Computer Networks Overview, Revisited

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EECS 325/425
Fall 2018

"Ain't nobody here,
Who can cause me pain or raise my fear …"

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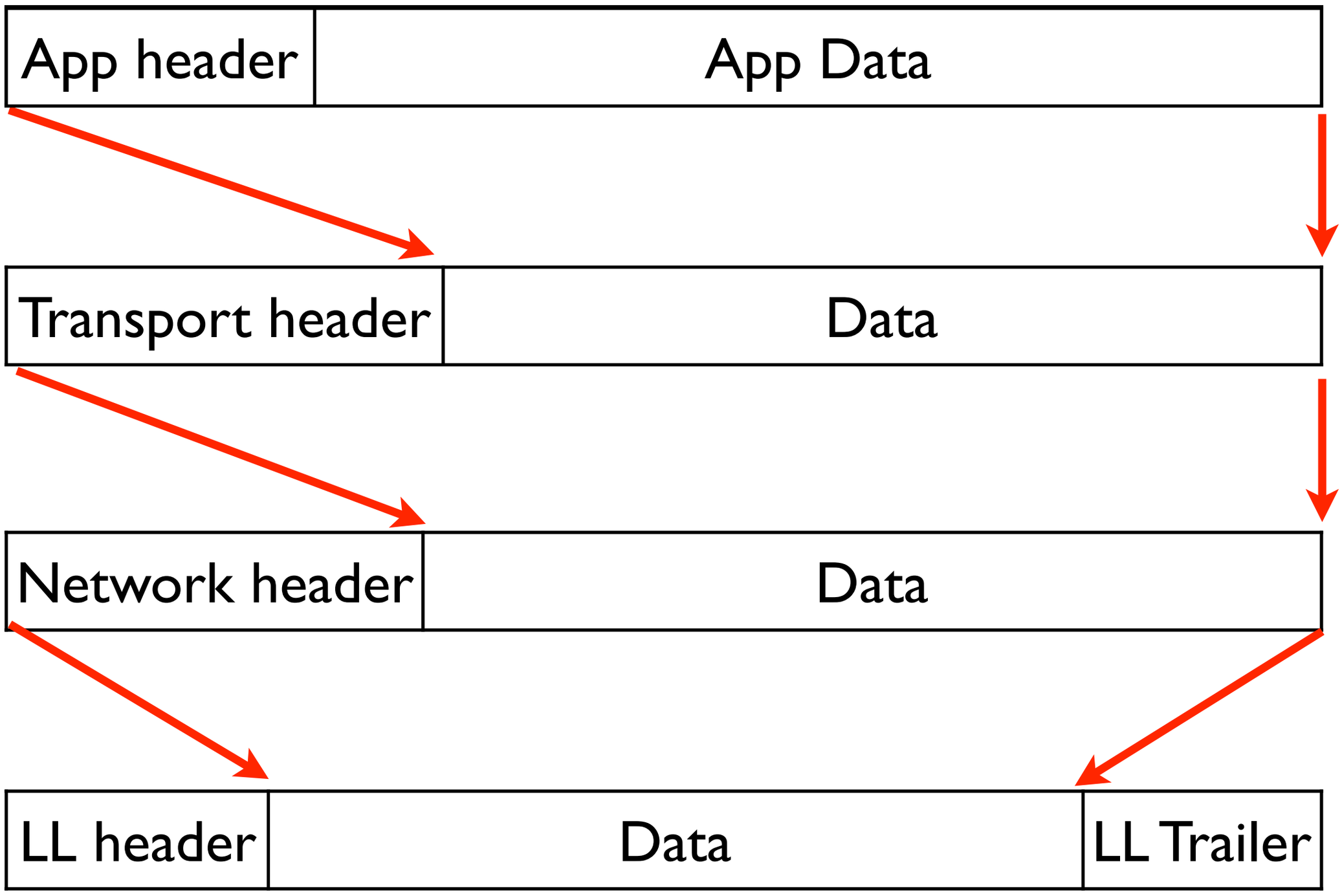
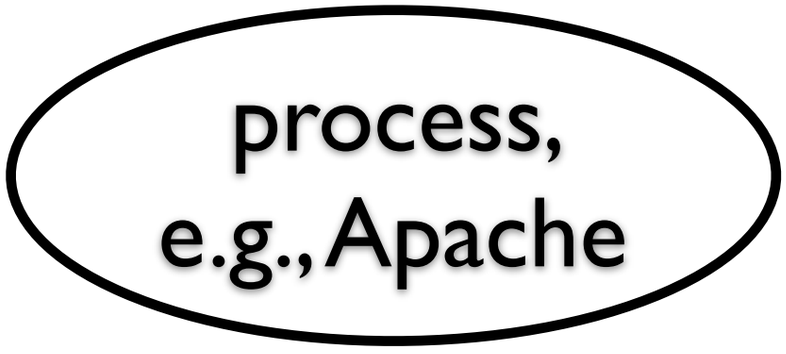
A Packet


App header
App Data
Transport header
Data
Network header
Data
LL header
Data
LL Trailer

Overhead / Data Flow

Overhead / Data Flow



Overhead / Data Flow

process,
e.g., Apache

2750 bytes

case.png

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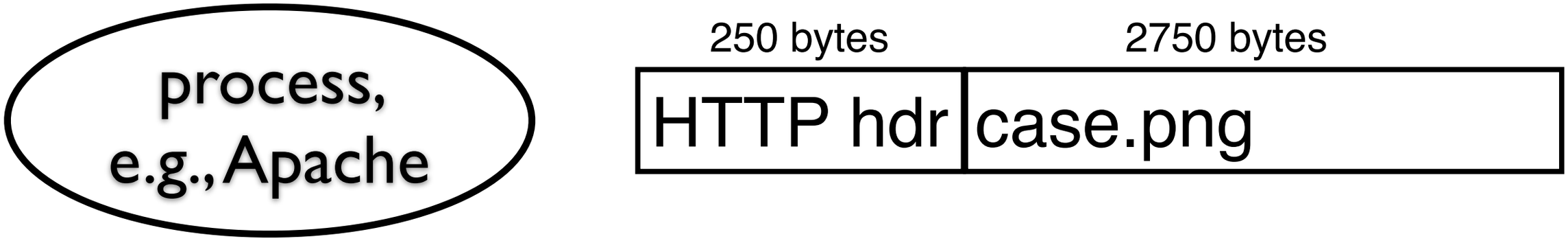

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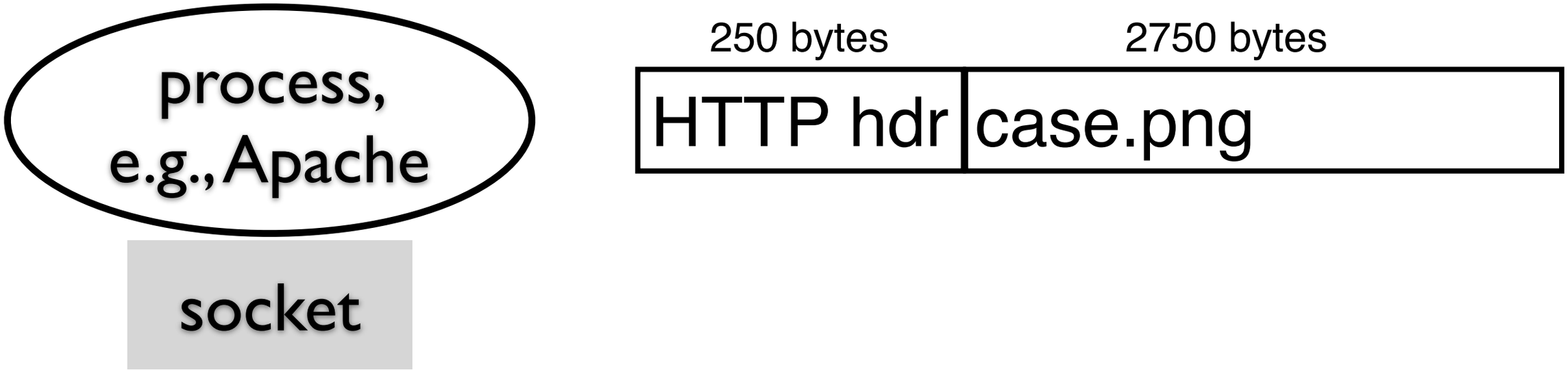

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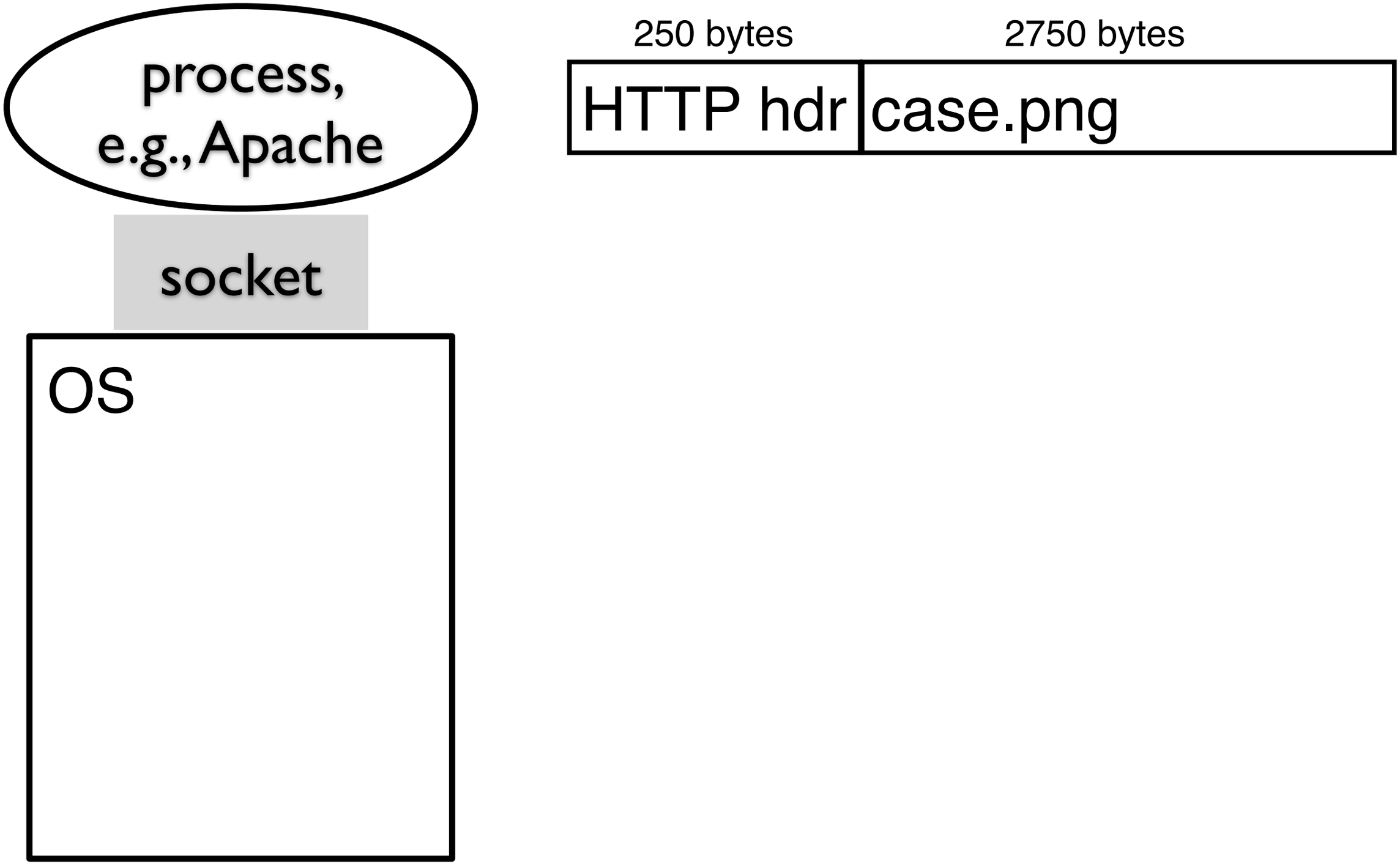

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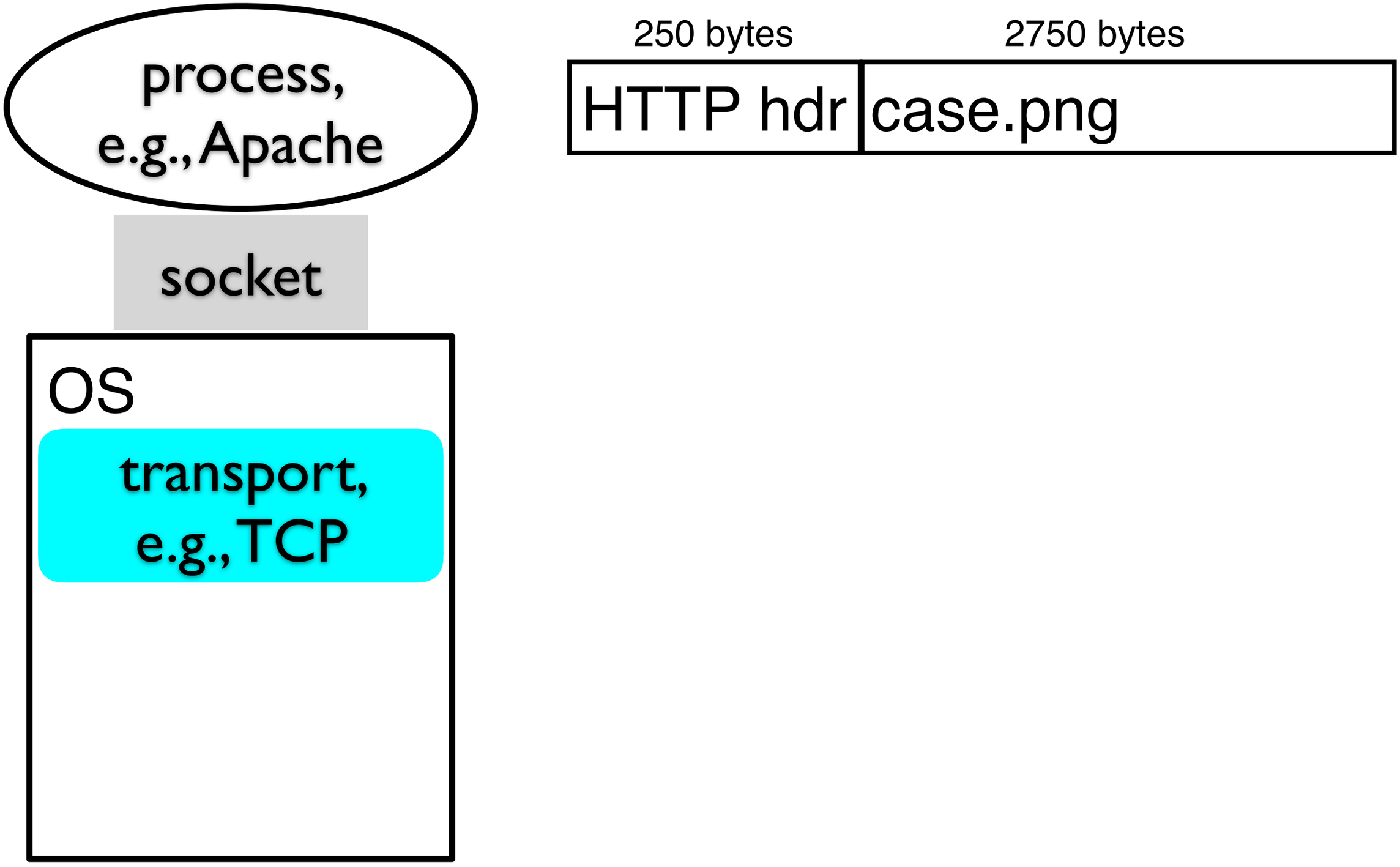

