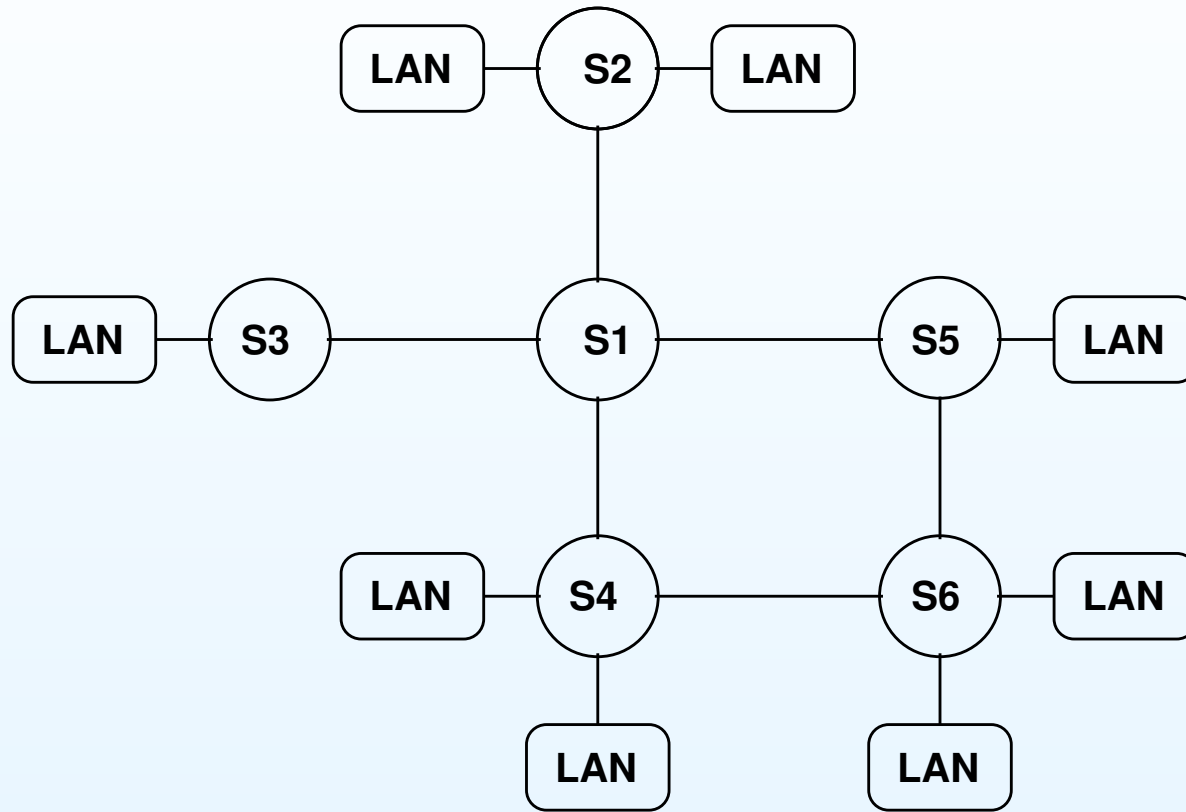


# Switching



**Switching Network**

# Switching

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Switching is the process that moves a unit of information through the network according to some set of rules.

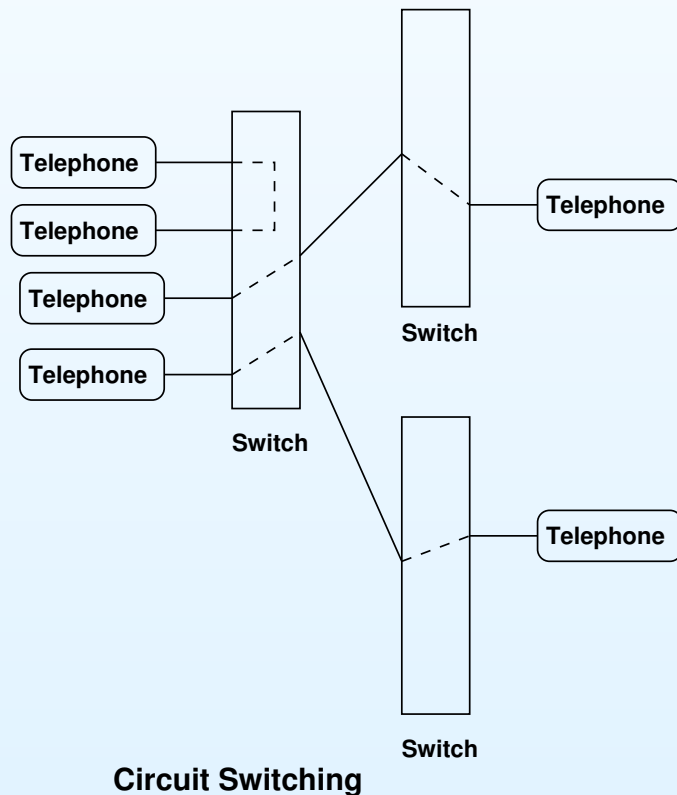
By contrast Routing is the process that determines the best route for those units to follow

