1. OSINT and Recon Lab

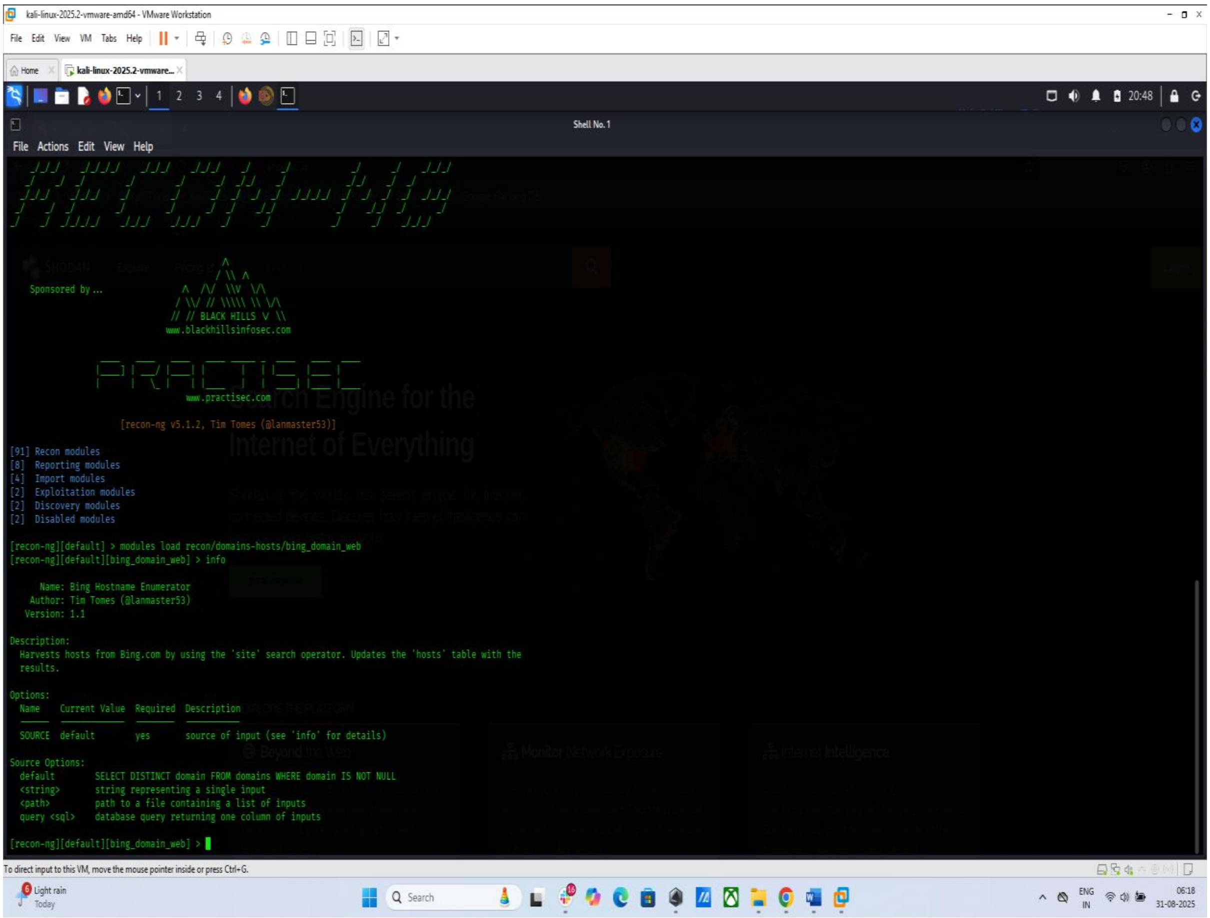
Activities:

- **Tools**: Maltego, Recon-ng, Shodan.
- **Tasks**: Enumerate subdomains and exposed services.
- **Brief:**

