

Identifying and Researching Potential Vulnerabilities

From our scanning and enumeration of the Kioptrix machine we have found the following key information:

```
80/443 - Open - 192.168.229.133
```

```
Default webpage - Apache - PHP
```

```
Information Disclosure - 404 page
```

```
information Disclosure - server headers disclose version information
```

```
80/tcp open http          Apache httpd 1.3.20 ((Unix) (Red-Hat/Linux) mod_ssl/2.8.4  
OpenSSL/0.9.6b)
```

```
mod_ssl/2.8.4 - mod_ssl 2.8.7 and lower are vulnerable to a remote buffer overflow  
which may allow a remote shell. http://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-  
2002-0082, OSVDB-756.
```

```
SMB
```

```
Unix (Samba 2.2.1a)
```

```
Webalizer Version 2.01 - http://192.168.229.133/usage/usage_201911.html
```

```
SSH
```

```
OpenSSH 2.9p2
```

Let's do some research on `mod_ssl 2.8.4` with a simple google search as shown below:

About 59,500 results (0.45 seconds)

github.com > heltonWernik > OpenLuck ▾

heltonWernik/OpenLuck: OpenFuck exploit updated ... - GitHub

OpenFuck exploit updated to linux 2018 - Apache mod_ssl < 2.8.7 OpenSSL - Remote Buffer Overflow - heltonWernik/OpenLuck.

www.exploit-db.com > exploits ▾

Apache mod_ssl < 2.8.7 OpenSSL - Exploit Database

Apr 4, 2003 - Apache mod_ssl < 2.8.7 OpenSSL - 'OpenFuckV2.c' Remote Buffer ... (apache-1.3.20+2.8.4)", 0x0808faf8 }, { "FreeBSD (apache-1.3.20_1)", ...

www.exploit-db.com > exploits ▾

Apache mod_ssl OpenSSL - Exploit Database

Apache mod_ssl OpenSSL < 0.9.6d / < 0.9.7-beta2 - 'openssl-too-open.c' SSL2 ... Linux/3mdk) mod_ssl/2.8.4 OpenSSL/0.9.6b Connection: close Content-Type: ...

www.rapid7.com > vulnerabilities > HTTP-MODS-0003 ▾

Remotely Exploitable Buffer Overflow in mod_ssl - Rapid7

Rapid7's VulnDB is curated repository of vetted computer software exploits and ... mod_ssl < 2.8.7 is vulnerable to a remotely exploitable buffer overflow when ...

Exploit-db is a good resource to start with. It also includes the exploit code so we can review the code and try to make sense of it.

The screenshot shows the Exploit Database interface. The main header is dark blue with the 'EXPLOIT DATABASE' logo and a 'GET CERTIFIED' button. The left sidebar is orange with various navigation icons. The main content area displays the details of a specific exploit:

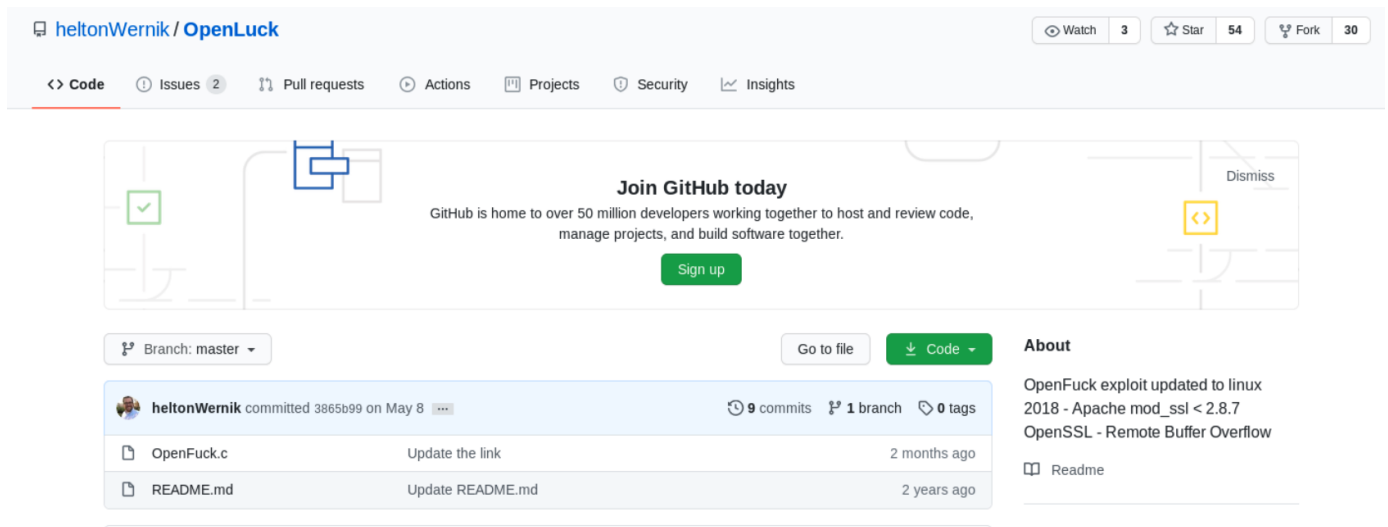
- Title:** Apache mod_ssl < 2.8.7 OpenSSL - 'OpenFuckV2.c' Remote Buffer Overflow (1)
- EDB-ID:** 764
- CVE:** 2002-0082
- Author:** SPABAM
- Type:** REMOTE
- Platform:** UNIX
- Date:** 2003-04-04
- EDB Verified:** ✓
- Exploit:** 📄 / {}
- Vulnerable App:** 📄

On the right, there is a promotional box for 'Become a Certified Penetration Tester' with a 'GET CERTIFIED' button.

At the bottom, there is a code block with the following content:

```
/*
 * E-DB Note: Updated exploit - https://www.exploit-db.com/exploits/47080
 * E-DB Note: Updating OpenFuck Exploit - http://paulsec.github.io/blog/2014/04/14/updating-openfuck-exploit/
 *
 * OF version r00t VERY PRIV8 spabam
 * Compile with: gcc -o OpenFuck OpenFuck.c -lcrypto
 * objdump -R /usr/sbin/httpd|grep free to get more targets
```

We will also look at the github resource which is also good as well (shown below):



We can also do a google search for `Apache httpd 1.3.20`. We will find a `cvedetails` resource. If the score of the vulnerability is red or tending to red/orange, it is likely vulnerable.

Another resource we can use is `Rapid7`.

We can also do some research in the terminal using a tool called `searchsploit`. Searchsploit is an "offline" version of Exploit-db as shown below:

```
root@kali:~# searchsploit samba 2
```

Exploit Title	Path (/usr/share/exploitdb/)
Microsoft Windows XP/2003 - Samba Shar	exploits/windows/dos/148.sh
Samba 1.9.19 - 'Password' Remote Buffe	exploits/linux/remote/20308.c
Samba 2.0.7 - SWAT Logfile Permissions	exploits/linux/local/20341.sh
Samba 2.0.7 - SWAT Logging Failure	exploits/unix/remote/20340.c
Samba 2.0.7 - SWAT Symlink (1)	exploits/linux/local/20338.c
Samba 2.0.7 - SWAT Symlink (2)	exploits/linux/local/20339.sh
Samba 2.0.x - Insecure TMP File Symbol	exploits/linux/local/20776.c
Samba 2.0.x/2.2 - Arbitrary File Creat	exploits/unix/remote/20968.txt
Samba 2.2.0 < 2.2.8 (OSX) - trans2open	exploits/osx/remote/9924.rb
Samba 2.2.2 < 2.2.6 - 'nttrans' Remote	exploits/linux/remote/16321.rb
Samba 2.2.8 (BSD x86) - 'trans2open' R	exploits/bsd_x86/remote/16880.rb
Samba 2.2.8 (Linux Kernel 2.6 / Debian	exploits/linux/local/23674.txt

TIP: when using searchsploit, do not be too specific with your search terms.