

pspspsps-ctf / writeups

Pull requests

Issues

<> Code

Projects

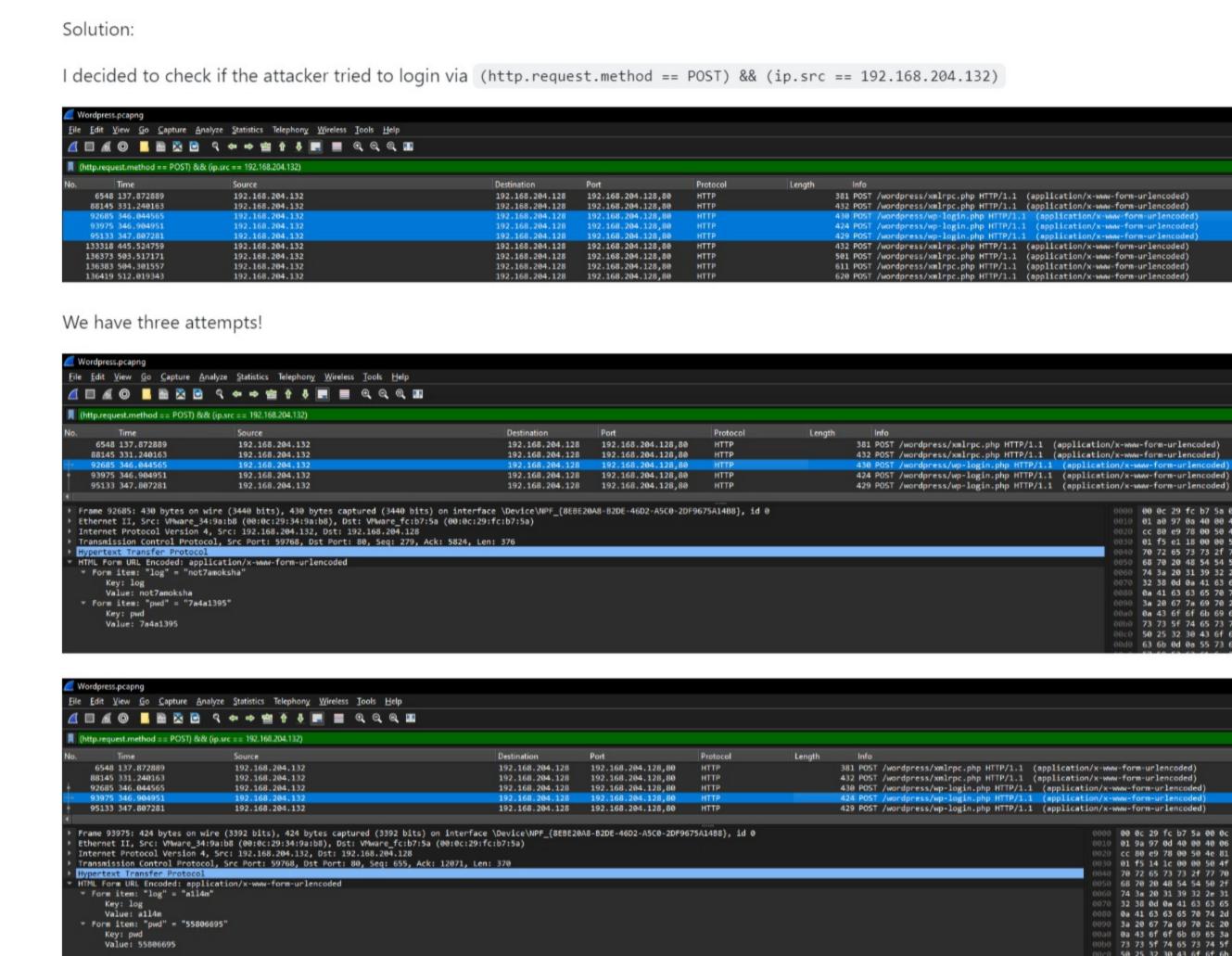
Actions

① Security

✓ Insights

Q Type // to search

>_ | + - | O | 11 | \(\to \)



