

🔑 main ▾ Vuln / Tenda AC21 / 3 /



xxy1126 -20220902 ...

on Sep 2 ⌚ History

..



readme.assets

3 months ago



readme.markdown

3 months ago



readme.markdown

Tenda AC21(V16.03.08.15) contains heap Buffer Overflow Vulnerability

overview

- Manufacturer's website information: <https://www.tenda.com.cn/>
- Firmware download address: <https://www.tenda.com.cn/download/detail-3419.html>

product information

Tenda A21(V16.03.08.15), latest version of simulation overview:

AC21 升级软件 V16.03.08.15

立即下载

关联产品: AC21 更新日期: 2022/7/4

AC21V1.0升级说明
硬件版本: V1.0

description

1. Vulnerability Details

Tenda AC21(V16.03.08.15) contains a heap overflow vulnerability in file `/bin/httpd`, function `setSchedWifi`.

This vulnerability allows attackers to cause a Denial of Service (DoS) via the `schedStartTime` and `schedEndTime` parameter.

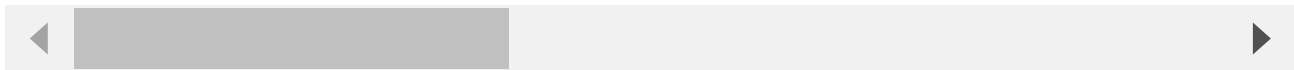
```
v9 = (char *)websGetVar(a1, "schedWifiEnable", "1");
v8 = (const char *)websGetVar(a1, "schedStartTime", &unk_4D7C58);
v7 = (const char *)websGetVar(a1, "schedEndTime", &unk_4D7C58);
nptr = (char *)websGetVar(a1, "timeType", "0");
s = (char *)websGetVar(a1, "day", "1,1,1,1,1,1,1");
v1 = wifi_get_mibname("wlan", "enable", v20);
GetValue(v1, v12);
if ( !LOBYTE(v12[0]) )
    strcpy((char *)v12, "1");
if ( atoi(nptr) )
    sscanf(s, "%d,%d,%d,%d,%d,%d,%d", &v13, &v14, &v15, &v16, &v17, &v18, &v19);
SetValue("sys.sched.wifi.timeType", nptr);
ptr = malloc(0x19u);
v10 = atoi(v9);
if ( ptr )
{
    *(_BYTE *)ptr = atoi((const char *)v12) != 0;
    *((_BYTE *)ptr + 1) = atoi(v9) != 0;
    strcpy((char *)ptr + 2, v8); // 1
    strcpy((char *)ptr + 10, v7); // 1
}
```

the `strcpy(ptr+2, v8)` and `strcpy(ptr+10, v7)` copies strings to heap buffer without checking its length, so there is a heap overflow.

2. Recurring loopholes and POC

In order to reproduce the vulnerability, the following steps can be followed:

1. Boot the firmware by qemu-system or other ways (real machine)
2. Attack with the following POC attacks

[illegible]

By sending this poc, we can achieve the effect of a denial-of-service(DOS) attack .

