

**Tecnologias
de
rede local**

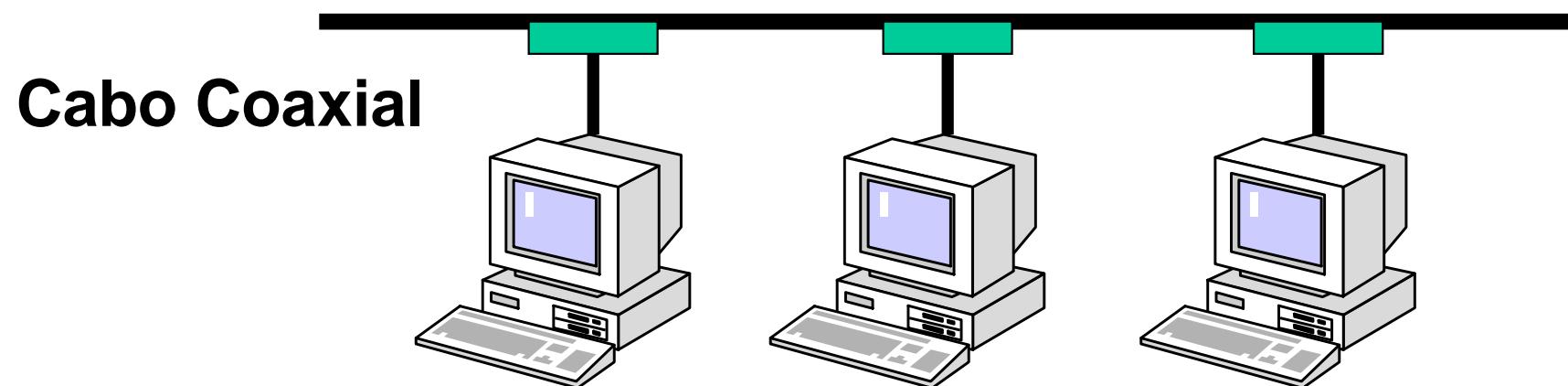
Tecnologias de rede local

- Switching -

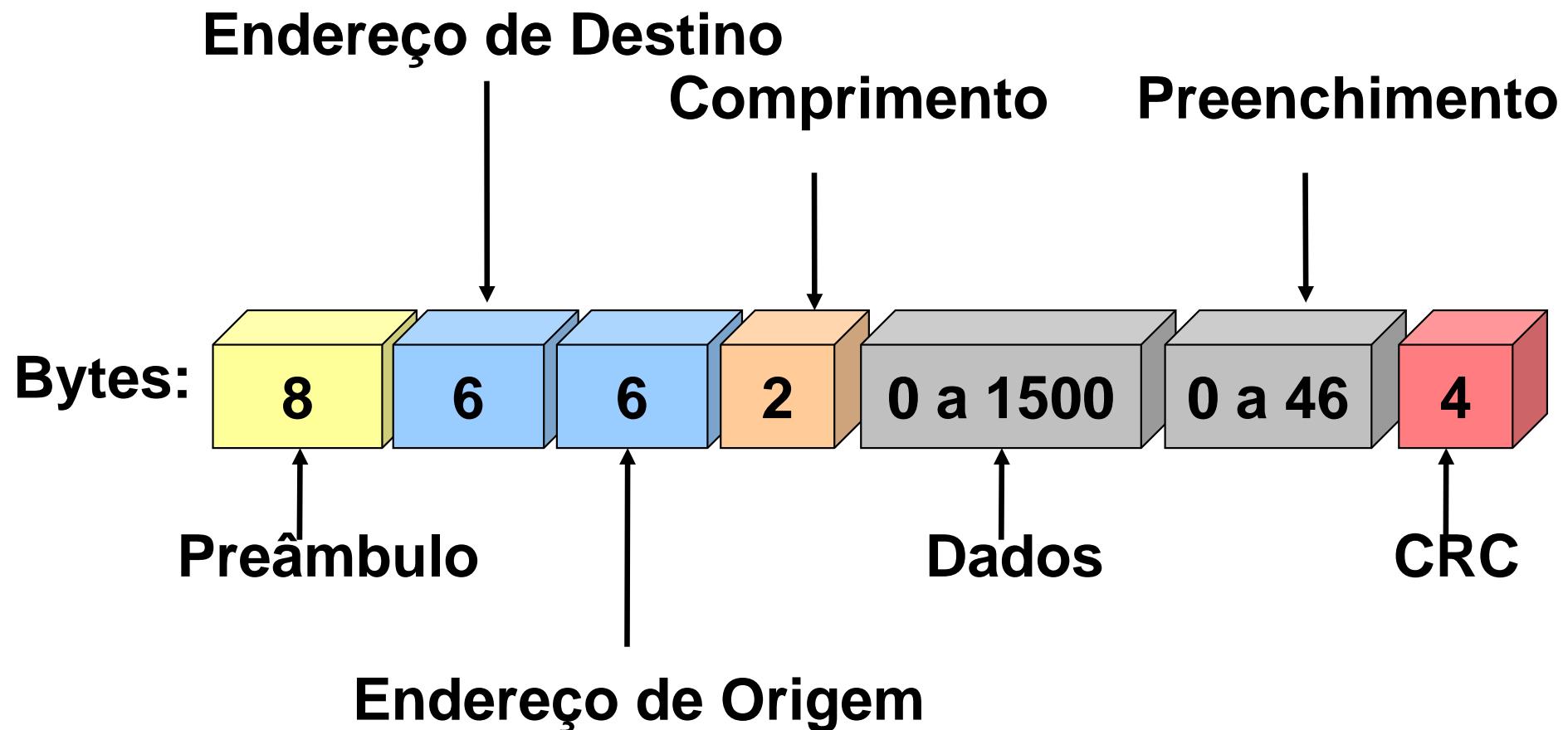
Palestrante:

Fabio de Azevedo Montoro
Engenheiro Eletrônico
Email: fmontoro@zetha.com.br

- Ethernet: 10 Mbps
- Meio Compartilhado
- Acesso Aleatório

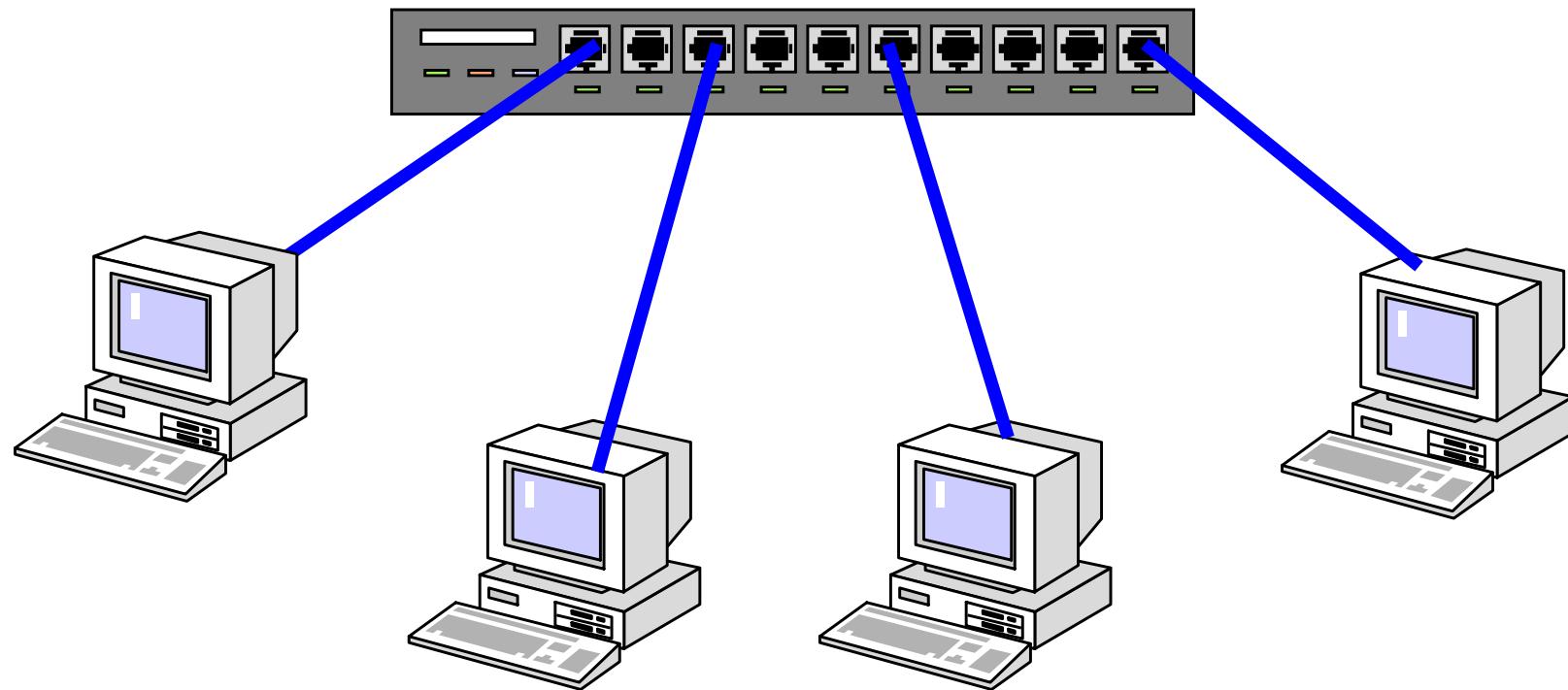


Pacote Ethernet

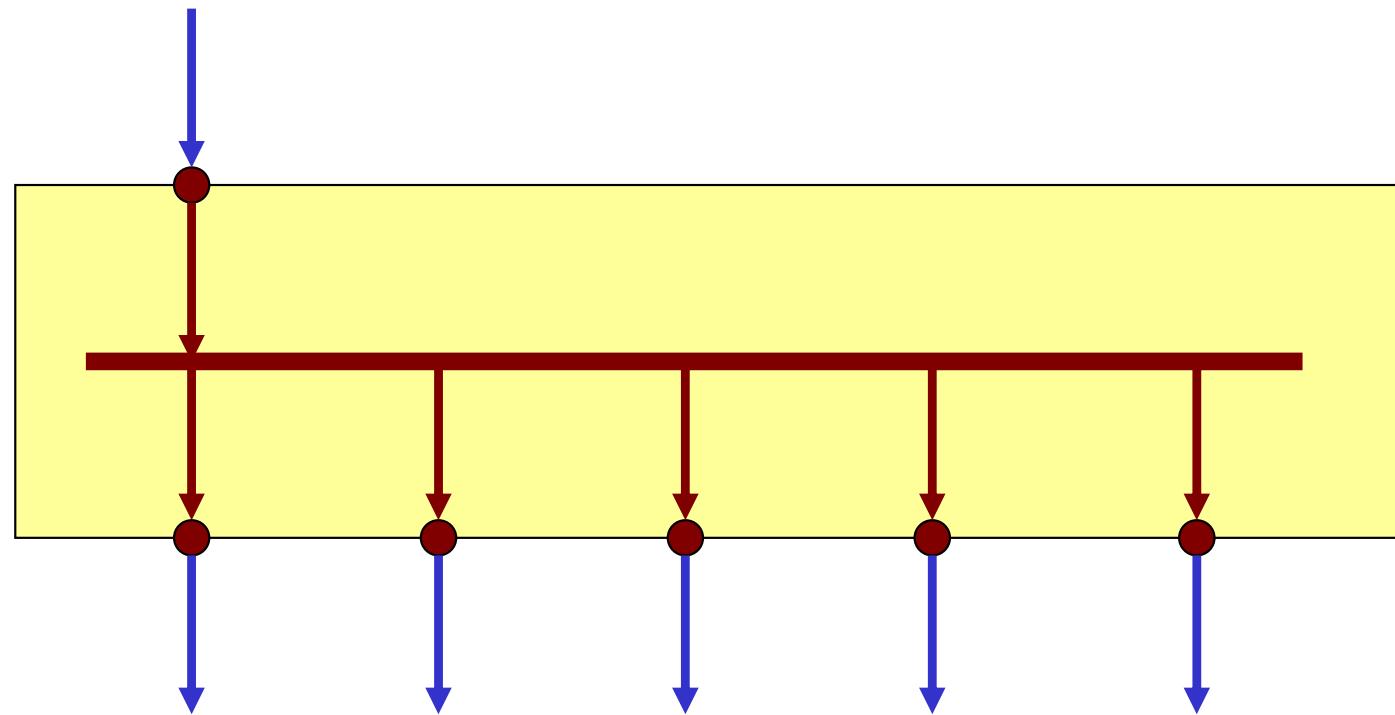


Evolução para o Par Trançado

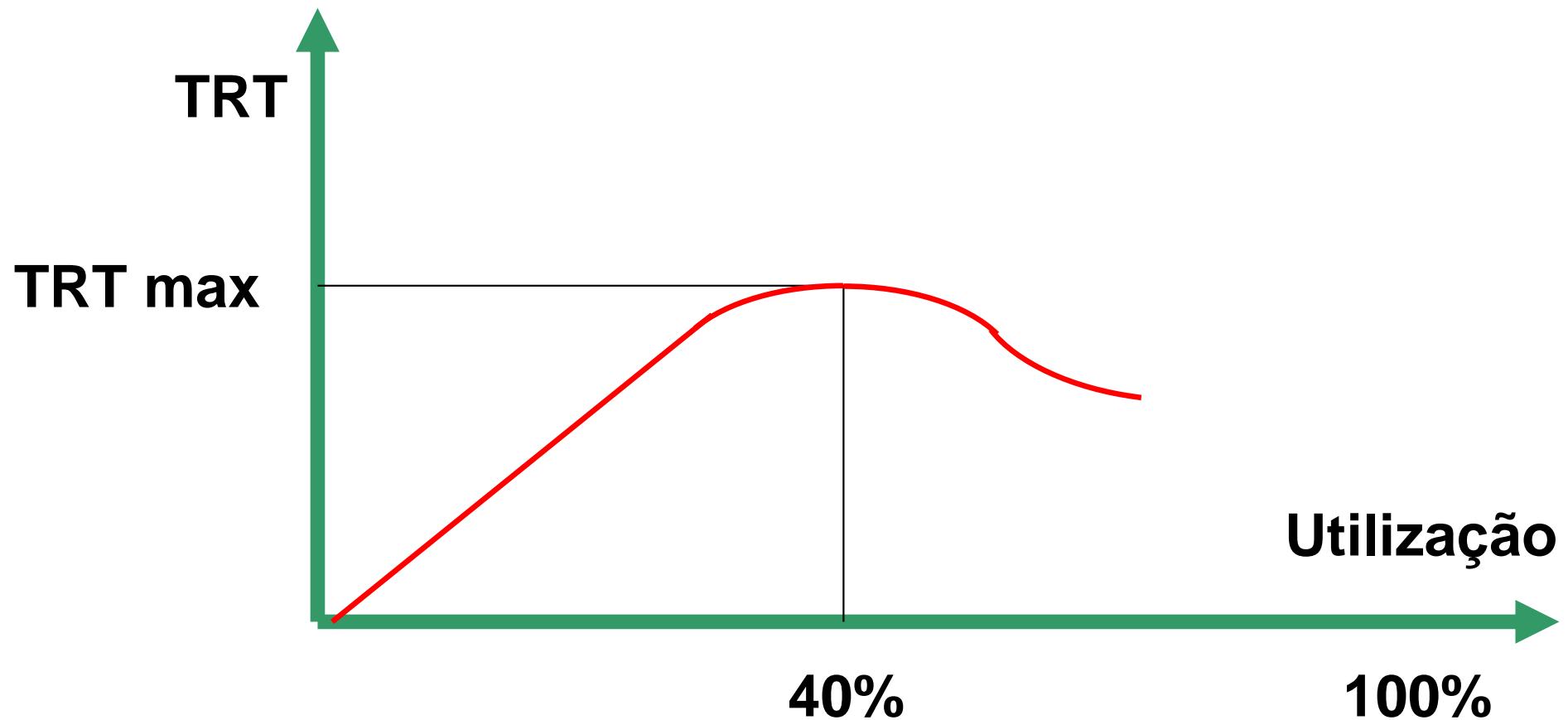
