

Informe

Trabajo práctico N°6 - Año 2024

Protocolo HTTP. Servidores y aplicaciones web.






Actividad 1 - Servidor Apache



Elija su equipo favorito

Ingresa su e-mail:

Equipo favorito:

- ☐ Boca Juniors 
- ☐ River Plate 
- ☐ San Lorenzo 
- ☐ Racing 
- ☒ Independiente 
- ☐ Otro

Enviar

Resultados de la encuesta:

- Boca Juniors: 0 votos
- River Plate: 1 votos
- San Lorenzo: 1 votos
- Racing: 0 votos
- Independiente: 1 votos
- Otro: 0 votos

Actividad 2 - Análisis de tráfico de mi servidor web

Busque los paquetes HTTP, específicamente:

a. La petición GET inicial y su respuesta.

GET Inicial desde mi celular android:

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|-------------|----------------|----------------|----------|--------|--|
| 1 | 0.000000000 | 172.19.128.1 | 172.19.129.143 | TCP | 66 | 61232 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM=1 |
| 2 | 0.000067084 | 172.19.129.143 | 172.19.128.1 | TCP | 66 | 80 → 61232 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460 SACK_PERM=1 |
| 3 | 0.000526694 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=1 Ack=1 Win=2102272 Len=0 |
| 4 | 0.025464377 | 172.19.128.1 | 172.19.129.143 | HTTP | 526 | GET /index.php HTTP/1.1 |
| 5 | 0.025534747 | 172.19.129.143 | 172.19.128.1 | TCP | 54 | 80 → 61232 [ACK] Seq=1 Ack=473 Win=64128 Len=0 |
| 6 | 0.026170386 | 172.19.129.143 | 172.19.128.1 | HTTP | 975 | HTTP/1.1 200 OK (text/html) |
| 7 | 0.081907850 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=473 Ack=922 Win=2101248 Len=0 |
| 8 | 5.031418741 | 172.19.129.143 | 172.19.128.1 | TCP | 54 | 80 → 61232 [FIN, ACK] Seq=922 Ack=473 Win=64128 Len=0 |
| 9 | 5.032034500 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=473 Ack=923 Win=2101248 Len=0 |

Frame 4: 526 bytes on wire (4208 bits), 526 bytes captured (4208 bits) on interface eth0, id 0
Ethernet II, Src: Microsof 8a:ce:d0 (00:15:5d:8a:ce:d0), Dst: Microsof_bc:7e:96 (00:15:5d:bc:7e:96)
Internet Protocol Version 4, Src: 172.19.128.1, Dst: 172.19.129.143
Transmission Control Protocol, Src Port: 61232, Dst Port: 80, Seq: 1, Ack: 1, Len: 472
Hypertext Transfer Protocol
GET /index.php HTTP/1.1\r\n
[Expert Info (Chat/Sequence): GET /index.php HTTP/1.1\r\n]
Request Method: GET
Request URI: /index.php
Request Version: HTTP/1.1
Host: 192.168.0.118\r\n
Connection: keep-alive\r\n
Cache-Control: max-age=0\r\n
Upgrade-Insecure-Requests: 1\r\n
User-Agent: Mozilla/5.0 (Linux; Android 10; K) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Mobile Safari/537.36\r\n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7\r\n
Accept-Encoding: gzip, deflate\r\n
Accept-Language: es-ES,es;q=0.9,en;q=0.8\r\n
\r\n
[Full request URI: http://192.168.0.118/index.php]
[HTTP request 1/1]
[Response in frame: 6]

Respuesta desde el servidor (mi pc):

| No. | Time | Source | Destination | Protocol | Length | Info |
|-----|-------------|----------------|----------------|----------|--------|---|
| 1 | 0.000000000 | 172.19.128.1 | 172.19.129.143 | TCP | 66 | 61232 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM=1 |
| 2 | 0.000067084 | 172.19.129.143 | 172.19.128.1 | TCP | 66 | 80 → 61232 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460 SACK_PERM=1 WS=128 |
| 3 | 0.000526694 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=1 Ack=1 Win=2102272 Len=0 |
| 4 | 0.025464377 | 172.19.128.1 | 172.19.129.143 | HTTP | 526 | GET /index.php HTTP/1.1 |
| 5 | 0.025534747 | 172.19.129.143 | 172.19.128.1 | TCP | 54 | 80 → 61232 [ACK] Seq=1 Ack=473 Win=64128 Len=0 |
| 6 | 0.026170386 | 172.19.129.143 | 172.19.128.1 | HTTP | 975 | HTTP/1.1 200 OK (text/html) |
| 7 | 0.081907850 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=473 Ack=922 Win=2101248 Len=0 |
| 8 | 5.031418741 | 172.19.129.143 | 172.19.128.1 | TCP | 54 | 80 → 61232 [FIN, ACK] Seq=922 Ack=473 Win=64128 Len=0 |
| 9 | 5.032034500 | 172.19.128.1 | 172.19.129.143 | TCP | 54 | 61232 → 80 [ACK] Seq=473 Ack=923 Win=2101248 Len=0 |

