REDES DE COMPUTADORES

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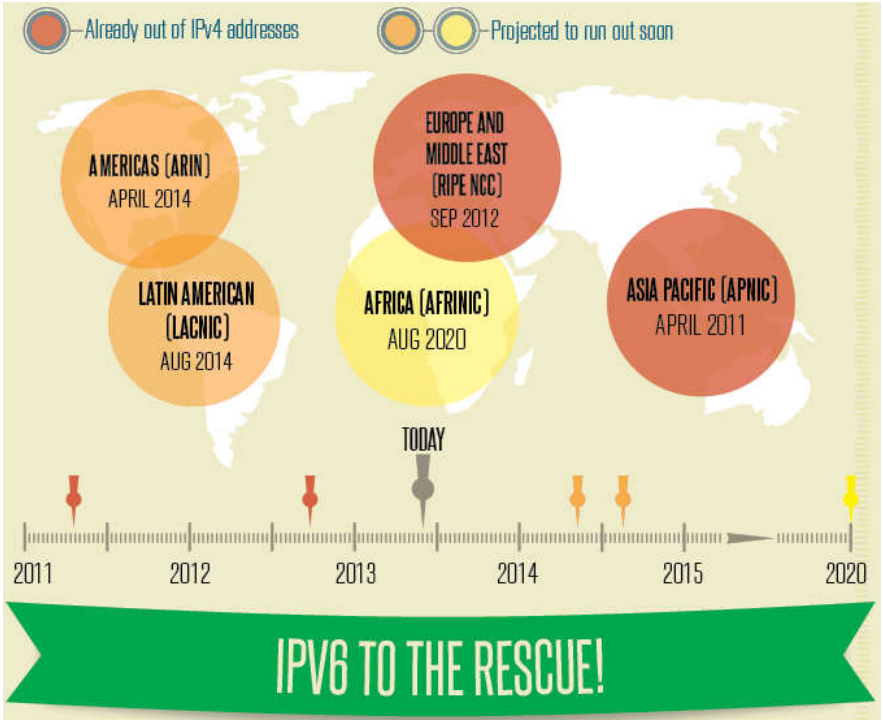
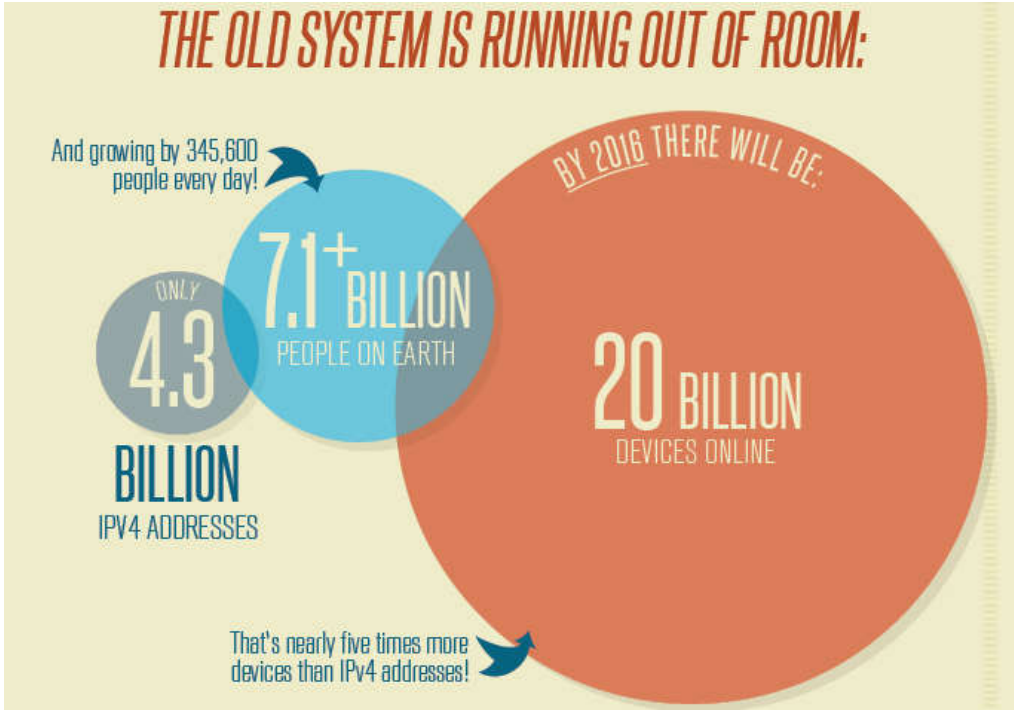
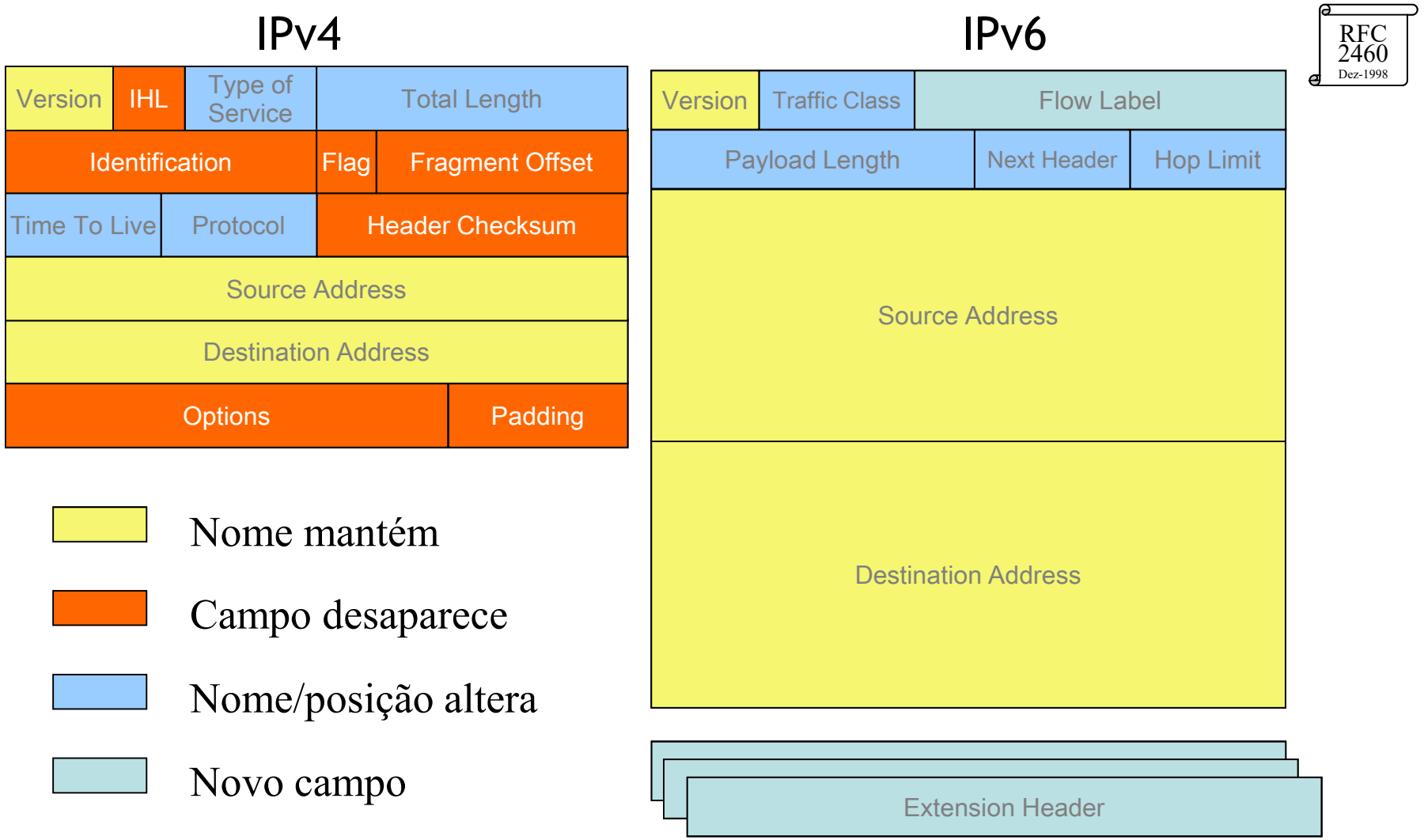
Tecnologia IPv6 - Motivação