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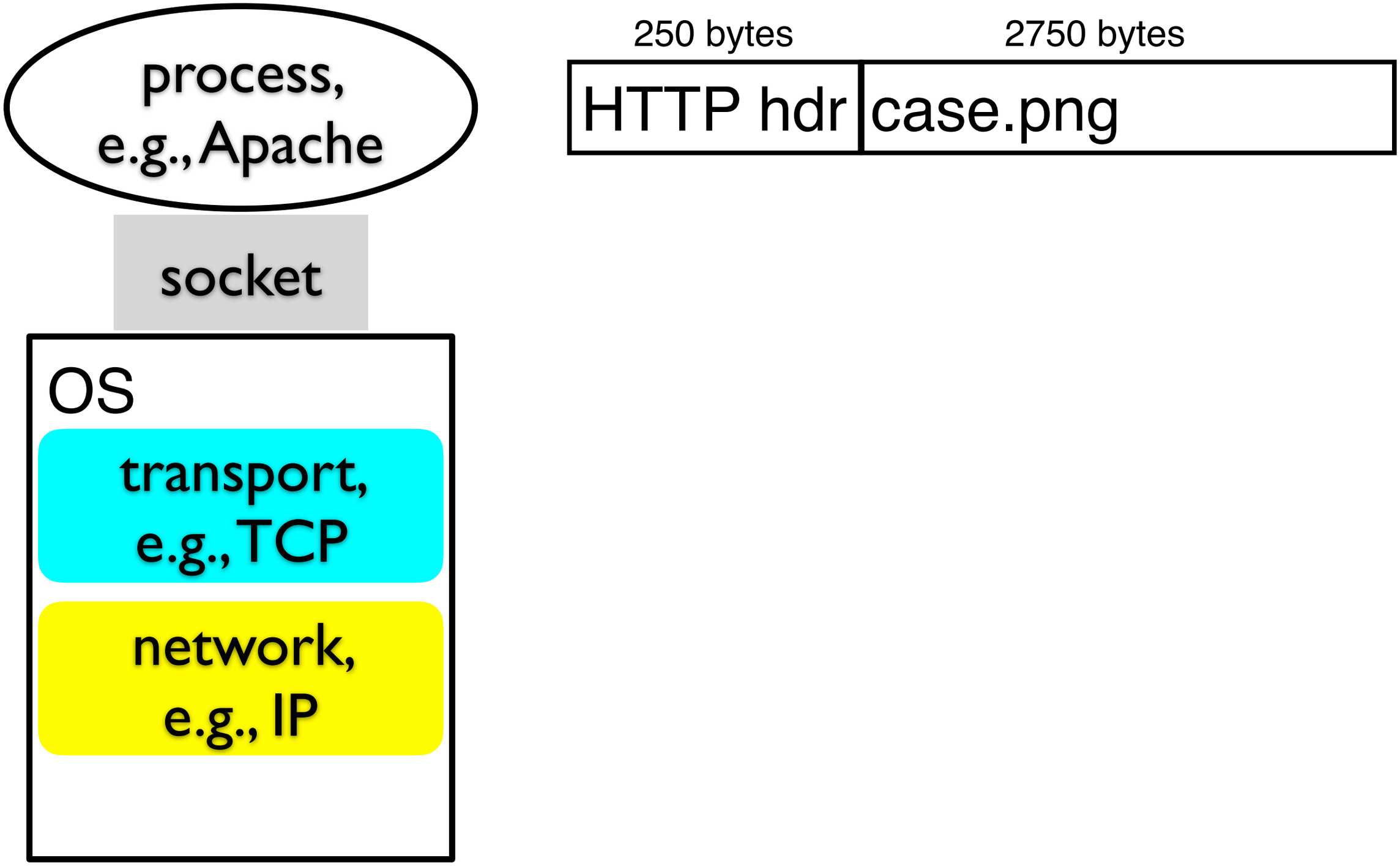

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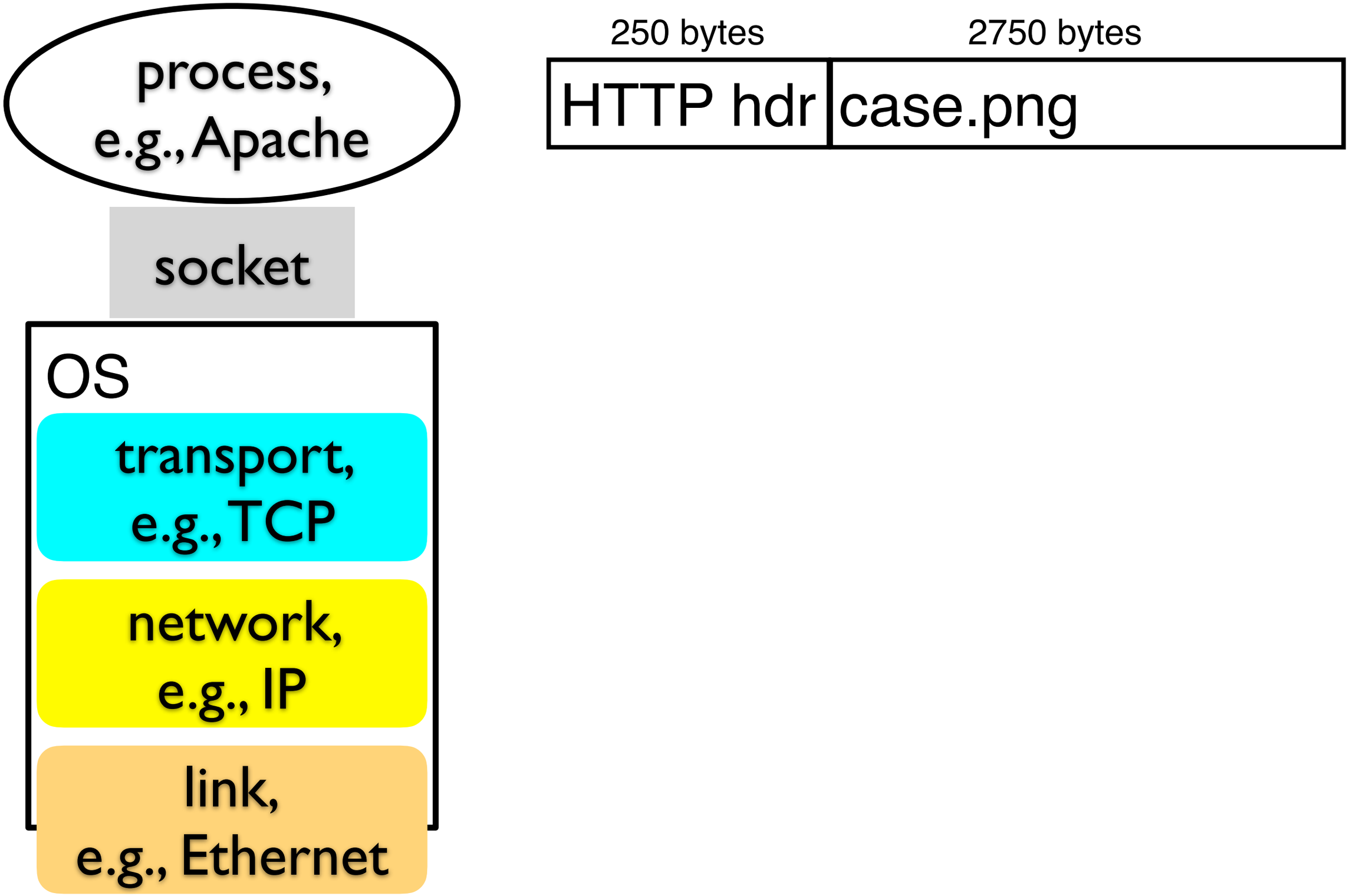

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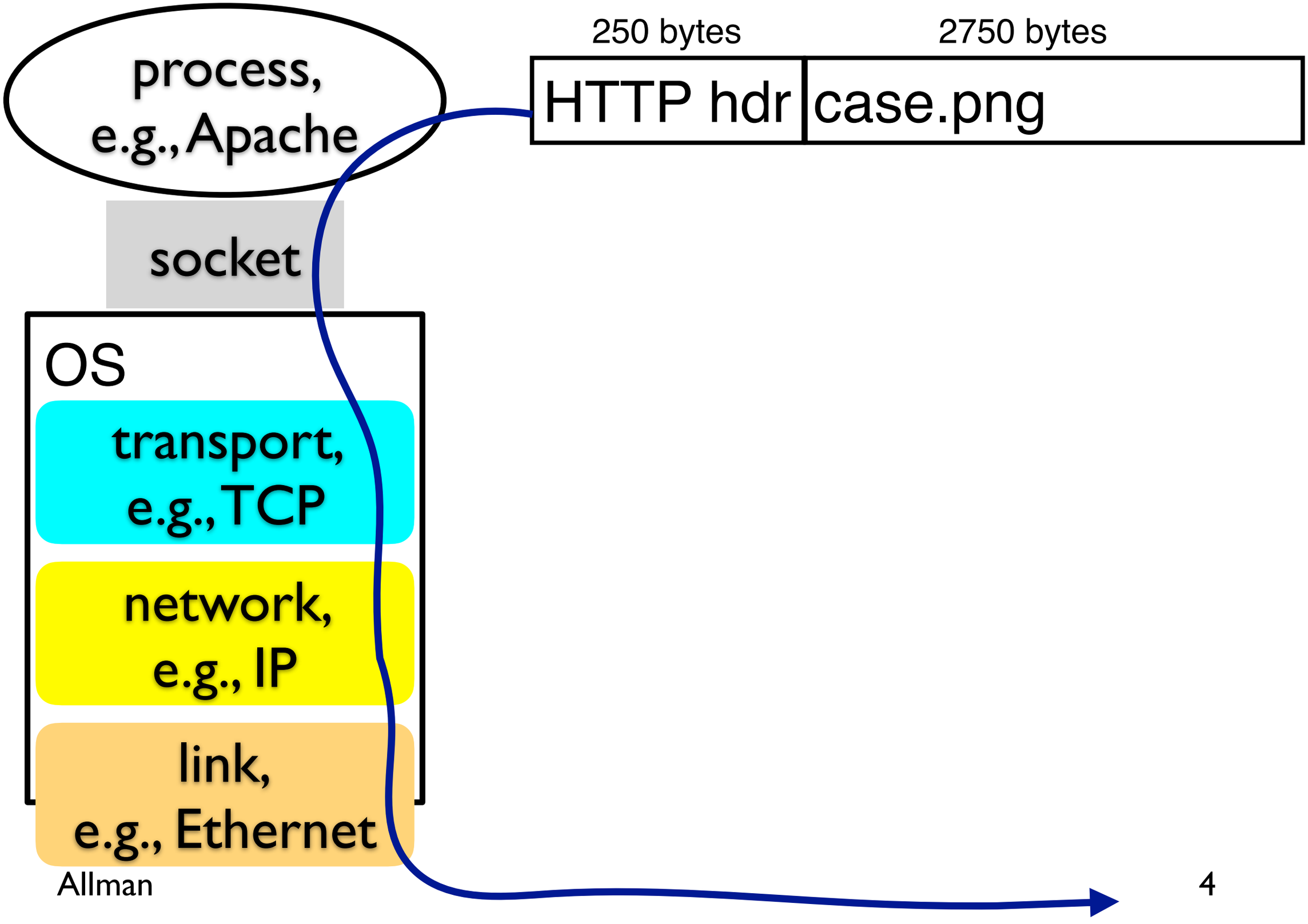

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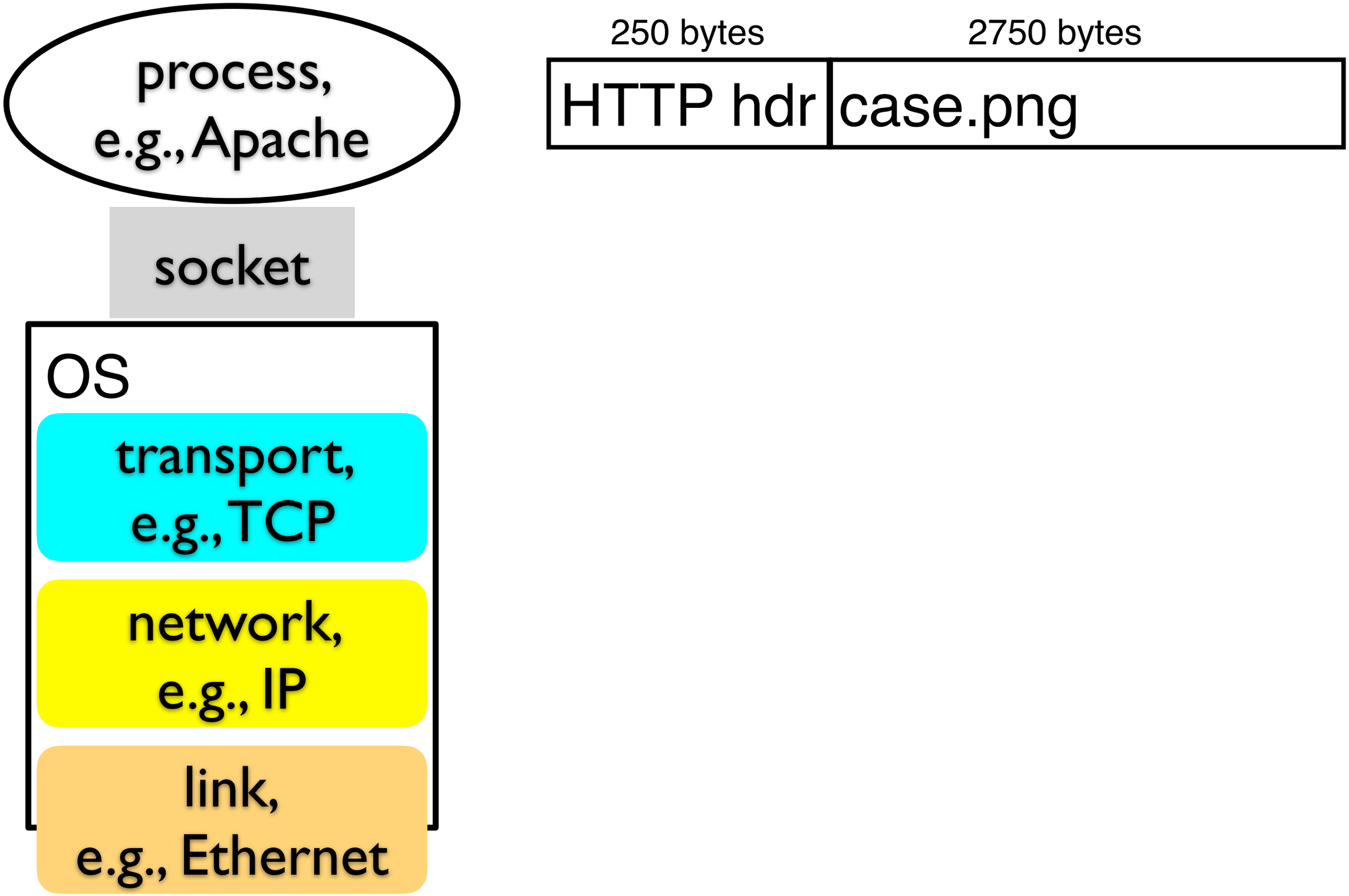

