

Modelo TCP/IP

(parte 2 - protocolos/serviços)

Prof. Dr. Luiz Arthur Feitosa dos Santos



luiz.arthur.feitosa.santos@gmail.com

<https://luizsantos.github.io/>



Modelo TCP/IP

TCP/IP é um modelo de rede utilizado para ditar como os dados devem ser transmitidos em redes de computadores, tal como o Modelo ISO/OSI.

O TCP/IP é muito importante, pois:

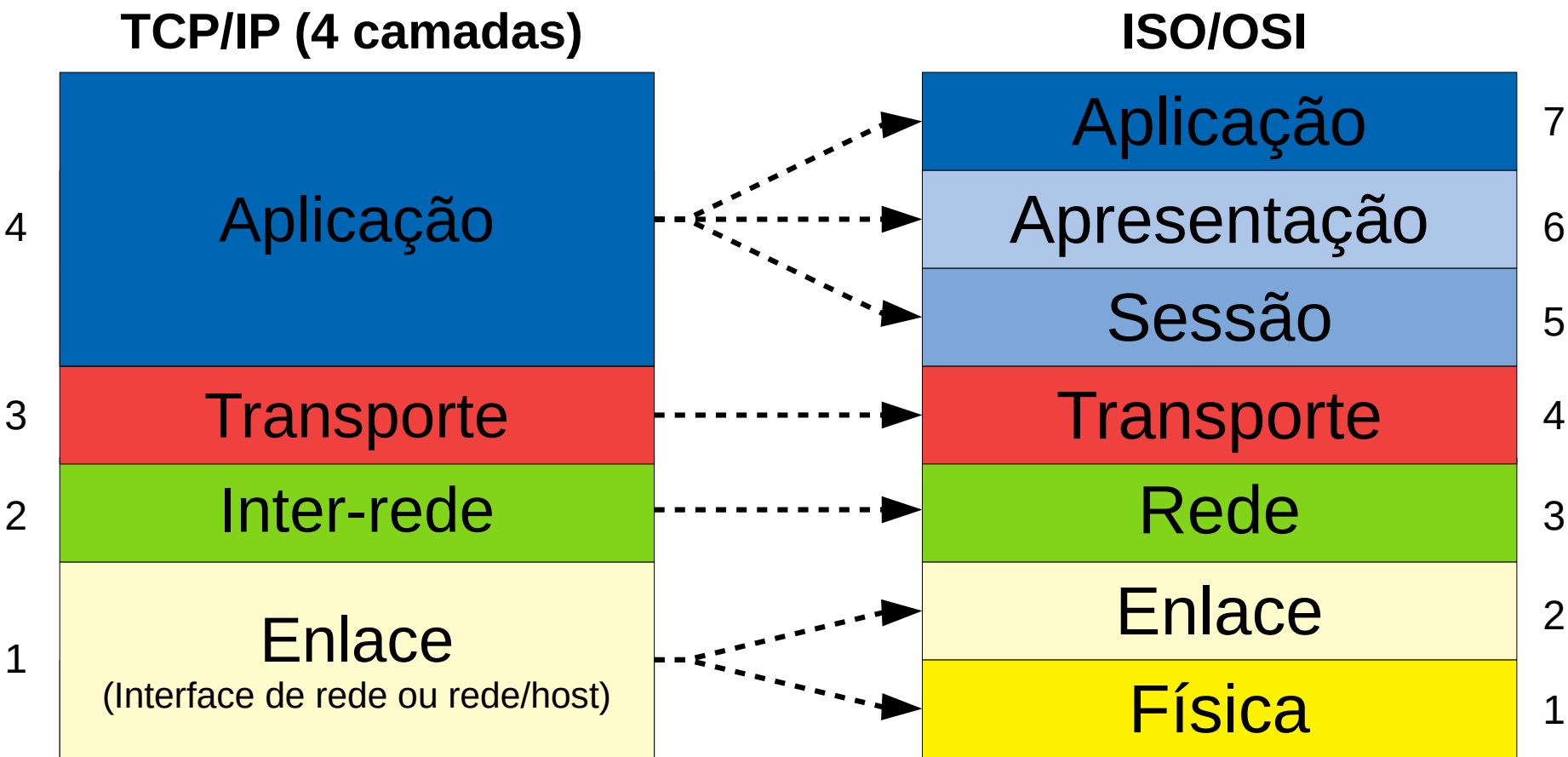
- Modelo utilizado na **Internet** (utilizado em ~90% das redes no mundo);
- Criado para ser altamente **disponível**;
- Modelo aberto (Open Source);
- **TODAVIA** não é deve ser o melhor do mundo (antigo, inseguro, etc).

Camadas do Modelo TCP/IP

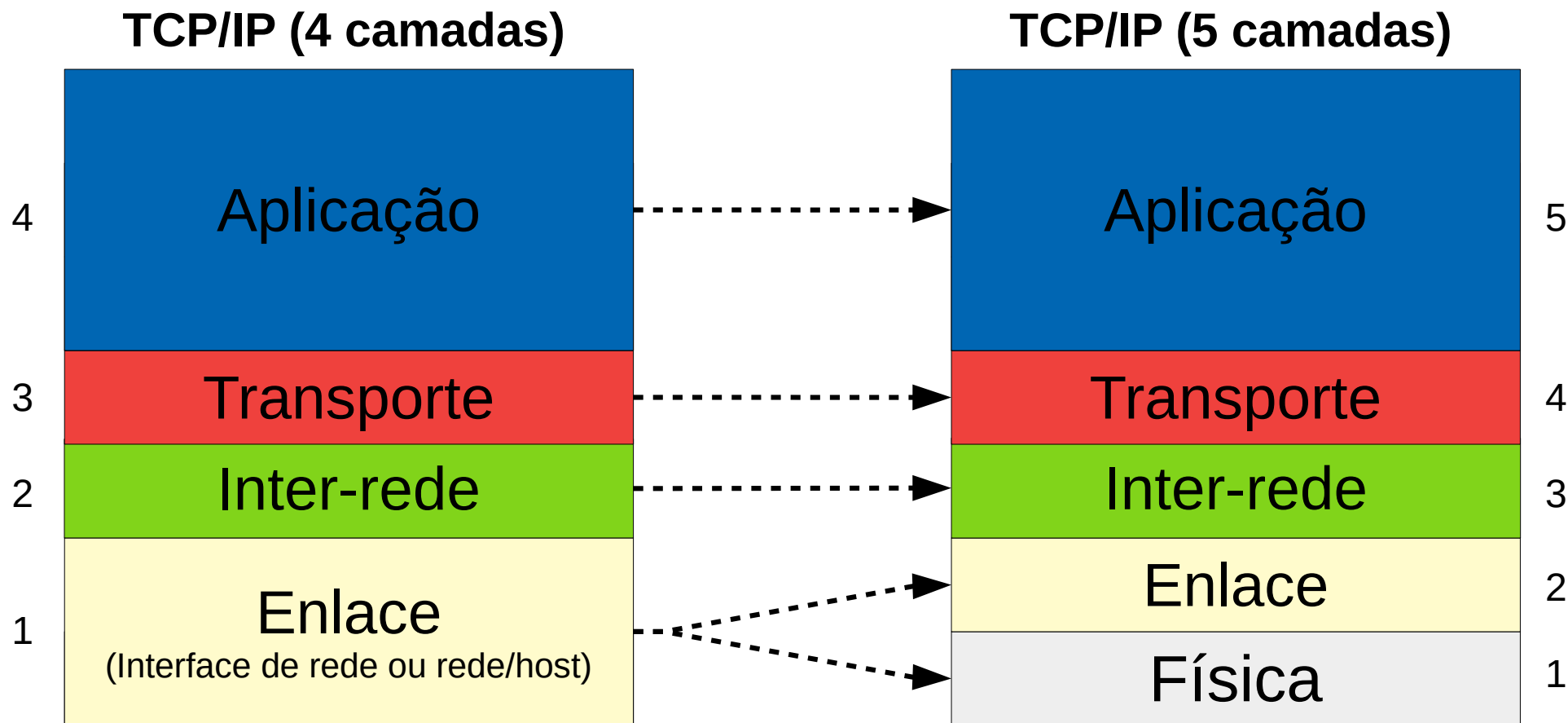
TCP/IP (4 camadas)