http://www.worldipv6launch.org/

IPv6 versus IPv4



Cabeçalhos de estensão

RFC 2460 Dez-1998

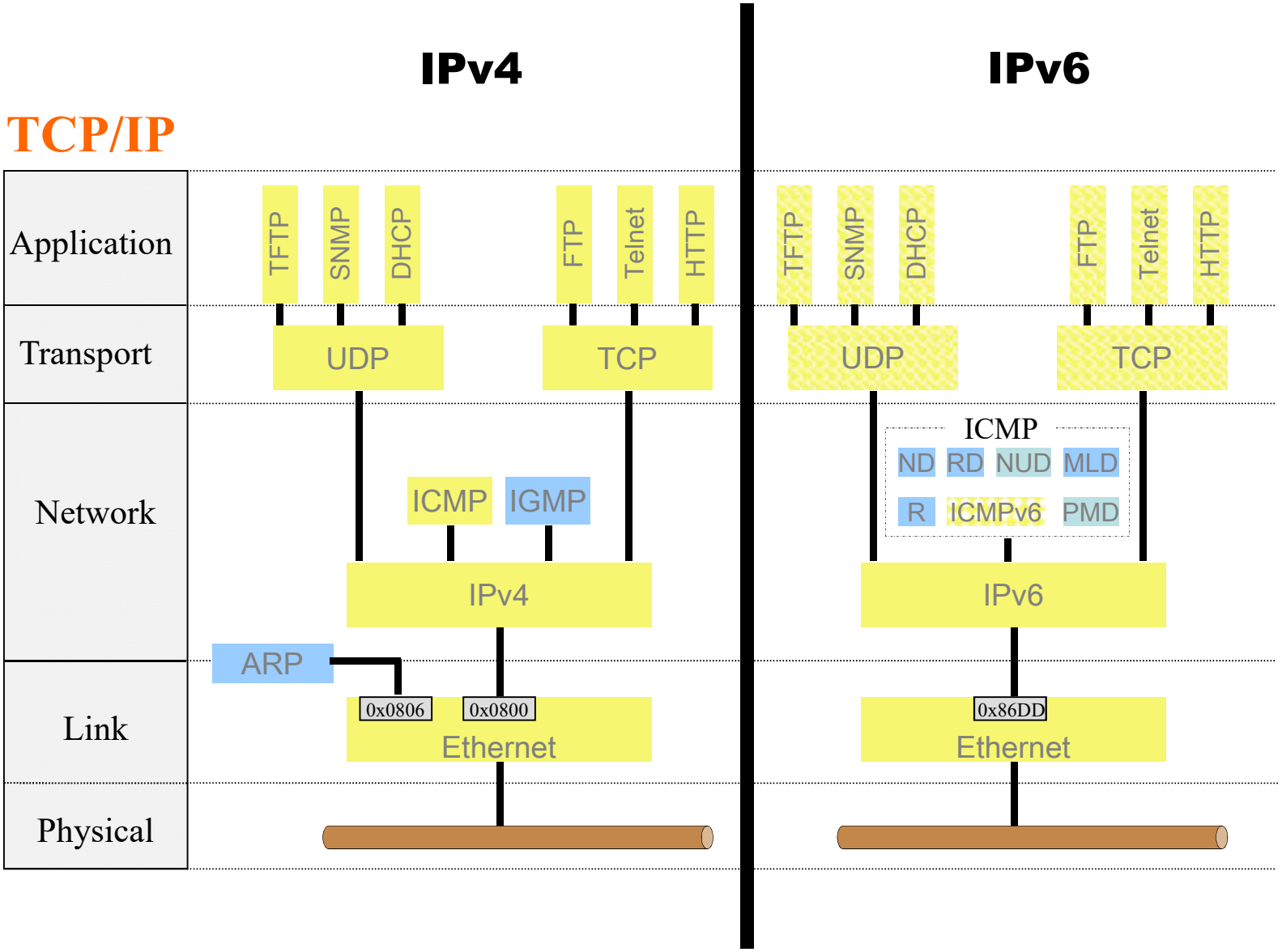
IPv6 header NextHeader=TCP	TCP Header and Data

