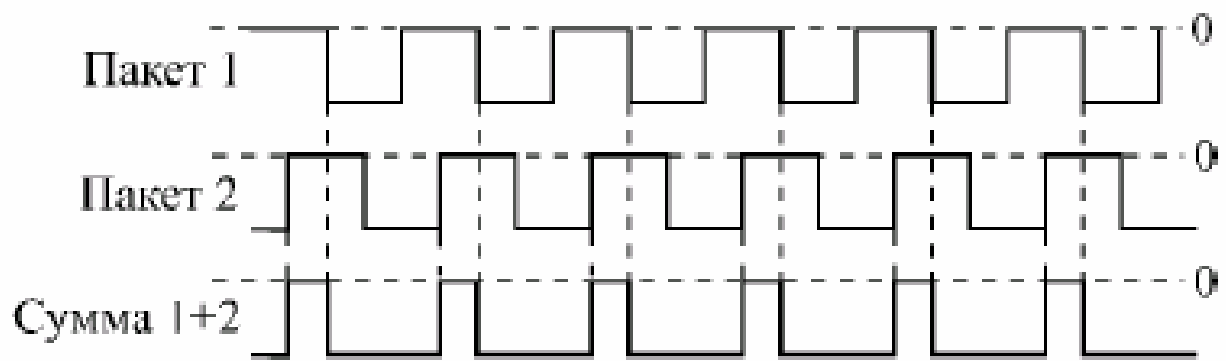


**FDDI**

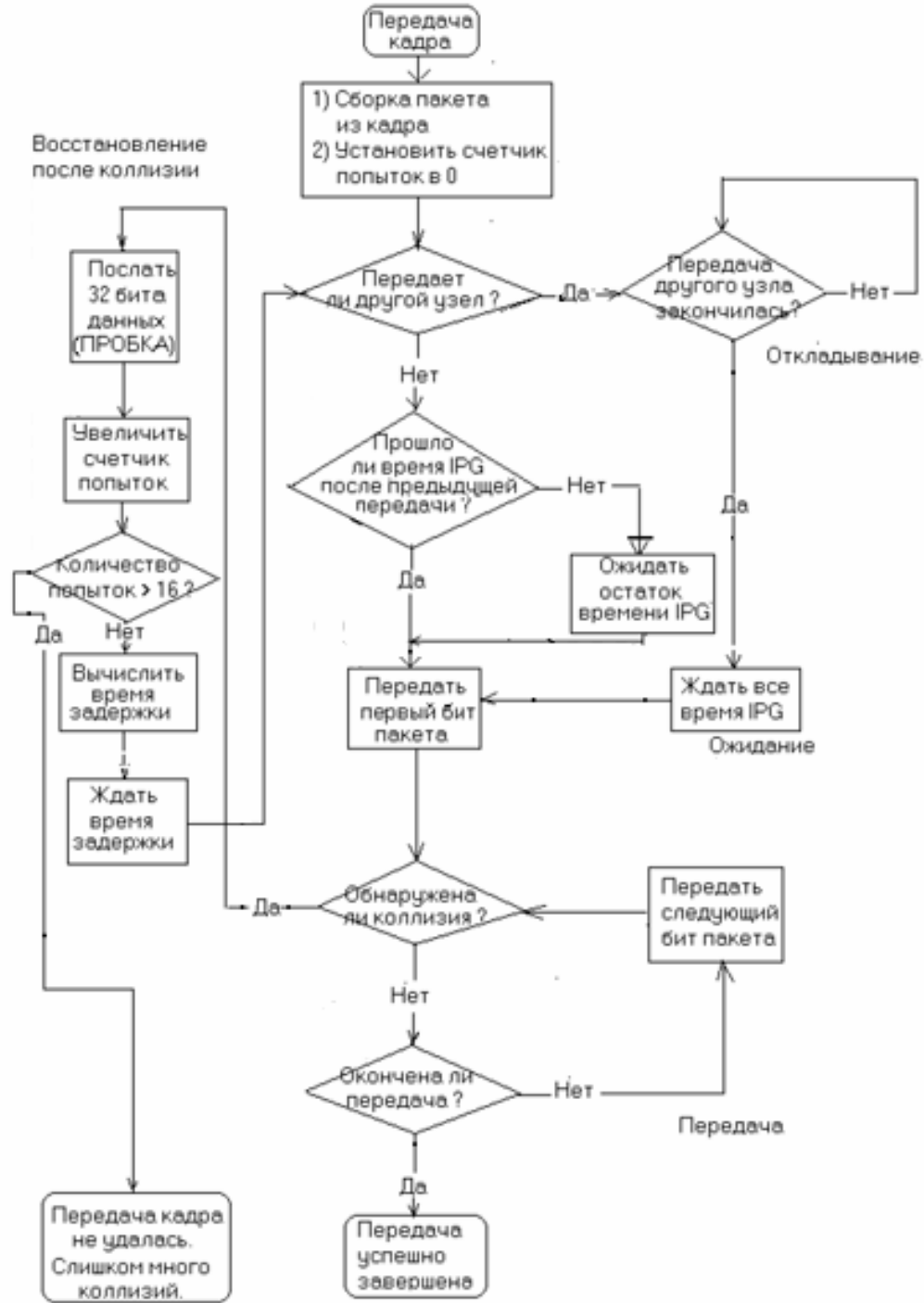


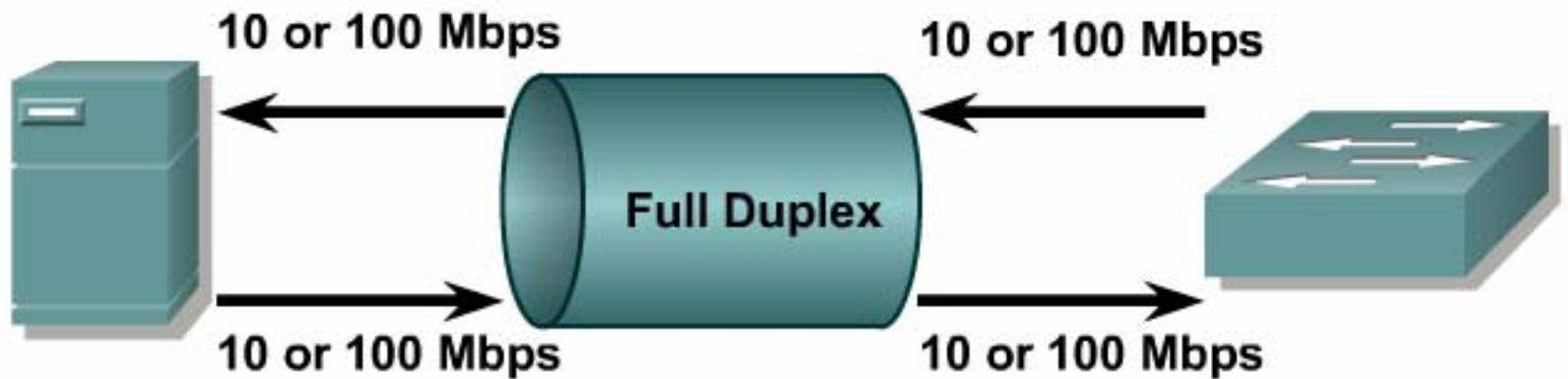
# CSMA/CD



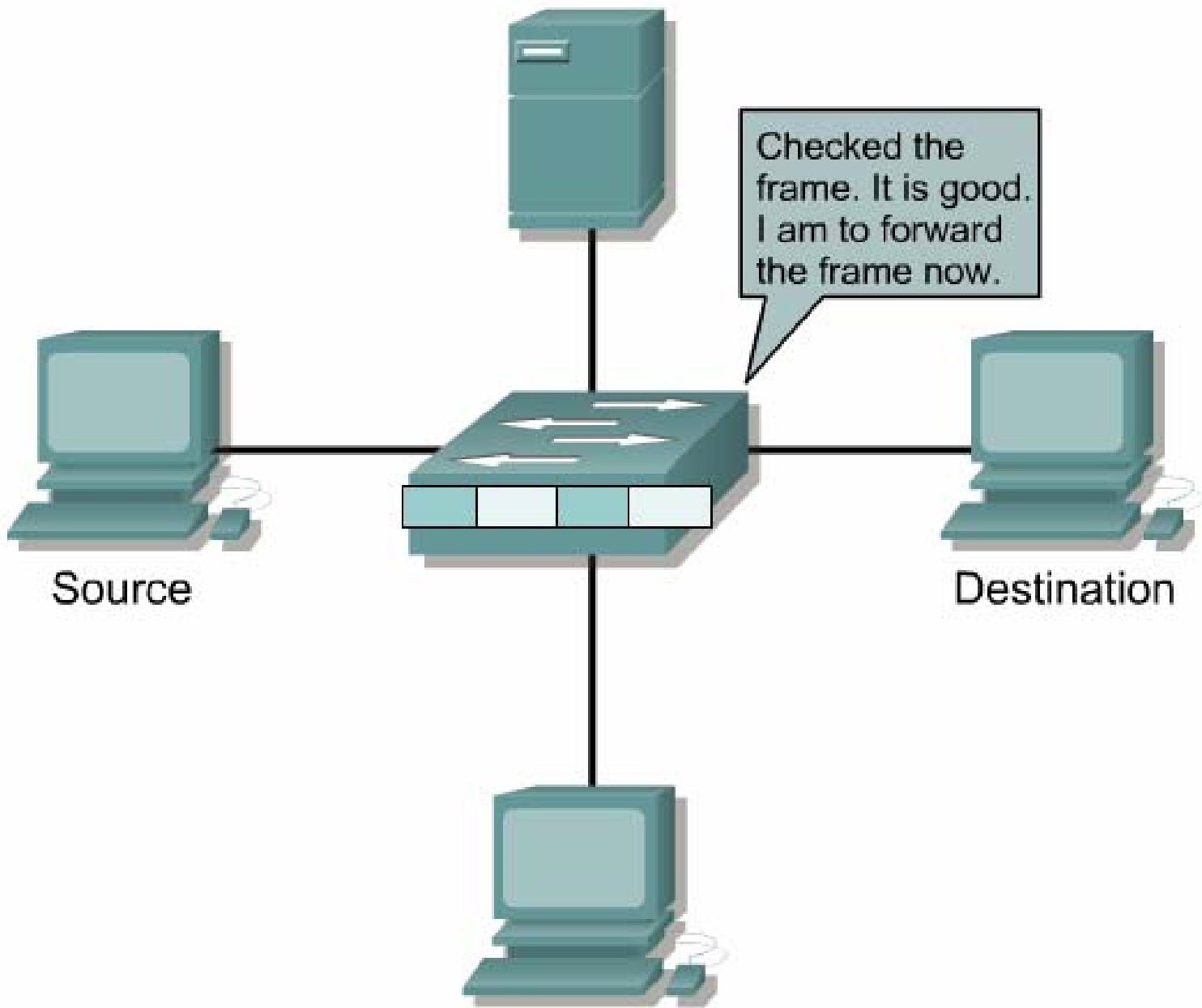








- Doubles bandwidth between nodes
- Collision-free transmission
- Two 10- or 100- Mbps data paths



Source

Destination

Checked the frame. It is good. I am to forward the frame now.