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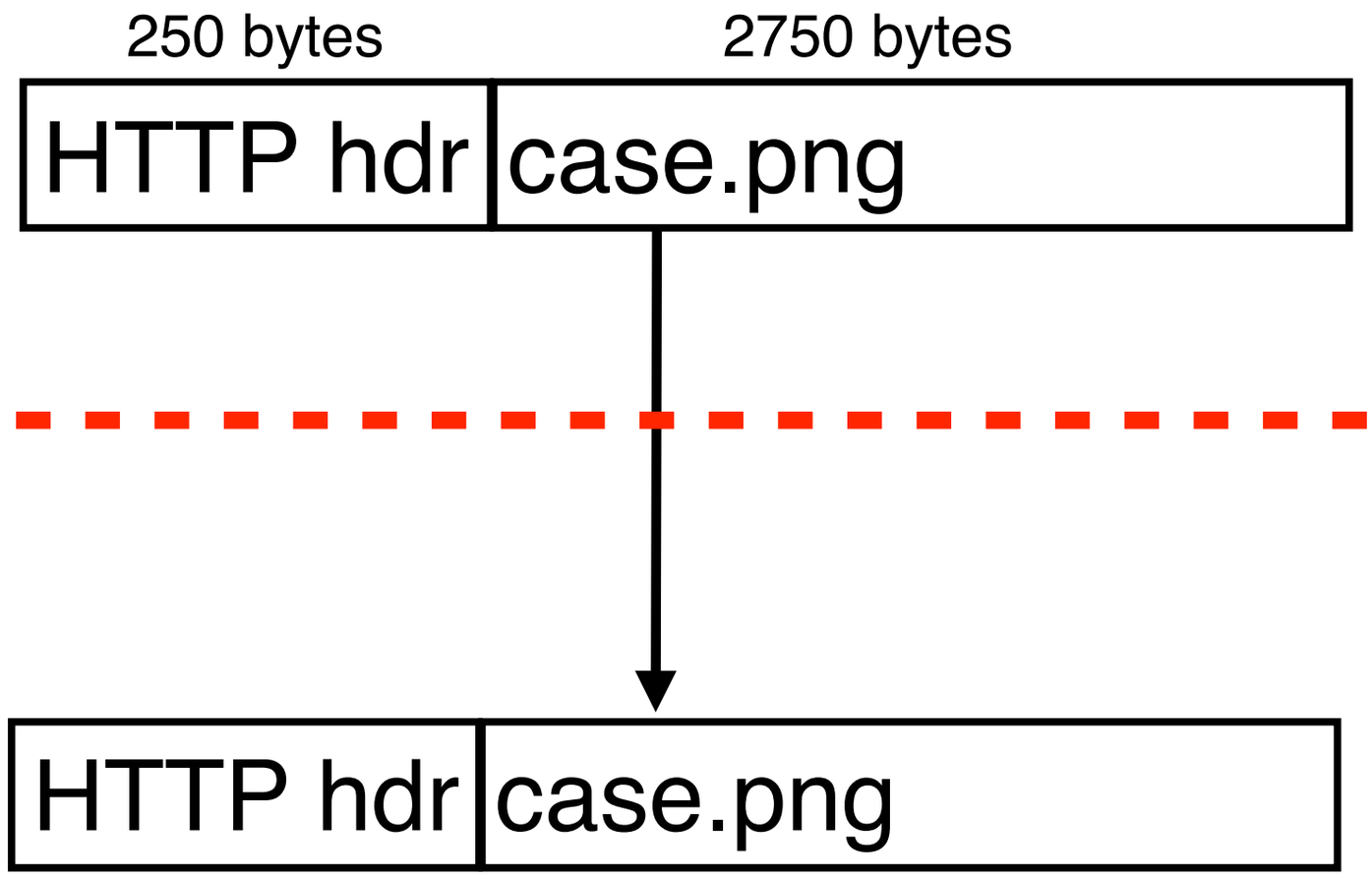

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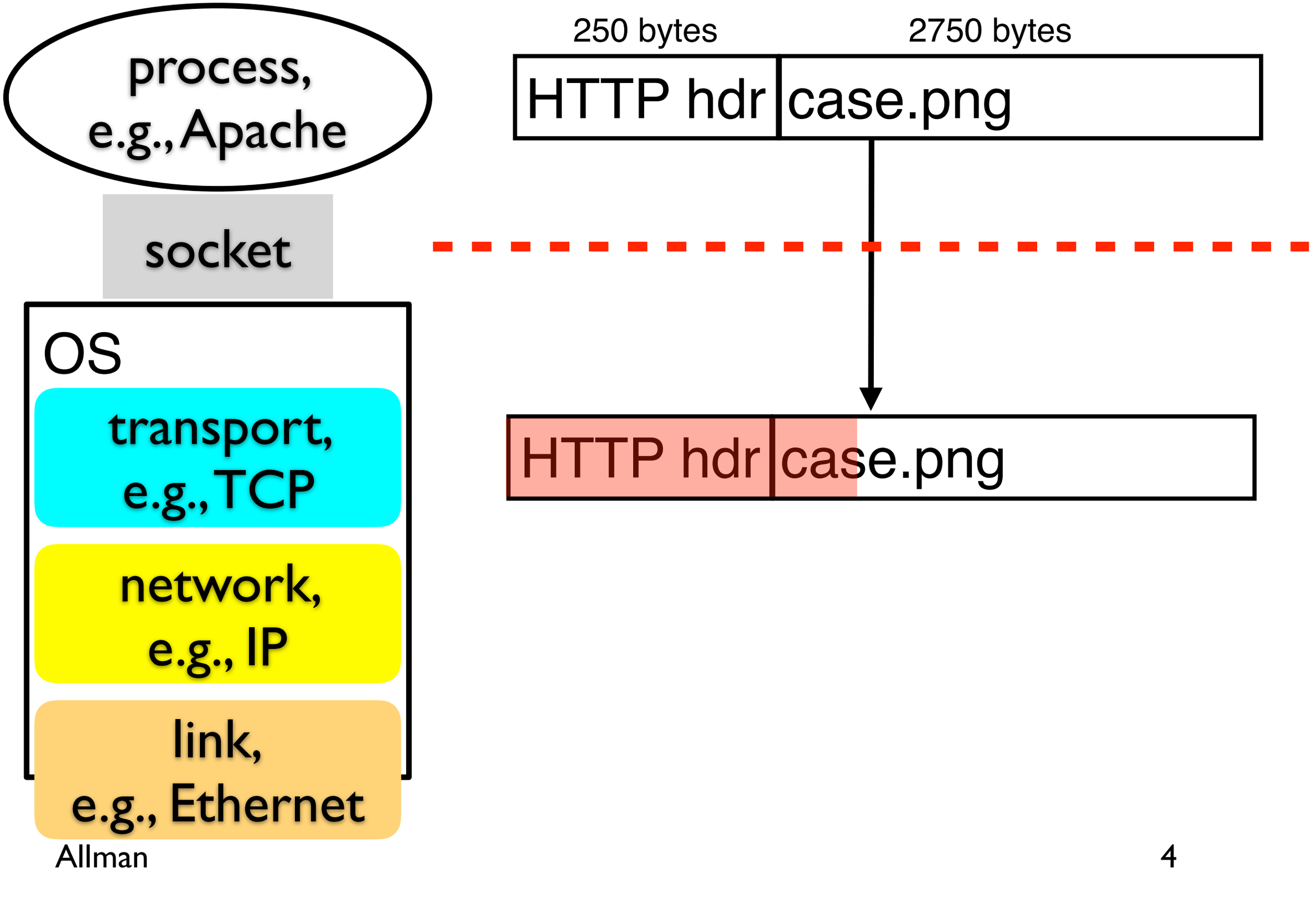

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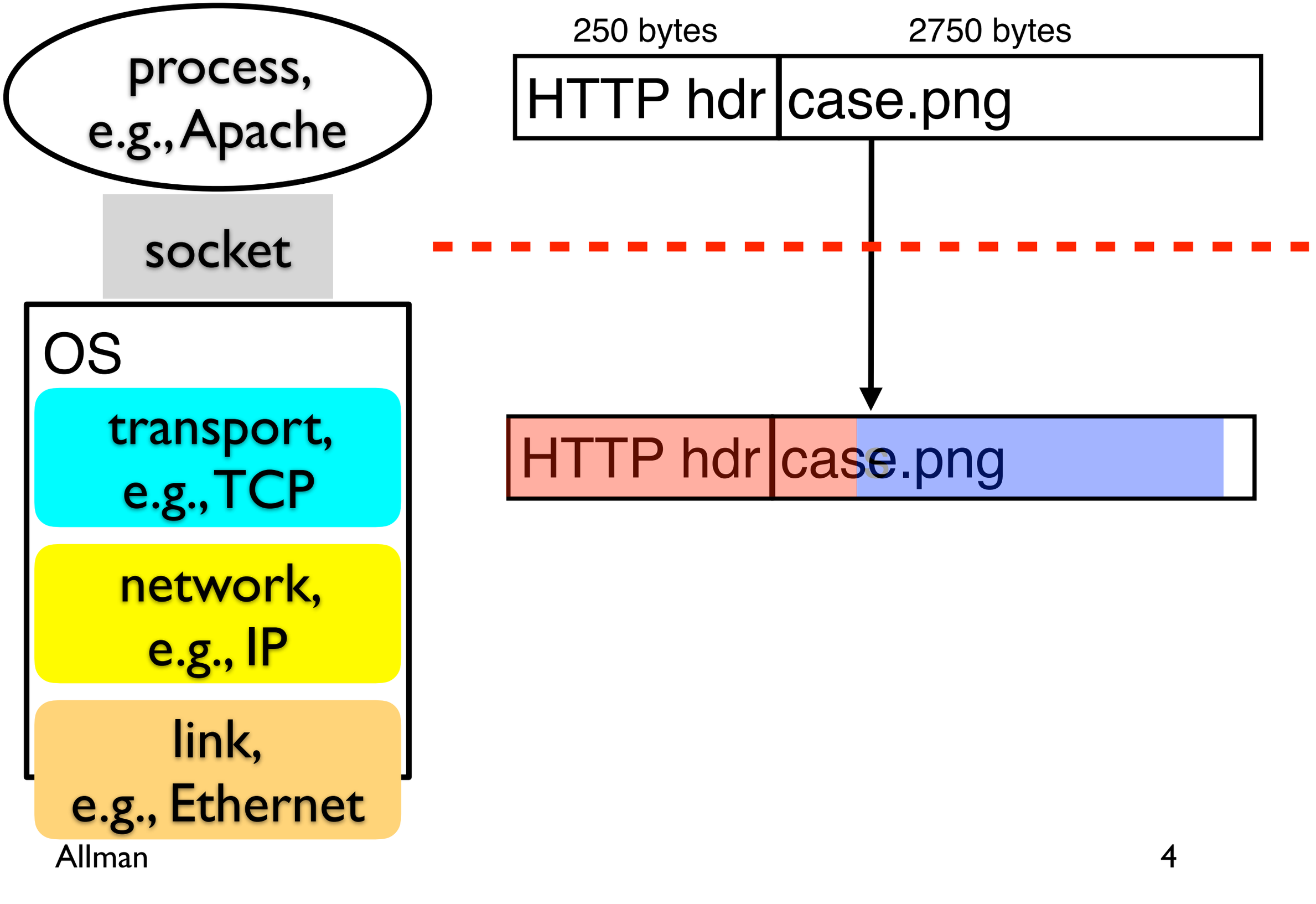

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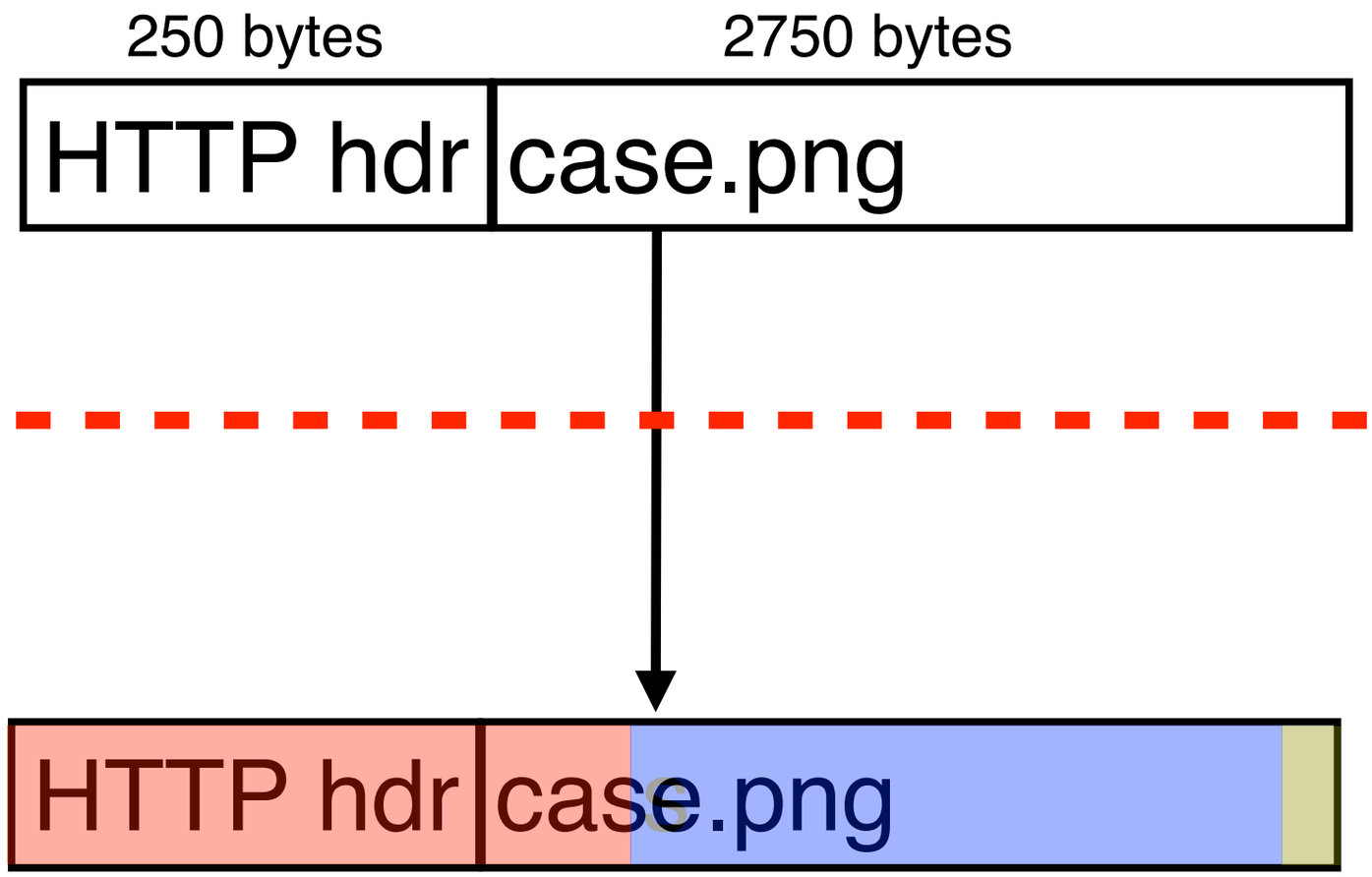

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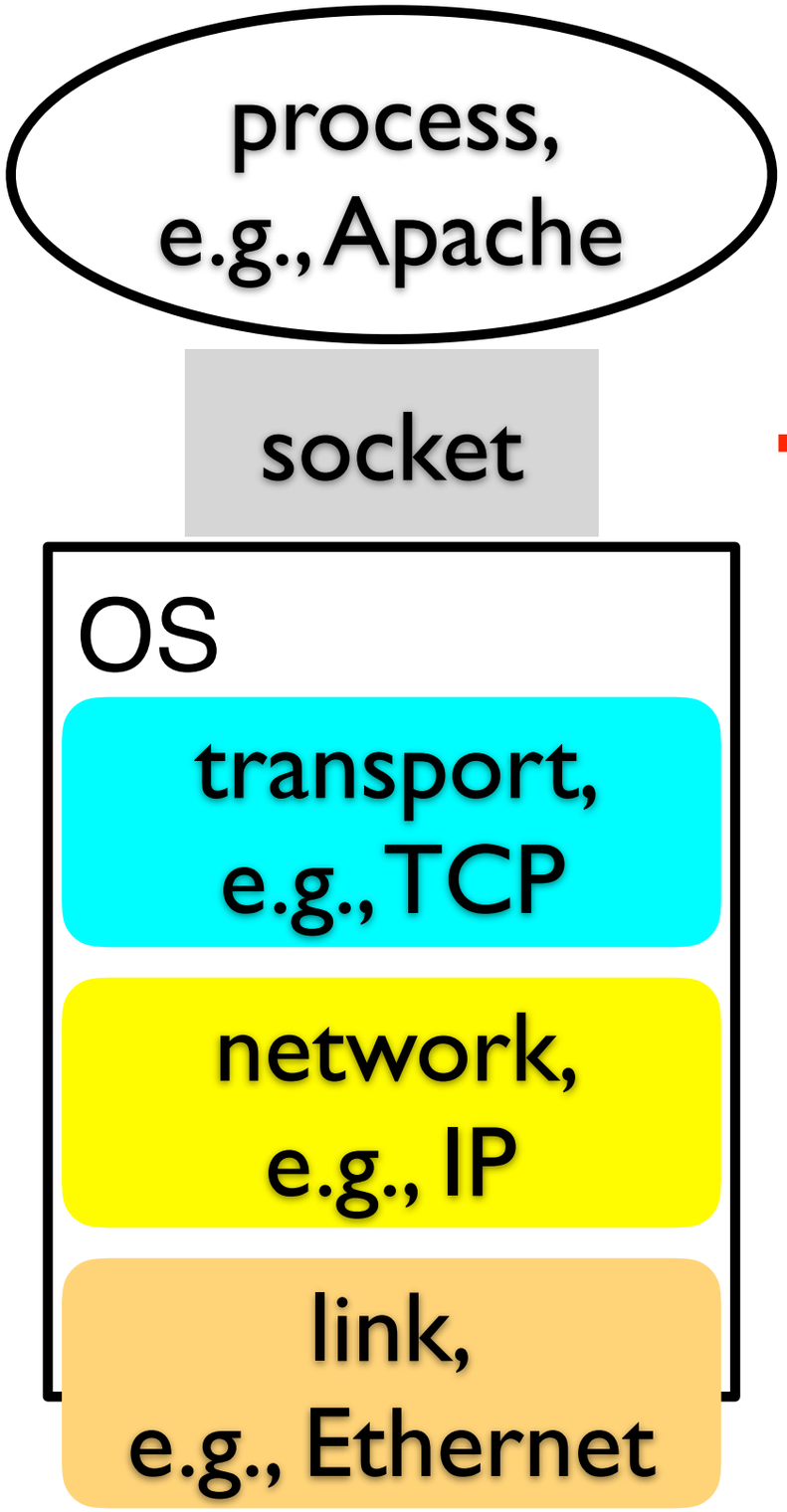