IPv6 header NextHeader=Routing	Routing header NextHeader=TCP	TCP Header and Data

IPv6 header NextHeader=Routing	Routing header NextHeader=Frag.	Fragment header NextHeader=TCP	TCP Header and Data

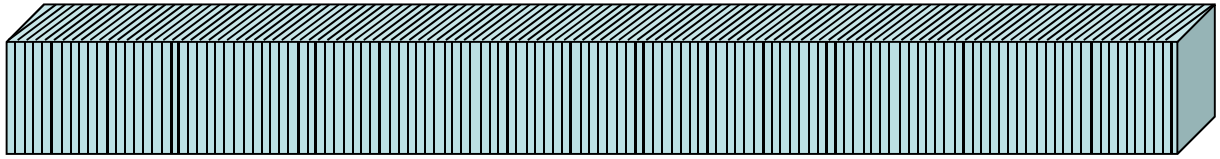
#	Tipo de Header	Next Header
1	Basic IPv6 Header	-
2	Hop-by-Hop Options	0
4	Routing Header	43
5	Fragment Header	44
6	Authentication Header	51
7	ESP Header	50
UL	**TCP**	**6**
UL	**UDP**	**17**
UL	**ICMP**	**58**

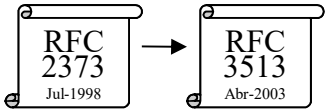
IPv6 versus IPv4



