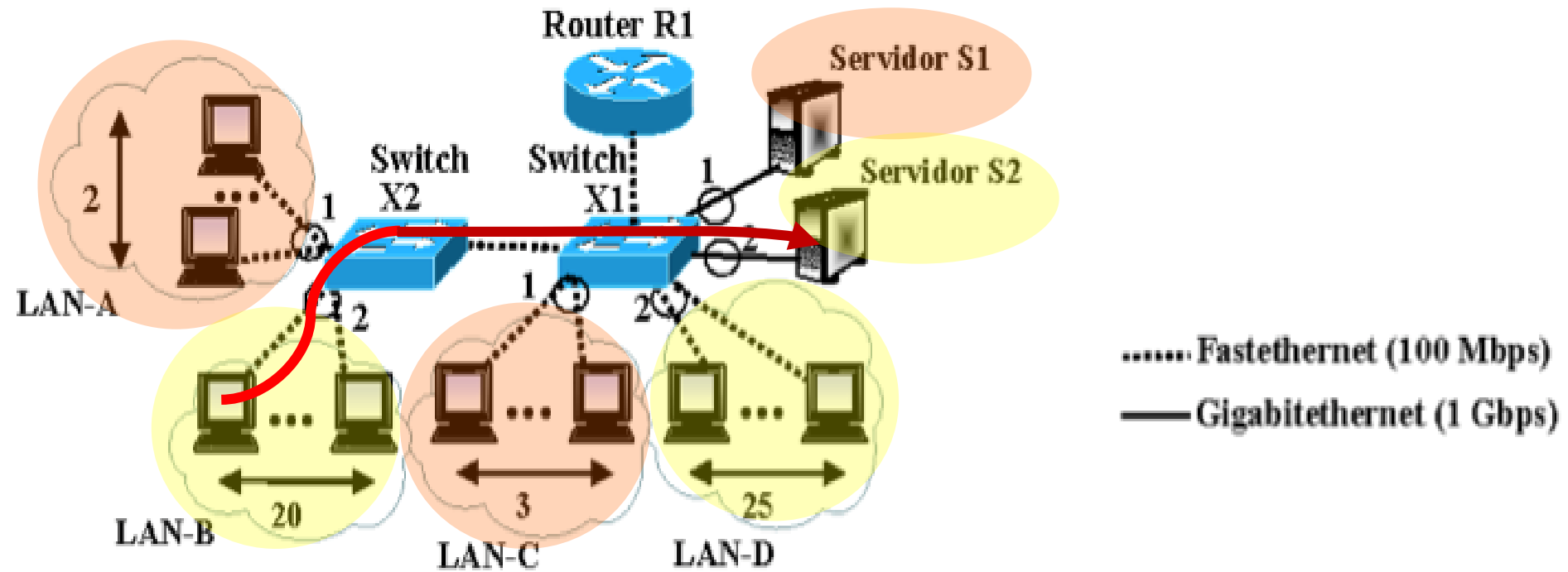
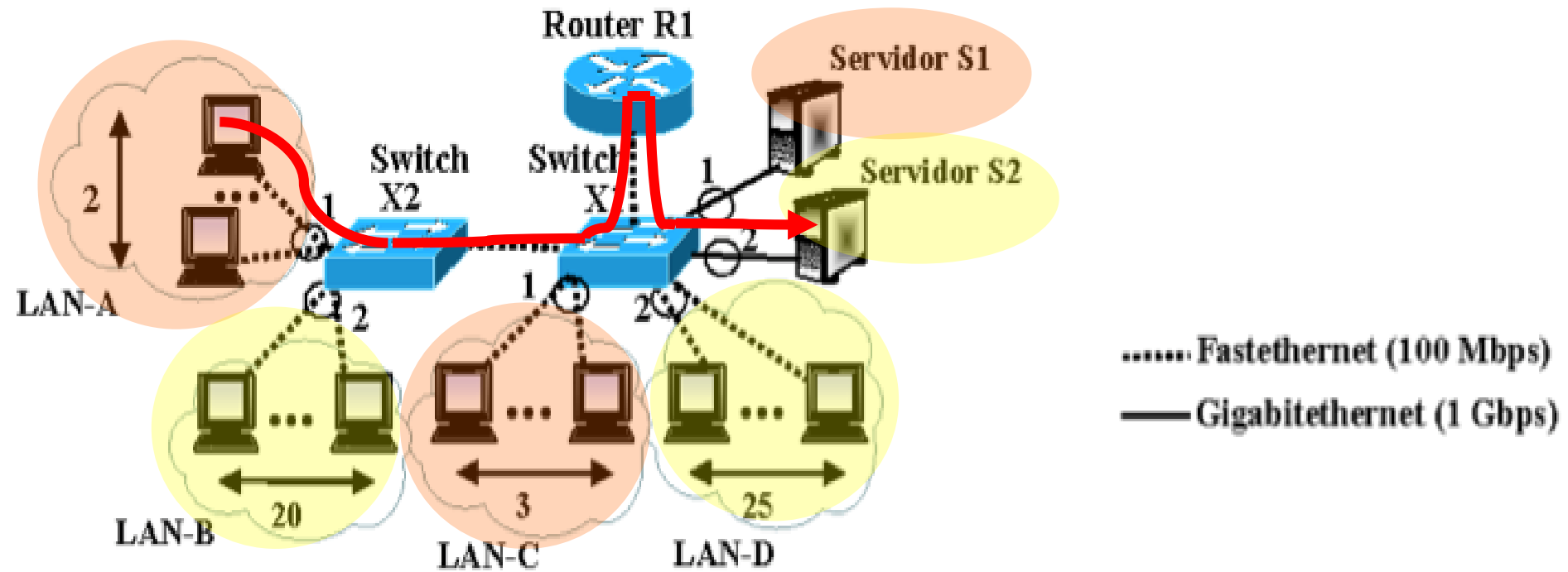