Hub Repetidor



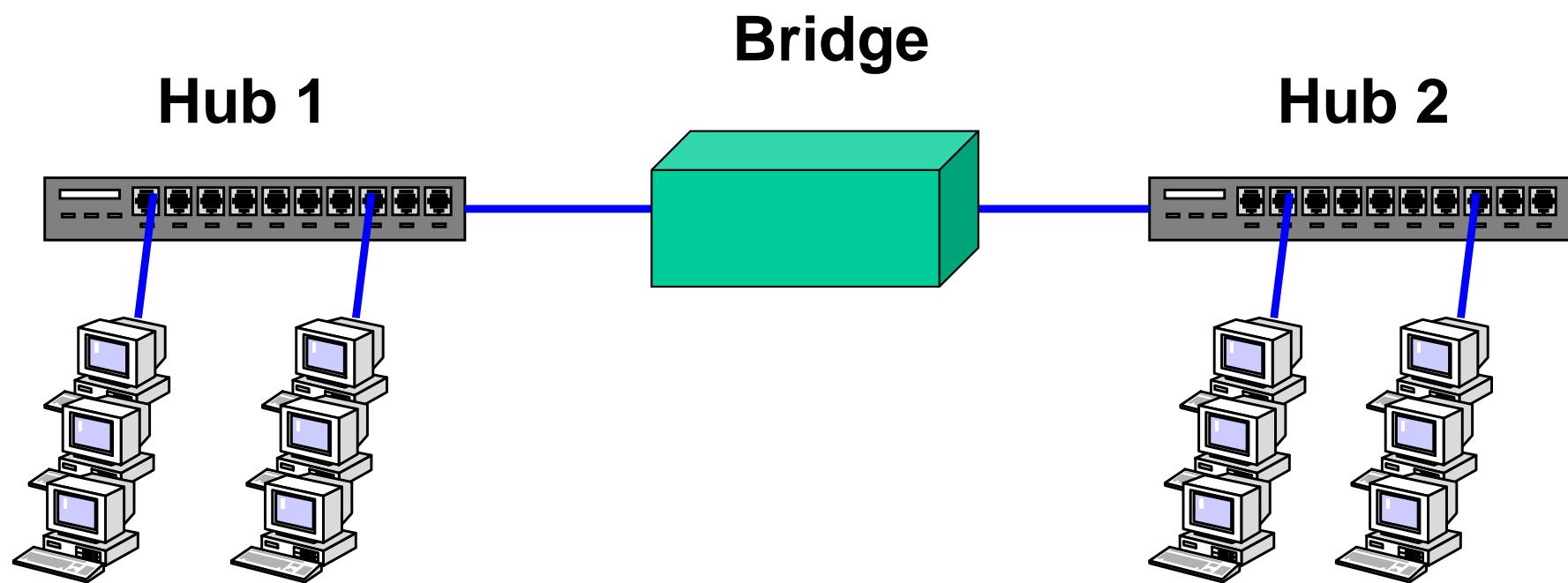
Arquitetura do Hub



Domínio de Colisão/Congestionamento