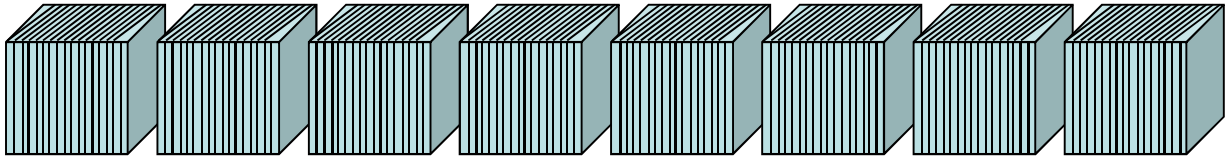
Representação dos endereços

A estrutura de 128 bits …





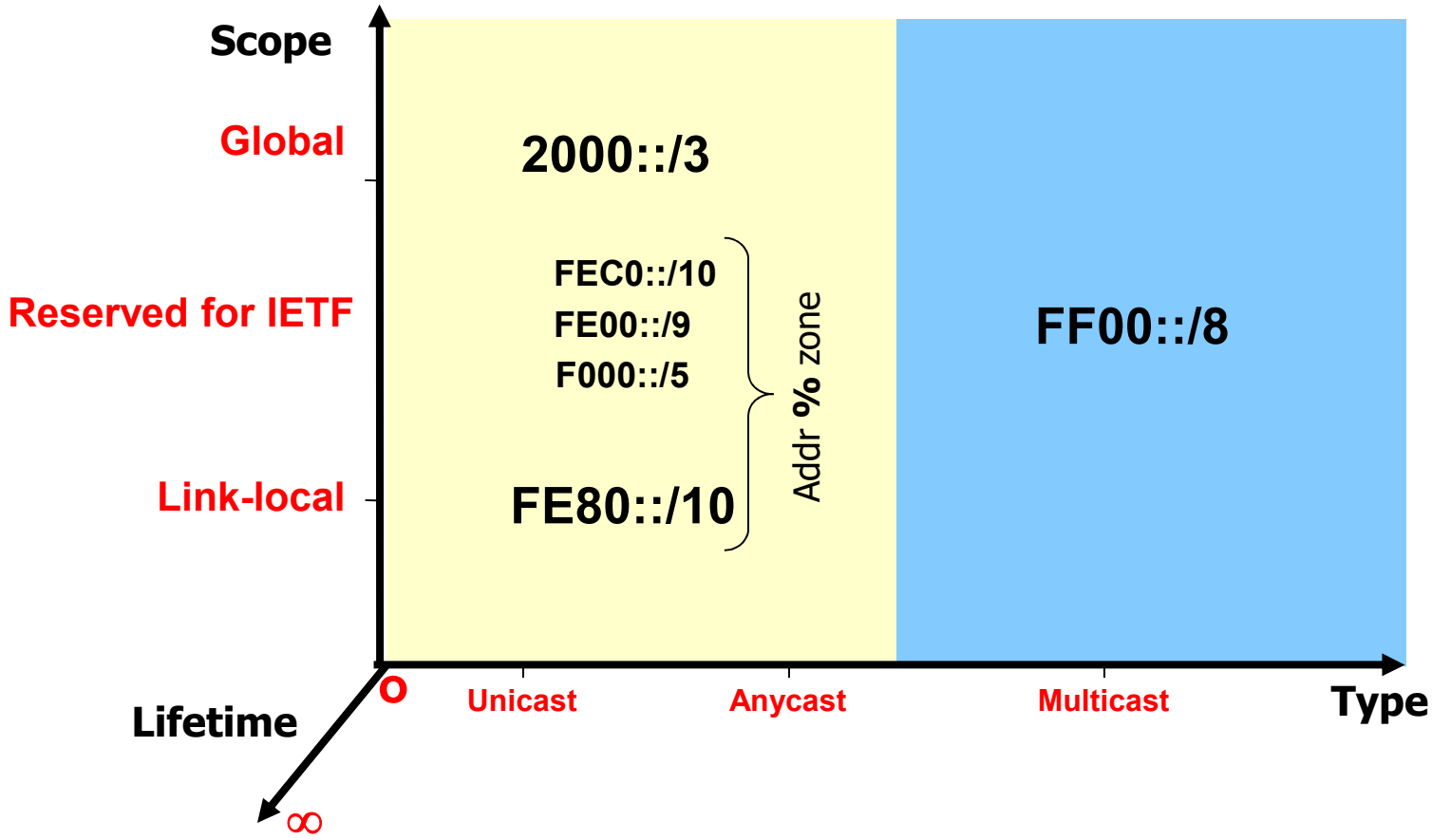
...é dividida em 8 blocos de 16 bits …



... e apresentada na notação “column-hexadecimal”

FE80 : 34A6 : B67D : E431 : 903C : ABCD : 4592 : 2315

Espaço de endereçamento



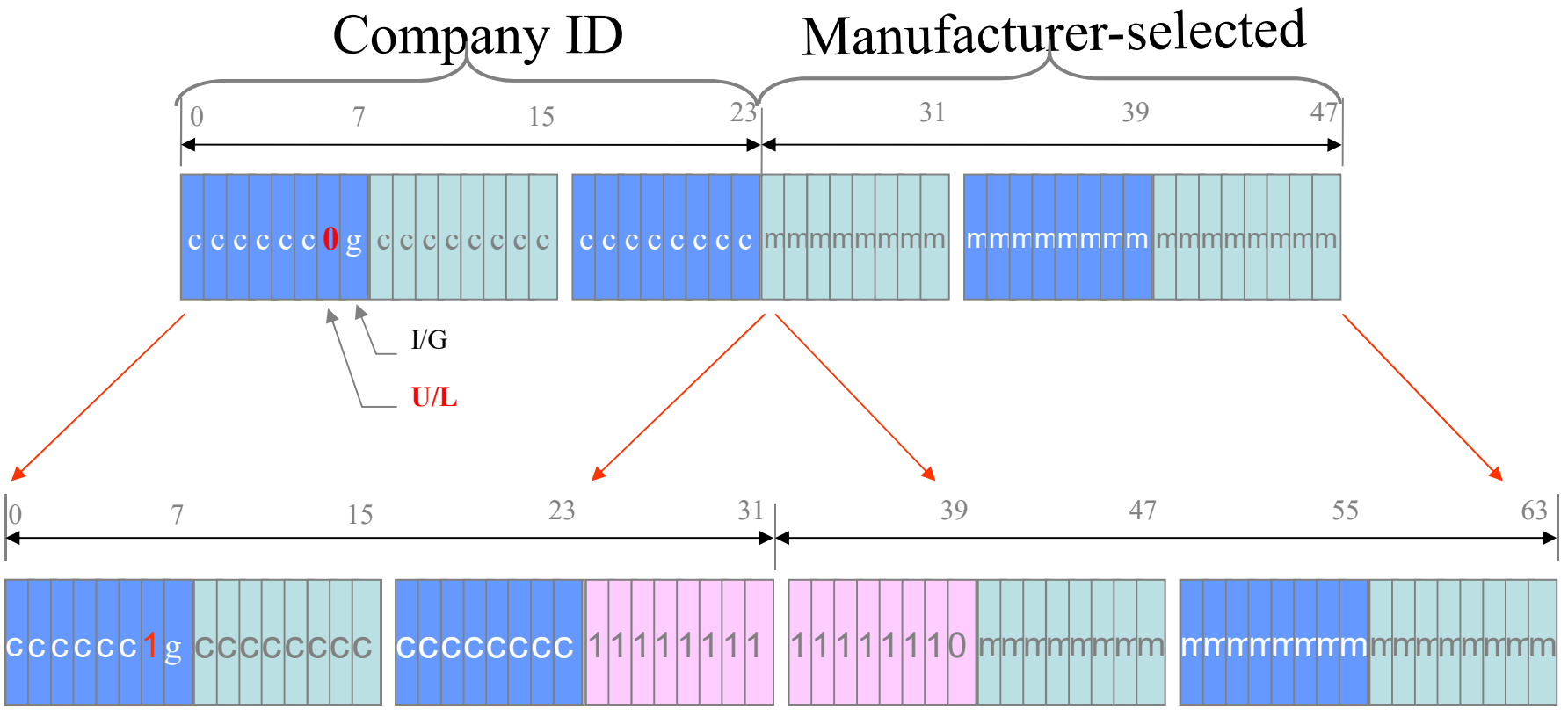
Resumo em http://www.iana.org/assignments/ipv6-address-space/ipv6-address-space.xhtml

Endereçamento Link-local

Interface ID ≡ Modified EUI-64 (Extended Unique ID)