Camadas do Modelo TCP/IP



Camadas do Modelo TCP/IP

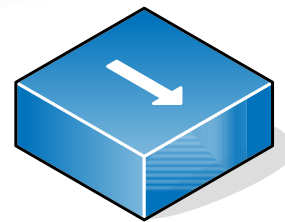
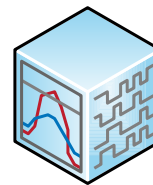
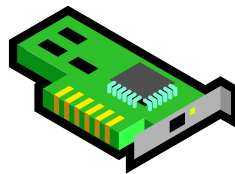
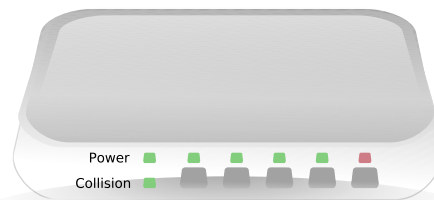
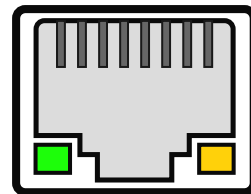
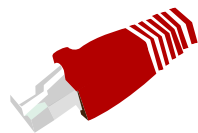


Modelo TCP/IP

Tá, mas na prática o que tem em cada camada?

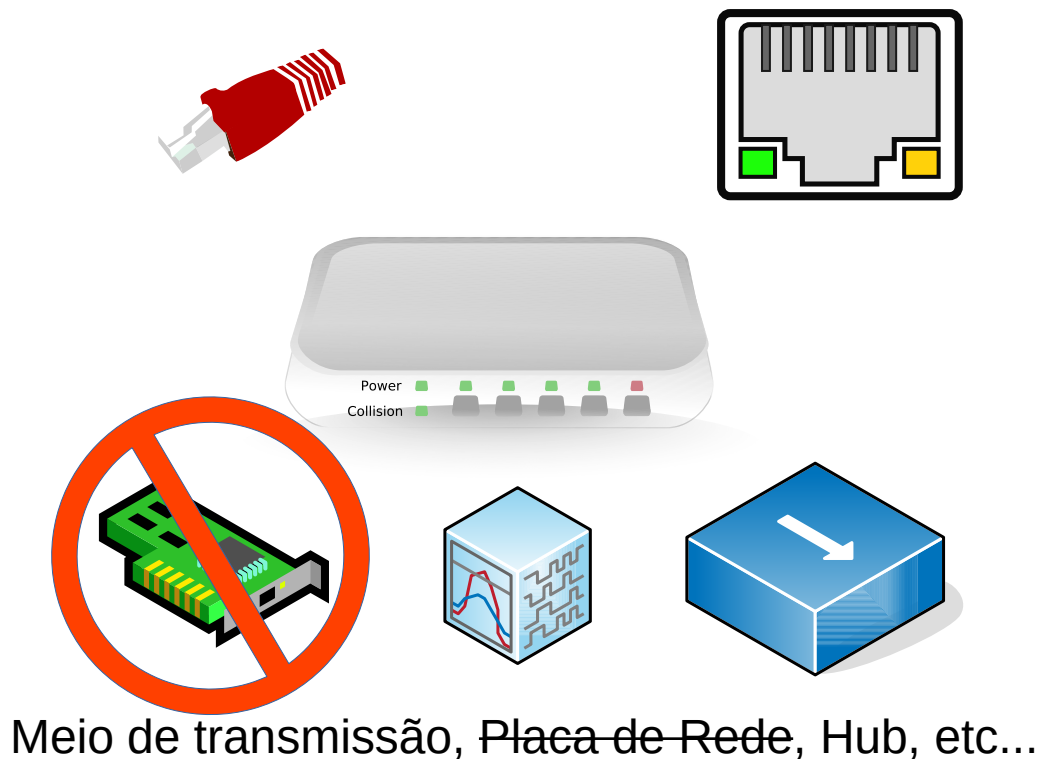


Protocolos TCP/IP

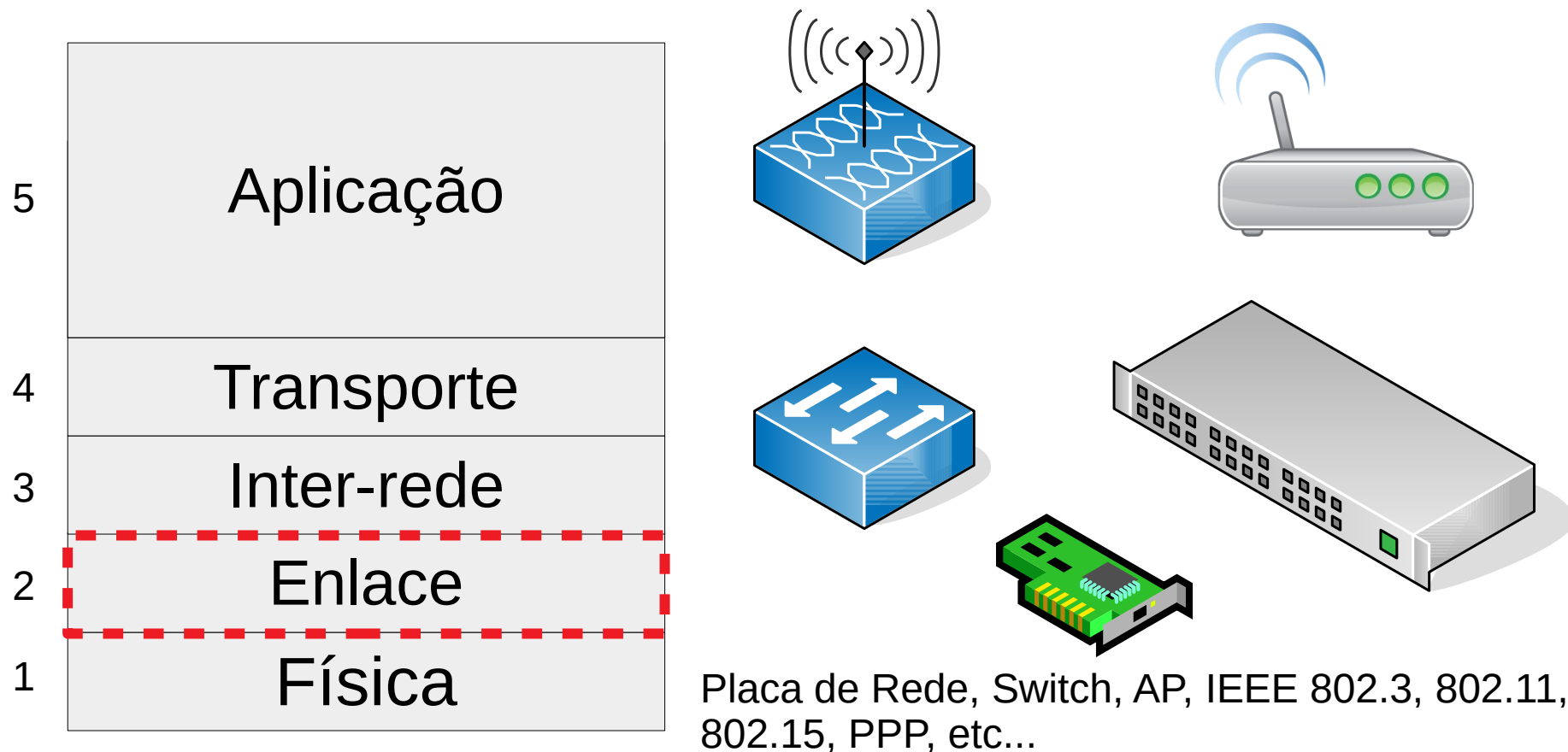


Meio de transmissão, Placa de Rede, Hub, etc...

