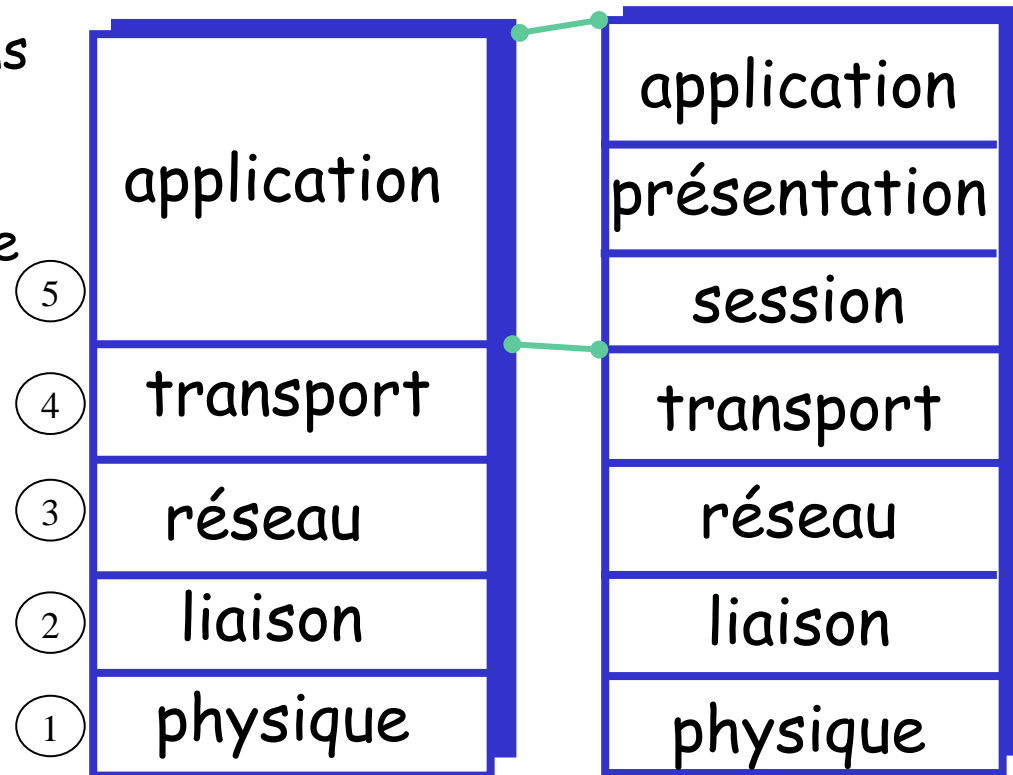


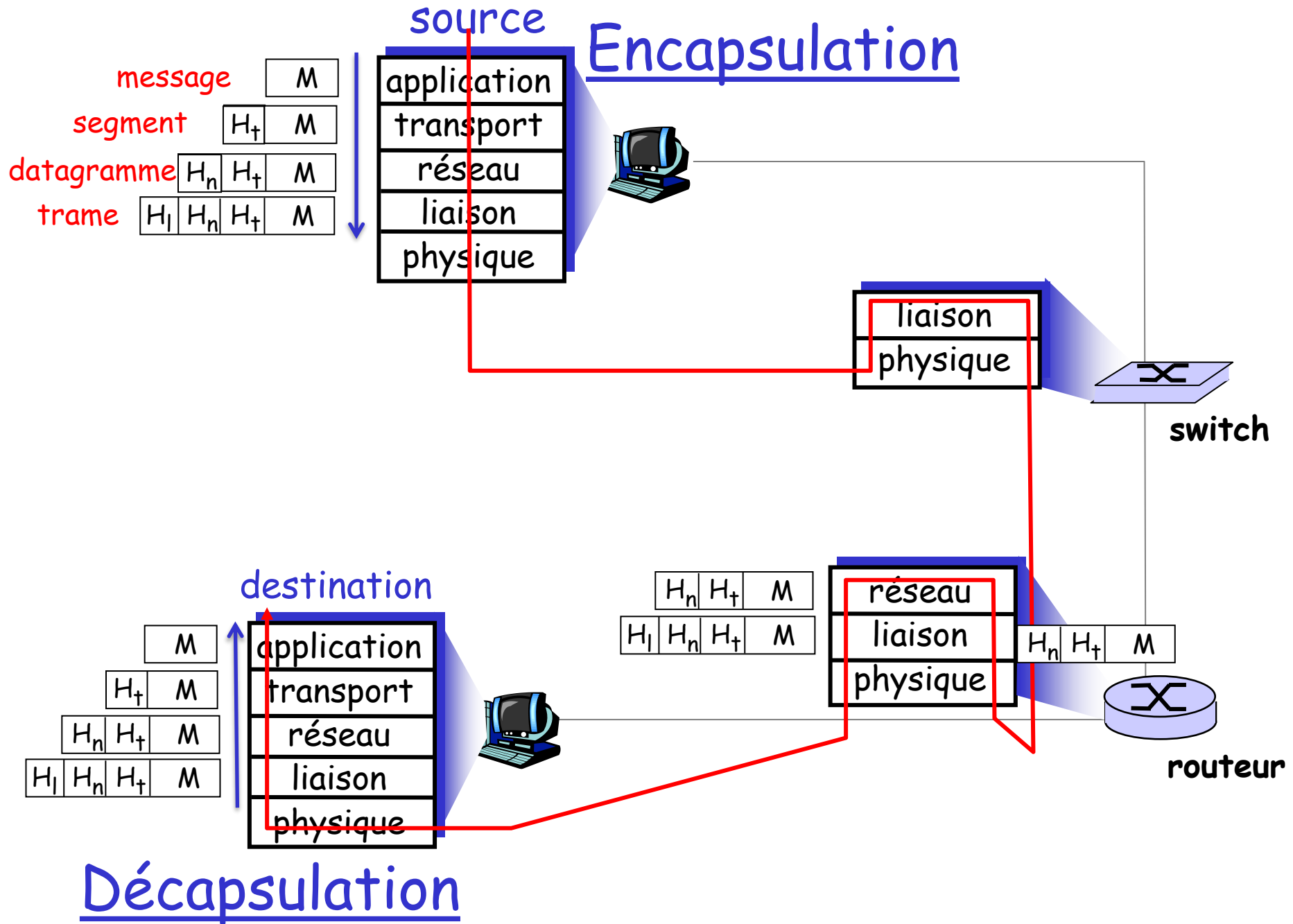
La pile des protocoles d'Internet

- **Couche application:** les fonctions des couches application, présentation et session sont maintenant regroupées dans une seule couche application



Modèle Internet

Modèle OSI



Wireshark

Une trame →

No.	Time	Source	Destination	Protocol	Length	Info
55	2.954058	216.151.177.22	10.164.137.16	FTP	98	Response: 220 spftp/1.0.0000 Server [216.151.177.22]
89	6.692372	10.164.137.16	216.151.177.22	FTP	70	Request: USER anonymous
91	6.713843	216.151.177.22	10.164.137.16	FTP	87	Response: 331 Password required for USER.
129	15.140525	10.164.137.16	216.151.177.22	FTP	68	Request: PASS pass123
130	15.162435	216.151.177.22	10.164.137.16	FTP	387	Response: 230-
160	19.252037	10.164.137.16	216.151.177.22	FTP	82	Request: PORT 10,164,137,16,137,136
162	19.273385	216.151.177.22	10.164.137.16	FTP	84	Response: 200 PORT command successful.
163	19.281287	10.164.137.16	216.151.177.22	FTP	70	Request: RETR usage.txt

Physique → > Frame 55: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface \Device\NPF_{95461DDF-B9EF--...}

Liaison → > Ethernet II, Src: Cisco_6e:64:ff (00:23:33:6e:64:ff), Dst: Dell_ad:ab:a4 (98:90:96:ad:ab:a4)

Réseau → > Internet Protocol Version 4, Src: 216.151.177.22, Dst: 10.164.137.16

Transport → > Transmission Control Protocol, Src Port: 21, Dst Port: 35207, Seq: 1, Ack: 1, Len: 44

Application → > File Transfer Protocol (FTP)
[Current working directory:]

0000 98 90 96 ad ab a4 00 23 33 6e 64 ff 08 00 45 00
0010 00 54 c0 8f 40 00 35 06 67 b2 d8 97 b1 16 0a a4
0020 89 10 00 15 89 87 af 3c ba dc 1b 4a 0e 3c 50 18
0030 01 c9 d3 fd 00 00 32 32 30 20 73 70 66 74 70 2f
