

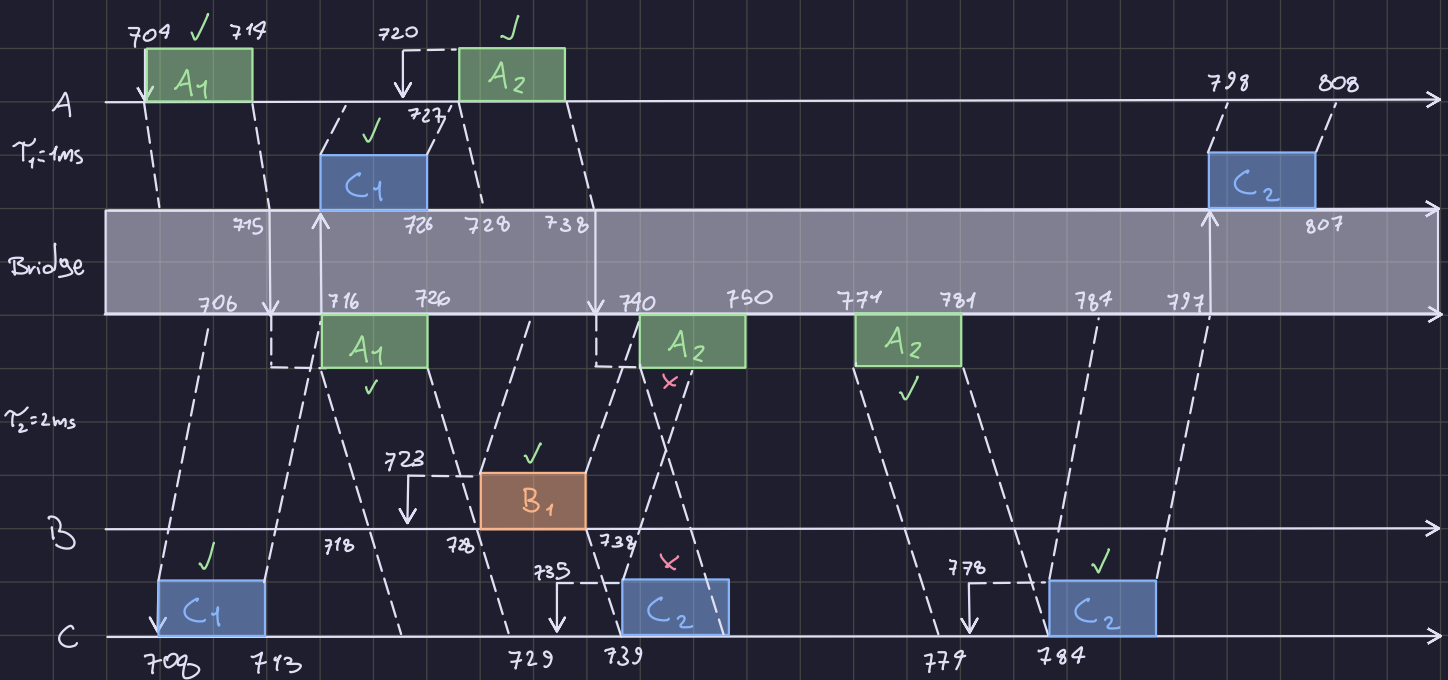
Esame 09/04/2012

Esercizio 1

$$\begin{aligned}
 &v = 1,6 \text{ Mbit/s} \\
 &L = 2000 \text{ byte} \\
 &\quad \uparrow \\
 &\quad \text{Fissato} \\
 &\quad \text{perché c'era} \\
 &\quad \text{un errore} \\
 &\quad \text{nell'esame}
 \end{aligned}
 \left.
 \begin{array}{l}
 \\
 \\
 \end{array}
 \right\}
 T = \frac{L}{v} = \frac{200 \cdot 8 \text{ bit}}{1,6 \cdot 10^6 \frac{\text{bit}}{\text{s}}} = 10 \text{ ms}$$

$$A \left\{ \begin{array}{l} 704 \rightarrow B \\ 720 \rightarrow B \end{array} \right.$$

$$B \left\{ \begin{array}{l} 703 \rightarrow A \\ 735 \rightarrow A \end{array} \right.$$



$$Z_{BR} = (7 + 4 + 0) \cdot 1 + 10 = 21 \text{ ms} \rightarrow 750 + 21 = 771 \text{ ms}$$

$$Z_C = (7 + 3 + 9) \cdot 1 + 10 = 29 \text{ ms} \rightarrow 749 + 29 = 778 \text{ ms}$$