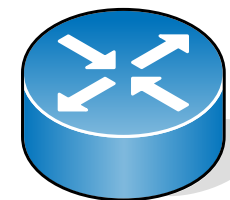
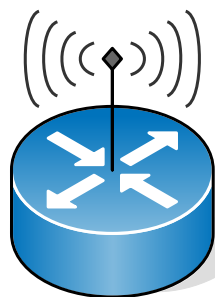
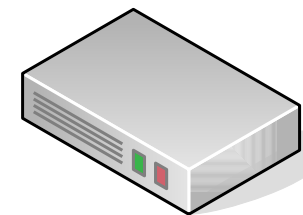
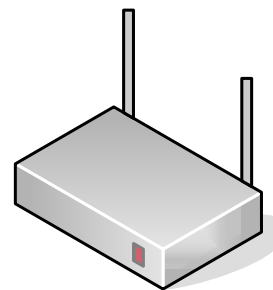
Protocolos TCP/IP



Protocolos TCP/IP



Protocolos TCP/IP

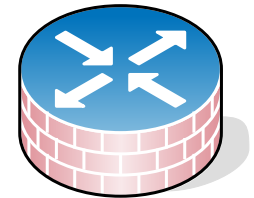
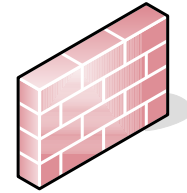
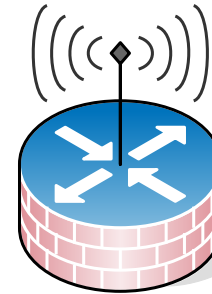


Roteador, IP, ARP, RARP, ICMP...

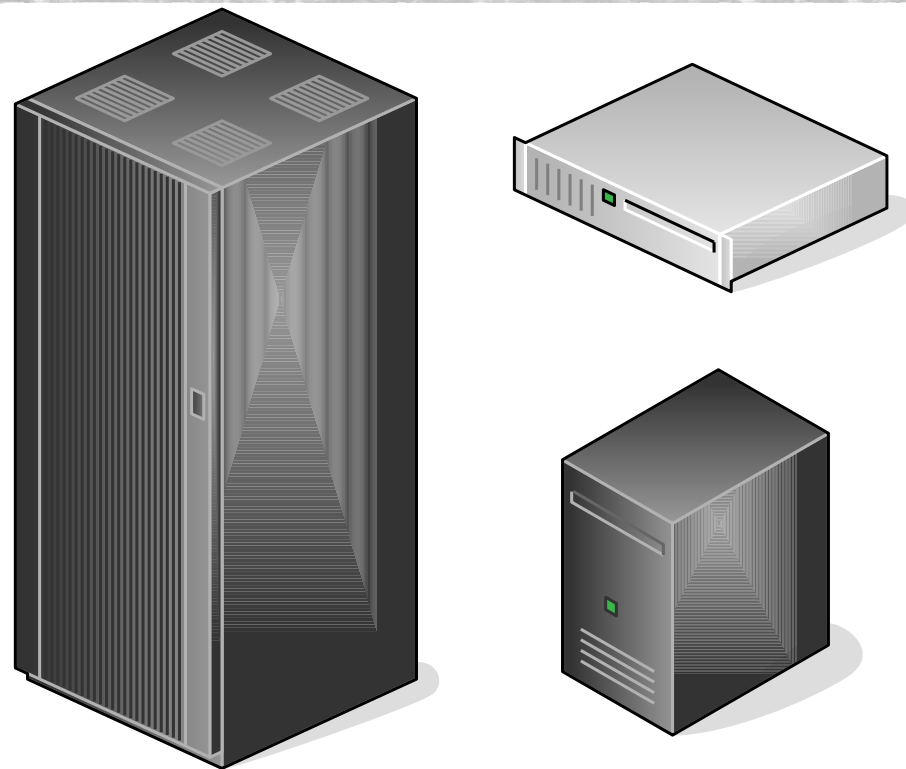
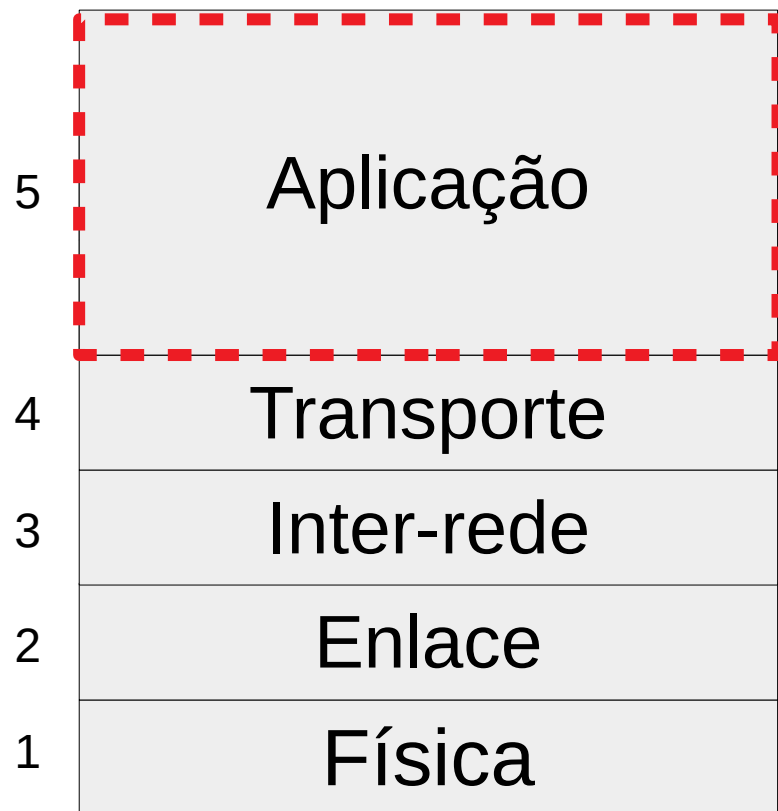
Protocolos TCP/IP



Firewall, TCP, UDP.



Protocolos TCP/IP



Telnet, FTP, HTTP, SSH, HTTPS, DNS, DHCP, NFS, SMB, Proxy, etc... (aqui tem muita coisa!)