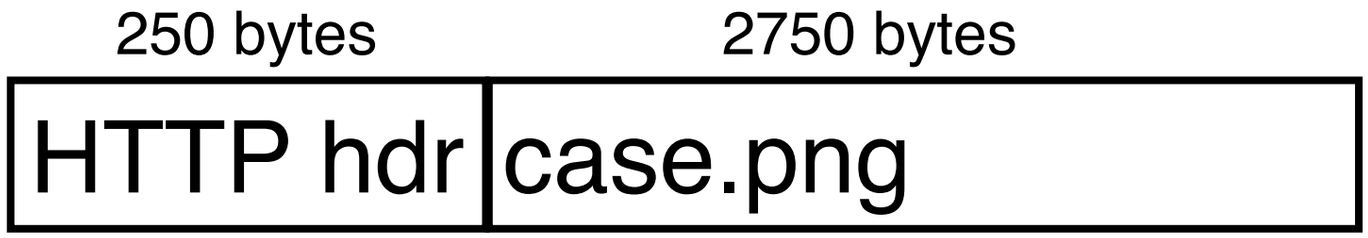

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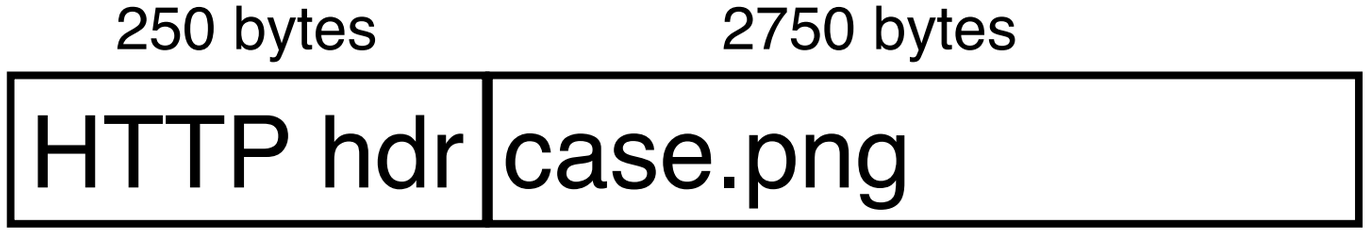

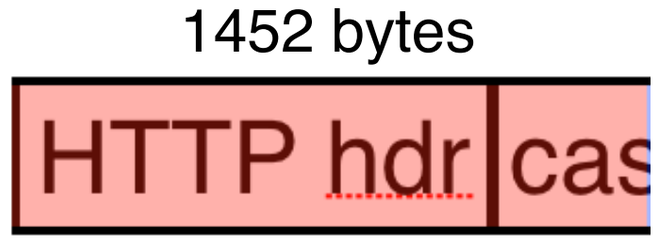

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TCP | HTTP hdr | cas

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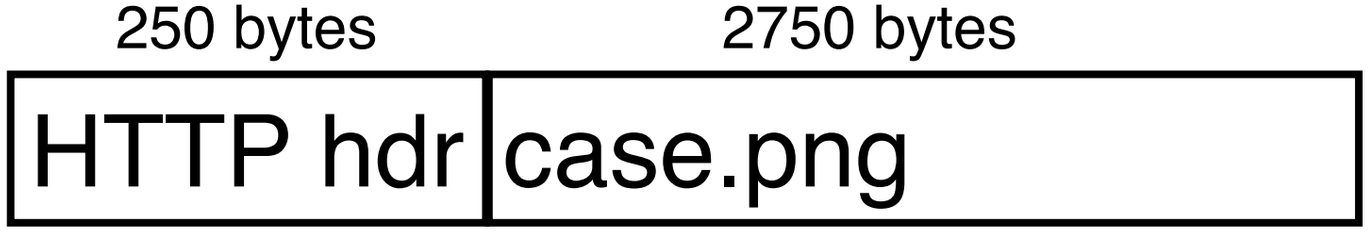

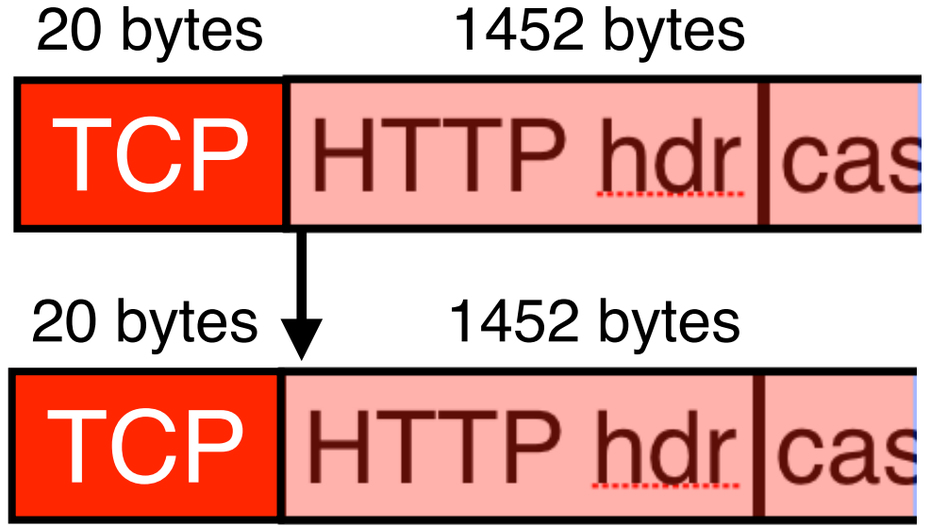

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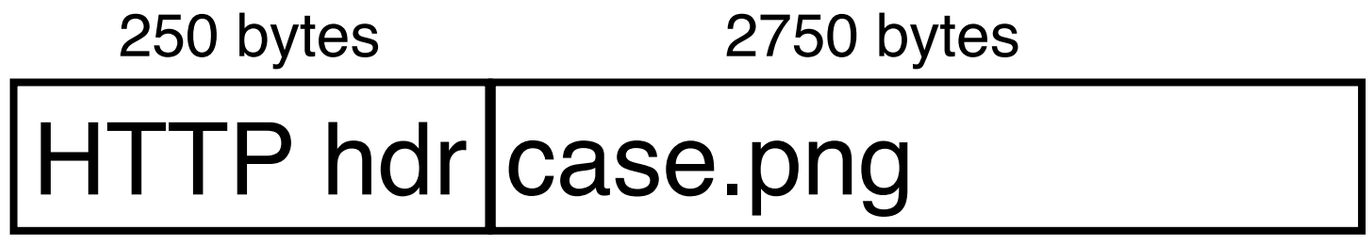

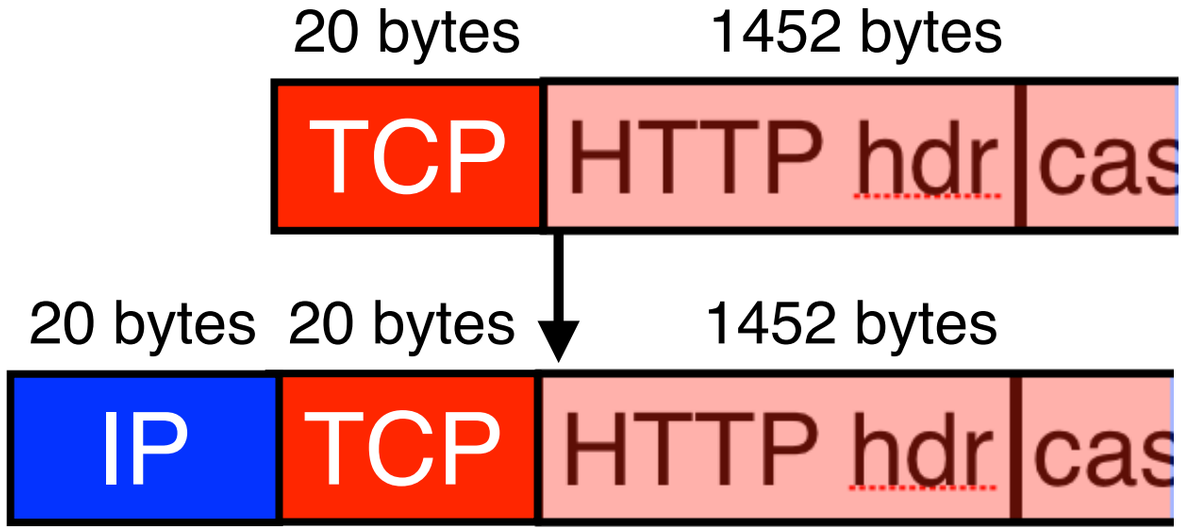

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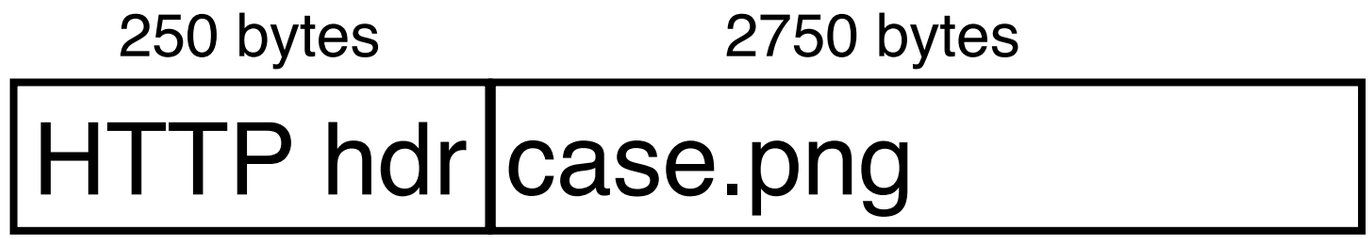

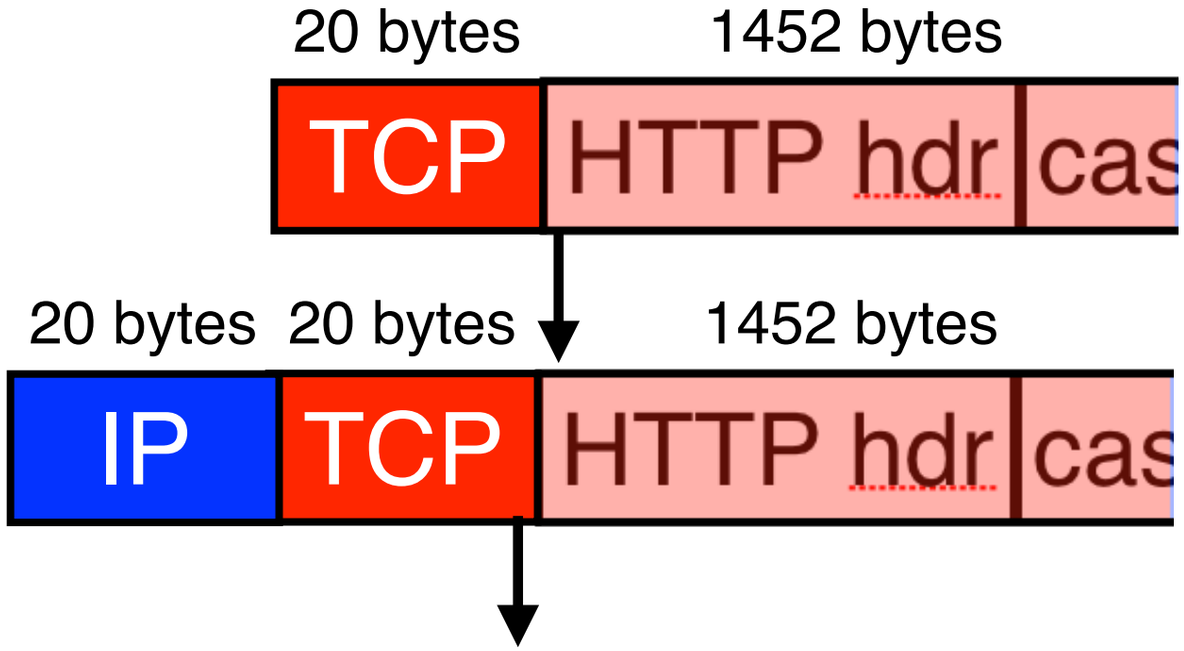

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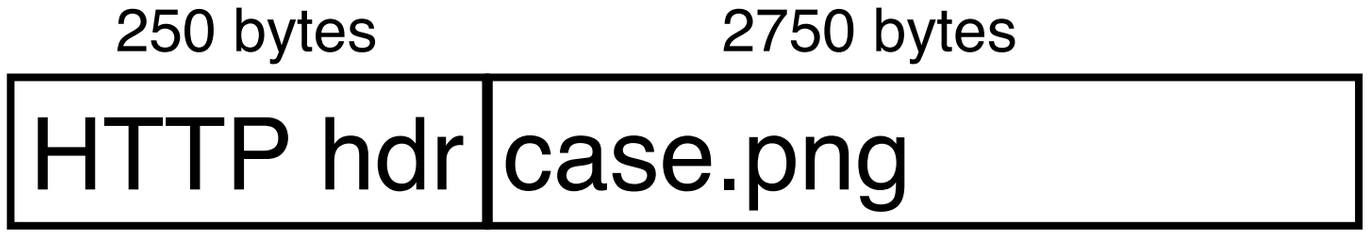

