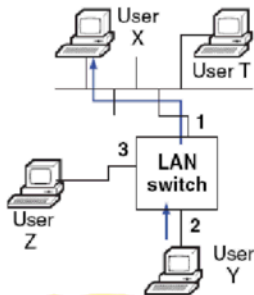
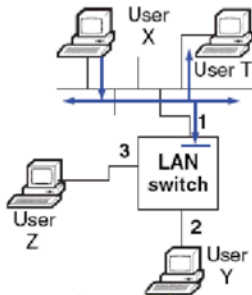


Functions of an Ethernet Switch

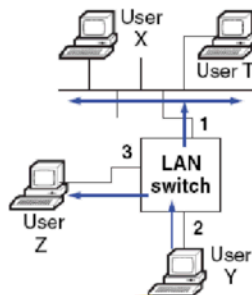
- Uses tables similar to the routing tables but based on the addresses of layer 2: It learns the address by analysing the frames received (automatic learning).
- It receives frames with any destination address and performs one of three functions: forwarding, broadcast (flooding) and filtering.



Forwarded: packet
from Y to X



Filtered: packet
from X to T



Flooded: packet
from Y to Z

Fonte: I. Kaminow et al. "Optical Fiber Telecommunications", Academic Press, p. 361

Source address table

MAC address	Port
X	1
Y	2
T	1

When Z starts transmitting the Source Address Table learns the address



MAC address = Z, Port = 3