Port

192.168.204.128

192.168.204.128

192.168.204.128

192,168,204,128,80

192.168.204.128,80

192.168.204.128,80

Protocol

HTTP

381 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)

432 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
430 POST /wordpress/wp-login.php HTTP/1.1 (application/x-www-form-urlencoded)

424 POST /wordpress/wp-login.php HTTP/1.1 (application/x-www-form-urlencoded)

0000 00 0c 29 fc b7 5a 00

cc 80 e9 78 00 50 4e

01 f5 f1 31 00 00 50 70 72 65 73 73 2f 77 68 70 20 48 54 54 50

74 3a 20 31 39 32 20

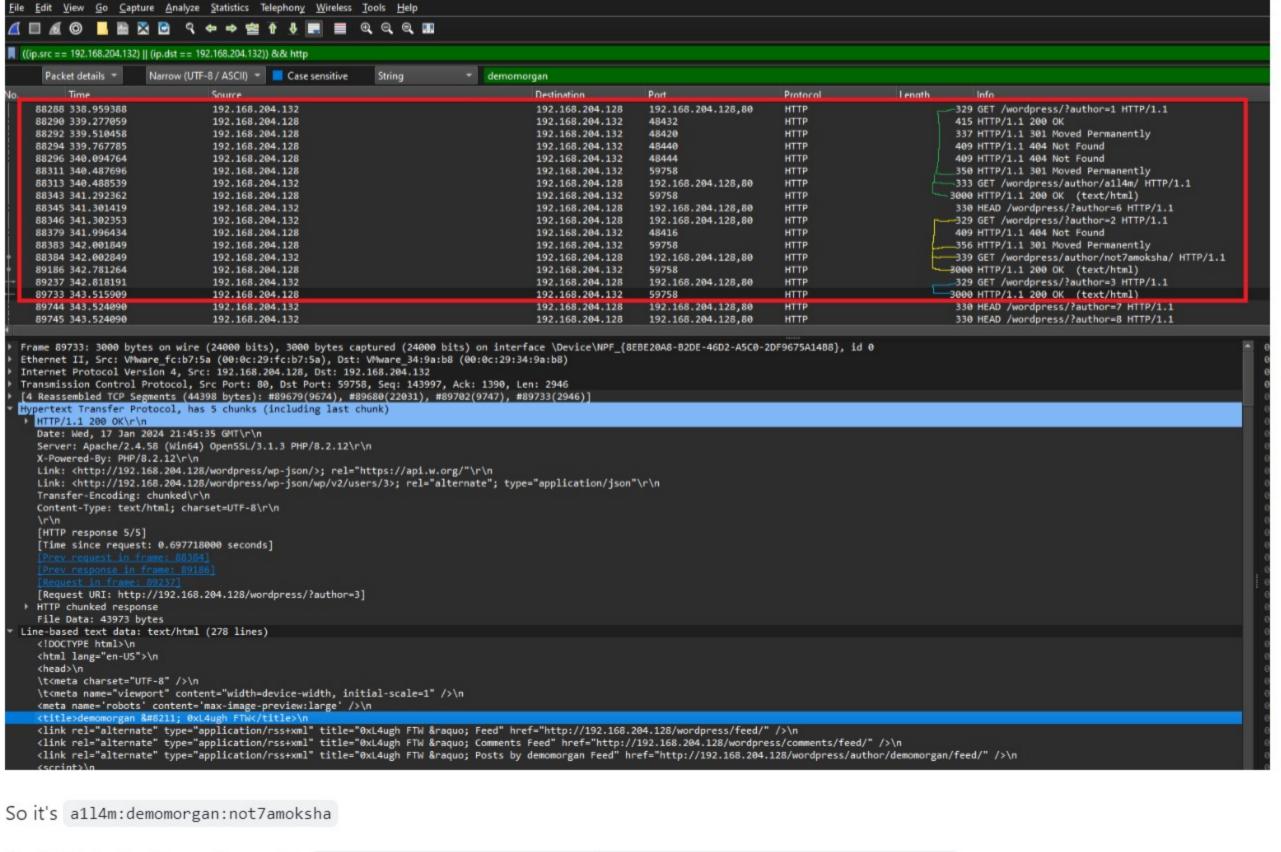
32 38 9d 9a 41 63 63 9a 41 63 63 65 79 74 3a 29 67 7a 69 79 2c 9a 43 6f 6f 6b 69 65