0040 31 2e 30 2e 30 30 30 30 20 53 65 72 76 65 72 20
0050 5b 32 31 36 2e 31 35 31 2e 31 37 37 2e 32 32 5d
0060 0d 0a

Wireshark

Un champ de l'entête de la
couche transport:
Nom du champ: Source Port
Valeur du champ: 21
Taille du champ: 2 octets

> Frame 55: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface \Device\NPF_{95461DDF-B9E...}

> Ethernet II, Src: Cisco_6e:64:ff (00:23:33:6e:64:ff), Dst: Dell_ad:ab:a4 (98:90:96:ad:ab:a4)

> Internet Protocol Version 4, Src: 216.151.177.22, Dst: 10.164.137.16

▼ Transmission Control Protocol, Src Port: 21, Dst Port: 35207, Seq: 1, Ack: 1, Len: 44

Source Port: 21

Destination Port: 35207

[Stream index: 0]

[Conversation completeness: Complete, WITH_DATA (31)]

[TCP Segment Len: 44]

Sequence Number: 1 (relative sequence number)

Sequence Number (raw): 2939992796

[Next Sequence Number: 45 (relative sequence number)]

Acknowledgment Number: 1 (relative ack number)

Acknowledgment number (raw): 457838140

0101 = Header Length: 20 bytes (5)

> Flags: 0x018 (PSH, ACK)

Window: 457

[Calculated window size: 14624]

[Window size scaling factor: 32]

Checksum: 0xd3fd [unverified]

[Checksum Status: Unverified]

Urgent Pointer: 0

> [Timestamps]

> [SEQ/ACK analysis]

TCP payload (44 bytes)

> File Transfer Protocol (FTP)

Source Port (tcp.srcport), 2 byte(s)

0000 98 90 96 ad ab a4 00 23 33 6e 64 ff 08 00 45 00

0010 00 54 00 8f 40 00 35 06 67 b2 d8 97 b1 16 0a a4

0020 89 10 00 15 89 87 af 3c ba dc 1b 4a 0e 3c 50 18

0030 01 09 d3 fd 00 00 32 32 30 20 73 70 66 74 70 2f

0040 31 2e 30 2e 30 30 30 30 20 53 65 72 76 65 72 20

0050 5b 32 31 36 2e 31 35 31 2e 31 37 37 2e 32 32 5d

0060 0d 0a

Paquet sélectionné : 55 · Paquets : 400 · Affichés : 12 (3.0%) | Profil : Default