Esercizio 2

$$L_1 \rightarrow 500 \rightarrow 512 +$$

$$L_2 \rightarrow 1200 \rightarrow 2048 +$$

$$L_3 \rightarrow 200 \rightarrow 256 +$$

$$\underline{2816} \rightarrow 4096 \rightarrow 2^{12} \rightarrow \text{Blocco totale /20}$$

L_2 Broadcast 89.136.63.255



89.136.0011111.11111111

└──────────┘
Prefisso

Indirizzo di rete

89.136.0011000.00000000

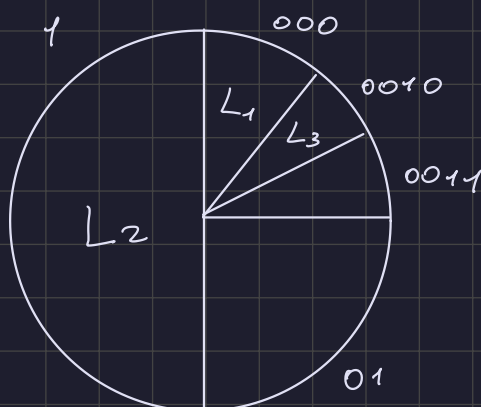
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Prefisso

In decimale:

89.136.48.0/20

Blocco CIDR totale

Sottoreti:



L_2 :

89.136.00111000.00000000

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Prefisso Sottorete

89.136.56.0/24

L₁:

89.136.00110000.0000000000
 Prefisso SSORETE

89.136.48.0/23

L₃:

89.136.00110010.0000000000
 Prefisso SSORETE

89.136.50.0/24

Esercizio 3

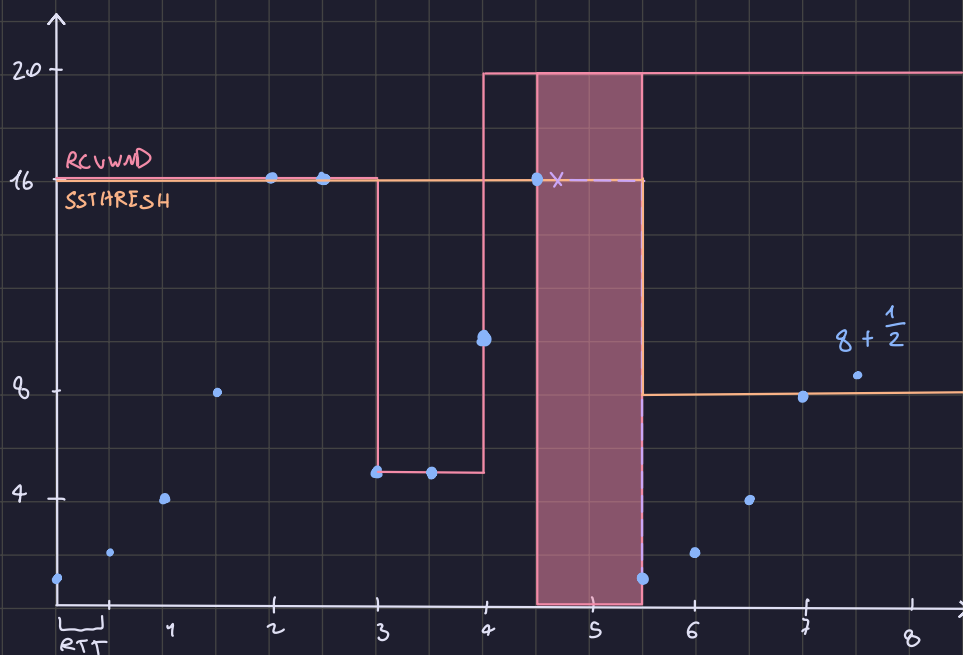
78 segmenti da trasmettere

Down [4,5; 5,5]

RCVWND_{mit} = 16 segmenti

↳ $t > 2,5 \rightarrow 5$ segmenti
 $t > 3,5 \rightarrow 20$ segmenti

RTT = 0,5 s



$$\# \text{Trasmissi} = 1 + 2 + 4 + 8 + 16 + 16 + 5 + 5 + 10 + \underbrace{11}_{(67)} + 1 + 2 + 4 + \underbrace{4}_8 = 78$$