73 73 5f 74 65 73 74 50 25 32 30 43 6f 6f

<mark>___ Wordpress.pcapng</mark> <u>File Edit View Go C</u>apture <u>A</u>nalyze <u>S</u>tatistics Telephon<u>y W</u>ireless <u>T</u>ools <u>H</u>elp

Double-checked via ((ip.src == 192.168.204.132) || (ip.dst == 192.168.204.132)) && http as well...

Frame 95133: 429 bytes on wire (3432 bits), 429 bytes captured (3432 bits) on interface \Device\NPF_{8EBE20A8-B2DE-46D2-A5C0-2DF9675A14B8}, id 0



I noticed several POST requests to /wordpress/xmlrpc.php

Example, packet 136419, invokes wp.getUsersBlogs with two parameters, the username (in this case, it's not7amoksha), and another text which

192.168.204.132

192.168.204.132

192.168.204.132

Internet Protocol Version 4, Src: 192.168.204.132, Dst: 192.168.204.128

HTML Form URL Encoded: application/x-www-form-urlencoded

Ethernet II, Src: VMware_34:9a:b8 (00:0c:29:34:9a:b8), Dst: VMware_fc:b7:5a (00:0c:29:fc:b7:5a)

Transmission Control Protocol, Src Port: 59768, Dst Port: 80, Seq: 1025, Ack: 18306, Len: 375

We can see that it was able to query those three authors.

(http.request.method == POST) && (ip.src == 192.168.204.132)

6548 137,872889

88145 331.240163

93975 346.904951

Form item: "log" - "demomorgan"
Key: log
Value: demomorgan
Form item: "pwd" - "f69cd672"