There are three types of switching networks:

- Circuit switching networks
- Packet switching networks
- Virtual-circuit switching networks

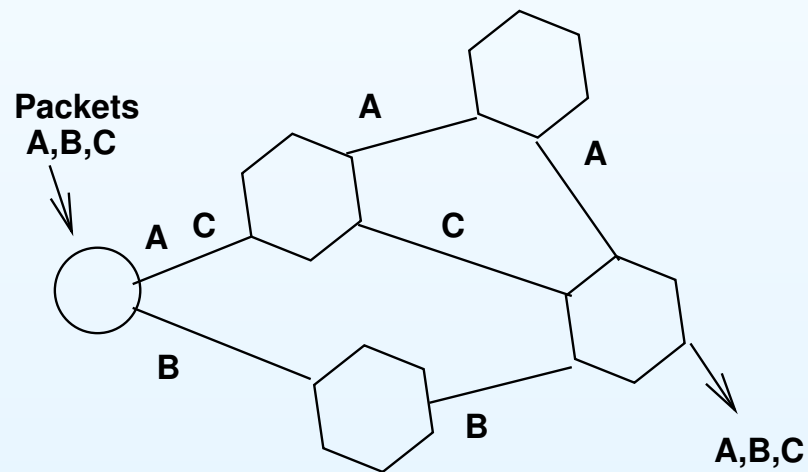
# Circuit Switching

- The route is chosen at connect time and does not change during the life of the connection.
- An example is the old telephone system where dialing the phone initiated the connection.



# Packet Switching

- Each packet is routed independently.
- An example is the postal system, where each letter in a series of letters is handled independently.
- Routers are used as switches.



**Packet Switching**

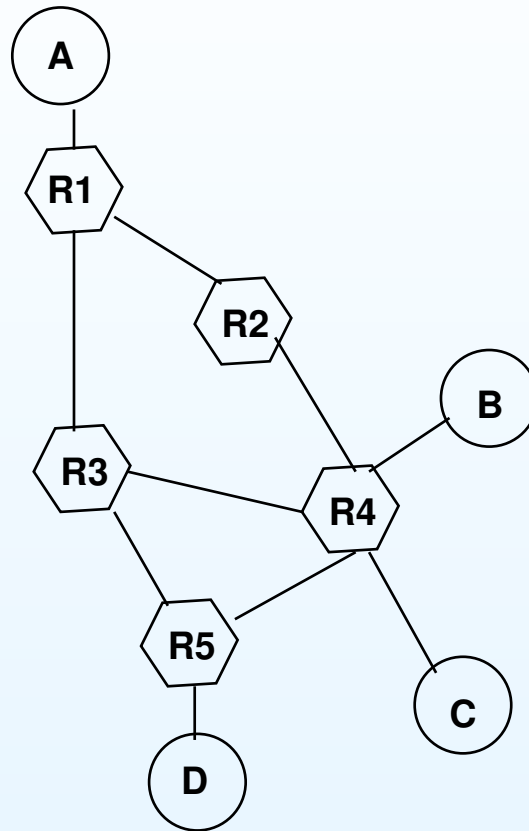
# Routing Tables

**Table for R3**  
Dest      Send To

A	R1
B	R4
C	R4
D	R5

**Table for R1**  
Dest      Send To

A	Local
B	R2
C	R3, R2
D	R3



**Routing Table for R3**

- Tables also include metrics for selecting routes.