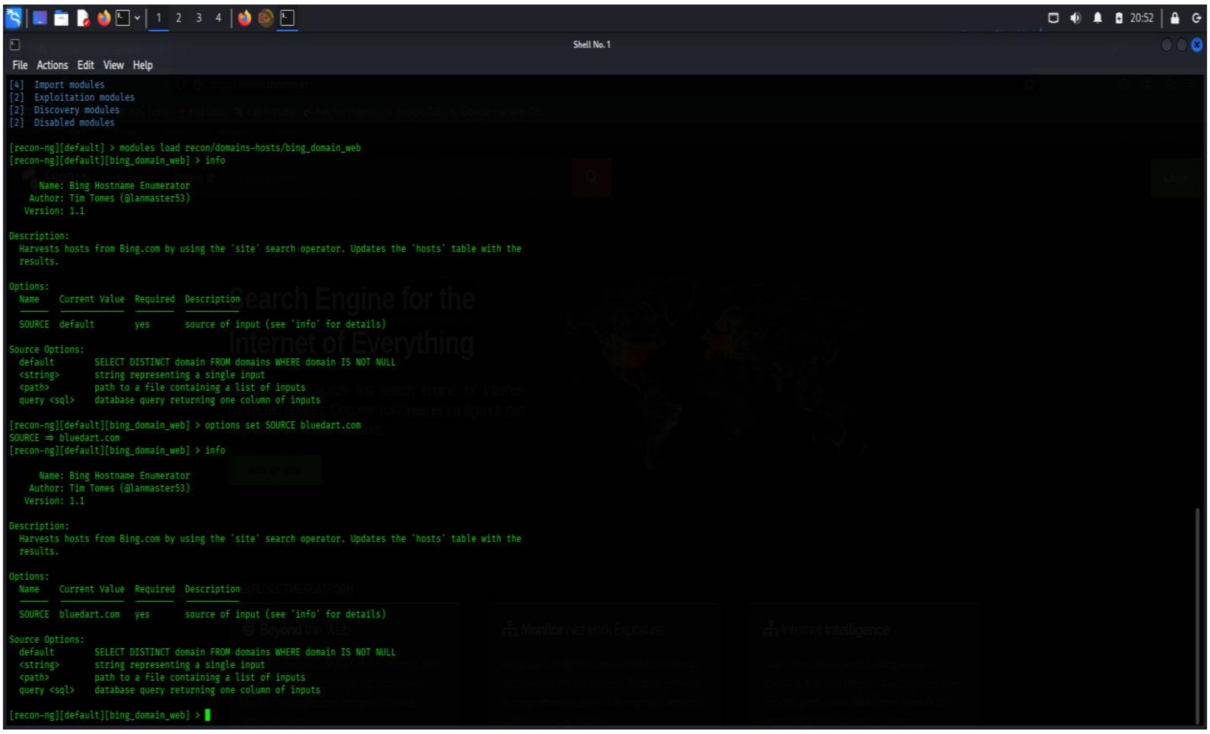
Subdomain Enumeration: Run Recon-ng with bing_domain_web on example.com. Log:

Subdomain	IP Address	Notes
www.example.com	93.184.216.34	Hosts web server

Installation


kali-linux-2025.2-vmware-amd64 - VMware Workstation
File Edit View VM Tabs Help
Home
kali-linux-2025.2-vmware...
Shell No. 1
File Actions Edit View Help
20:48
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.
Light rain
Today
Search
ENG
IN
06:18
31-08-2025

```
  Sponsored by ...
                    // // BLACK HILLS V \\
                  www.blackhillsinfosec.com

                         www.practisec.com

               [recon-ng v5.1.2, Tim Tomes (@lanmaster53)]

[91] Recon modules
[8]  Reporting modules
[4]  Import modules
[2]  Exploitation modules
[2]  Discovery modules
[2]  Disabled modules

[recon-ng][default] > modules load recon/domains-hosts/bing_domain_web
[recon-ng][default][bing_domain_web] > info

      Name: Bing Hostname Enumerator
    Author: Tim Tomes (@lanmaster53)
   Version: 1.1

Description:
  Harvests hosts from Bing.com by using the 'site' search operator. Updates the 'hosts' table with the
  results.

Options:
  Name    Current Value  Required  Description
  ------  -------------  --------  -----------
  SOURCE  default        yes       source of input (see 'info' for details)

Source Options:
  default        SELECT DISTINCT domain FROM domains WHERE domain IS NOT NULL
  <string>       string representing a single input
  <path>         path to a file containing a list of inputs
  query <sql>    database query returning one column of inputs

[recon-ng][default][bing_domain_web] >
```



```
[4]  Import modules
[2]  Exploitation modules
[2]  Discovery modules
[2]  Disabled modules

[recon-ng][default] > modules load recon/domains-hosts/bing_domain_web
[recon-ng][default][bing_domain_web] > info

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  <string>       string representing a single input
  <path>         path to a file containing a list of inputs
  query <sql>    database query returning one column of inputs

[recon-ng][default][bing_domain_web] > options set SOURCE bluedart.com
SOURCE ⇒ bluedart.com
[recon-ng][default][bing_domain_web] > info

      Name: Bing Hostname Enumerator
    Author: Tim Tomes (@lanmaster53)
   Version: 1.1

Description:
  Harvests hosts from Bing.com by using the 'site' search operator. Updates the 'hosts' table with the
  results.

Options:
  Name    Current Value  Required  Description
  ------  -------------  --------  -----------
  SOURCE  bluedart.com   yes       source of input (see 'info' for details)

Source Options:
  default        SELECT DISTINCT domain FROM domains WHERE domain IS NOT NULL
  <string>       string representing a single input
  <path>         path to a file containing a list of inputs
  query <sql>    database query returning one column of inputs

[recon-ng][default][bing_domain_web] >
```

