電腦網路導論 HW3

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-IPv6

Internet Protocol version 6，a new version of Internet Protocal

Difference from IPv4

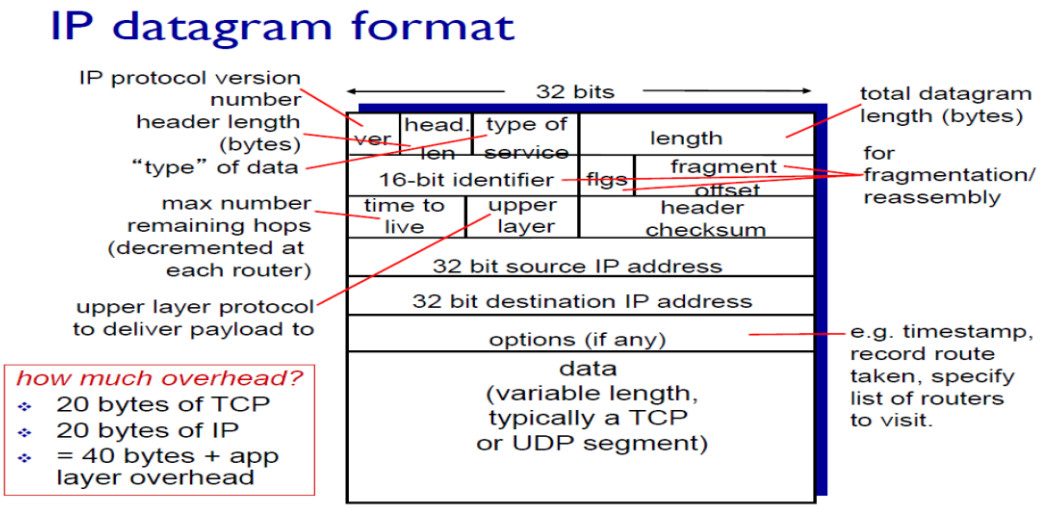
Number of identifier bits: 32 -> 128

Address expression: (ex) 140.112.2.3 -> 1079:3:6ED4::44:72BE

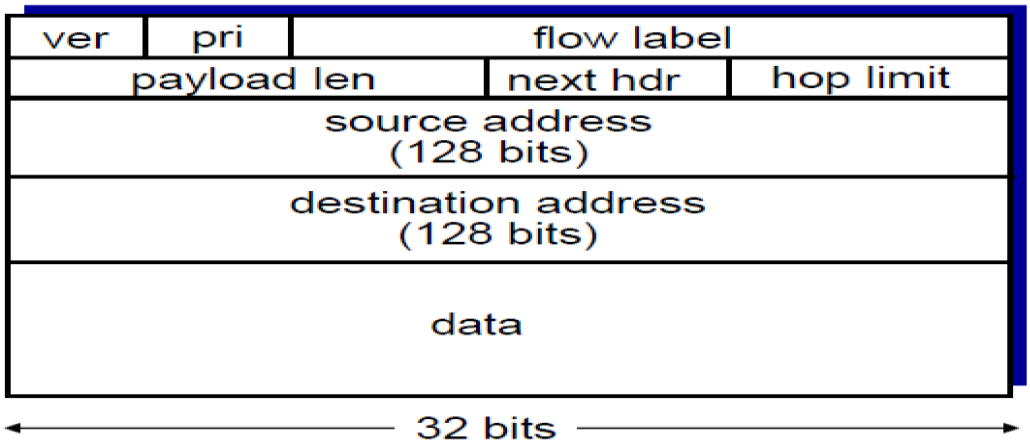
Safety: IPSec not open by default -> IPSec open by default

