

B. Pavan Sai
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1. Exploring Email Tracer

Email Tracer is an online as well as offline tool provided by Resource Center for Cyber Forencics, India [CDAC]

It is used to check if a mail is authentic or malicious and can trace to the source of mail.

User has to input a particular email header to check its authenticity.

The screenshot displays the OnlineEmailTracer interface in a Firefox Developer Edition browser. The main content area shows the results of an email analysis performed on a message from **noreply@fbhides.com**.

Details extracted from Mail Header:

- The mail appears to be originated from the computer with IP address **103.243.118.106** (**bhs-118106.fbhides.com**).
- The contact information of the ISP for the above IP address is:
 - TEAM@CRUDEAREA.COM**
 - +91-9920837624
 - CrudeArea Web Private Limited, UB, LGF, Green Park, NEW DELHI, New Delhi
 - INDIA
- The sender's email address is **noreply@fbhides.com**.
- The message-id of the mail is **<mail_45892931_5229424_5142042_555134_34_790_40211522040675590.com.root@bhs-118106.fbhides.com>**.

Path traced by the mail:

```

graph TD
    A[noreply@fbhides.com  
Mon, 26 Mar 2018 05:04:04 GMT] --> B[bhs-118106.fbhides.com[103.243.118.106]  
Sun, 25 Mar 2018 22:04:39 -0700 (PDT)]
    B --> C[10.46.152.85  
Sun, 25 Mar 2018 22:04:39 -0700 (PDT)]
    C --> D[pavansai1296@gmail.com]
  
```

Details obtained from Regional Internet Registry:

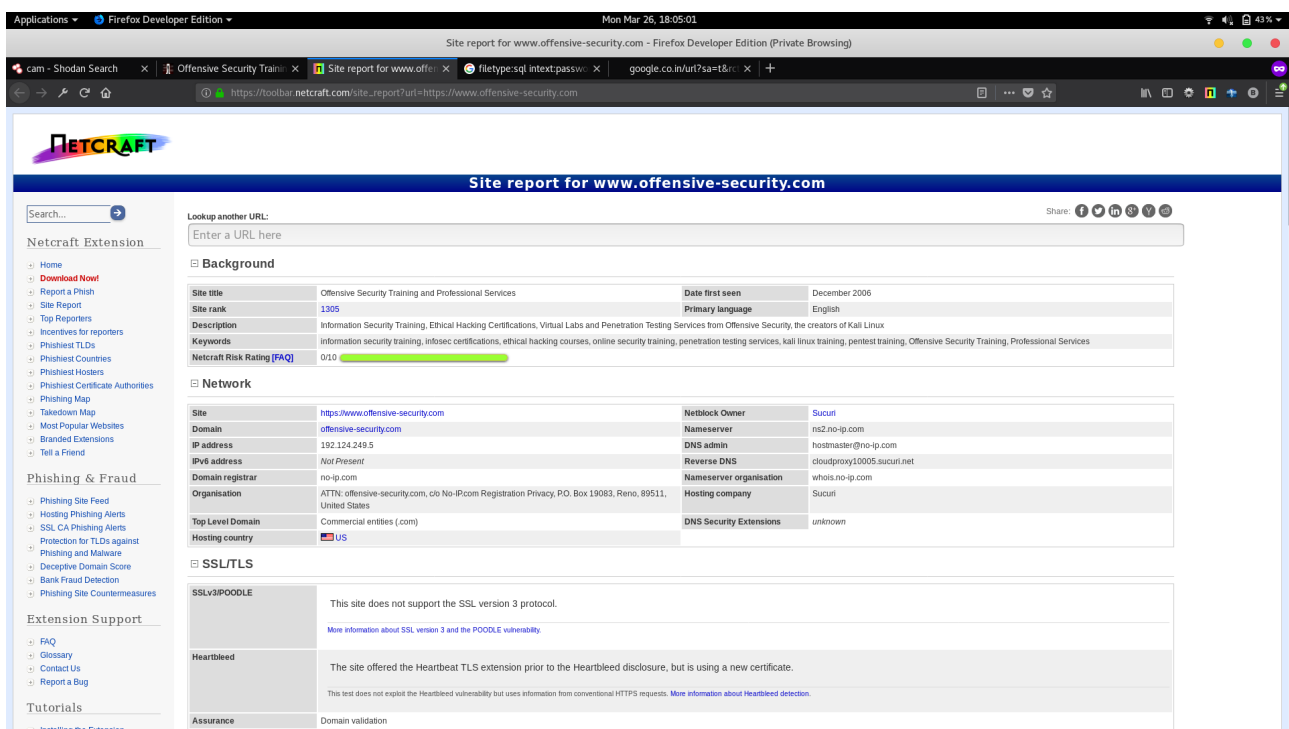
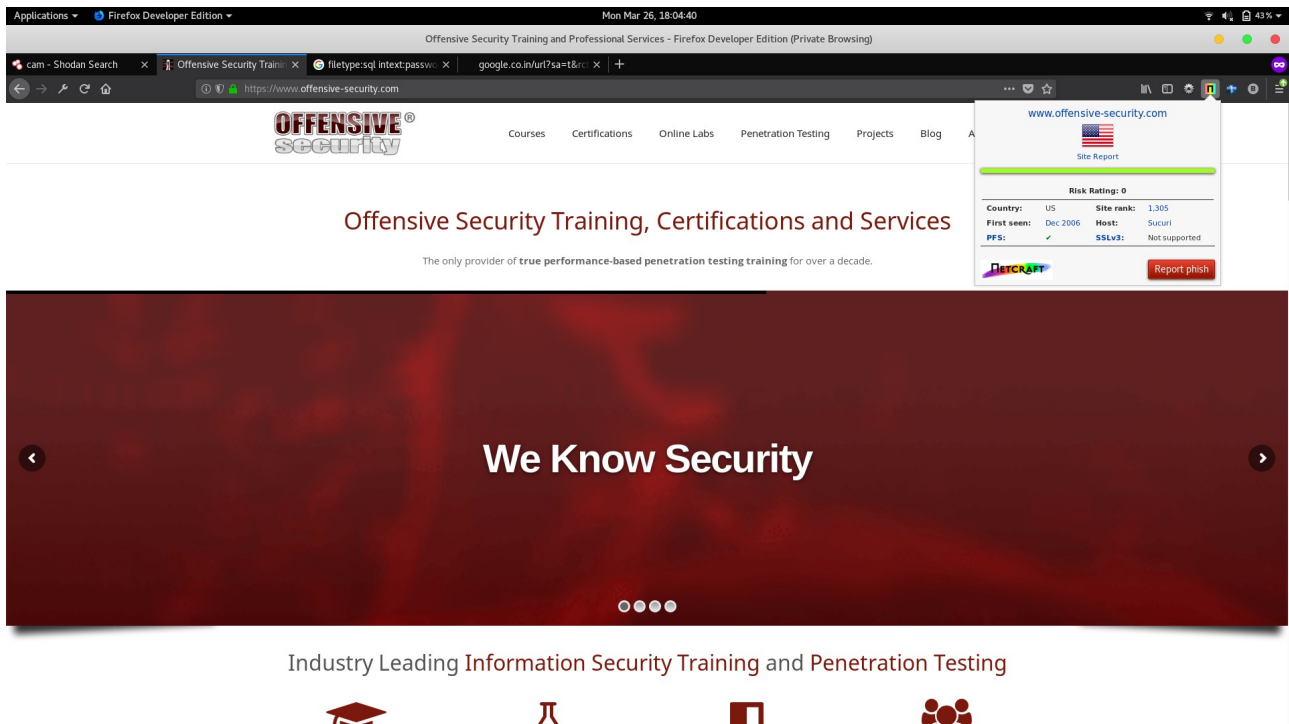
Domain/hostname	IP	Registry	Country	City/Address	ISP
bhs-118106.fbhides.com	103.243.118.106/CWPL-IN	APNIC	INDIA	CrudeArea Web Private Limited, UB, LGF, Green Park, NEW DELHI, New Delhi	CRUDEAREA WEB PRIVATE LIMITED

