

## Authenticated Stored XSS in pfSense 2.4.4-p2

## CVE-2020-19201

```
1  pfSense-SA-19_03.webgui          Security Advisory
2                                     pfSense
3
4  Topic:          XSS vulnerability in the WebGUI
5
6  Category:       pfSense Base System
7  Module:         webgui
8  Announced:     2019-05-20
9  Credits:        Dharmesh Baskaran -- https://www.linkedin.com/in/dharmeshbaskaran
10 CVE ID:         CVE-2020-19201
11 Affects:        pfSense software versions <= 2.4.4-p2
12 Corrected:      2019-05-03 19:24:43 UTC (pfSense/master, pfSense 2.5.0)
13                 2019-05-03 19:24:43 UTC (pfSense/RELENG_2_4_4, pfSense 2.4.4-pX)
14                 The latest revision of this advisory is available at
15 URL:            https://pfsense.org/security/advisories/pfSense-SA-19_03.webgui.asc
16                 https://redmine.pfsense.org/issues/9499
17
18
19 0.  Revision History
20
21 v1.1  2021-05-20 Added CVE ID
22 v1.0  2019-05-20 Initial SA draft
23
24 I.   Background
25
26 pfSense® software is a free network firewall distribution based on the
27 FreeBSD operating system. The pfSense software distribution includes third-
28 party free software packages for additional functionality, and provides most of
29 the functionality of common commercial firewalls.
30
31 The majority of users of pfSense software have never installed or used a stock
32 FreeBSD system. Unlike similar GNU/Linux-based firewall distributions, there
33 is no need for any UNIX knowledge. The command line is never used, and there
34 is no need to ever manually edit any rule sets. Instead, pfSense software
35 includes a web interface for the configuration of all included components.
36 Users familiar with commercial firewalls will quickly understand the web
37 interface, while those unfamiliar with commercial-grade firewalls may encounter
38 a short learning curve.
39
40 II.  Problem Description
41
42 A Cross-Site Scripting (XSS) vulnerability was found in
43 status_filter_reload.php, a page in the pfSense software WebGUI, on version
44 2.4.4-p2 and earlier.
45
46 The page did not encode output from the filter reload process, and a stored XSS
47 was possible via the descr (description) parameter on NAT rules.
48
49 III. Impact
50
51 Due to the lack of proper encoding on the affected parameters susceptible to
52 XSS, arbitrary JavaScript could be executed in the user's browser. The user's
53 session cookie or other information from the session may be compromised.
54
55 IV.  Workaround
56
57 No workaround. To help mitigate the problem on older releases, use one or more
58 of the following:
59 * Do not give firewall administrators access to pages or functions which allow
60   writing arbitrary files to the firewall.
61 * Limit access to the affected pages to trusted administrators only.
62 * Do not log into the firewall with the same browser used for non-
63   administrative web browsing.
64
65 V.   Solution
66
67 Users can upgrade to version 2.4.4-p3 or later. This upgrade may be performed in
68 the web interface or from the console.
69
70 See https://docs.netgate.com/pfsense/en/latest/install/upgrade-guide.html
71
72 Users may also apply the relevant revisions below using the System Patches
73 package to obtain the fix.
74
75 See https://docs.netgate.com/pfsense/en/latest/development/system-patches.html
76
77 VI.  Correction details
78
79 The following list contains the correction revision commit ID for each
80 affected item.
```

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81
82 Branch/path Revision
83 - - - - -
84 pfSense/master 1af9400d594cd183d011f22fa9b3a7630570a250
85 pfSense/RELENG_2_4_4 41c9fac85c3ff621665bd7fa7b9af497bc16fd3a
86 - - - - -
87
88 VII. References
89
90 <URL:https://redmine.pfsense.org/issues/9499>
91 <URL:https://docs.netgate.com/pfsense/en/latest/install/upgrade-guide.html>
92 <URL:https://docs.netgate.com/pfsense/en/latest/development/system-patches.html>
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