QoS: not available in headers -> available in headers

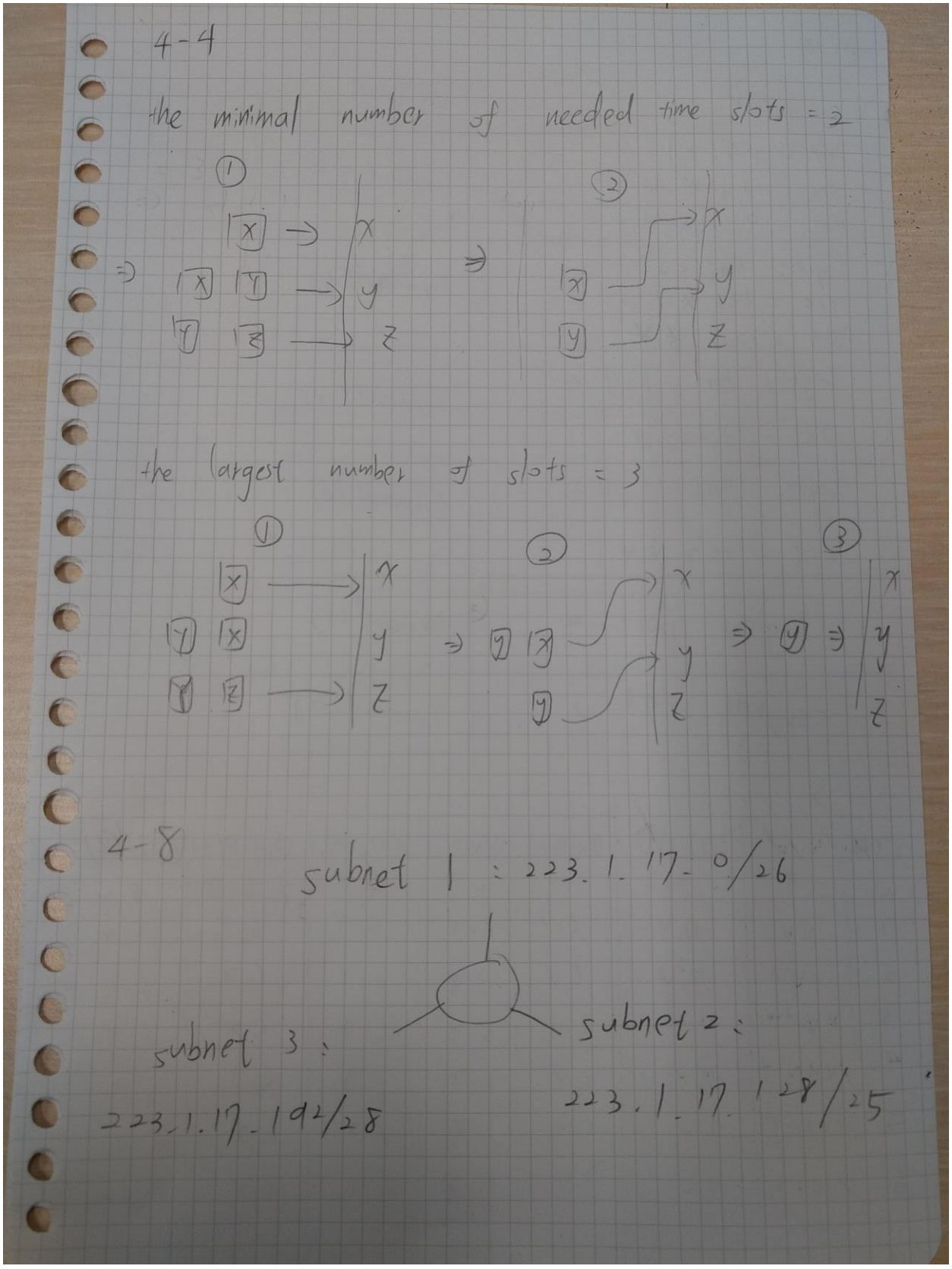
Format:



→



Hand written Part



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match	action
Ingress port = 1 src = 10.3.*.* Dst = 10.1.*.*	Forward (2)
Ingress Port = 2 src = 10.1.*.* Dst = 10.3.*.*	Forward (3)
Ingress port = 1 || 2 Dst = 10.2.0.3	Forward (3)
Ingress port = 1 || 2 Dst = 10.2.0.4	Forward (4)
Ingress port = 4	Forward (3)
Ingress port = 3	Forward (4)

5-3

step	N'	D(t), P(t)	D(u), P(u)	D(v), P(v)	D(w), P(w)	D(y), P(y)	D(z), P(z)
0	x	∞	∞	3, x	6, x	6, x	8, x
1	xv	17, v	6, v	3, x	6, x	6, x	8, x
2	xvu	17, v	6, v	3, x	6, x	6, x	8, x
3	xvuw	17, v	6, v	3, x	6, x	6, x	8, x
4	xvuwy	17, v	6, v	3, x	6, x	6, x	8, x
5	xvuwyt	17, v	6, v	3, x	6, x	6, x	8, x
6	xvuwytz	17, v	6, v	3, x	6, x	6, x	8, x

5-5

from \ to	u	v	x	y	z
v	∞	∞	∞	∞	∞
x	∞	∞	∞	∞	∞
z	∞	6	2	∞	0

	u	v	x	y	z
v	1	0	3	3	5
x	4	3	0	3	2
z	6	5	2	5	0

	u	v	x	y	z
v	1	0	3	∞	6
x	∞	3	0	3	2
z	17	5	2	5	0

	u	v	x	y	z
v	1	0	3	3	5
x	4	3	0	3	2
z	6	5	2	5	0

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(a) eBGP (b) iBGP

(c) eBGP (d) iBGP