Value: f69cd672

For Q2, I decided to continue with ((ip.src == 192.168.204.132) || (ip.dst == 192.168.204.132)) && http

```
((ip.src == 192.168.204.132) || (ip.dst == 192.168.204.132)) && http
          Packet details ▼ Narrow (UTF-8 / ASCII) ▼ Case sensitive String
                                                                                                                      Destination
                                                                                                                                              Port
                                                                                                                                                                             Protocol Length
                                                                                                                                                                                                                  Info
                                                                                                                                               192.168.204.128,80
                                                                                                                                                                                                                   619 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
614 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
609 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
                                               192,168,204,132
                                                                                                                      192.168.204.128
      136421 512.019343
                                                                                                                                                                             HTTP
                                               192.168.204.132
                                                                                                                      192.168.204.128
                                                                                                                                               192.168.204.128,80
      136422 512.019343
                                                                                                                                                                             HTTP
                                                                                                                      192.168.204.128
      136425 512.023802
                                               192.168.204.132
                                                                                                                                               192.168.204.128,80
                                                                                                                                                                             HTTP
                                                                                                                                                                                                                   619 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
                                                                                                                                               39522
39532
                                               192,168,204,128
      136432 513.788218
                                                                                                                      192.168.204.132
                                                                                                                                                                             HTTP/XML
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
                                                                                                                      192.168.204.132
      136437 514.062465
                                               192.168.204.128
                                                                                                                                                                             HTTP/XML
                                               192.168.204.128
                                                                                                                      192.168.204.132
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
      136447 514.279218
                                               192.168.204.128
                                                                                                                      192.168.204.132
                                                                                                                                               39540
                                                                                                                                                                             HTTP/XML
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
      136452 514.521978
                                               192.168.204.128
                                                                                                                      192.168.204.132
                                                                                                                                                                             HTTP/XML
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
                                                                                                                                                                                                                  618 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
613 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
608 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
616 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
                                                                                                                      192.168.204.128
                                               192,168,204,132
      136469 514.552106
                                                                                                                                               192.168.204.128,80
                                                                                                                                                                             HTTP
                                                                                                                      192.168.204.128
                                                                                                                                               192.168.204.128,80
      136472 514.574504
                                               192.168.204.132
       136473 514.574504
                                               192.168.204.132
                                                                                                                      192.168.204.128
                                                                                                                                               192.168.204.128,80
                                                                                                                      192.168.204.128
      136475 514.595206
                                               192.168.204.132
                                                                                                                                               192.168.204.128,80
                                                                                                                                                                             HTTP
                                               192.168.204.132
                                                                                                                                               192.168.204.128,80
                                                                                                                                                                                                                   615 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded)
      136477 514.595206
                                                                                                                      192.168.204.128
                                                                                                                                                                             HTTP
                                               192,168,204,128
                                                                                                                      192.168.204.132
      136482 516.214041
                                                                                                                                                                             HTTP/XML
                                                                                                                                               39578
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
                                                                                                                      192.168.204.132
                                                                                                                                               39554
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
      136487 516.348221
                                               192.168.204.128
      136492 516.519025
                                               192.168.204.128
                                                                                                                      192.168.204.132
                                                                                                                                                                                                                   674 HTTP/1.1 200 OK
    Frame 136419: 620 bytes on wire (4960 bits), 620 bytes captured (4960 bits) on interface \Device\NPF_{8EBE20A8-B2DE-46D2-A5C0-2DF9675A14B8}, id 0
                                                                                                                                                                                                                                                                                        0020 cc 80 9a 62 00 50
    Ethernet II, Src: VMware_34:9a:b8 (00:0c:29:34:9a:b8), Dst: VMware_fc:b7:5a (00:0c:29:fc:b7:5a)
