تمرین هفتم درس شبکه های کامپیوتری ۲

دکترهاشمی

ترم ۴۰۲۲

سپهر عبادی
۹۹۳۳۲۴۳

P29. Consider the MPLS network shown in Figure 6.29, and suppose that routers R5 and R6 are now MPLS enabled. Suppose that we want to perform traffic engineering so that packets from R6 destined for A are switched to A via R6-R4-R3-R1, and packets from R5 destined for A are switched via R5-R4-R2-R1. Show the MPLS tables in R5 and R6, as well as the modified table in R4, that would make this possible.

R5

In label	Out label	Dest	Out interface
	5	A	0

R6

In label	Out label	Dest	Out interface
	7	A	0

R4

In label	Out label	Dest	Out interface
7	10	A	0
	12	D	0
5	8	A	1

P30. Consider again the same scenario as in the previous problem, but suppose that packets from R6 destined for D are switched via R6-R4-R3, while packets from R5 destined to D are switched via R4-R2-R1-R3. Show the MPLS tables in all routers that would make this possible.

R1

In label	Out label	Dest	Out interface
1	12	D	1

R2

In label	Out label	Dest	Out interface
4	1	D	0

R3

In label	Out label	Dest	Out interface
12		D	0

R4

In label	Out label	Dest	Out interface
3	12	D	0
2	4	D	1

R5

In label	Out label	Dest	Out interface
	2	D	0

R6

In label	Out label	Dest	Out interface
	3	D	0