Protocolos TCP/IP



Servidor 1 (netbook)
(TELNET, FTP, HTTP)
192.168.0.158

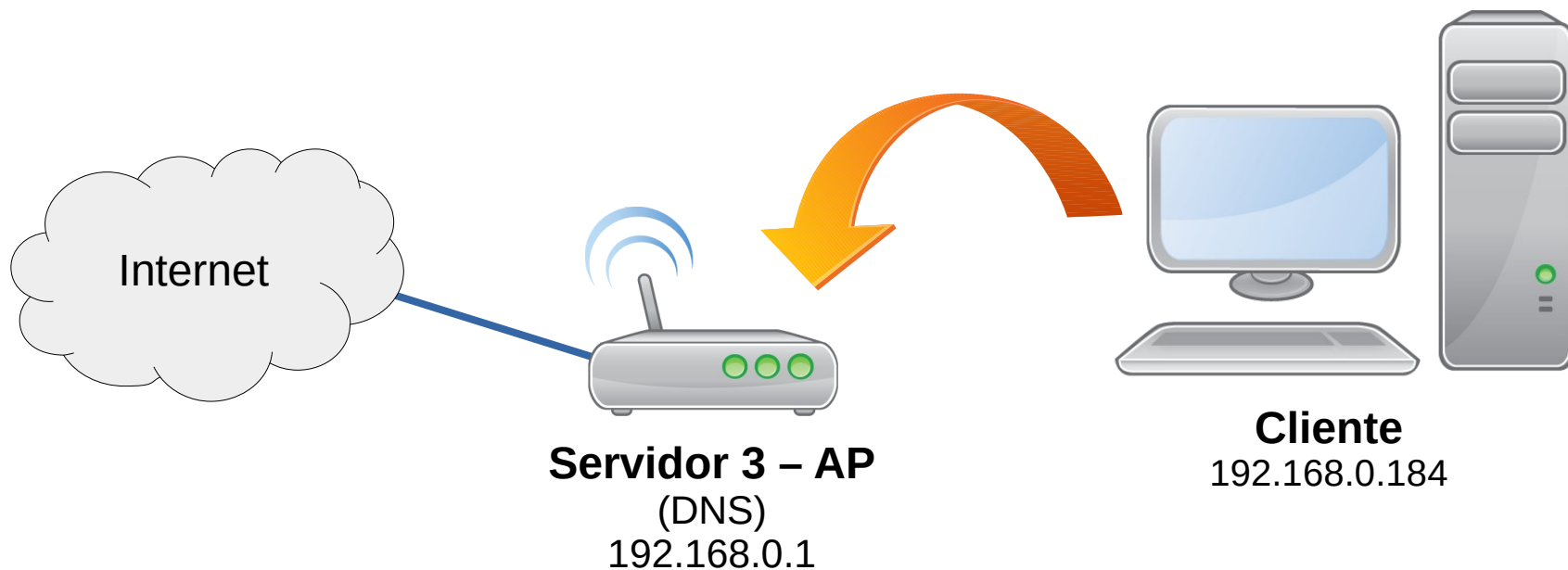


Servidor 2 (raspberry)
(SSH, HTTP)
192.168.0.199



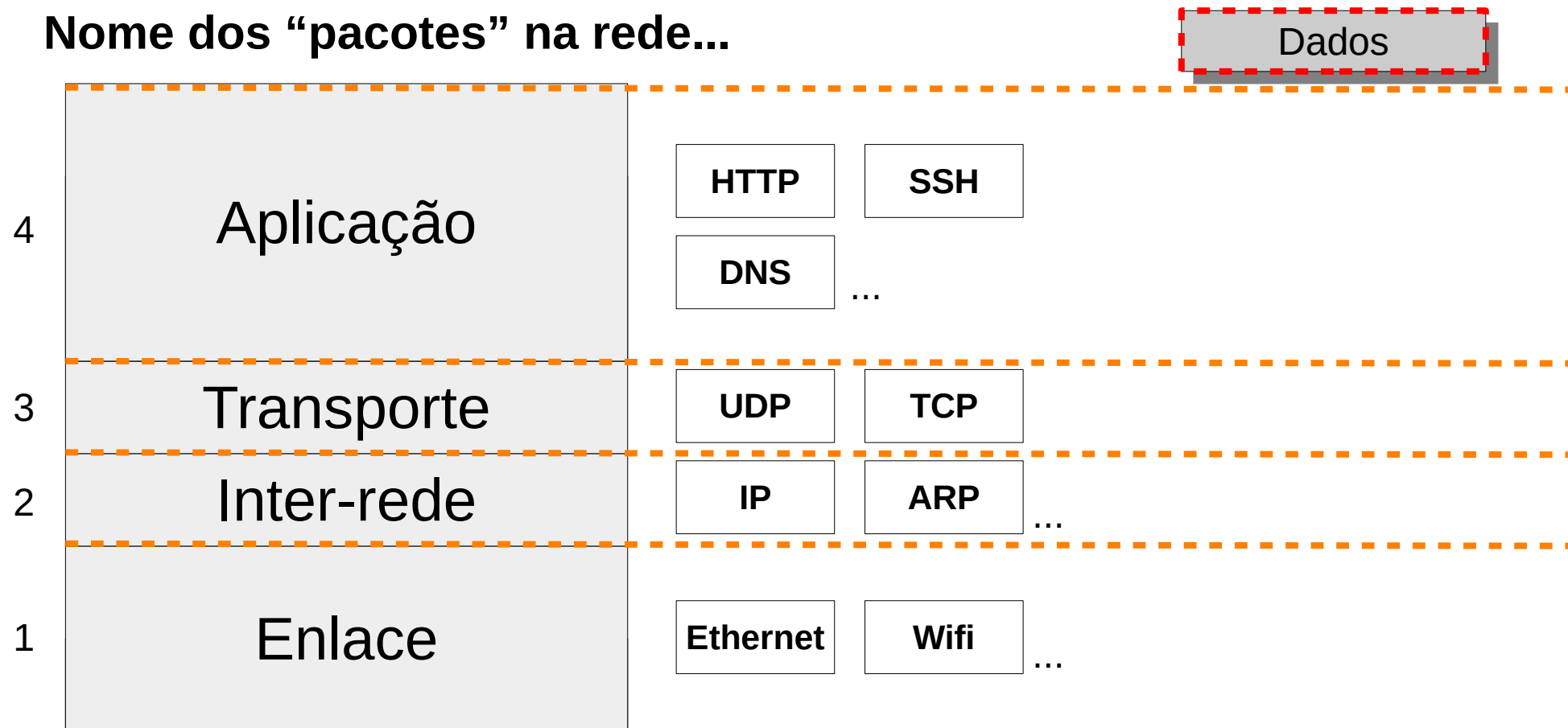
Cliente
192.168.0.184

Protocolos TCP/IP



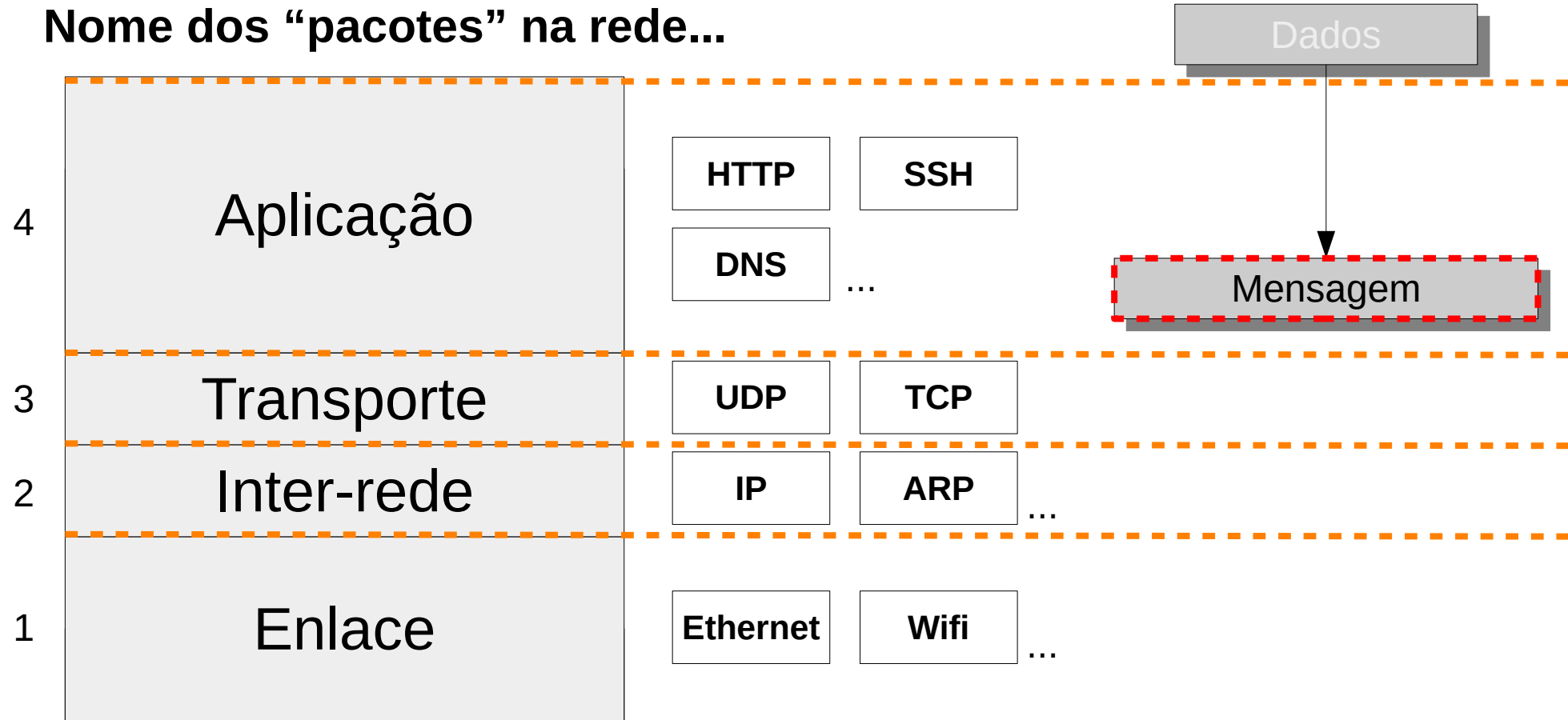
Camadas do Modelo TCP/IP

Nome dos “pacotes” na rede...