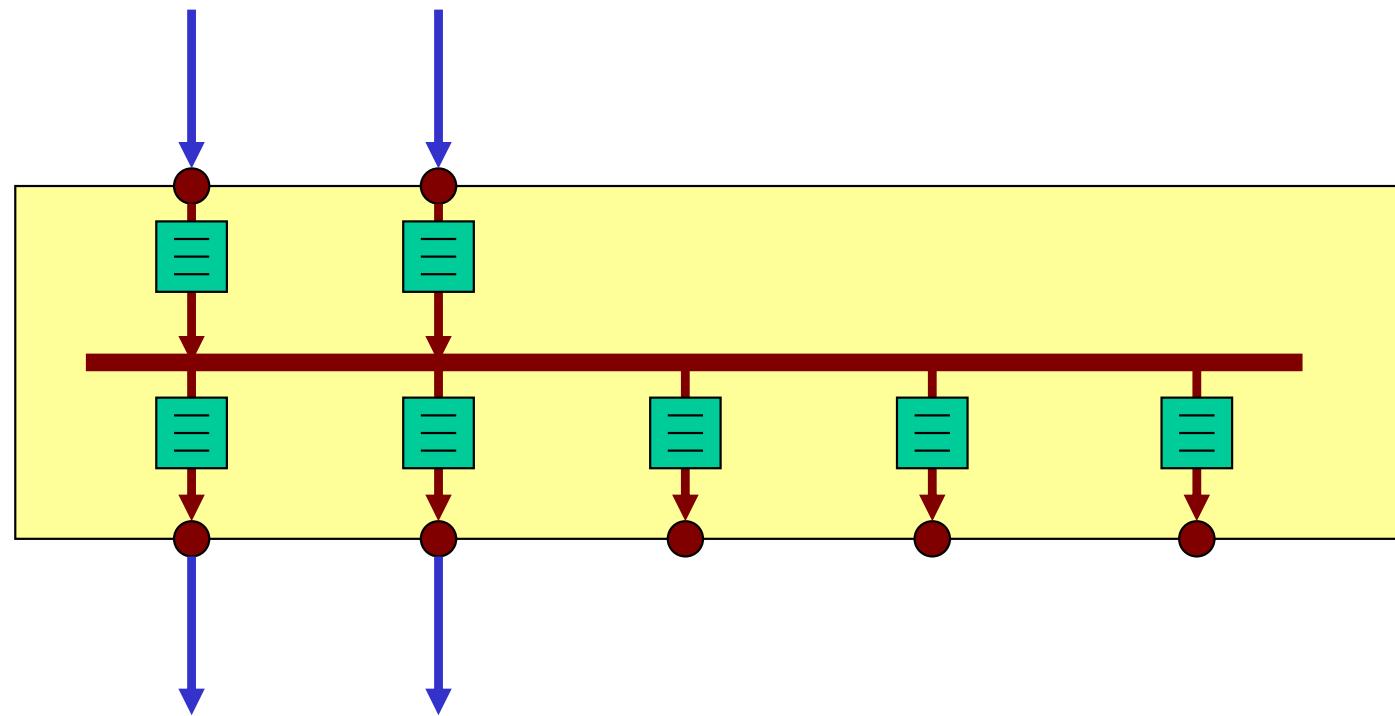
Segmentação: A Bridge



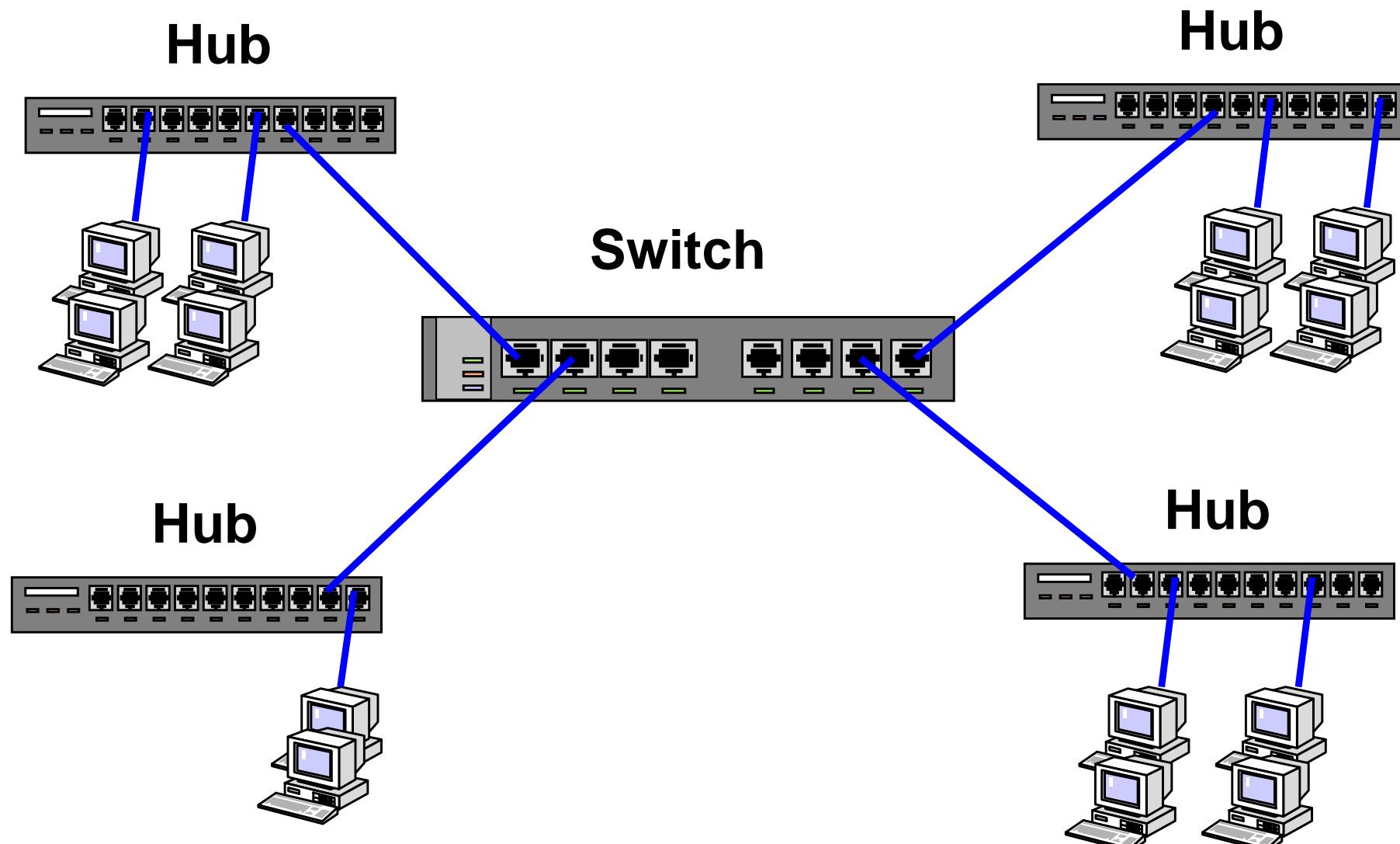
- Latênciam
- Store and Forward
- Cut-Through