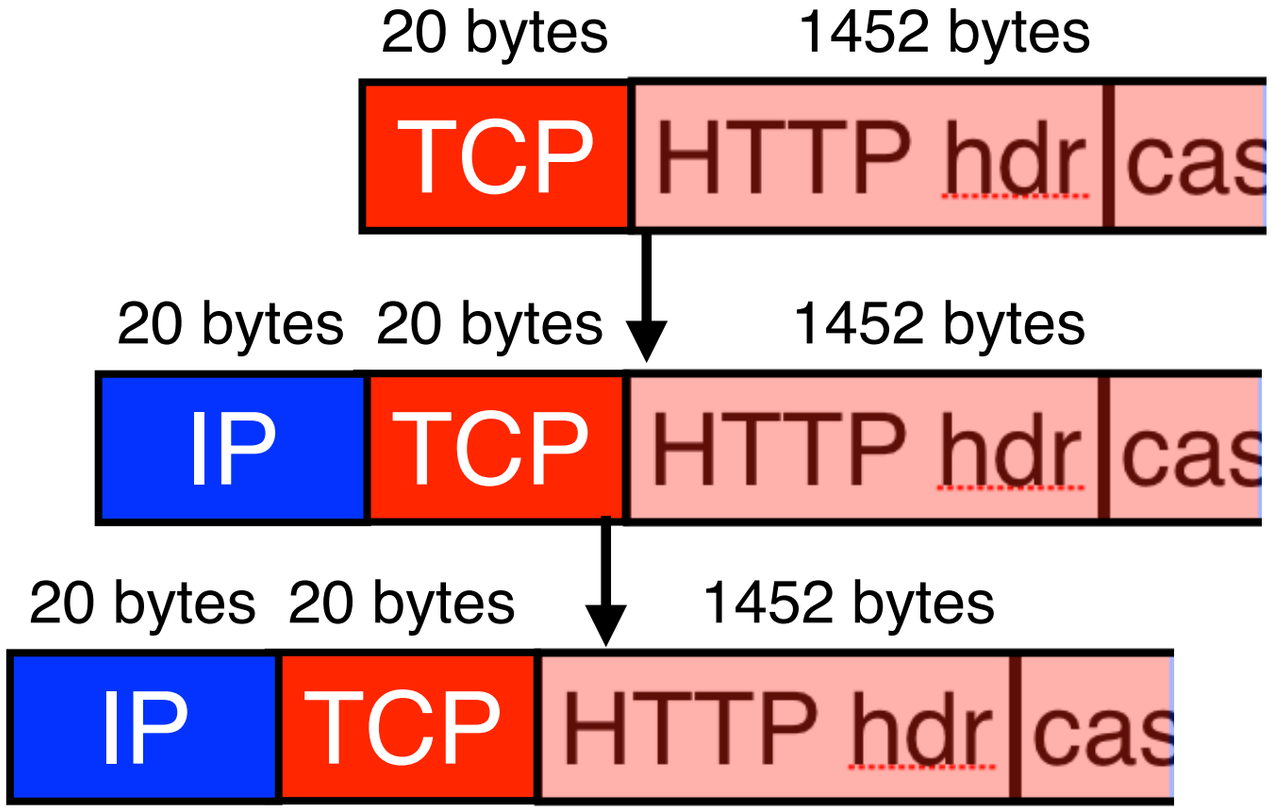

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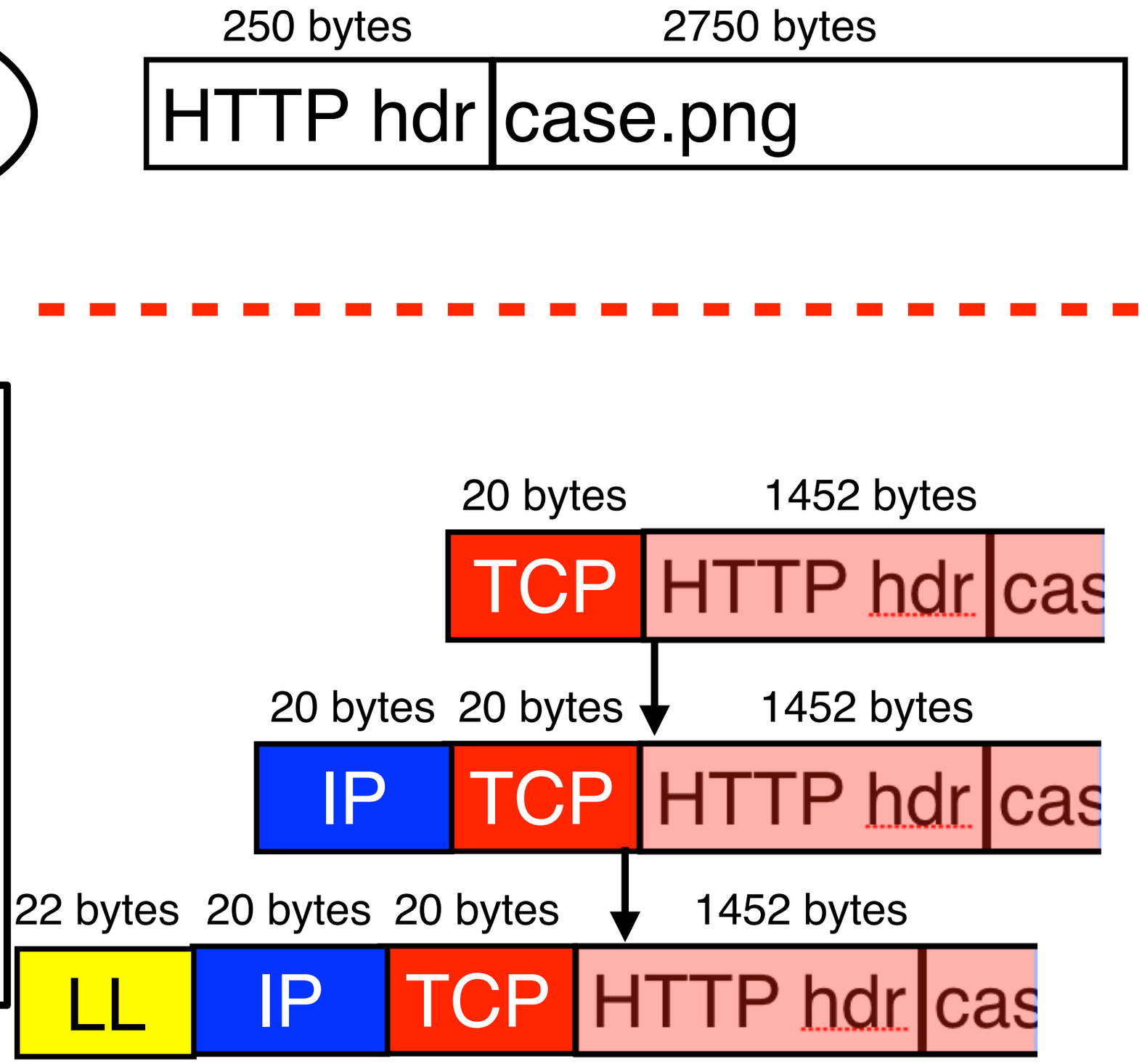

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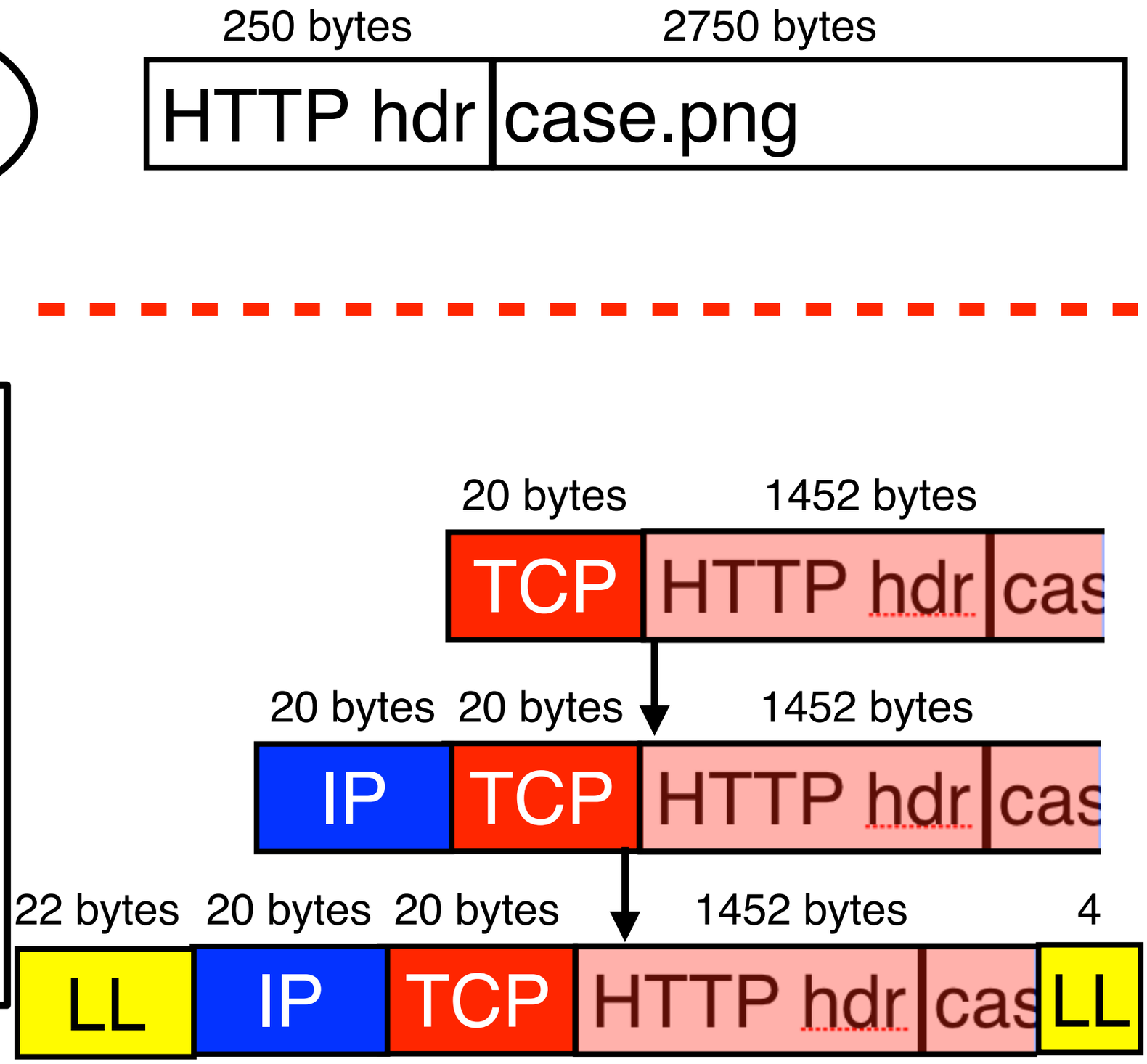

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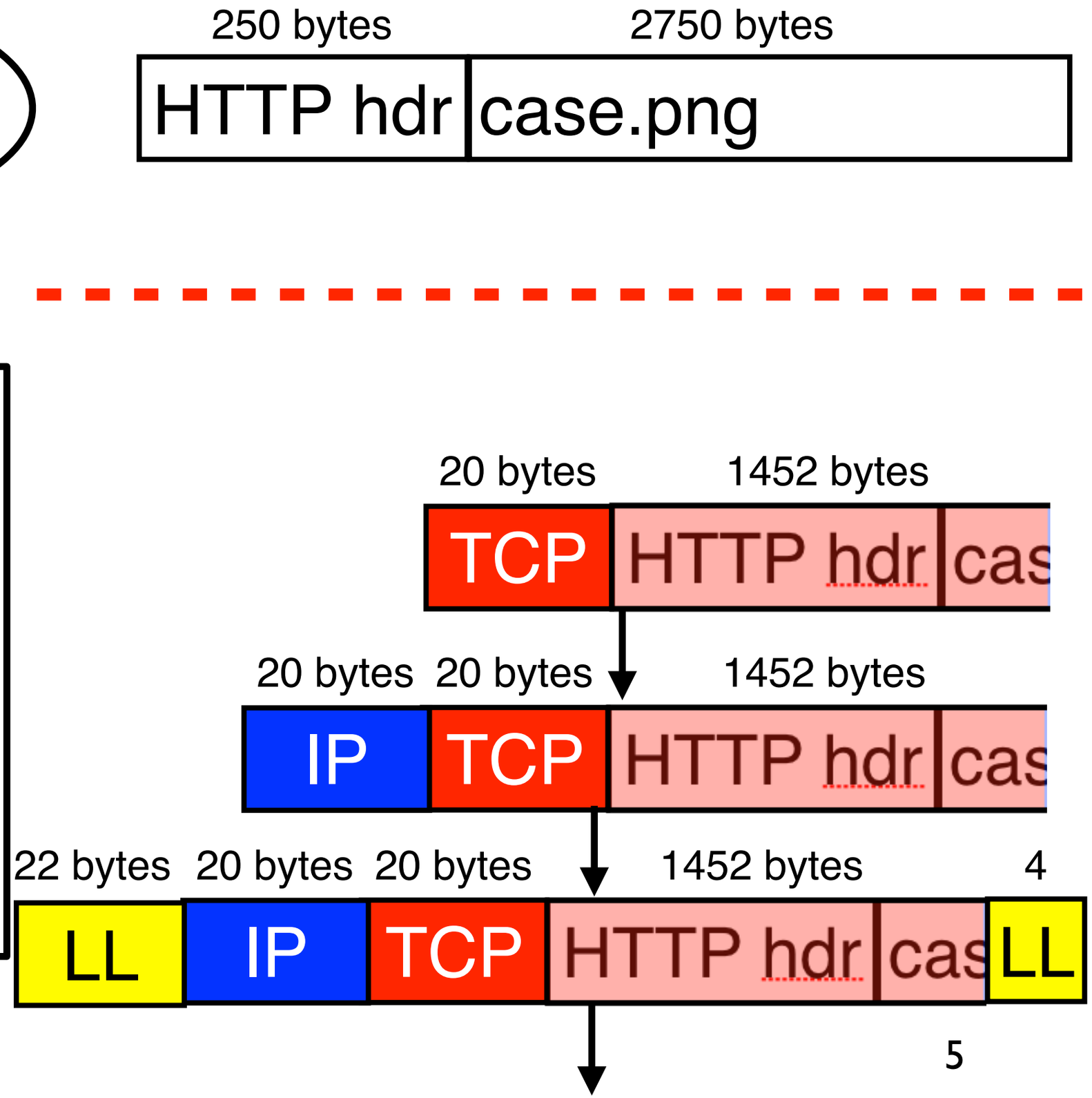

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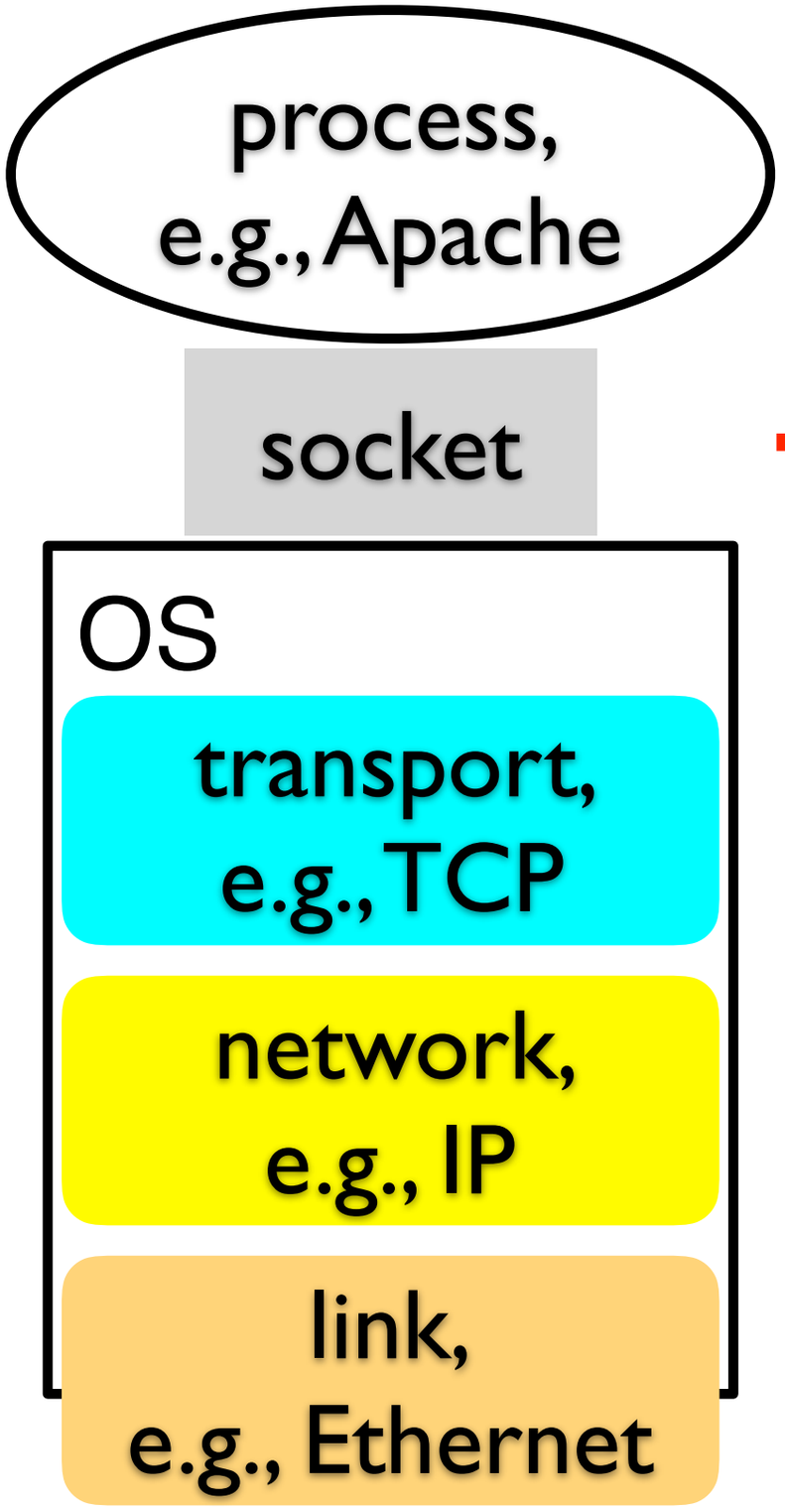