103.243.118.106/CWPL-IN [java.apnic.net]
 % Whois data copyright terms http://www.apnic.net/whois/copyright.html
 % Information related to 103.243.118.0 - 103.243.119.255
 % Abuser contact for 103.243.118.0 - 103.243.119.255 is 'team@crudearea.com'

2. Netcraft

Netcraft is a simple but excellent tool which generally is used for getting risk information of a particular website.. Though the tool gives much more information about that website.

Netcraft is available as both website and extension for web browsers like Google Chrome and Firefox.



3. Shodan

Shodan is a search engine which is generally used for offensive purposes or forensics. It provides various facilities to explore almost all kinds of devices connected to internet. It provides these services basing on the Meta-data of the servers connected.

The screenshot shows the Shodan search engine interface in a Firefox Developer Edition browser. The search query is 'cam'. The results are categorized into several sections:

- TOTAL RESULTS:** 5,472
- TOP COUNTRIES:** A world map showing the distribution of results by country. The top countries listed are: United States (1,284), Germany (768), United Kingdom (387), Italy (296), and France (288).
- TOP SERVICES:** HTTP (1,306), HTTPS (657), Telnet (398), SSH (288), and HTTP (81) (177).
- TOP ORGANIZATIONS:** Deutsche Telekom AG (433), Utility Telephone (240), Orange (175), MOJOHOST (132), and Gamma Telecom Limited (54).
- TOP OPERATING SYSTEMS:** QTS (41), Linux 3.x (38), Unix (35), Windows 6.1 (23), and Linux 2.6.x (10).
- TOP PRODUCTS:** Apache httpd (609), and two other entries (204 and 154).

