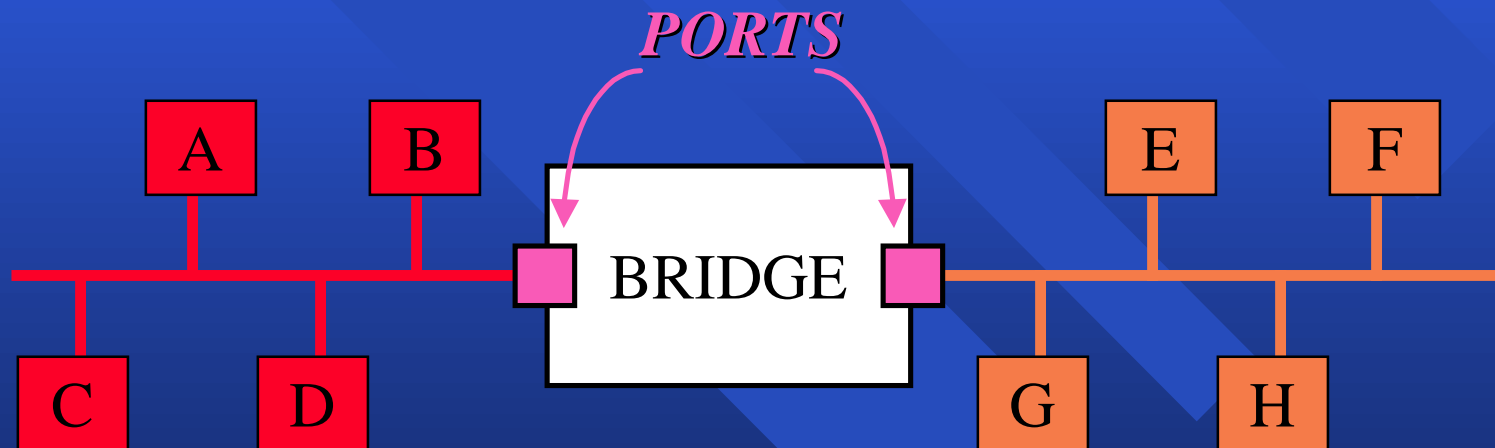
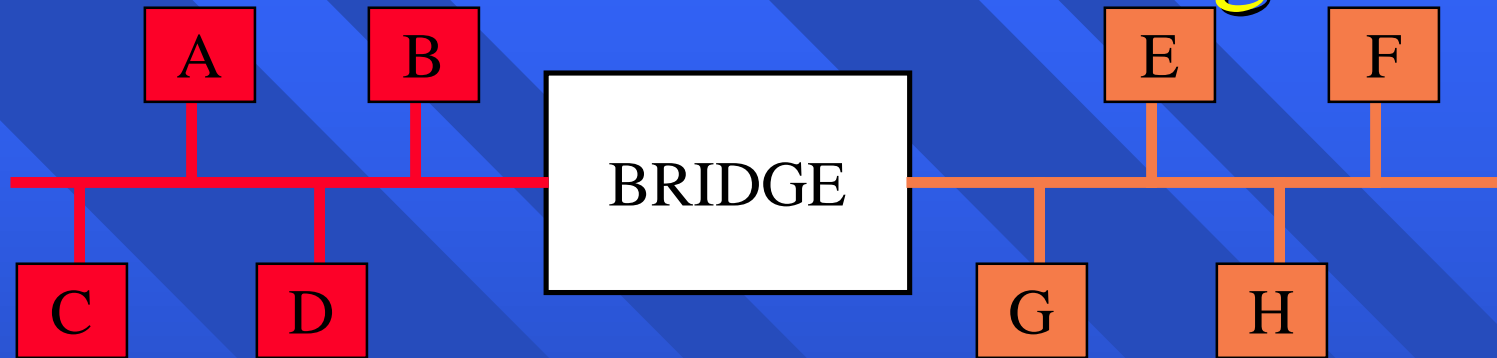


Bridge Software

- A bridge connects networks and forwards frames from one network to another.



Selective Forwarding




- If **A** sends a frame to **E** - the frame must be forwarded by the bridge.
- If **A** sends a frame to **B** - there is no reason to forward the frame.

Bridge Database

- The bridge needs a database that contains information about which hosts are on which network.
- The realistic options are:
 - The system administrator can create and maintain the database.
 - The bridge can acquire the database on the fly.

Hard to add new computers



Some loss of efficiency



Learning the host mapping

- The bridge forwards packets for which it does not know which network the destination is on.
- Everytime the bridge forwards a packet it can record the network on which the sender is located.
- Each host mapping expires when it is unused for a “long” period of time.

Learning Bridge

- A host can be moved to another network.
- New hosts can be added at any time.
- Requires no setup information from humans.
- One MAJOR flaw:

What is the problem ?