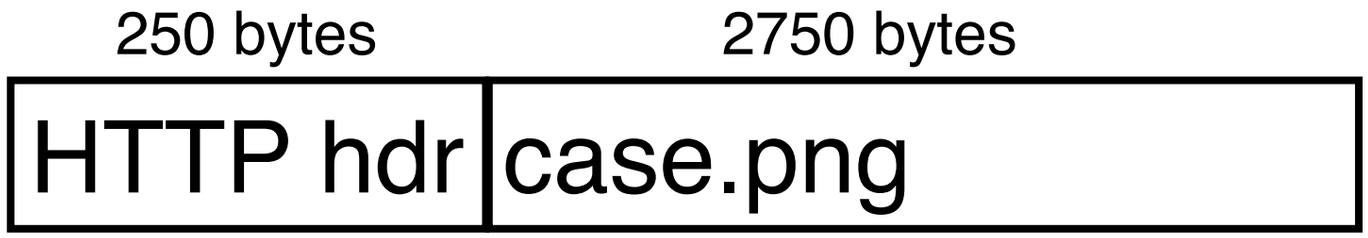

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HTTP hdr | case.png

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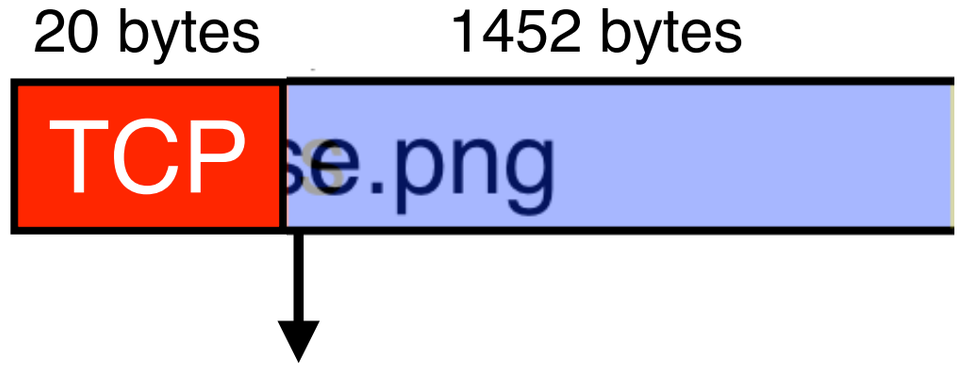

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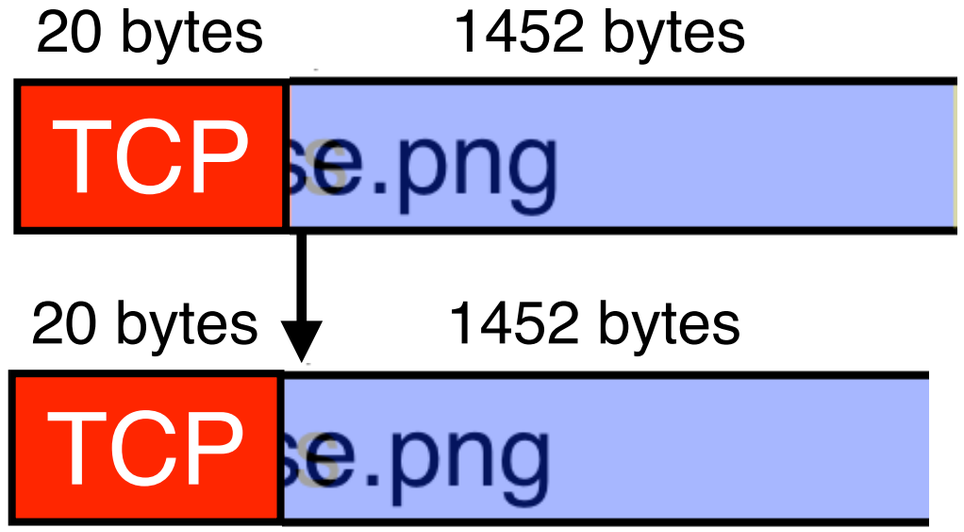

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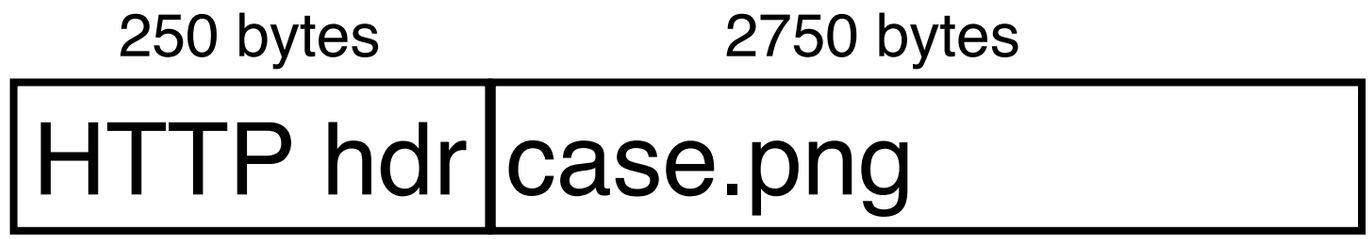

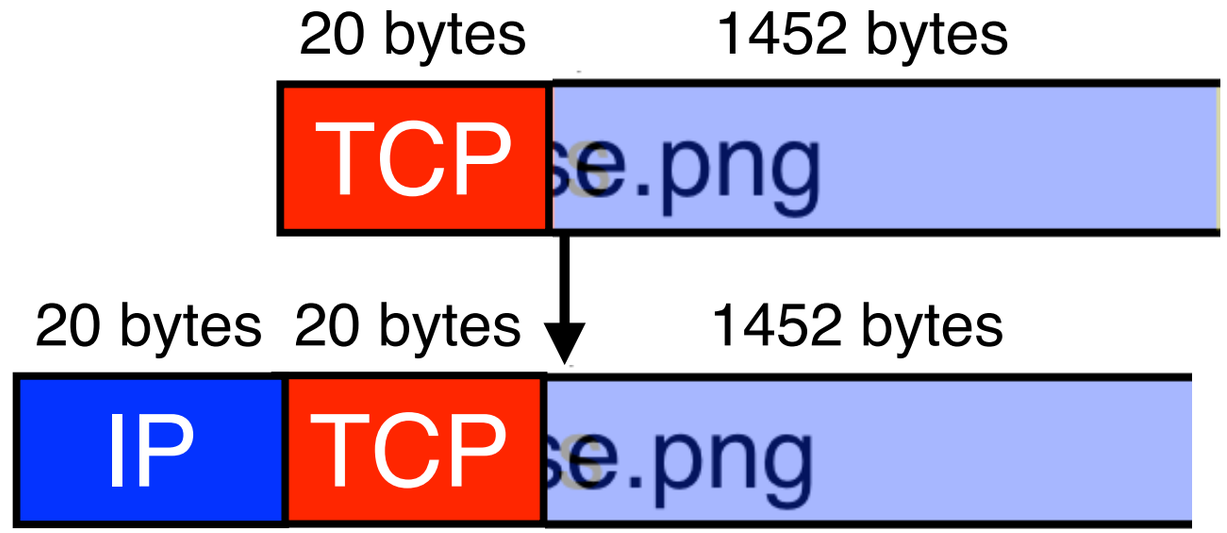

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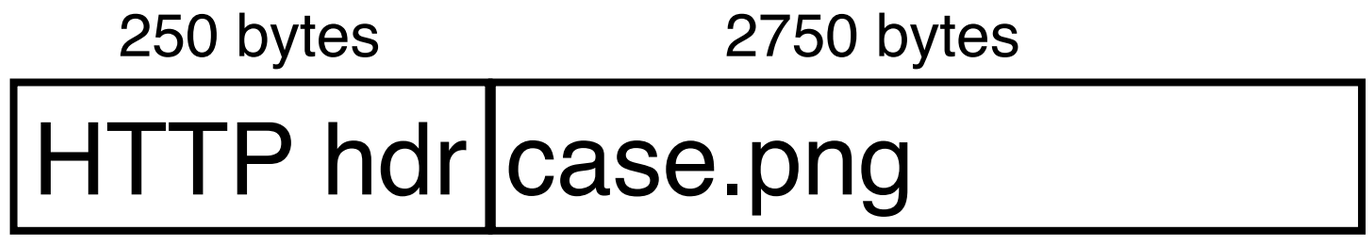

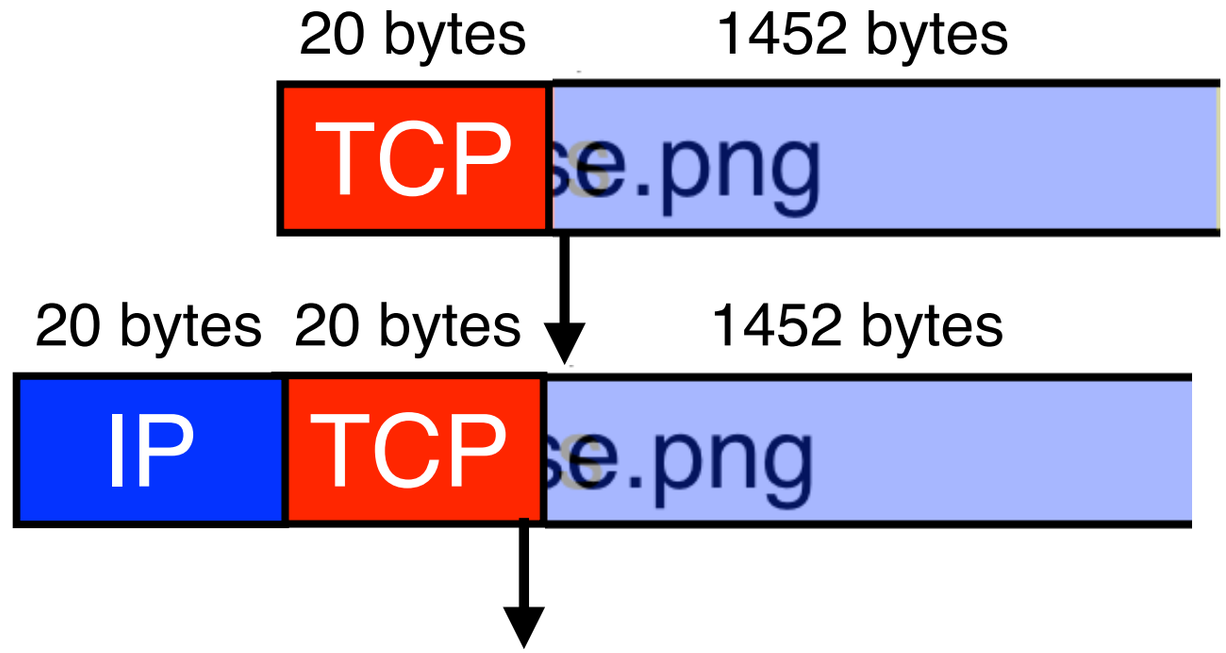

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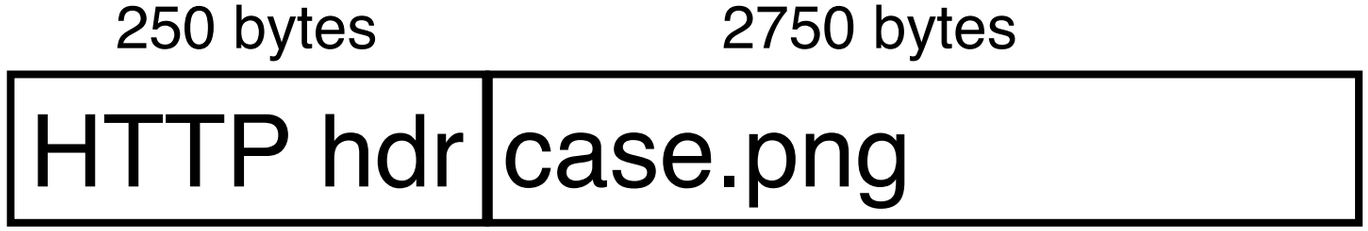