Llista la seqüència de dispositius que intervenen en cada un dels casos següents:

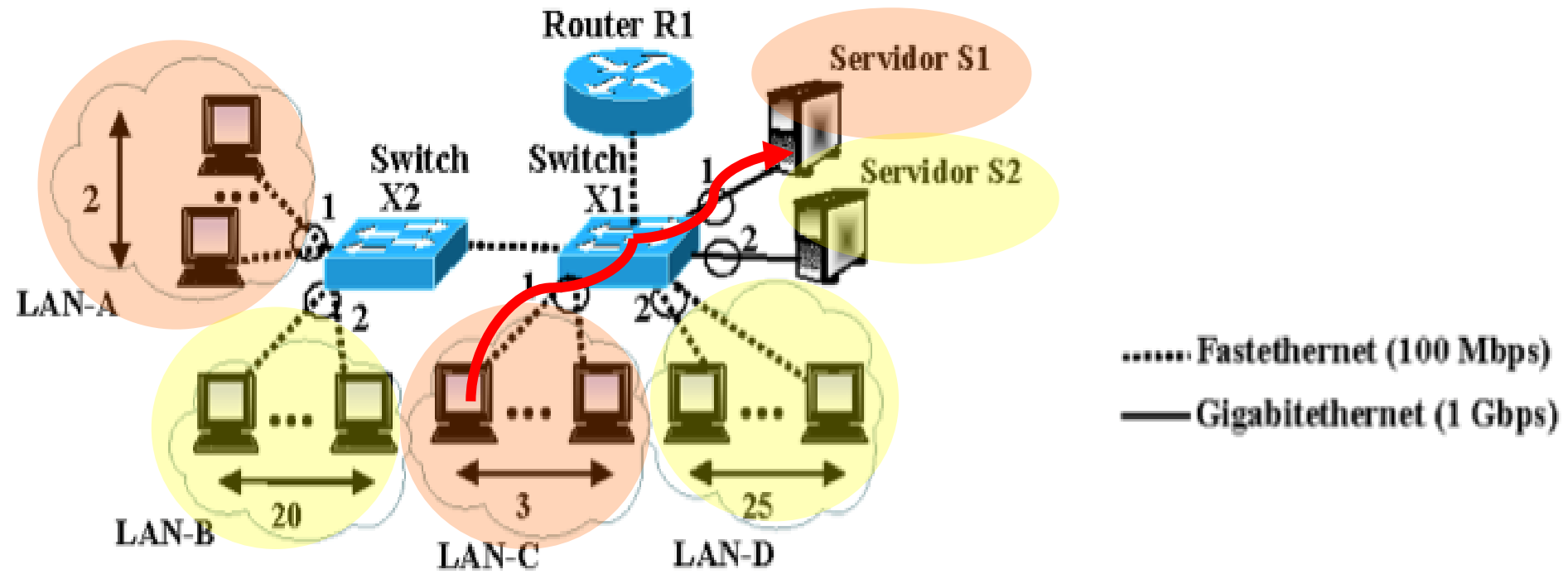
- 1) Un dispositiu de LAN-B envia dades a S2
- 2) Un dispositiu de LAN-A envia dades a S2
- 3) Un dispositiu de LAN-C envia dades a S1
- 4) Quins són els enllaços que estan en mode Trunk?
- 5) El servidor S1 envia tràfic a S2. Hi ha algun coll d'ampolla? S'aplica control del flux? Com?
- 6) El servidor S2 envia tràfic a tots els dispositius de VLAN2. Quin és la velocitat de transmissió per a cada dispositiu?