48 bit IEEE 802.2 address

RFC 3513 Abr-2003



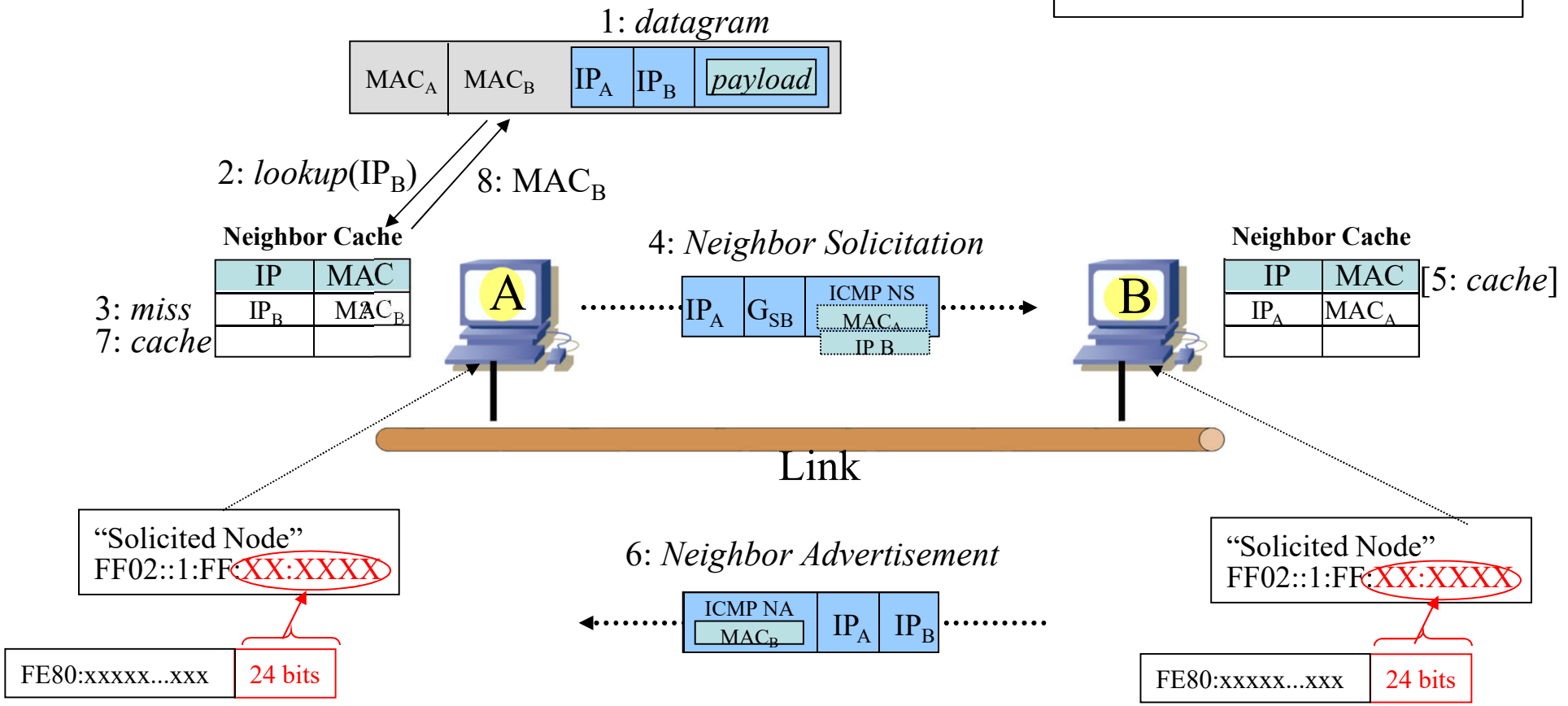
Modified EUI-64

Resolução de endereços

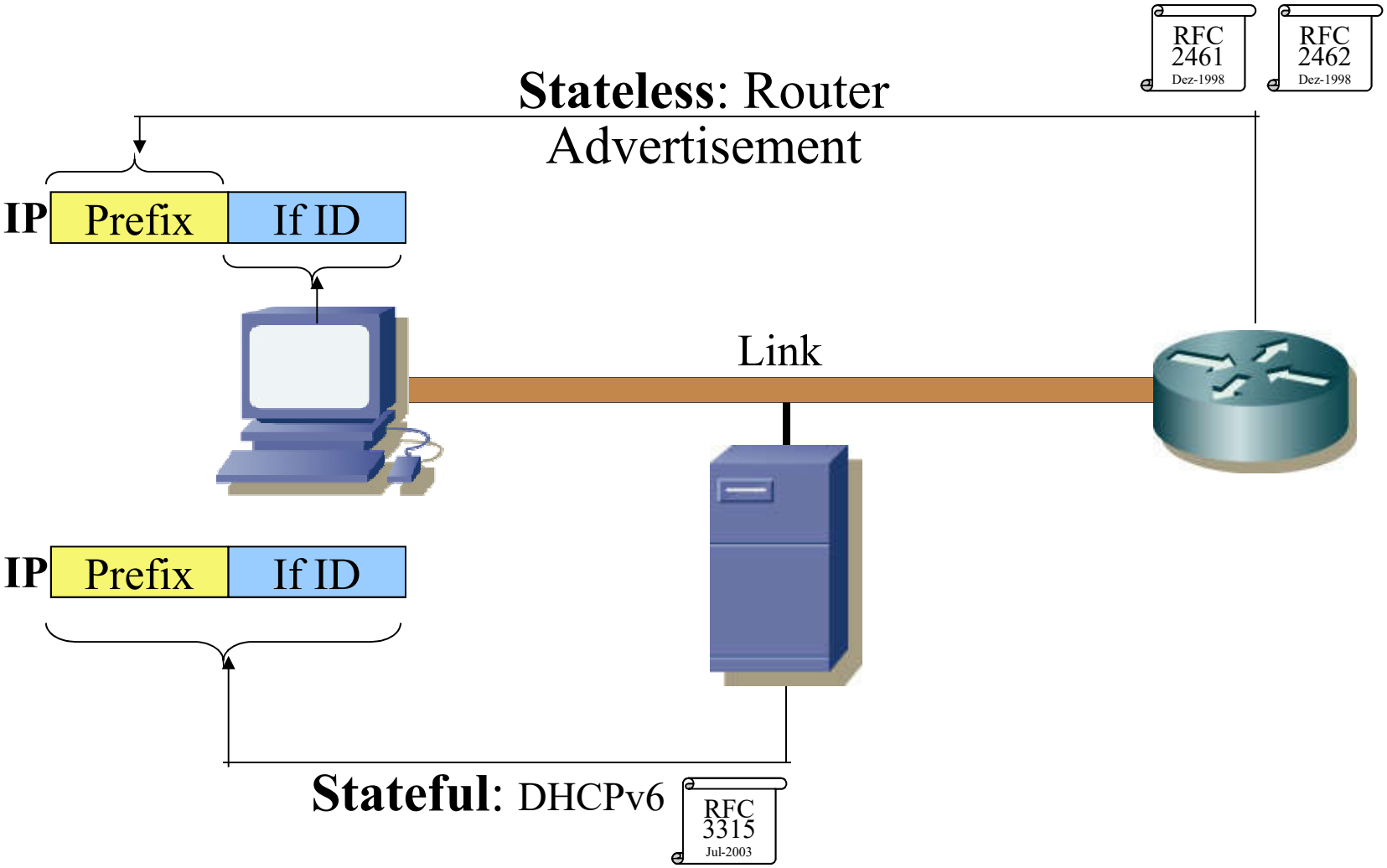
