Exercises

• 6-15) In Figure 6-20, suppose that a new flow E is added that takes a path from R1 to R2 to R6. How does the max-min bandwidth allocation change for the five flows?

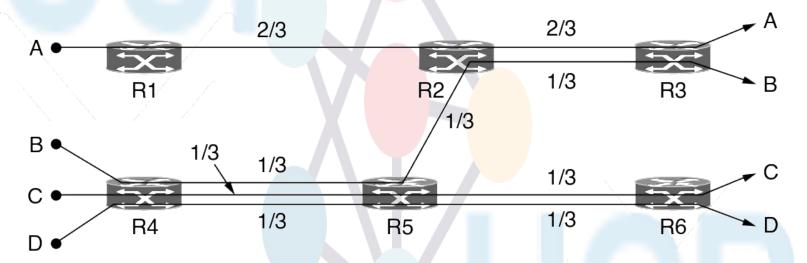


Figure 6-20. Max-min bandwidth allocation for four flows.

Exercises

 6-20) Two hosts simultaneously send data through a network with a capacity of 1 Mbps. Host A uses UDP and transmits a 100 bytes packet every 1 msec. Host B generates data with a rate of 600 kbps and uses TCP. Which host will obtain higher throughput?

 6-23) Both UDP and TCP use port numbers to identify the destination entity when delivering a message. Give two reasons why these protocols invented a new abstract ID (port numbers), instead of using process IDs, which already existed when these protocols were designed.