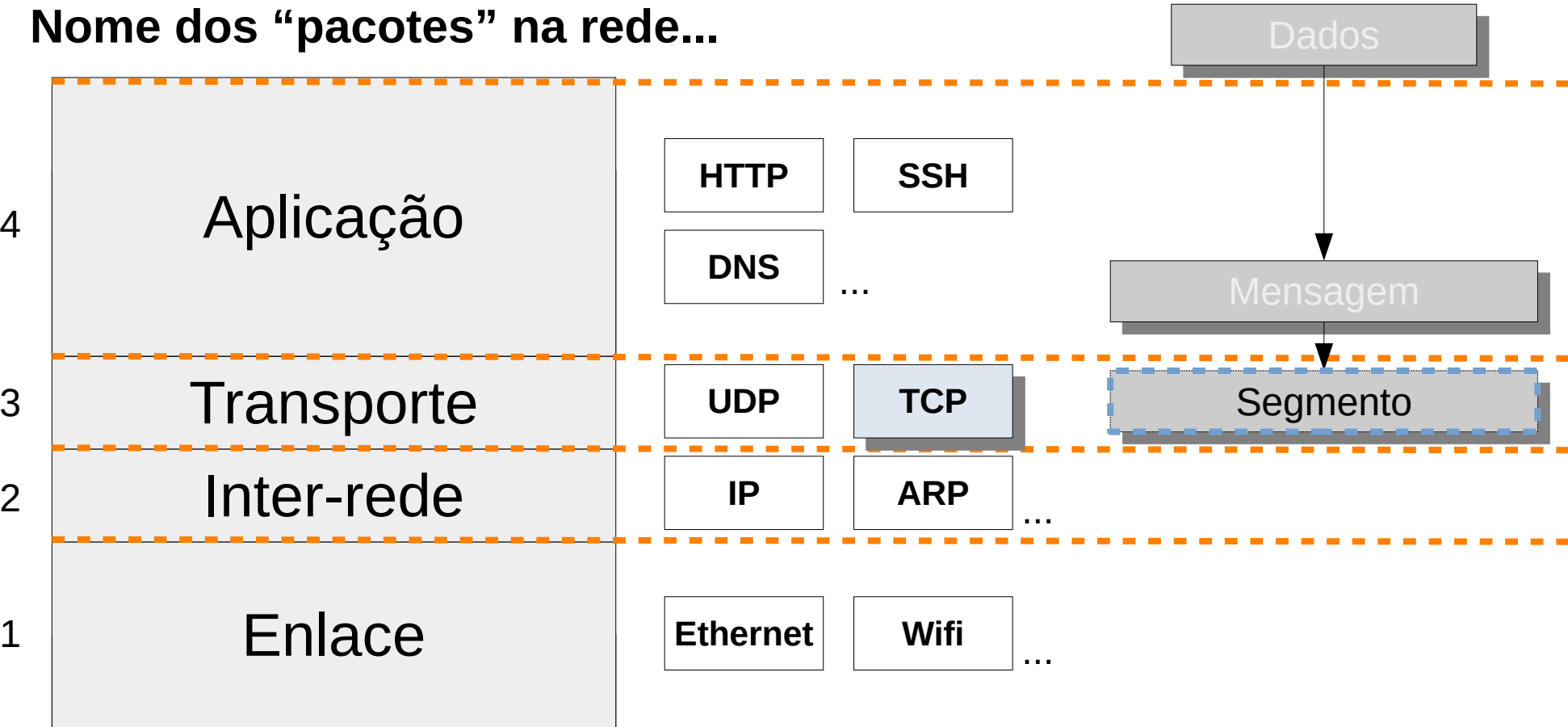
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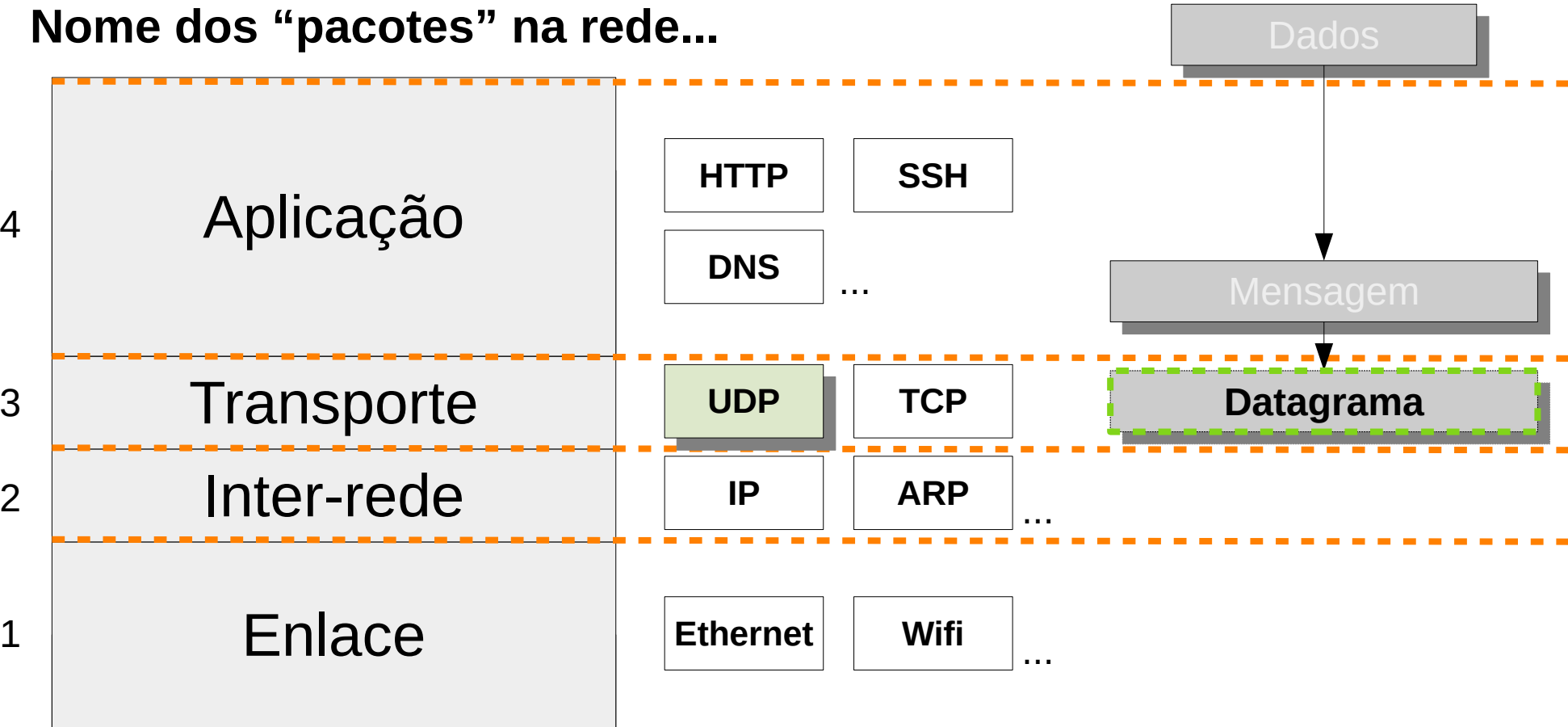
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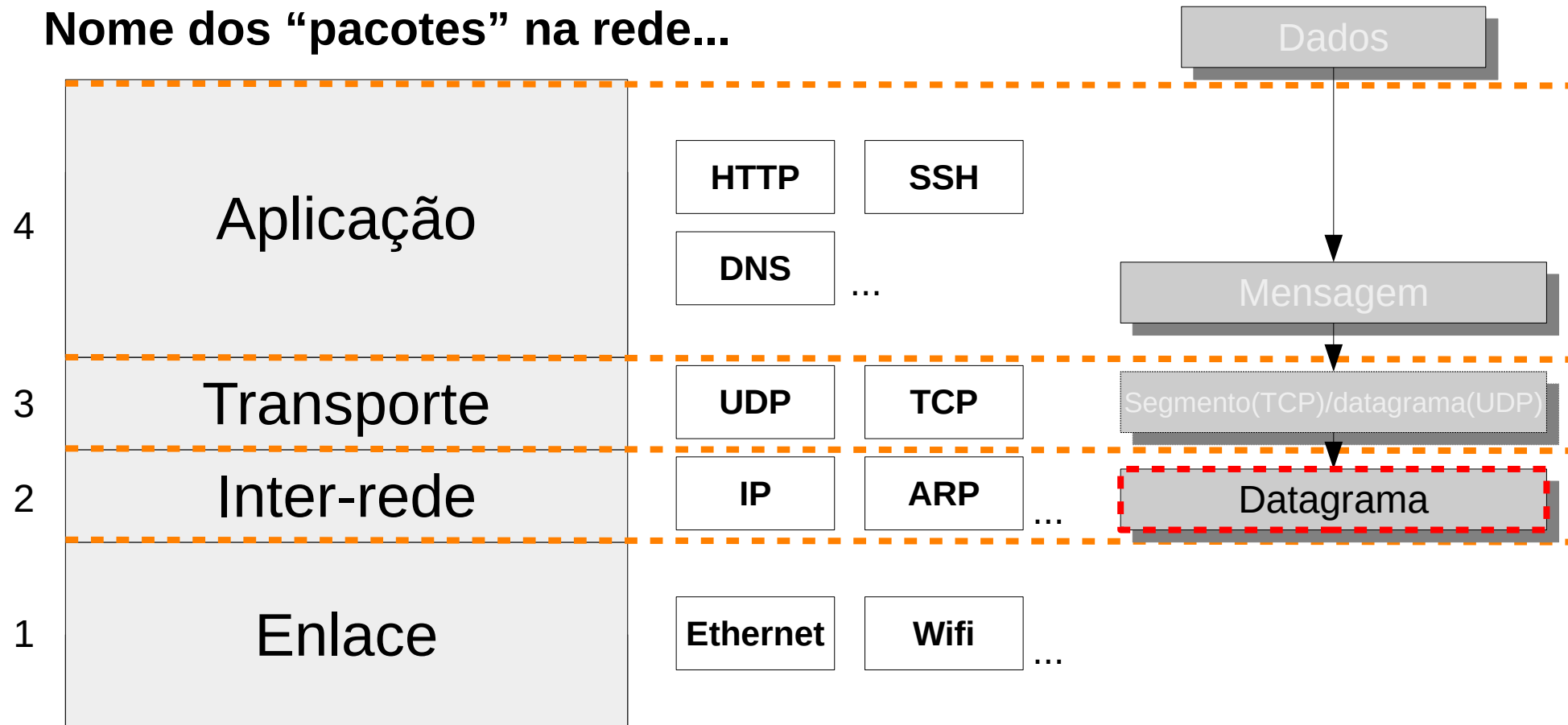
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