Content-encoded entity body (gzip): 669 bytes -> 2055 bytes
File Data: 2055 bytes
Line-based text data: text/html (41 lines)
<!DOCTYPE html>\n<html>\n<head>\n<title>Encuesta de Equipos de Fútbol</title>\n<link rel="stylesheet" type="text/css" href="styles.css">\n<script src="script.js"></script>\n</head>\n<body>\n<div class="container">\n\n<h1>Elija su equipo favorito</h1>\n<form id="equipoForm" onSubmit="validarFormulario(event)" method="post" action="procesar_form.php">\n<label for="email">Ingrese su e-mail:</label>\n<input type="email" id="email" name="email" required>\n
\n<label>Equipo favorito:</label>\n
\n<input type="radio" id="bocaJuniors" name="equipo" value="Boca Juniors">\n<label for="bocaJuniors">Boca Juniors </label>\n
\n<input type="radio" id="riverPlate" name="equipo" value="River Plate">\n<label for="riverPlate">River Plate </label>\n
\n<input type="radio" id="sanLorenzo" name="equipo" value="San Lorenzo">\n<label for="sanLorenzo">San Lorenzo </label>\n
\n<input type="radio" id="racing" name="equipo" value="Racing">\n<label for="racing">Racing </label>\n
\n<input type="radio" id="independiente" name="equipo" value="Independiente">\n<label for="independiente">Independiente </label>\n

b. La petición POST al enviar el formulario y su respuesta.

| No. | Time | Source | Destination | Protocol | Length | Info |
|---|------|---------------|----------------|----------------|--------|--|
| | 21 | 299.878603385 | 172.19.128.1 | 172.19.129.143 | TCP | 66 61266 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM=1 |
| | 22 | 299.878666016 | 172.19.129.143 | 172.19.128.1 | TCP | 66 80 → 61266 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460 SACK_PERM=1 WS=128 |
| | 23 | 299.879136024 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=1 Ack=1 Win=2102272 Len=0 |
| + | 24 | 299.903296573 | 172.19.128.1 | 172.19.129.143 | HTTP | 781 POST /procesar_form.php HTTP/1.1 |
| | 25 | 299.903382348 | 172.19.129.143 | 172.19.128.1 | TCP | 54 80 → 61266 [ACK] Seq=1 Ack=728 Win=64128 Len=0 |
| | 26 | 299.904530479 | 172.19.129.143 | 172.19.128.1 | HTTP | 444 HTTP/1.1 200 OK (text/html) |
| | 27 | 299.948444944 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=728 Ack=391 Win=2101760 Len=0 |
| | 28 | 304.909765319 | 172.19.129.143 | 172.19.128.1 | TCP | 54 80 → 61266 [FIN, ACK] Seq=391 Ack=728 Win=64128 Len=0 |
| | 29 | 304.910353171 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=728 Ack=392 Win=2101760 Len=0 |
| | | | | | | |
| ▶ Frame 24: 781 bytes on wire (6248 bits), 781 bytes captured (6248 bits) on interface eth0, id 0 | | | | | | |
| ▶ Ethernet II, Src: Microsof_8a:ce:d0 (00:15:5d:8a:ce:d0), Dst: Microsof_bc:7e:96 (00:15:5d:bc:7e:96) | | | | | | |
| ▶ Internet Protocol Version 4, Src: 172.19.128.1, Dst: 172.19.129.143 | | | | | | |
| ▶ Transmission Control Protocol, Src Port: 61266, Dst Port: 80, Seq: 1, Ack: 1, Len: 727 | | | | | | |
| ▶ Hypertext Transfer Protocol | | | | | | |
| ▼ POST /procesar_form.php HTTP/1.1\r\n | | | | | | |
| ▶ [Expert Info (Chat/Sequence): POST /procesar_form.php HTTP/1.1\r\n] | | | | | | |
| Request Method: POST | | | | | | |
| Request URI: /procesar_form.php | | | | | | |
| Request Version: HTTP/1.1 | | | | | | |
| Host: 192.168.0.118\r\n | | | | | | |
| Connection: keep-alive\r\n | | | | | | |
| Content-Length: 258\r\n | | | | | | |
| User-Agent: Mozilla/5.0 (Linux; Android 10; K) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Mobile Safari/537.36\r\n | | | | | | |
| Content-Type: multipart/form-data; boundary=----WebKitFormBoundaryIBmApZtLDJ0EjMX\r\n | | | | | | |
| Accept: */*\r\n | | | | | | |
| Origin: http://192.168.0.118\r\n | | | | | | |
| Referer: http://192.168.0.118/index.php\r\n | | | | | | |
| Accept-Encoding: gzip, deflate\r\n | | | | | | |
| Accept-Language: es-ES,es;q=0.9,en;q=0.8\r\n | | | | | | |
| \r\n | | | | | | |
| [Full request URI: http://192.168.0.118/procesar_form.php] | | | | | | |
| [HTTP request 1/1] | | | | | | |
| [Response in frame: 26] | | | | | | |
| File Data: 258 bytes | | | | | | |
| ▶ MIME Multipart Media Encapsulation, Type: multipart/form-data, Boundary: "----WebKitFormBoundaryIBmApZtLDJ0EjMX" | | | | | | |
| | | | | | | |