    Internet Protocol Version 4, Src: 192.168.204.132, Dst: 192.168.204.128
Transmission Control Protocol, Src Port: 39522, Dst Port: 80, Seq: 1, Ack: 1, Len: 566
                                                                                                                                                                                                                                                                                              70 72 65 73 73 2f
20 48 54 54 50 2f
         ertext Transfer Protocol
                                                                                                                                                                                                                                                                                               20 31 39 32 2e 31
                    rdpress/xmlrpc.php HTTP/1.1\r\n
                                                                                                                                                                                                                                                                                               0d 0a 41 63 63 65
        Host: 192.168.204.128\r\n
                                                                                                                                                                                                                                                                                               63 63 65 70 74 2d 4
                                                                                                                                                                                                                                                                                               67 7a 69 70 2c 20 (
      Accept-Encoding: gzip, deflate\r\n
Cookie: wordpress_test_cookie=WP%20Cookie%20check\r\n
                                                                                                                                                                                                                                                                                               6f 6f 6b 69 65 3a
                                                                                                                                                                                                                                                                                               5f 74 65 73 74 5f
                                                                                                                                                                                                                                                                                               32 30 43 6f 6f 6b
        User-Agent: WPScan v3.8.25 (https://wpscan.com/wordpress-security-scanner)\r\n
        Referer: http://192.168.204.128/wordpress\r\n
                                                                                                                                                                                                                                                                                               0d 0a 55 73 65 72
                                                                                                                                                                                                                                                                                               53 63 61 6e 20 76
       Content-Length: 219\r\n
        Content-Type: application/x-www-form-urlencoded\r\n
                                                                                                                                                                                                                                                                                               74 70 73 3a 2f 2f
                                                                                                                                                                                                                                                                                               2f 77 6f 72 64 70
                                                                                                                                                                                                                                                                                               69 74 79 2d 73 63 (
        [HTTP request 1/1]
                                                                                                                                                                                                                                                                                               66 65 72 65 72 3a :
                                                                                                                                                                                                                                                                                               32 2e 31 36 38 2e
      HTML Form URL Encoded: application/x-www-form-urlencoded
                                                                                                                                                                                                                                                                                              2d 4c 65 6e 67 74 6
6e 74 65 6e 74 2d 9
      69 63 61 74 69 6f
            Value: "1.0" ?><methodCall><methodName>wp.getUsersBlogs</methodName></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param></param>
                                                                                                                                                                                                                                                                                               72 6d 2d 75 72 6c
                                                                                                                                                                                                                                                                                       0190 Oa 3
                                                                                                                                                                                                                                                                                       01a0
01b0
Looking at the response.
    Wordpress.pcapng
 <u>File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help</u>
```

```
((ip.src == 192.168.204.132) || (ip.dst == 192.168.204.132)) && http
                          Narrow (UTF-8 / ASCII) T Case sensitive
                                                                                 ▼ demomorgan
                                                                                                                                                                        620 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded 619 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
     136419 512.019343
                                     192.168.204.132
                                                                                               192.168.204.128
                                                                                                                                          HTTP
                                                                                                                  192.168.204.128,80
                                                                                                                  192.168.204.128,80
     136421 512.019343
                                     192.168.204.132
                                                                                               192.168.204.128
                                     192.168.204.132
                                                                                                                                                                        614 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
     136424 512.023802
                                     192.168.204.132
                                                                                               192.168.204.128
                                                                                                                   192.168.204.128,80
                                                                                                                                                                         609 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
     136425 512.023802
                                     192.168.204.132
                                                                                              192.168.204.128
                                                                                                                  192.168.204.128,80
                                                                                                                                          HTTP
                                                                                                                                                                        619 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
                                     192.168.204.128
                                                                                               192.168.204.132
                                                                                                                                           HTTP/XML
                                                                                                                                                                        674 HTTP/1.1 200 OK
     136442 514.162328
                                     192.168.204.128
                                                                                               192.168.204.132
                                                                                                                   39526
                                                                                                                                           HTTP/XML
                                                                                                                                                                        674 HTTP/1.1 200 OK