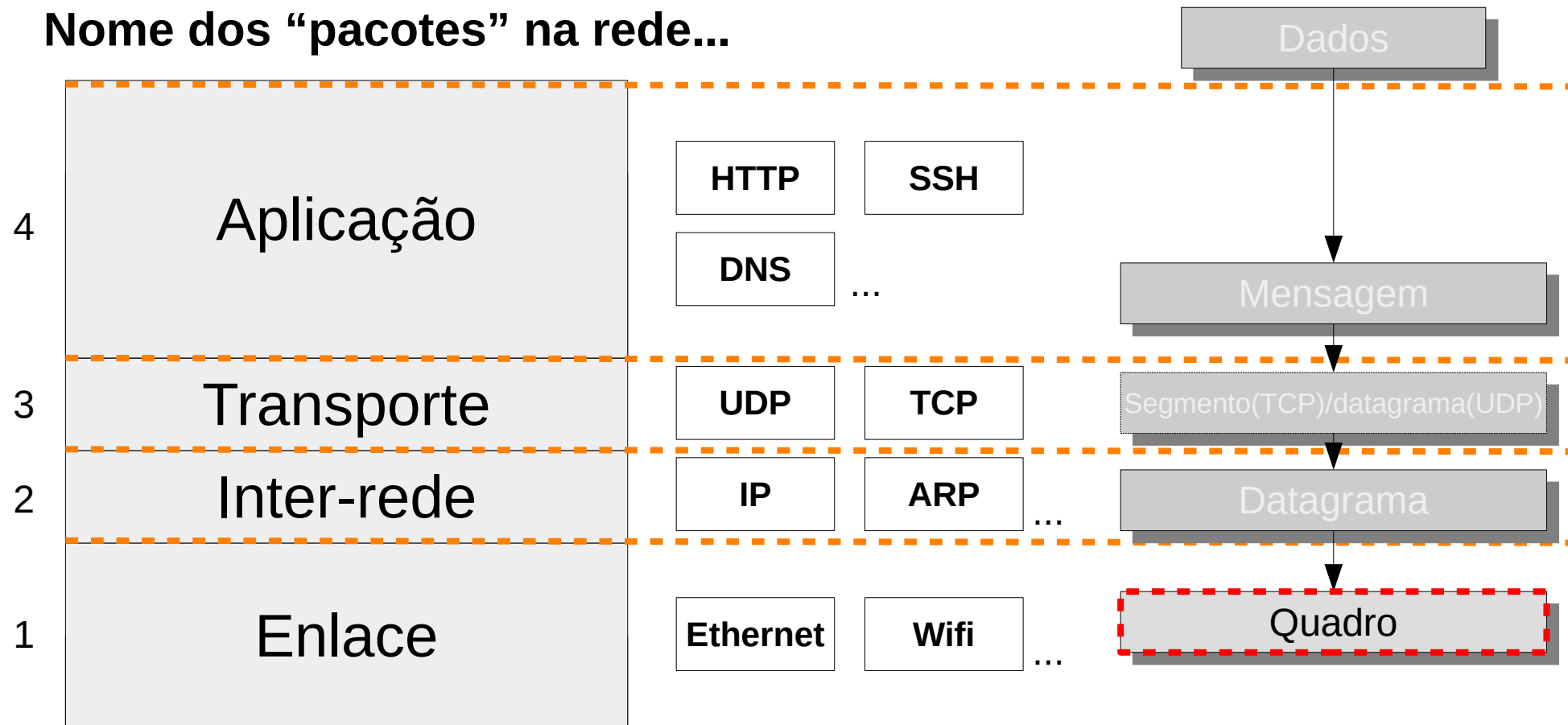
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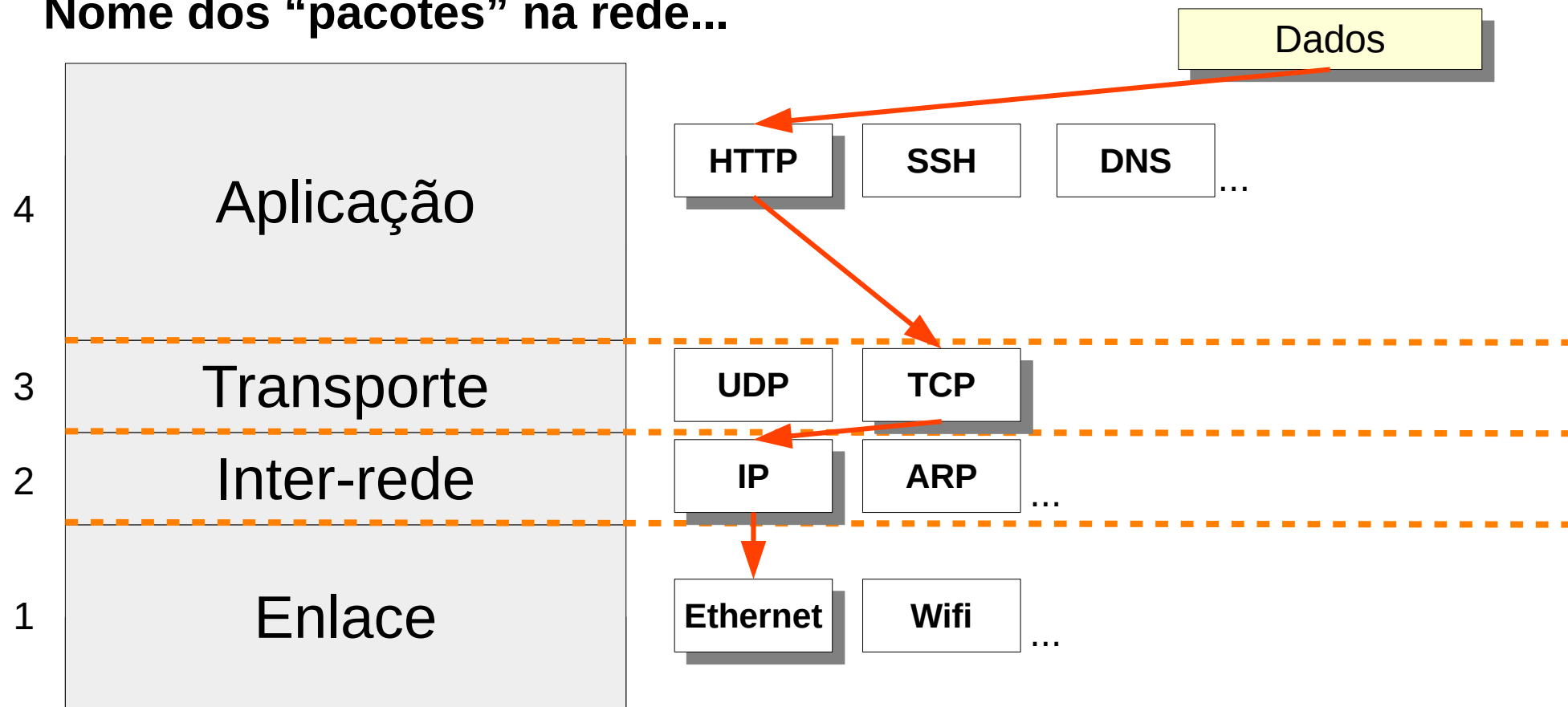
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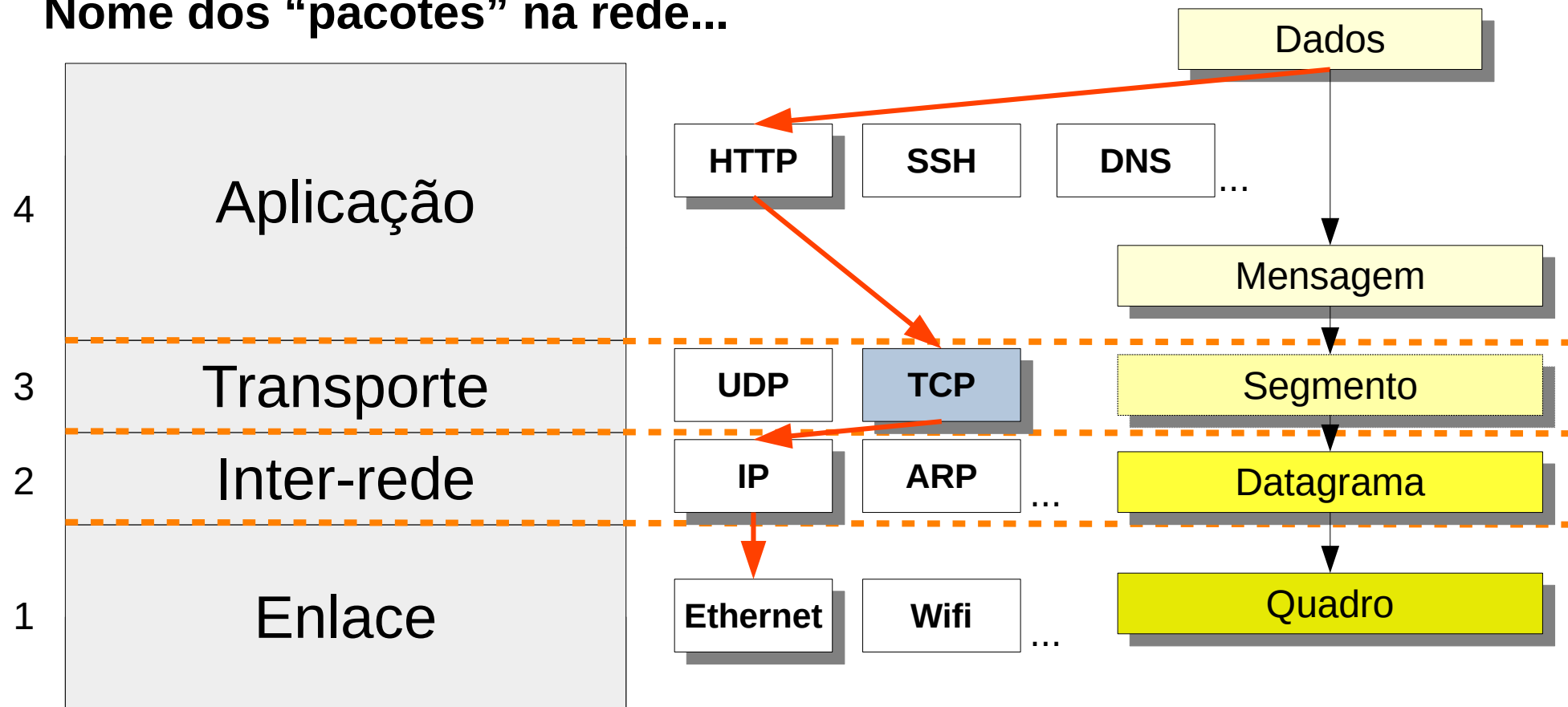
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