| No. | Time | Source | Destination | Protocol | Length | Info |
|---|------|---------------|----------------|----------------|--------|--|
| | 21 | 299.878603385 | 172.19.128.1 | 172.19.129.143 | TCP | 66 61266 → 80 [SYN] Seq=0 Win=64240 Len=0 MSS=1460 WS=256 SACK_PERM=1 |
| | 22 | 299.878666016 | 172.19.129.143 | 172.19.128.1 | TCP | 66 80 → 61266 [SYN, ACK] Seq=0 Ack=1 Win=64240 Len=0 MSS=1460 SACK_PERM=1 WS=128 |
| | 23 | 299.879136024 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=1 Ack=1 Win=2102272 Len=0 |
| | 24 | 299.903296573 | 172.19.128.1 | 172.19.129.143 | HTTP | 781 POST /procesar_form.php HTTP/1.1 |
| | 25 | 299.903382348 | 172.19.129.143 | 172.19.128.1 | TCP | 54 80 → 61266 [ACK] Seq=1 Ack=728 Win=64128 Len=0 |
| - | 26 | 299.904530479 | 172.19.129.143 | 172.19.128.1 | HTTP | 444 HTTP/1.1 200 OK (text/html) |
| | 27 | 299.948444944 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=728 Ack=391 Win=2101760 Len=0 |
| | 28 | 304.909765319 | 172.19.129.143 | 172.19.128.1 | TCP | 54 80 → 61266 [FIN, ACK] Seq=391 Ack=728 Win=64128 Len=0 |
| | 29 | 304.910353171 | 172.19.128.1 | 172.19.129.143 | TCP | 54 61266 → 80 [ACK] Seq=728 Ack=392 Win=2101760 Len=0 |
| | | | | | | |
| ▶ Frame 26: 444 bytes on wire (3552 bits), 444 bytes captured (3552 bits) on interface eth0, id 0 | | | | | | |
| ▶ Ethernet II, Src: Microsof_bc:7e:96 (00:15:5d:bc:7e:96), Dst: Microsof_8a:ce:d0 (00:15:5d:8a:ce:d0) | | | | | | |
| ▶ Internet Protocol Version 4, Src: 172.19.129.143, Dst: 172.19.128.1 | | | | | | |
| ▶ Transmission Control Protocol, Src Port: 80, Dst Port: 61266, Seq: 1, Ack: 728, Len: 390 | | | | | | |
| ▶ Hypertext Transfer Protocol | | | | | | |
| ▼ HTTP/1.1 200 OK\r\n | | | | | | |
| ▶ [Expert Info (Chat/Sequence): HTTP/1.1 200 OK\r\n] | | | | | | |
| Response Version: HTTP/1.1 | | | | | | |
| Status Code: 200 | | | | | | |
| [Status Code Description: OK] | | | | | | |
| Response Phrase: OK | | | | | | |
| Date: Mon, 10 Jun 2024 17:46:46 GMT\r\n | | | | | | |
| Server: Apache/2.4.52 (Ubuntu)\r\n | | | | | | |
| Vary: Accept-Encoding\r\n | | | | | | |
| Content-Encoding: gzip\r\n | | | | | | |
| Content-Length: 138\r\n | | | | | | |
| Keep-Alive: timeout=5, max=100\r\n | | | | | | |
| Connection: Keep-Alive\r\n | | | | | | |
| Content-Type: text/html; charset=UTF-8\r\n | | | | | | |
| \r\n | | | | | | |
| [HTTP response 1/1] | | | | | | |
| [Time since request: 0.001233906 seconds] | | | | | | |
| [Request in frame: 24] | | | | | | |
| [Request URI: http://192.168.0.118/procesar_form.php] | | | | | | |
| Content-encoded entity body (gzip): 138 bytes -> 209 bytes | | | | | | |
| File Data: 209 bytes | | | | | | |
| Line-based text data: text/html (1 lines) | | | | | | |
| ->2-Resultados de la encuesta: <h2>Boca Juniors: 1 votosRiver Plate: 1 votosSan Lorenzo: 1 votosRacing: 0 votosIndependiente: 1 votosOtro: 1 votos | | | | | | |