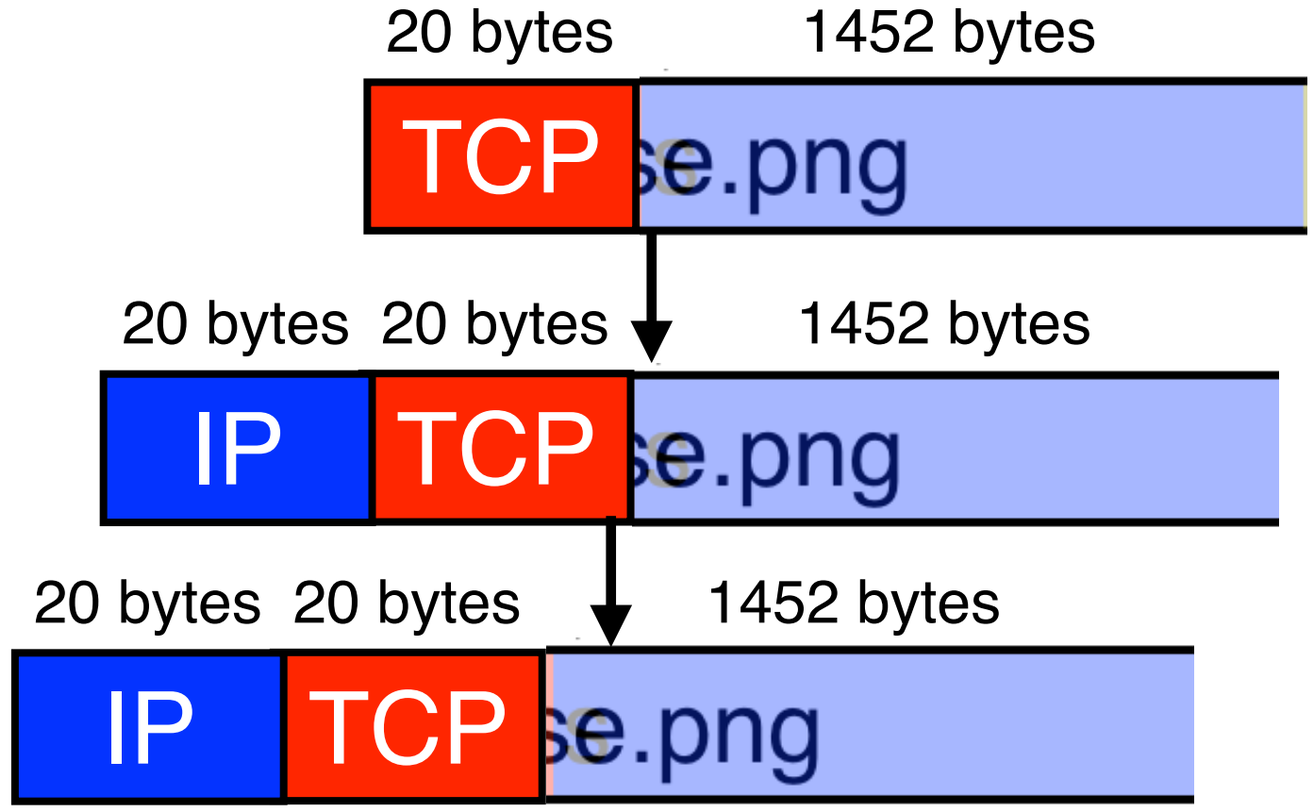

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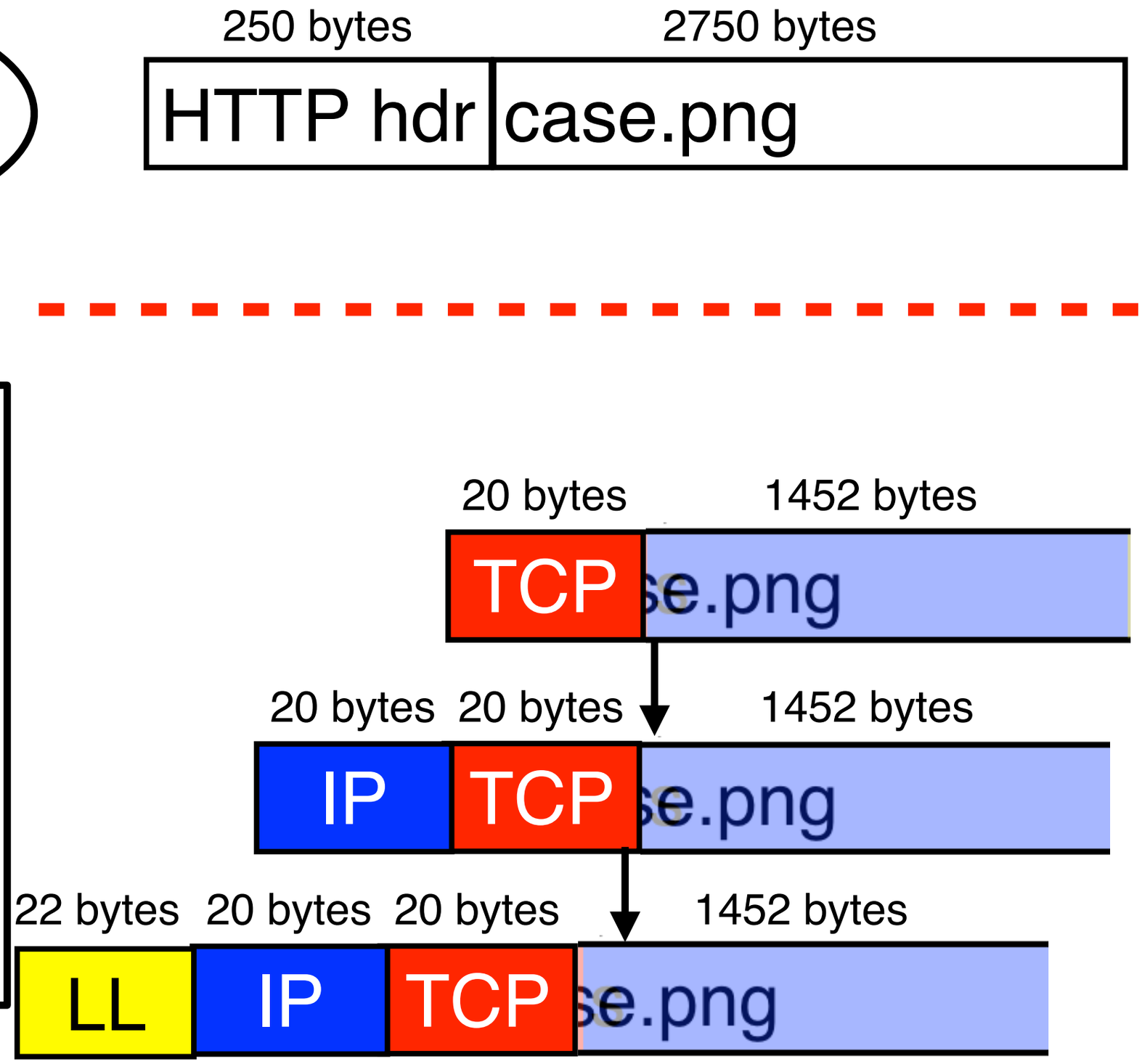

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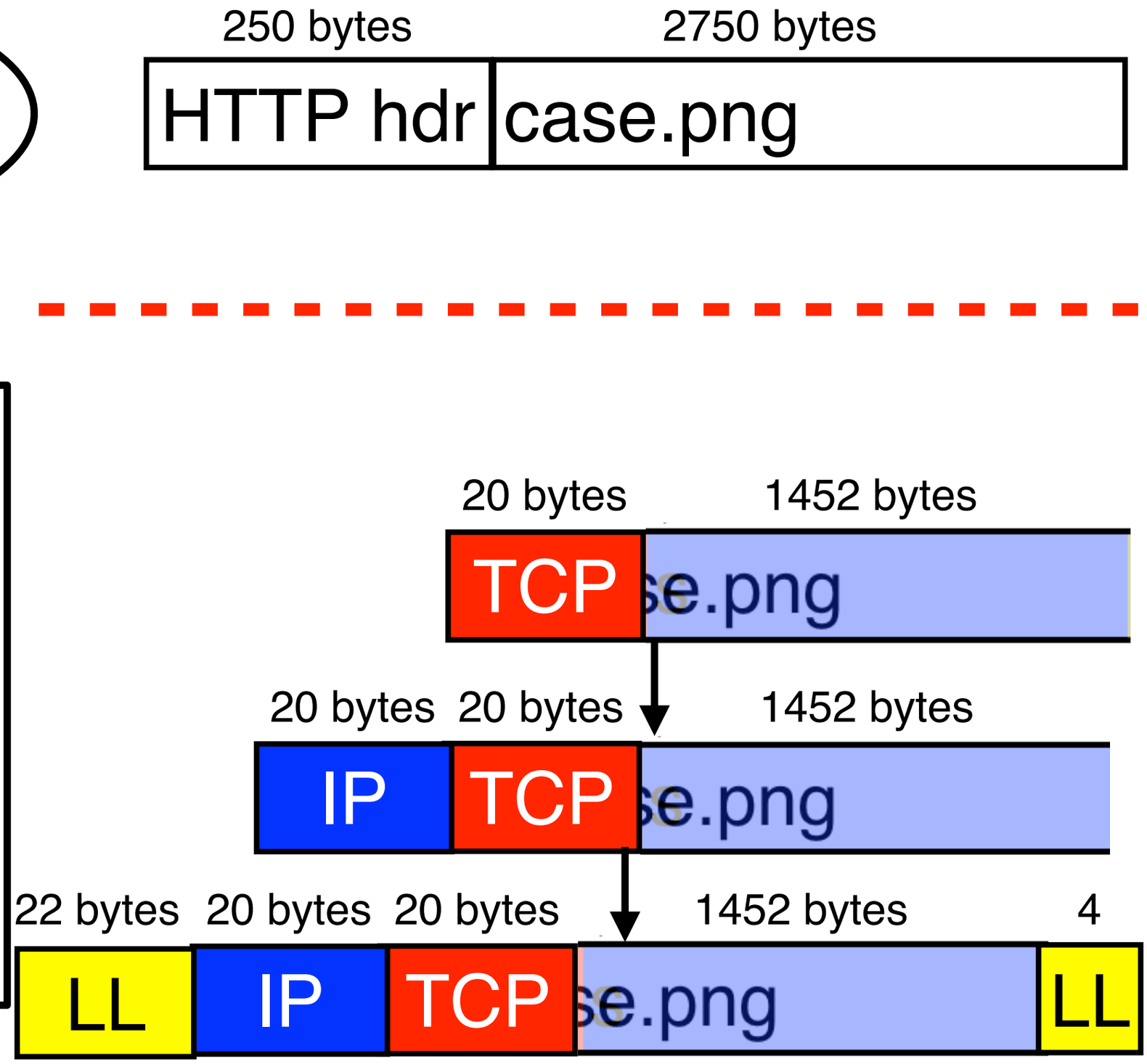

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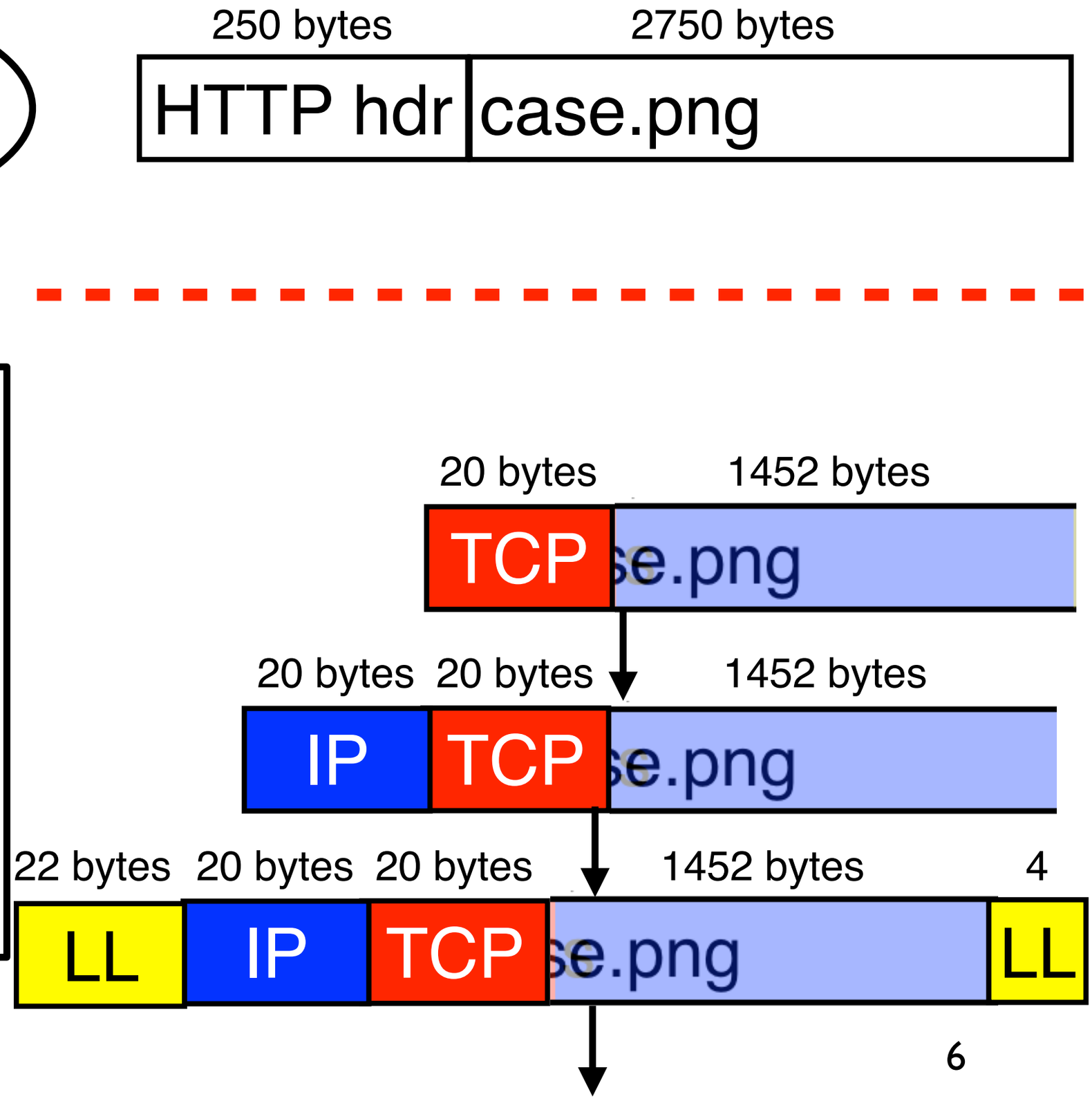

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HTTP hdr | case.png

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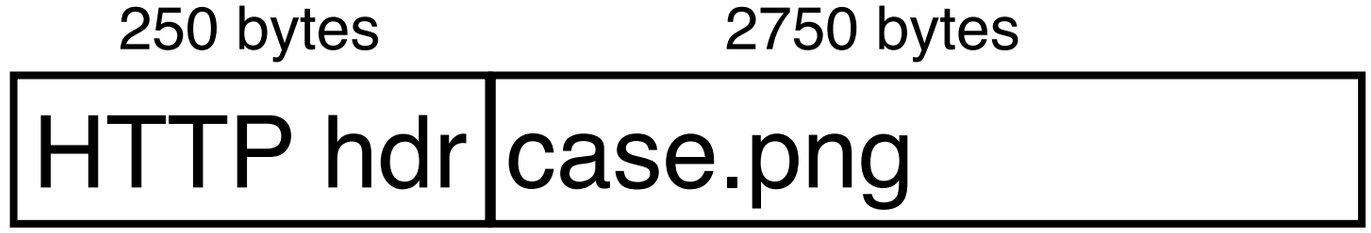

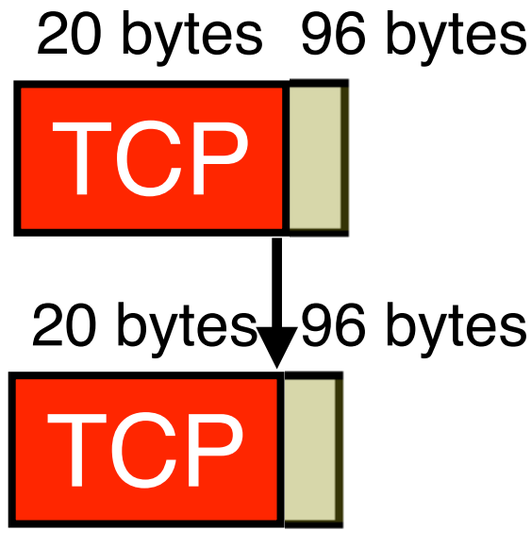

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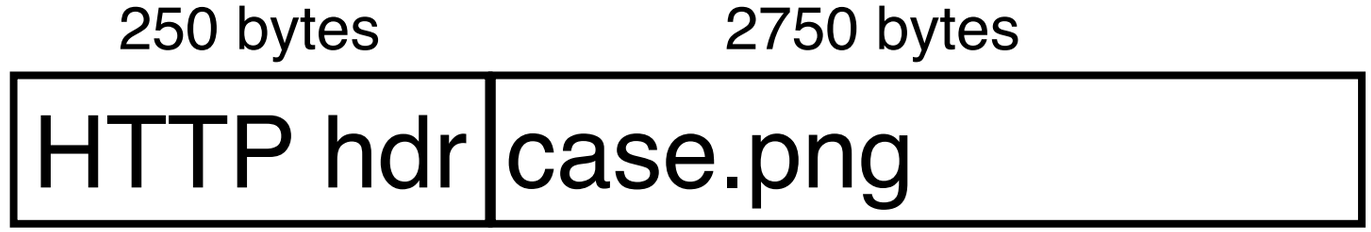

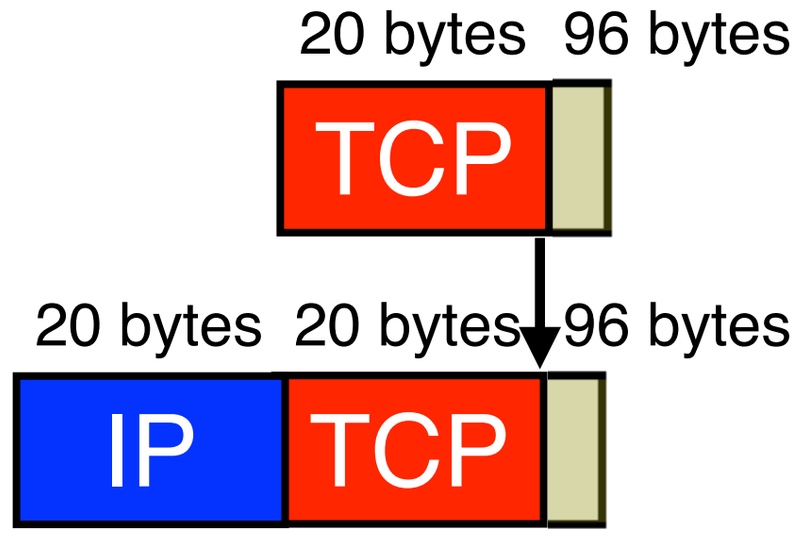

Overhead / Data Flow

process,
e.g., Apache

socket

OS

transport,
e.g., TCP

network,
e.g., IP

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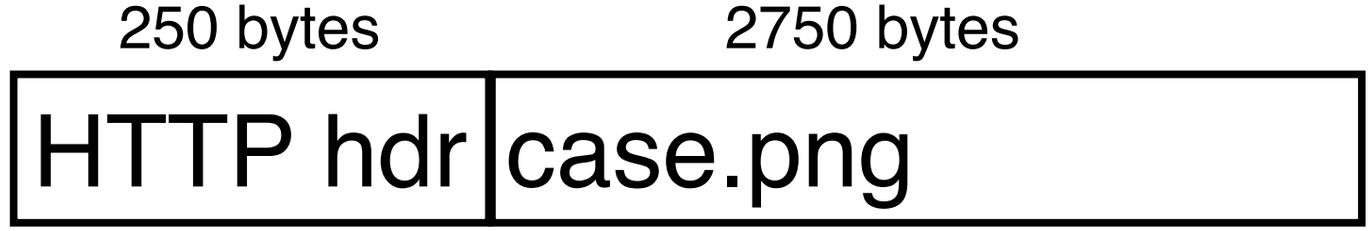
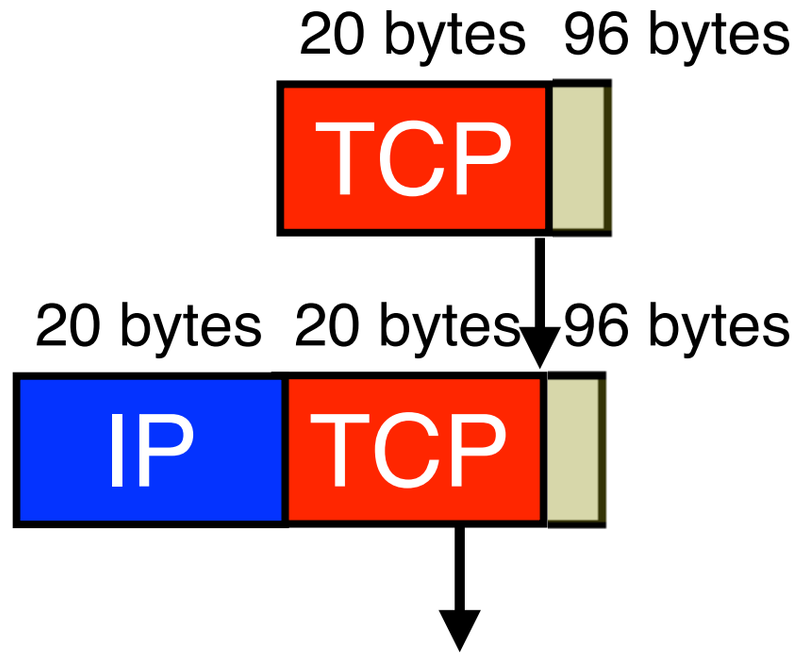
e.g., Ethernet