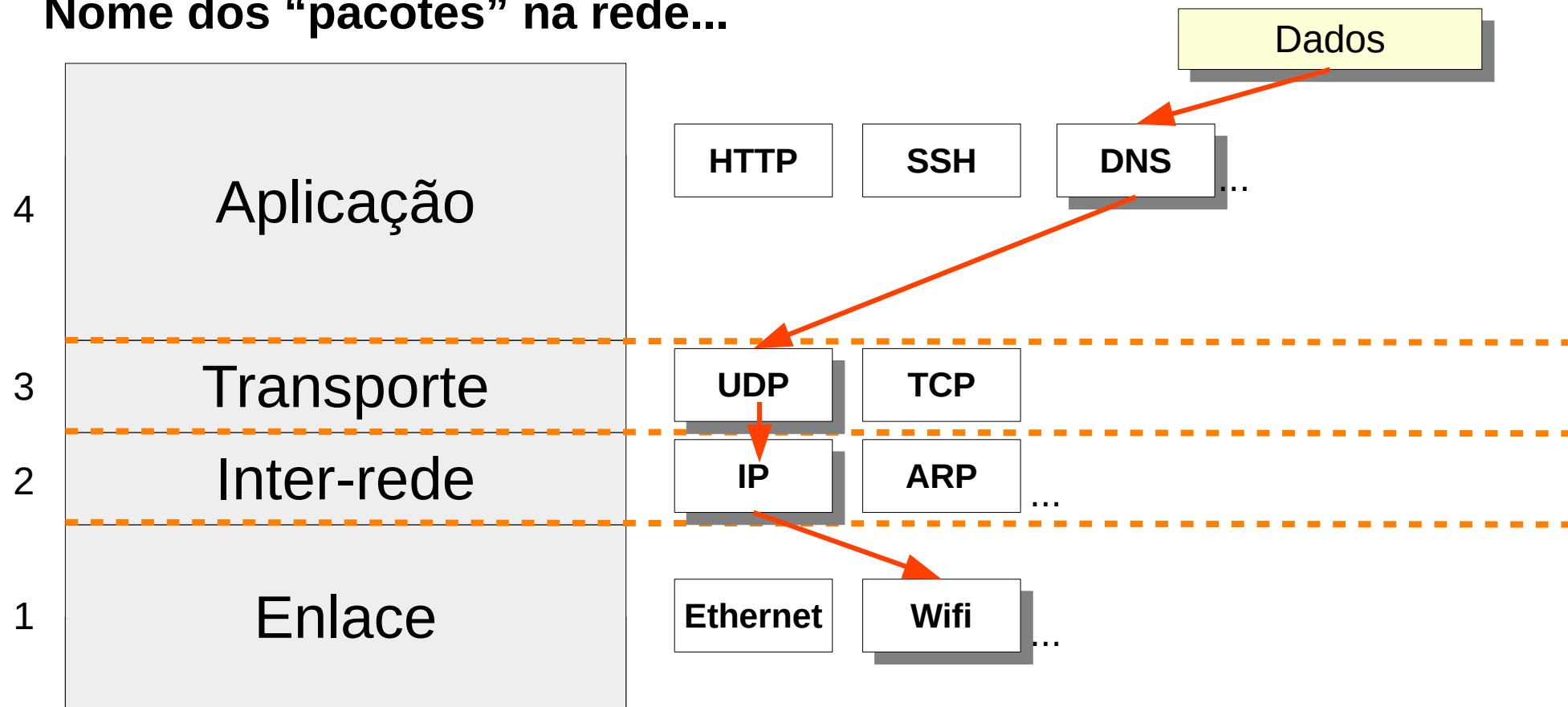
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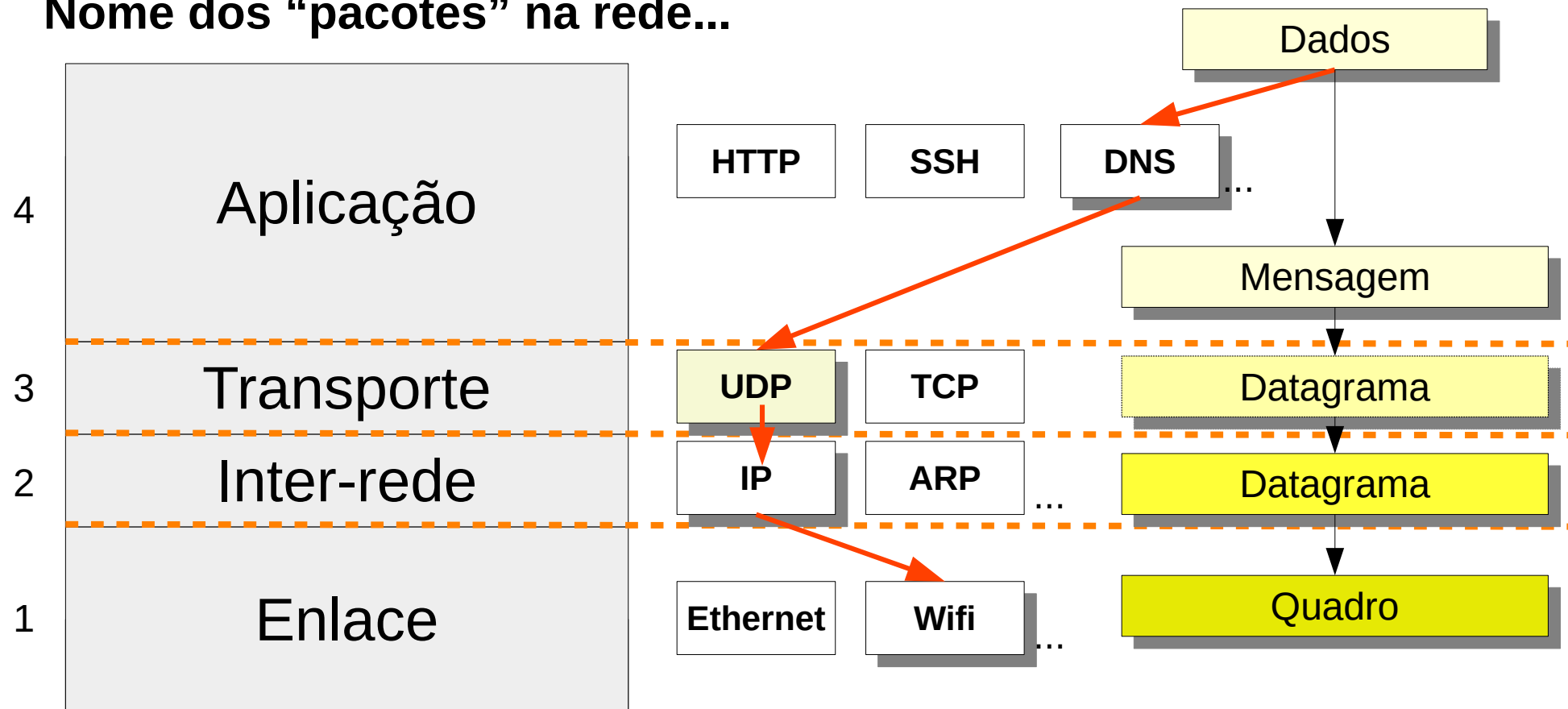
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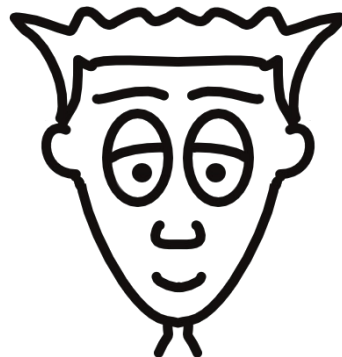
Nome dos “pacotes” na rede...



Modelo TCP/IP

Conclusão:

Na prática o TCP/IP é o modelo utilizado na Internet, quase toda tecnologia de rede utiliza TCP/IP. No fundo TCP/IP é um conjunto de tecnologias/protocolos/serviços!!!



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Links e referencias na descrição do vídeo