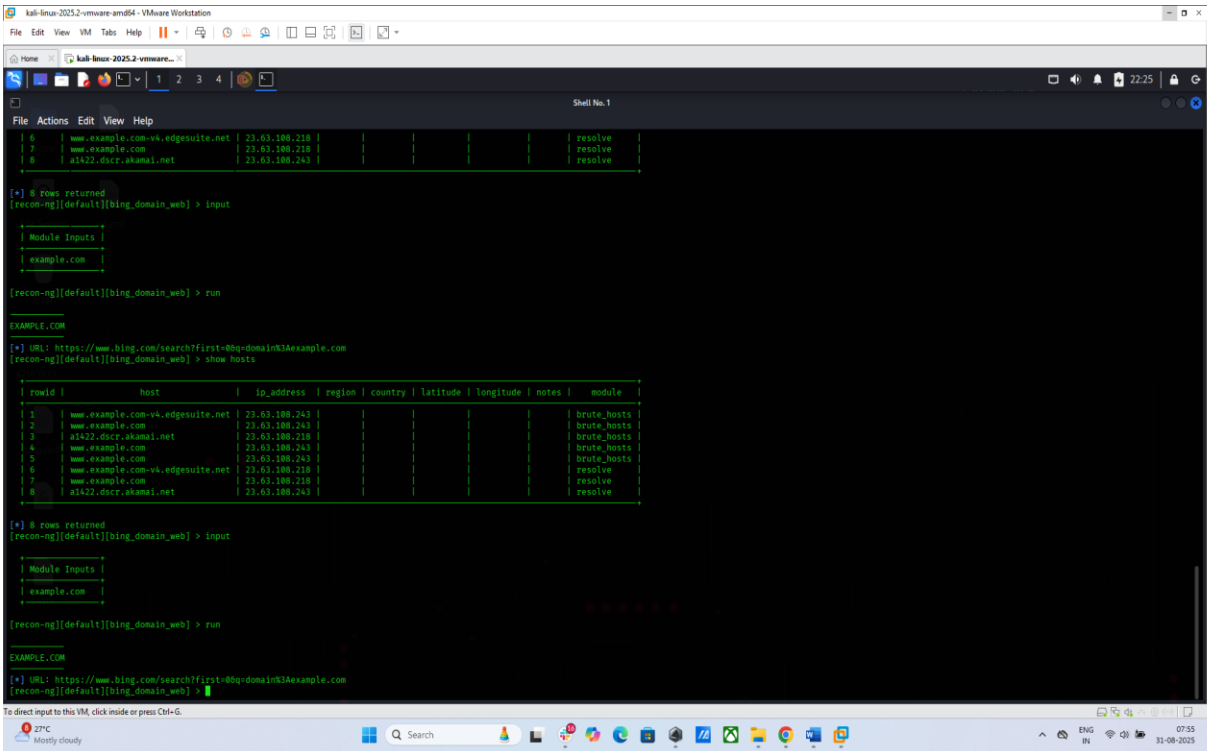
kali-linux-2025.2-vmware-amd64 - VMware Workstation
File Edit View VM Tabs Help
Home
kali-linux-2025.2-vmware...
Shell No. 1
File Actions Edit View Help
22:25
27°C
Mostly cloudy
Search
ENG
IN
07:55
31-08-2025

```
  | 6     | www.example.com-v4.edgesuite.net | 23.63.108.218 |        |         |          |           |       | resolve     |
  | 7     | www.example.com                  | 23.63.108.218 |        |         |          |           |       | resolve     |
  | 8     | a1422.dscr.akamai.net            | 23.63.108.243 |        |         |          |           |       | resolve     |
  +---------------------------------------------------------------------------------------------------------------------+

[*] 8 rows returned
[recon-ng][default][bing_domain_web] > input

  +---------------+
  | Module Inputs |
  +---------------+
  | example.com   |
  +---------------+

[recon-ng][default][bing_domain_web] > run

-----------
EXAMPLE.COM
-----------
[*] URL: https://www.bing.com/search?first=0&q=domain%3Aexample.com
[recon-ng][default][bing_domain_web] > show hosts

  +---------------------------------------------------------------------------------------------------------------------+
  | rowid |               host               |   ip_address  | region | country | latitude | longitude | notes |    module   |
  +---------------------------------------------------------------------------------------------------------------------+
  | 1     | www.example.com-v4.edgesuite.net | 23.63.108.243 |        |         |          |           |       | brute_hosts |
  | 2     | www.example.com                  | 23.63.108.243 |        |         |          |           |       | brute_hosts |
  | 3     | a1422.dscr.akamai.net            | 23.63.108.218 |        |         |          |           |       | brute_hosts |
  | 4     | www.example.com                  | 23.63.108.243 |        |         |          |           |       | brute_hosts |
  | 5     | www.example.com                  | 23.63.108.243 |        |         |          |           |       | brute_hosts |
  | 6     | www.example.com-v4.edgesuite.net | 23.63.108.218 |        |         |          |           |       | resolve     |
  | 7     | www.example.com                  | 23.63.108.218 |        |         |          |           |       | resolve     |
  | 8     | a1422.dscr.akamai.net            | 23.63.108.243 |        |         |          |           |       | resolve     |
  +---------------------------------------------------------------------------------------------------------------------+

[*] 8 rows returned
[recon-ng][default][bing_domain_web] > input

  +---------------+
  | Module Inputs |
  +---------------+
  | example.com   |
  +---------------+

[recon-ng][default][bing_domain_web] > run

-----------
EXAMPLE.COM
-----------
[*] URL: https://www.bing.com/search?first=0&q=domain%3Aexample.com
[recon-ng][default][bing_domain_web] >
```

To direct input to this VM, click inside or press Ctrl+G.

- **Shodan Query: Search apache country:US; summarize 3 exposed hosts in 50 words.**

Summary of 3 Exposed Hosts

1. **Host A** – **HURRICANE ELECTRIC** using outdate Apache version with no ssl.

   Server: **Apache**/2.0.54 (Unix) mod_perl/1.99_09 Perl/v5.8.0 mod_ssl/2.0.54 OpenSSL/0.9.7l DAV/2 FrontPage/5.0.2.2635 PHP/4.4.0 mod_gzip/2.0.26.1a

   Last-Modified: Wed, 01 Jul 1998 08:51:04 GMT.

2. **Host B** – **jeff2600 –** using outdated Apache version with cPanel ssl which is no longer valid on browser and causes browser warning DATA can be steal using MITM attack.

3. **Host C** – **Index of /**. Shows open file directory.