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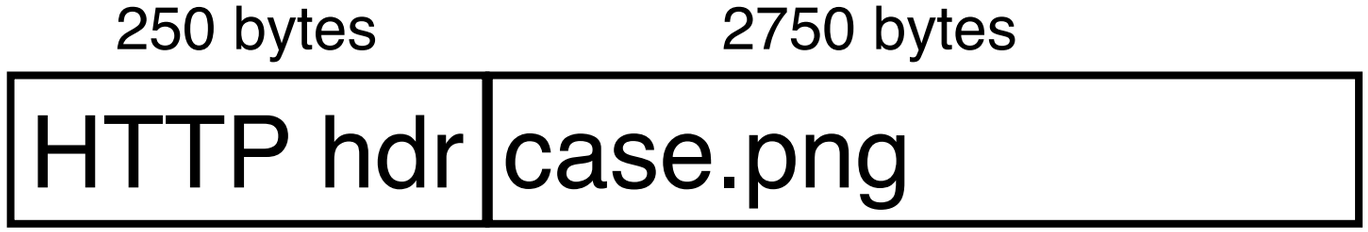

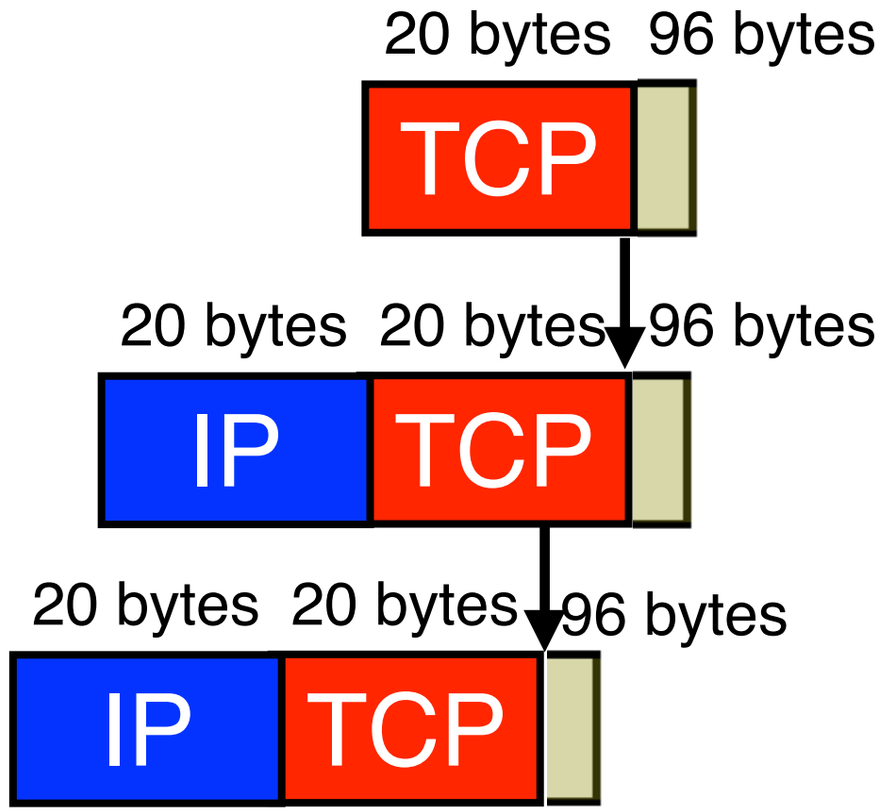

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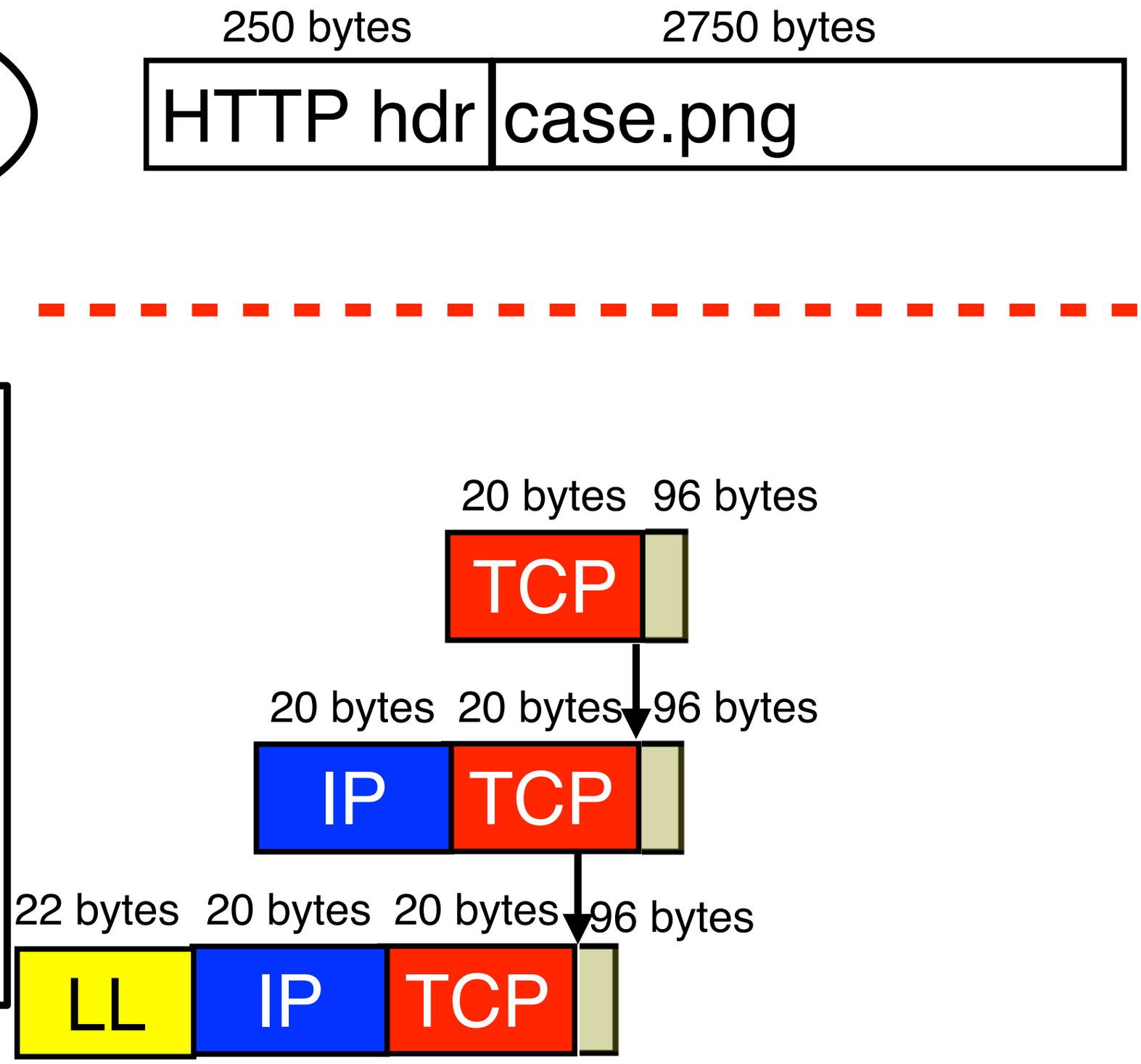

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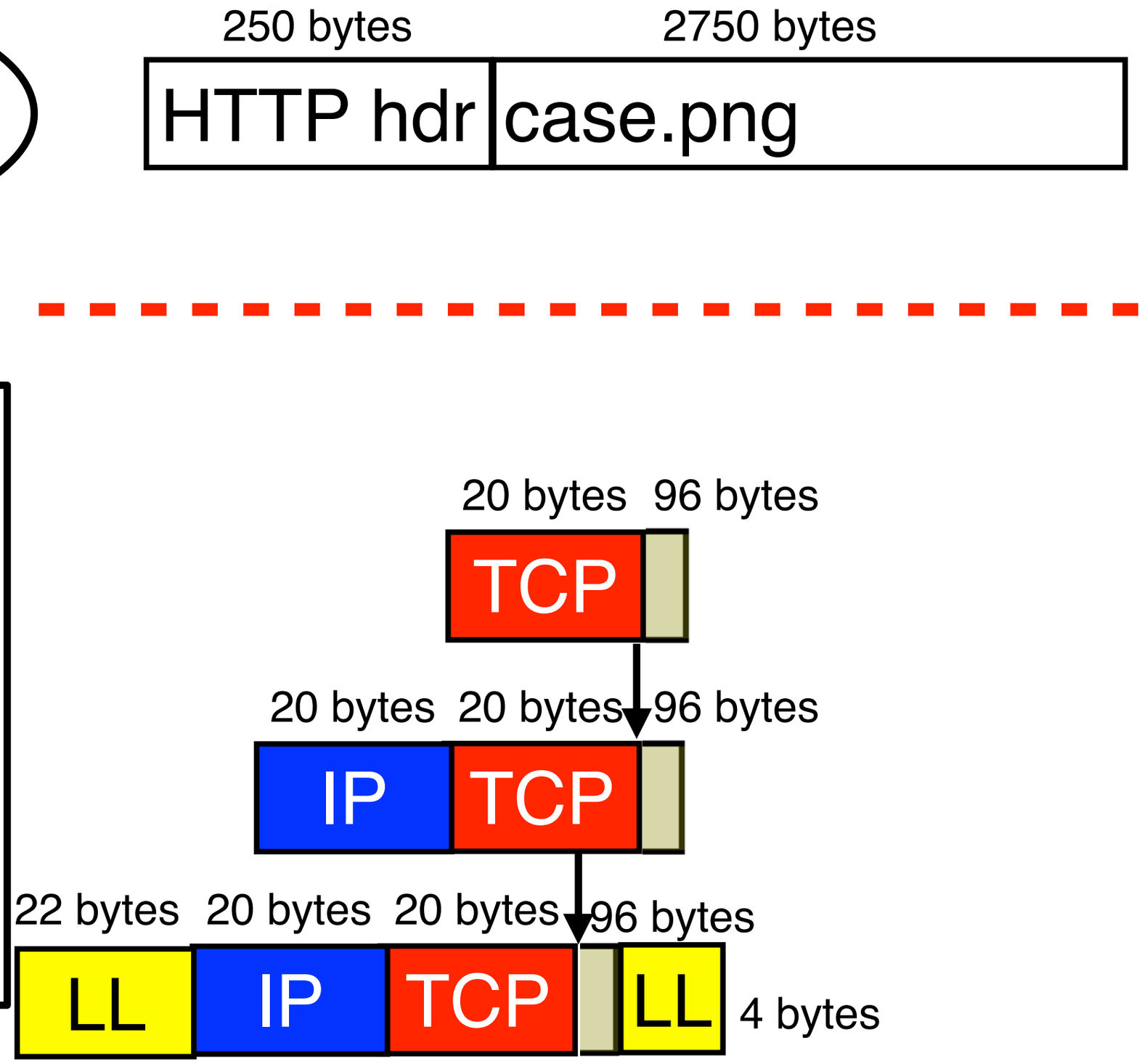

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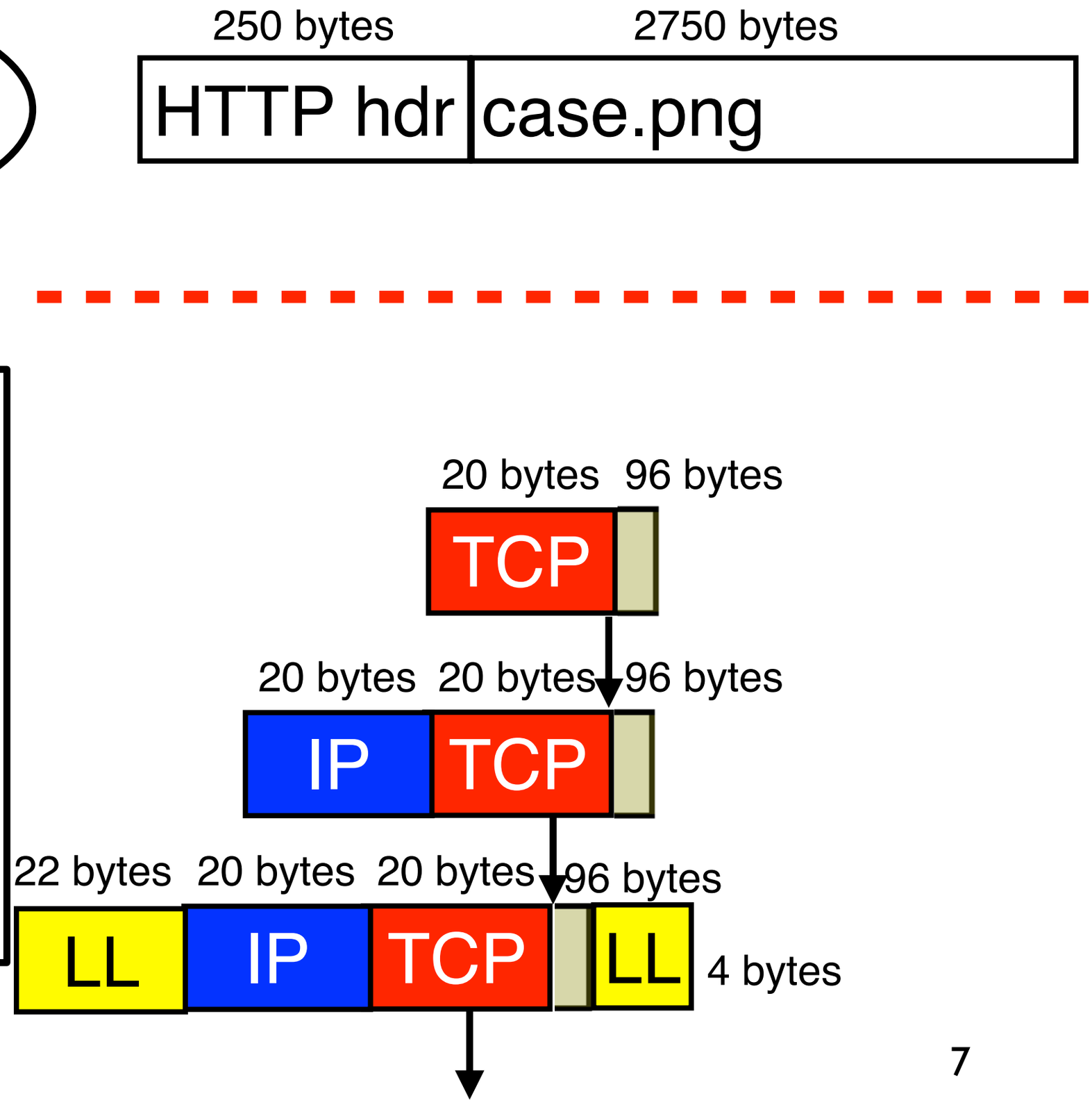

Overhead / Data Flow

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- Overhead:
  - (66 bytes x 3 packets) + 250 bytes = 448 bytes

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- Payload:
  - 2750 bytes (size of case.png)

Overhead / Data Flow

- Overhead:
  - (66 bytes x 3 packets) + 250 bytes = 448 bytes
- Payload:
  - 2750 bytes (size of case.png)
- Cost:
  - 448 / (448 + 2750) = ~14%