A Bridge multiporta
foi
batizada de
Switch !

Arquitetura do Switch



Aplicação do Switch



Outros Padrões

- FDDI → 100 Mbps
- CDDI → 100 Mbps
- Token Ring → 16 Mbps

O Switch interconecta

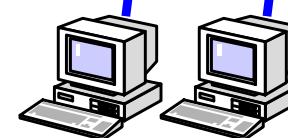
FDDI

FDDI

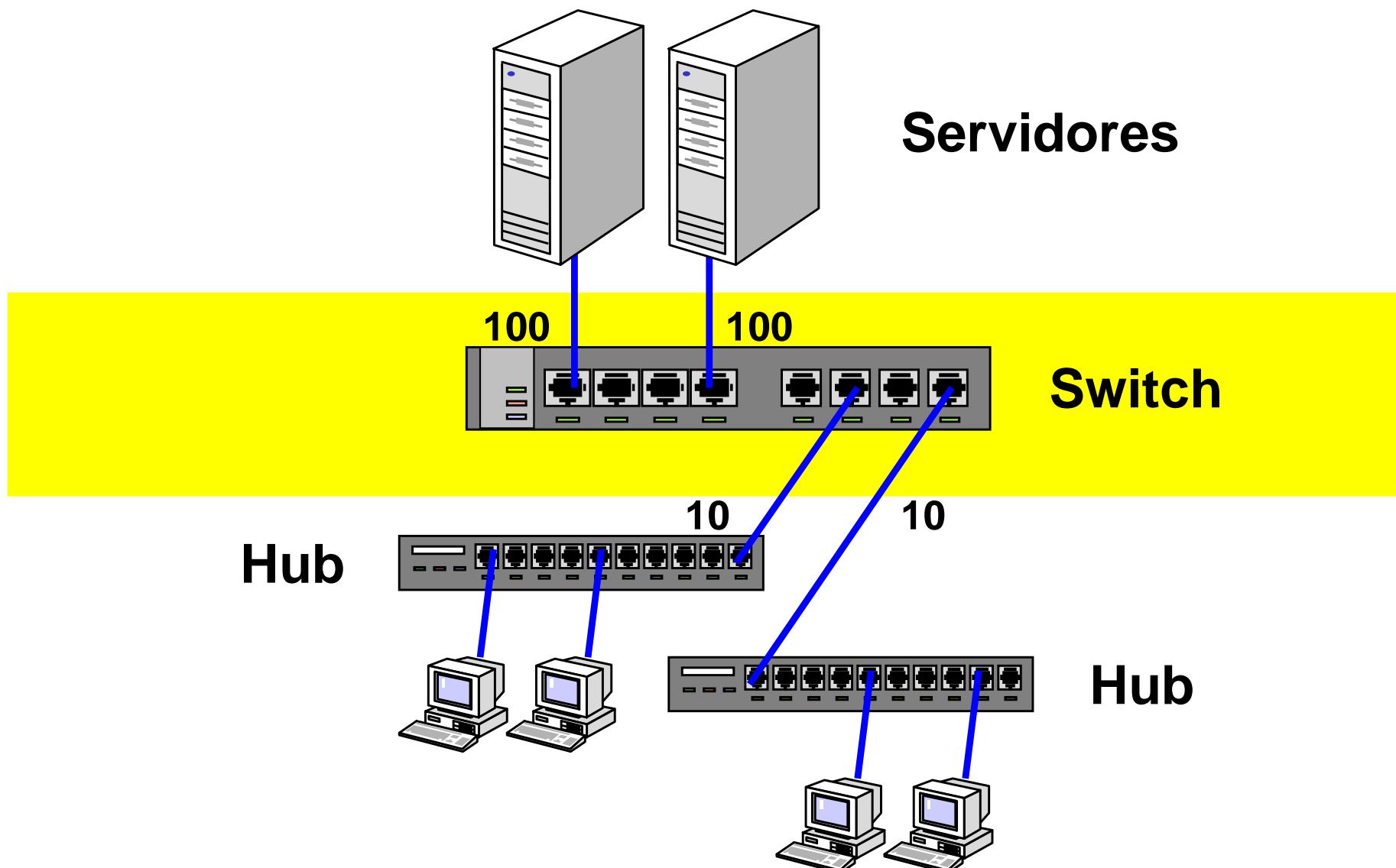
Switches



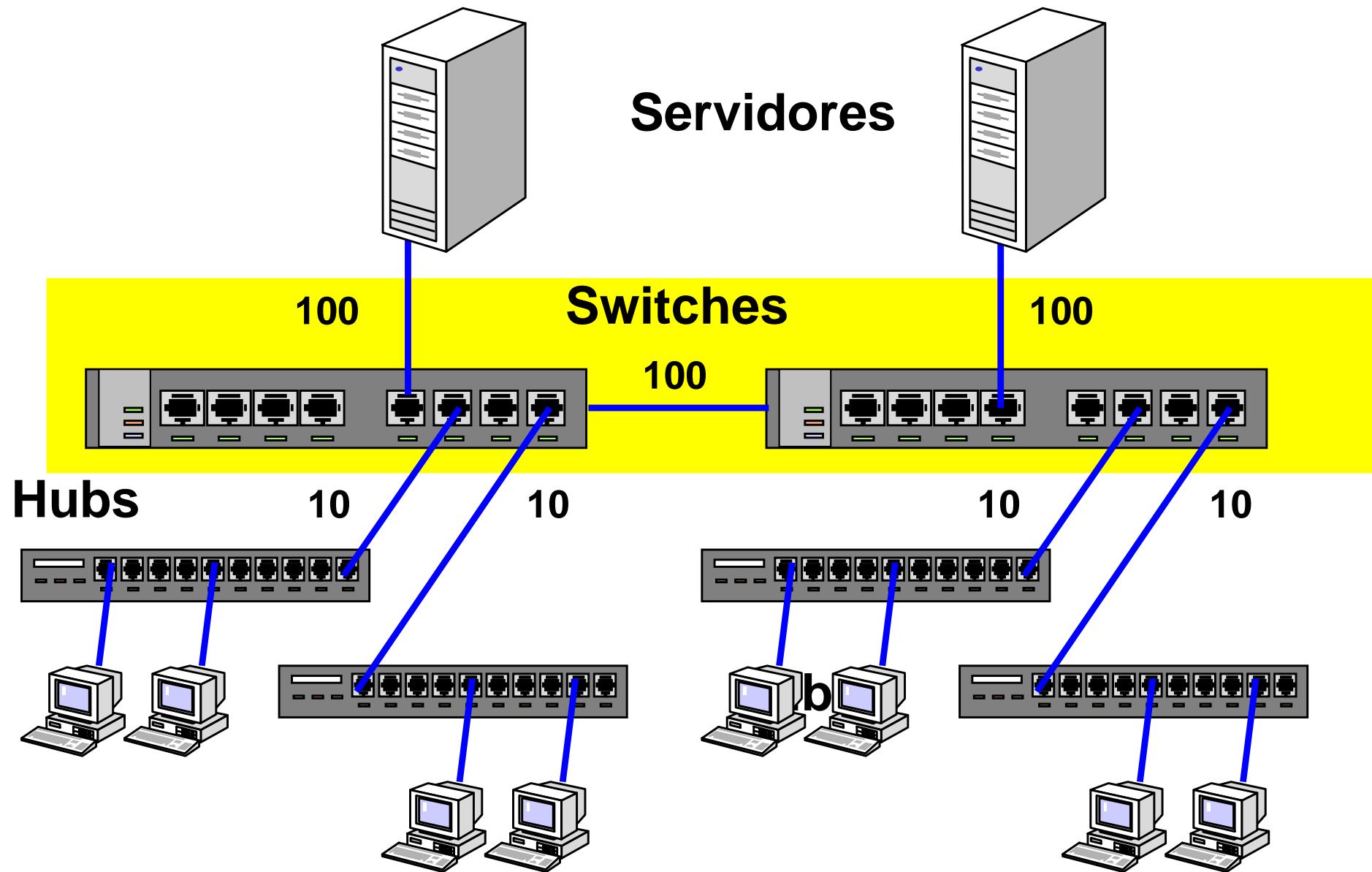
Hubs



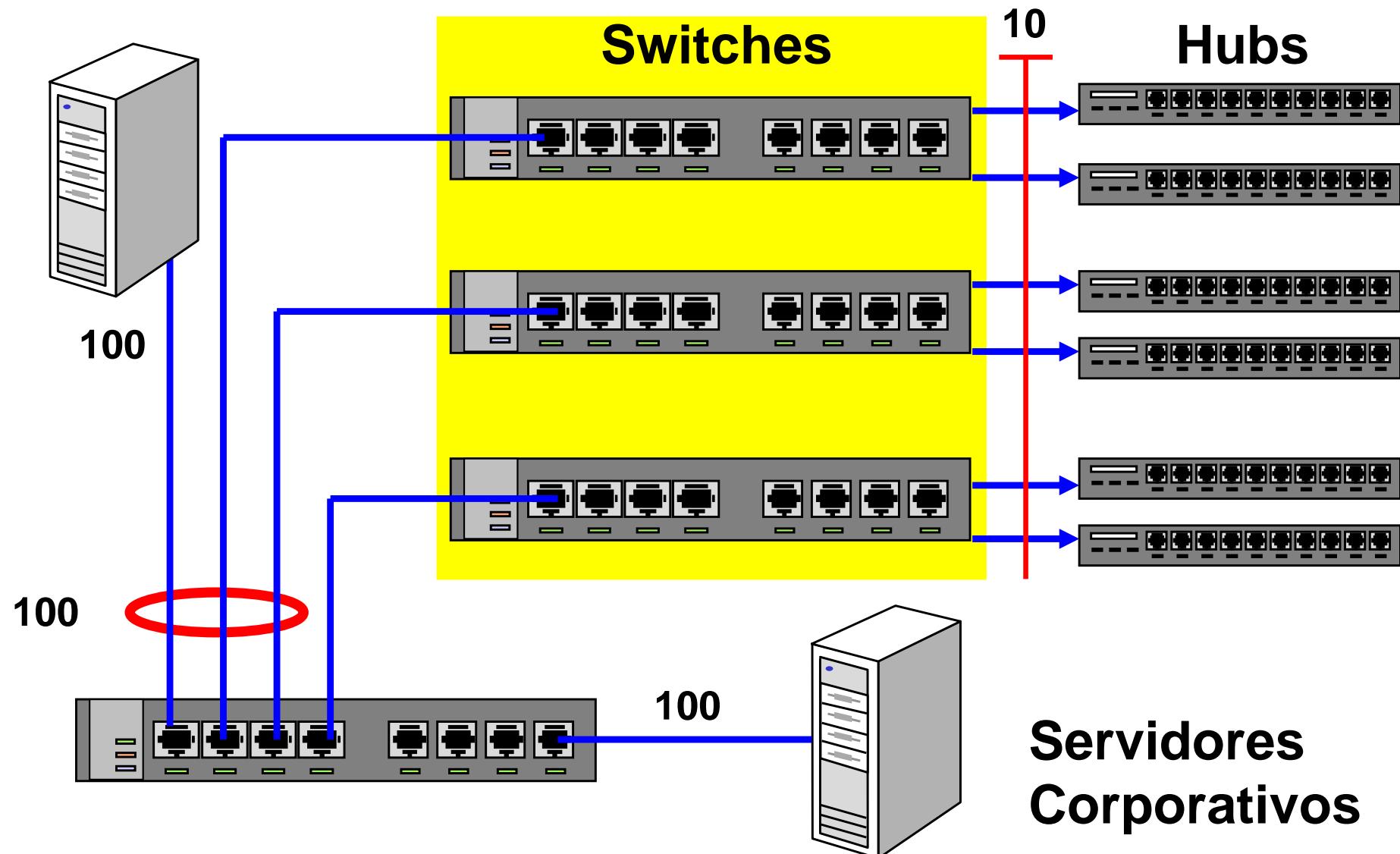
Fast-Ethernet