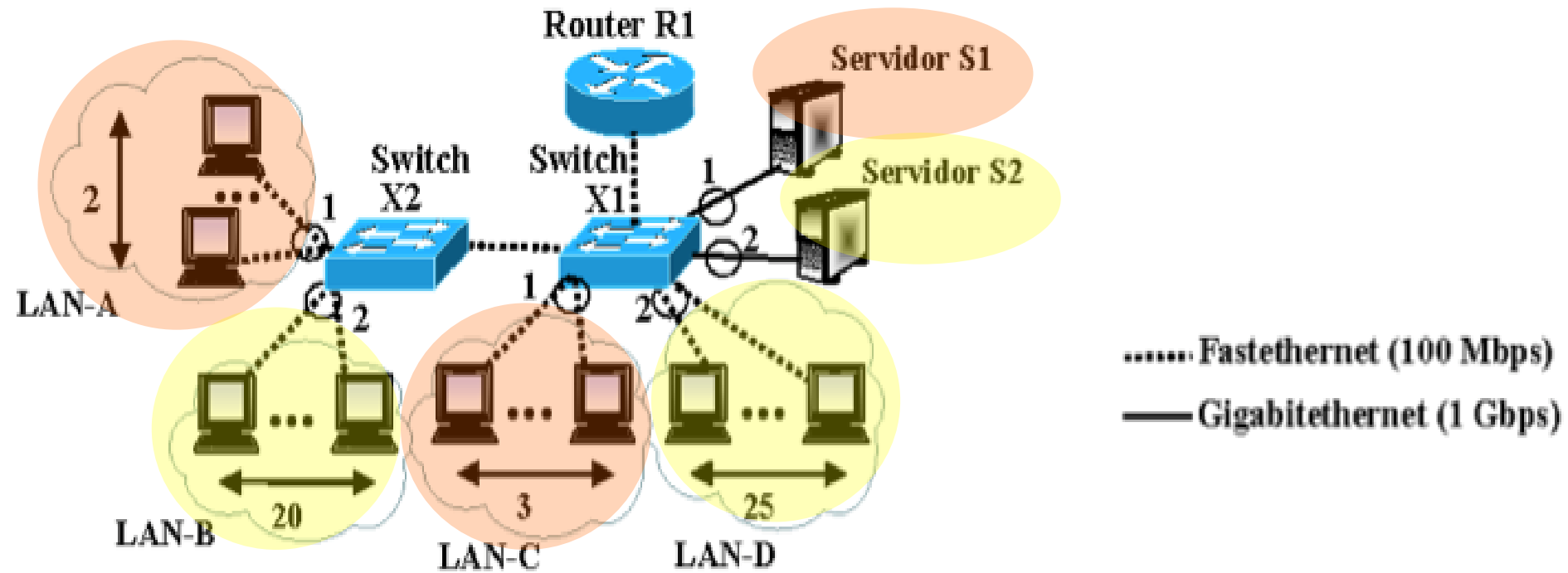
A host in LAN-B sends data to S2



A host in LAN-A sends data to S2



A host in LAN-C sends data to S1

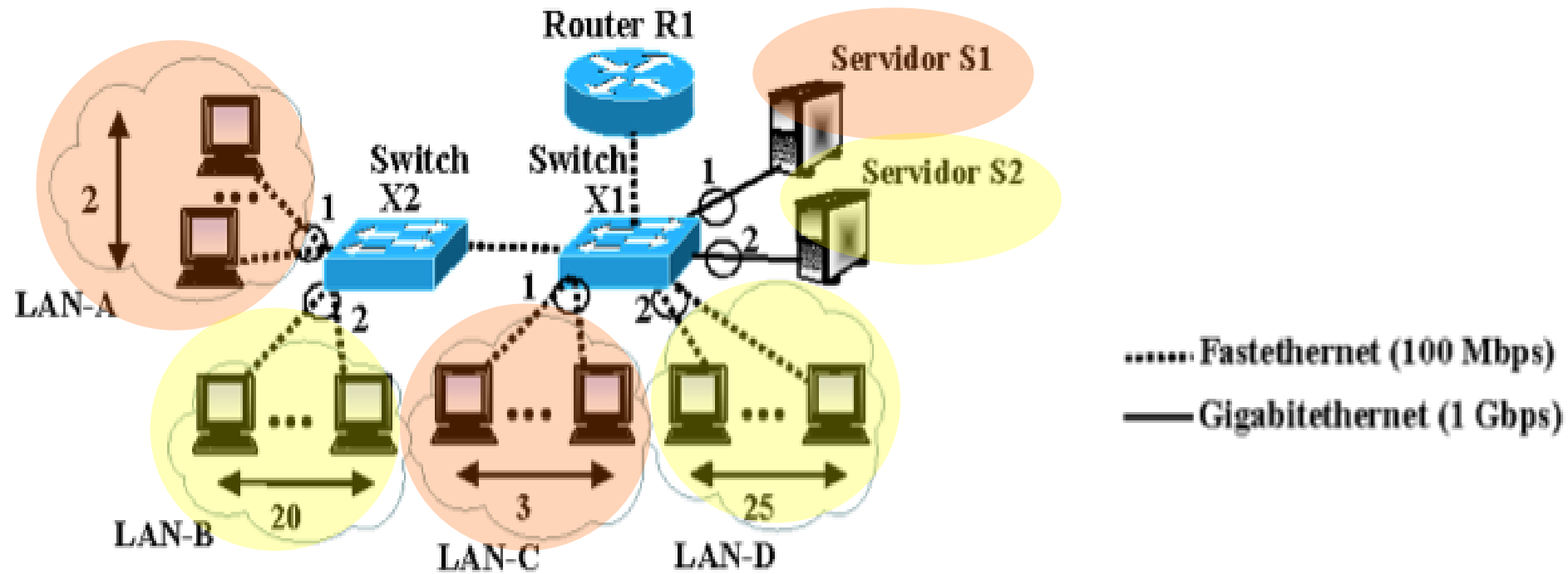


4) Which links should be configured in Trunk mode ?

**X1-X2 and X1-R1**

5) Server S1 sends traffic to S2. Is there any bottleneck? Does flow control apply? How?

**X1-R1 link has 100Mbps capacity only! Flow control limits to 100Mbps (pause frames)**



6) Server S2 sends traffic to all devices in VLAN2. What is the throughput for each device?

Traffic from S2 is distributed to switch X2 and LAN-B and to the 25 hosts in LAN-D.

X1-X2 limits to 100Mbps. Hosts in LAN-B receive  $100\text{Mbps}/20 = 5\text{ Mbps}$ .

The remaining 900Mbps are distributed among the 25 hosts in LAN-D. That is, 36Mbps.

TCP will distribute 1Gbps equally among the 45 receivers. That is 22.22Mbps each.

LAN-B:  $20 \times 22.22 = 444\text{Mbps}$ .