Conversão $IP_B \rightarrow MAC_B$?

- Neighbor Discovery (ND) protocol

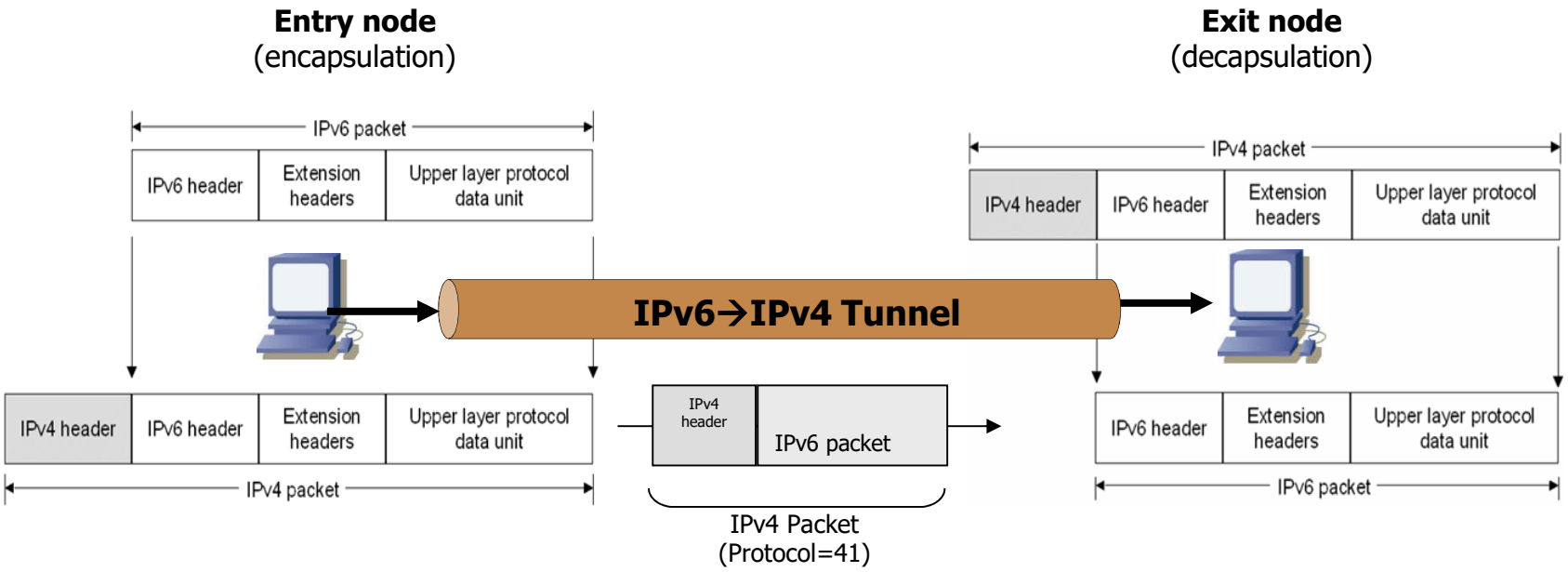
Multicast:
D_IP = FF02::1:FF:XX:XXXX
D_MAC = 33:33:FF:XX:XX:XX