                                     192.168.204.128
                                                                                               192.168.204.132
     136447 514.279218
                                                                                                                   39540
                                                                                                                                          HTTP/XML
                                                                                                                                                                        674 HTTP/1.1 200 OK
     136452 514.521978
                                     192.168.204.128
                                                                                               192.168.204.132
                                                                                                                   39536
                                                                                                                                          HTTP/XML
                                                                                                                                                                        674 HTTP/1.1 200 OK
                                                                                                                                          HTTP
                                                                                                                                                                        618 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded 613 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
                                     192,168,204,132
     136469 514.552106
                                                                                               192.168.204.128
                                                                                                                   192.168.204.128,80
     136472 514.574504
                                     192.168.204.132
                                                                                               192.168.204.128
                                                                                                                   192.168.204.128,80
     136473 514.574504
                                     192.168.204.132
                                                                                                                                                                        608 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
                                                                                               192.168.204.128
     136475 514.595206
                                     192.168.204.132
                                                                                               192.168.204.128
                                                                                                                   192.168.204.128,80
                                                                                                                                                                        616 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
                                                                                                                                                                        615 POST /wordpress/xmlrpc.php HTTP/1.1 (application/x-www-form-urlencoded
     136477 514.595206
                                     192.168.204.132
                                                                                               192.168.204.128
                                                                                                                  192.168.204.128,80
                                                                                                                                          HTTP
                                                                                                                  39578
39554
                                                                                                                                          HTTP/XML
     136482 516.214041
                                     192.168.204.128
                                                                                               192.168.204.132
                                                                                                                                                                        674 HTTP/1.1 200 OK
                                     192,168,204,128
                                                                                                                                          HTTP/XML
     136487 516.348221
                                                                                               192.168.204.132
                                                                                                                                                                        674 HTTP/1.1 200 OK
     136492 516.519025
                                                                                                                                                                        674 HTTP/1.1 200 OK
                                                                                               192.168.204.132
     Content-Length: 403\r\n
Content-Type: text/xml; charset=UTF-8\r\n
                                                                                                                                                                                                                                     00 0c 29 34 9a b
                                                                                                                                                                                                                                     02 94 31 8e 40 (
                                                                                                                                                                                                                                     cc 84 00 50 9a 62
                                                                                                                                                                                                                                     04 00 1c dd 00 0
      [Time since request: 1.768875000 seconds]
                                                                                                                                                                                                                                     30 30 20 4f 4b 0d
2c 20 31 37 20 4a
3a 34 38 3a 32 34
      [Request URI: http://192.168.204.128/wordpress/xmlrpc.php]
                                                                                                                                                                                                                                     65 72 3a 20 41
                                                                                                                                                                                                                                     38 20 28 57 69 6
4c 2f 33 2e 31 2
    eXtensible Markup Language
    + <?xml
     * <methodResponse</p>
                                                                                                                                                                                                                                     31 32 0d 0a 58
      ▼ <fault>
                                                                                                                                                                                                                                     3a 20 50 48 50
                                                                                                                                                                                                                                     6e 6e 65 63 74 6
         * <value>
                * <member>
                                                                                                                                                                                                                                     20 34 30 33 0d 0
                                                                                                                                                                                                                                     70 65 3a 20 74 6
61 72 73 65 74 3
                   ▼ <name>
                       faultCode
                                                                                                                                                                                                                                     3f 78 6d 6c 20
                                                                                                                                                                                                                                     30 22 20 65 6e i
                     * <int>
                                                                                                                                                                                                                                     2d 38 22 3f 3e 6
                                                                                                                                                                                                                                     70 6f 6e 73 65
                          403
                                                                                                                                                                                                                                     0a 20 20 20 20
20 20 20 3c 73
                          </int>
                       </value>
                     </member>
                                                                                                                                                                                                                                     20 20 20 20 30
                                                                                                                                                                                                                                     20 20 20 20 20