Fast-Ethernet



Fast-Ethernet



- ATM
- Gigabit Ethernet
- Novas Velocidades:

155 Mbps
622 Mbps
1000 Mbps

Laços de Fibra Ótica

Parâmetro	10FL	100FX	1000SX	1000LX	1000LX
Velocidade	10 Mbps	100 Mbps	1000 Mbps	1000 Mbps	1000 Mbps
Norma IEEE	802.3i	802.3u	802.3z	802.3z	802.3z
Modo da Fibra	Multi	Multi	Multi	Multi	Mono
Tipo da Fibra	62,5 µm	62,5 µm	62,5 µm	62,5 µm	10 µm
Duração de 1 bit	0,1 µs	0,01 µs	0,001 µs	0,001 µs	0,001 µs
Menor Pacote	512 bits	512 bits	512 bits	512 bits	512 bits
Maior Retardo	25,6 µs	2,56 µs	2,048 µs	2,048 µs	2,048 µs
Enlace Semi-Duplex	2000 m	412 m	111 m	111 m	111 m
Enlace Full-Duplex	2000 m	2000 m	260 m	550 m	3000 m

- Segurança
- Mobilidade
- Subredes
- Vídeo
- Voz

- Cabeamento Estruturado
- Drives de Rede
- Interconexão à WAN

Fim

obrigado pelo seu tempo