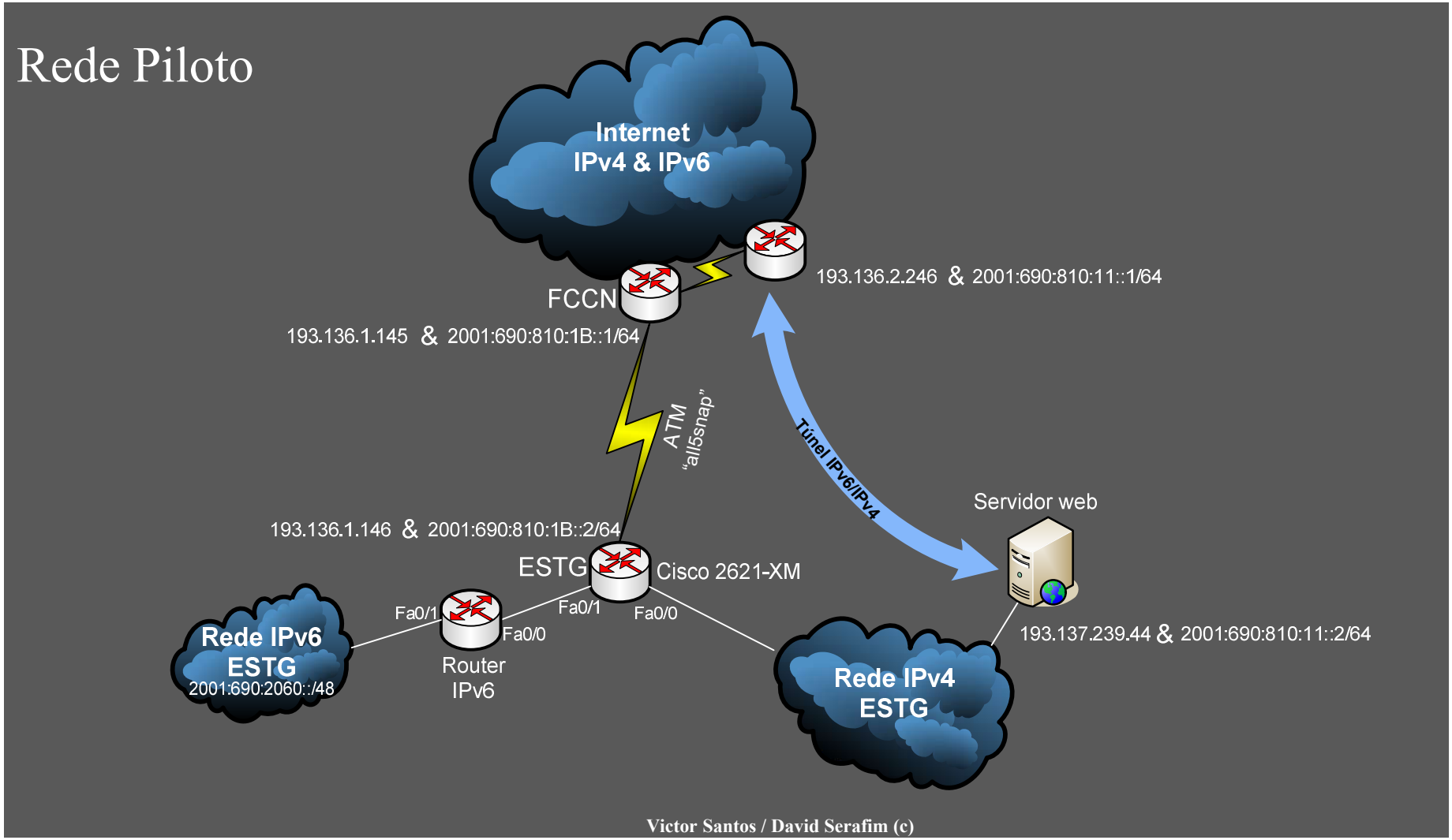
Endereçamento automático



Noção de túnel IPv4-IPv6

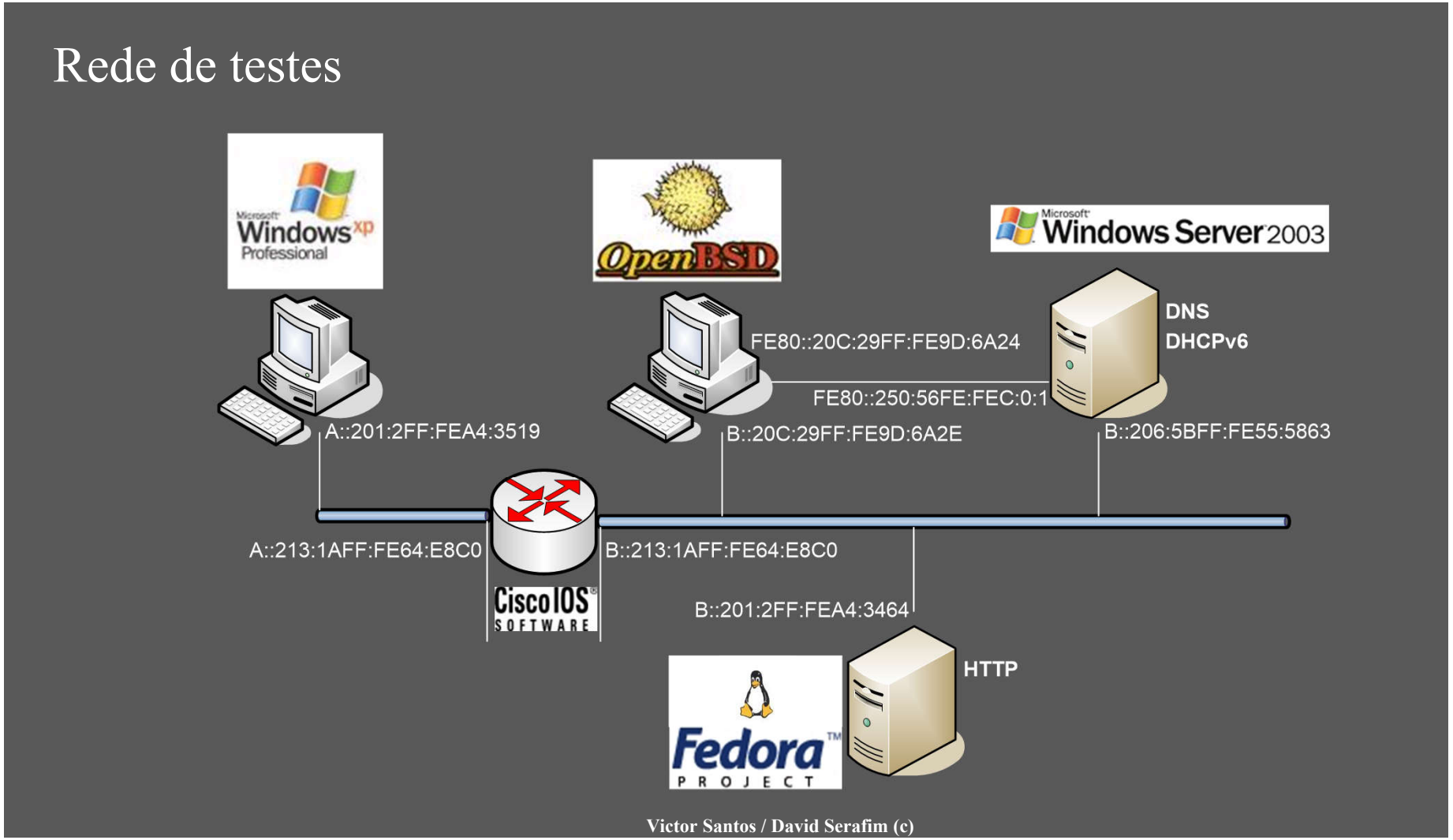


IPv6@ESTG-Leiria



http://dei.estg.ipleiria.pt/projetos/ipv6/