                                                                                                                                                                                                                                     6c 74 43 6f 64 6
                       faultString
                                                                                                                                                                                                                                     20 20 20 20 20 3
69 6e 74 3e 34
                       </name>
                                                                                                                                                                                                                                     61 6c 75 65 3e
                                                                                                                                                                                                                                     6d 65 6d 62 65
                          Incorrect username or password.
                                                                                                                                                                                                                                     3c 6d 65 6d 62 6
                                                                                                                                                                                                                                     20 20 20 3c 6e
                          </string>
                                                                                                                                                                                                                                     72 69 6e 67 3c
                       </value>
                   </struct>
The second parameter is indeed a password! Searching via the documentation also confirms it.
https://developer.wordpress.org/reference/classes/wp_xmlrpc_server/wp_getusersblogs/
```

```
(ip.dst == 192,168,204,132) && !(xml.cdata == "403") && (_ws.col.protocol == "HTTP/XML")
                                                                                        Destination
                                                                                                                                 Protocol
      6550 138.496168
                                   192.168.204.128
                                                                                         192.168.204.132
                                                                                                           53836
                                                                                                                                 HTTP/XML
                                                                                                                                                             674 HTTP/1.1 200 OK
                                                                                                                                 HTTP/XML
                                                                                                                                                            5707 HTTP/1.1 200 OK
      6722 145.924169
                                  192.168.204.128
                                                                                                           59206
                                                                                        192.168.204.132
                                  192.168.204.128
                                                                                                                                                            2115 HTTP/1.1 200 OK
      6727 147.229531
                                                                                        192.168.204.132
                                                                                                           59206
                                                                                                                                 HTTP/XML
     88149 331.959471
                                  192.168.204.128
                                                                                        192.168.204.132
                                                                                                                                 HTTP/XML
                                                                                                                                                             674 HTTP/1.1 200 OK
                                                                                                                                                            5707 HTTP/1.1 200 OK
                                                                                                           48414
     88202 335,782342
                                  192.168.204.128
                                                                                        192.168.204.132
                                                                                                                                 HTTP/XML
     88206 336.509494
                                   192.168.204.128
                                                                                        192.168.204.132
                                                                                                           48414
                                                                                                                                 HTTP/XML
                                                                                                                                                             601 HTTP/1.1 200 OK
    133321 446.202345
                                  192.168.204.128
                                                                                        192.168.204.132
                                                                                                           55618
                                                                                                                                 HTTP/XML
                                                                                                                                                             674 HTTP/1.1 200 OK
                                                                                                                                                            4544 HTTP/1.1 200 OK
    136375 504.269307
                                  192.168.204.128
                                                                                        192.168.204.132
                                                                                                           42778
                                                                                                                                 HTTP/XML
    140104 685.767500
                                   192.168.204.128
                                                                                        192.168.204.132
                                                                                                                                 HTTP/XML
                                                                                                                                                             674 HTTP/1.1 200 OK
   eXtensible Markup Language
   > <?xml
   < <methodResponse>
      ▼ <params>
         ▼ <param>
            ▼ <value>
              ▼ <array>
                 * <data>
                    * <value>
                      ▼ <struct>
                         * <member>
                                 isAdmin
                                 </name>
                            ▼ <value>
                              ▼ <boolean>
                                   </boolean>
                                </value>
                         ▼ <member>
                            ▼ <name>
                                url
                                 </name>
                            ▼ <value>
                              * <string>
                                   http://192.168.204.128/wordpress/
                                   </string>
                                </value>
                              </member>
                         ▼ <member>
                            ▼ <name>
                                 blogid
                                 </name>
There's a hit! Let's check the HTTP stream...

■ Wireshark · Follow HTTP Stream (tcp.stream eq 874) · Wordpress.pcapng
```

```
POST /wordpress/xmlrpc.php HTTP/1.1
  lost: 192.168.204.128
  ccept: */*
  ccept-Encoding: gzip, deflate
  Cookie: wordpress_test_cookie=WP%20Cookie%20check
 User-Agent: WPScan v3.8.25 (https://wpscan.com/wordpress-security-scanner)
 Referer: http://192.168.204.128/wordpress
  ontent-Length: 220
  ontent-Type: application/x-www-form-urlencoded
 <?xml version="1.0" ?><methodCall><methodName>wp.getUsersBlogs</methodName><params><param><value><string>demomorgan</string></value></param><param><value><string>demomorgan</stri</pre>
 ng></value></param></params></methodCall>
HTTP/1.1 200 OK
 Date: Wed, 17 Jan 2024 21:55:19 GMT
  Server: Apache/2.4.58 (Win64) OpenSSL/3.1.3 PHP/8.2.12
  -Powered-By: PHP/8.2.12
  onnection: close
  ontent-Length: 669
   ontent-Type: text/xml; charset=UTF-8
 <?xml version="1.0" encoding="UTF-8"?>
  methodResponse>
   <params>
     <param>
       <value>
       <array><data>
   <value><struct>
   <member><name>isAdmin</name><value><boolean>0</boolean></value></member>
   <member><name>url</name><value><string>http://192.168.204.128/wordpress/</string></value></member>
   <member><name>blogid</name><value><string>1</string></value></member>
   <member><name>blogName</name><value><string>0xL4ugh FTW</string></value></member>
    member><name>xmlrpc</name><value><string>http://192.168.204.128/wordpress/xmlrpc.php</string></value></member>
   struct></value>
   /data></array>
       </value>
     </param>
   </params>
  /methodResponse>
So it's demomorgan:demomorgan
```

For the page that was used to bruteforce, it's xmlrpc.php

Now we have the flag! :D

Now let's look for a successful request that doesn't return a 403.

File Edit View Go Capture Analyze Statistics Telephony Wireless Tools Help

Wordpress.pcapng

Let's use (ip.dst == 192.168.204.132) && !(xml.cdata == "403") && (_ws.col.protocol == "HTTP/XML")

Flag: 0xL4ugh{a114m:demomorgan:not7amoksha_demomorgan:demomorgan_xmlrpc.php}