IPv6@ESTG-Leiria



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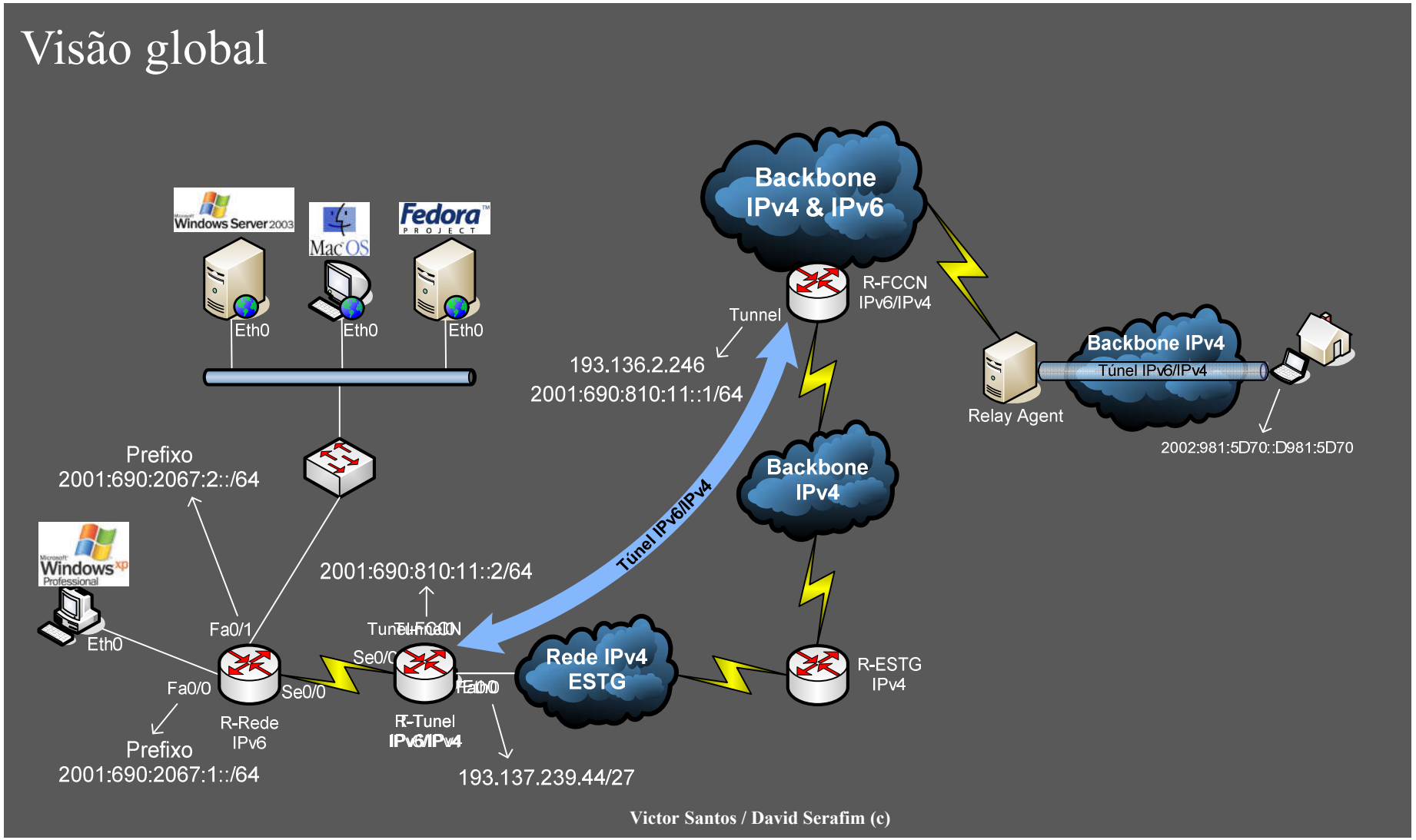

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