On the right side, there are three detailed search results for specific IP addresses:

- 401 Unauthorized:** HTTP/1.1 401 Unauthorized. Date: Mon, 26 Mar 2018 12:58:52 GMT. Server: Boa/0.94.14rc21. Accept-Ranges: bytes. Connection: close. WWW-Authenticate: Basic realm="Cam 6". Content-Type: text/html; charset=ISO-8859-1.
- 89.142.195.137:** HTTP/1.1 302 Redirect. Server: Caa-Mobs. Date: Mon Mar 26 13:55:09 2018. Pragma: no-cache. Cache-Control: no-cache. Content-Type: text/html. Location: http://89.142.195.137/browse/index.asp.
- 79.110.224.58:** HTTP/1.1 200 OK. Server: Apache/2.2.15 (Ubuntu). Date: Mon, 26 Mar 2018 11:53:40 GMT. Content-Type: text/html.

Here, I searched for printers, and got some printer available online.

The screenshot shows the Shodan search engine interface in a Firefox Developer Edition browser. The search query is 'printer'. The results are categorized into several sections:

- 128.205.113.88:** kmbt5b2af0.math.buffalo.edu
- Ports:** 21, 80, 515, 631
- Services:** Konica Minolta bizhub printer tpd, HTTP/1.1 200 OK, target: printer ipd: no entries, HTTP/1.1 200 OK

Below the search results, there is a table with the following information:

City	Buffalo
Country	United States
Organization	State University of New York at Buffalo
ISP	State University of New York at Buffalo
Last Update	2018-03-26T12:38:09.199933
Hostnames	kmbt5b2af0.math.buffalo.edu
ASN	AS3685

With its IP address, I was able to access the configuration page of the printer.

The screenshot shows a web browser window displaying the configuration page of a Konica Minolta printer. The browser's address bar shows the URL `128.205.113.88/128.205.113.88:631/wcd/system.xml`. The page has a navigation menu with tabs for Information, Job, Box, Direct Print, and Store Address. The 'Information' tab is selected, showing a sidebar with links to Device Information, Configuration Summary, Option, Consumables, Meter Count, Online Assistance, Network Setting Information, Print Setting Information, and Print Information. The main content area displays 'Device Information' with a printer icon and a table of toner levels. Below this, it shows 'Paper Tray' and 'Output Tray' settings, and 'Administrator Information'.

Toner	Status
Yellow	20%
Magenta	20%
Cyan	20%
Black	97%

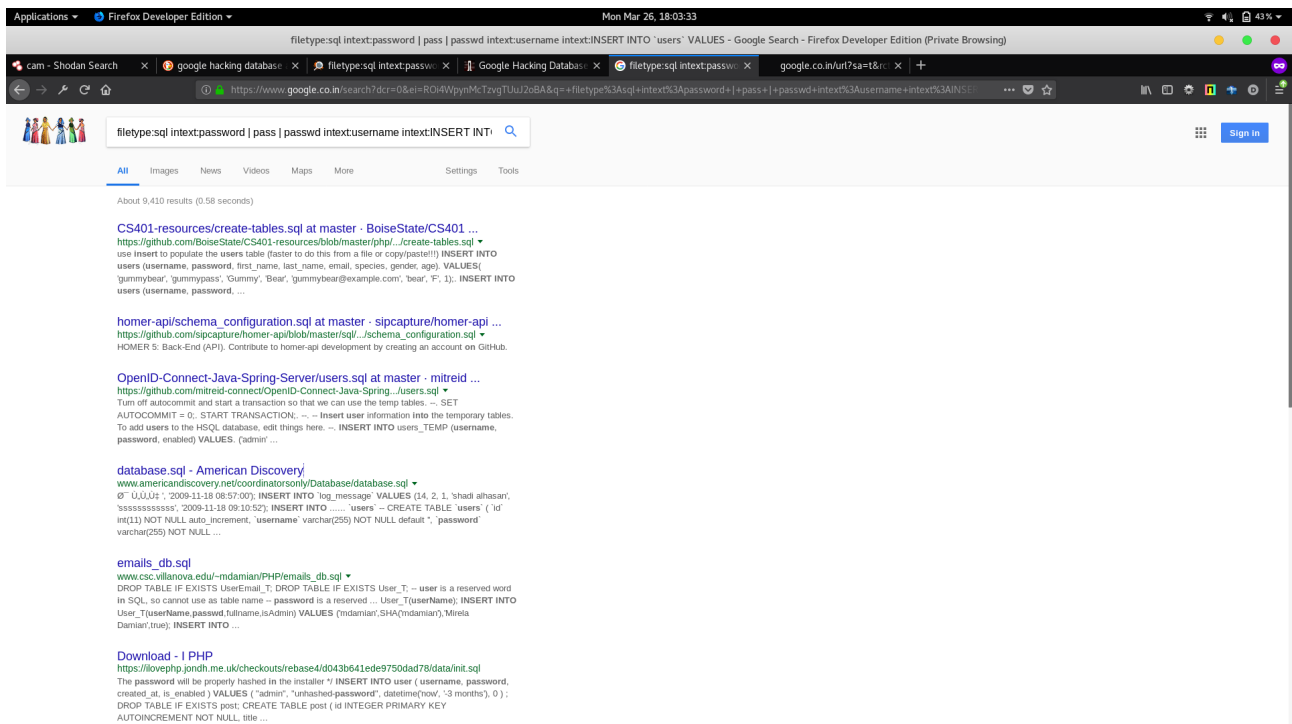
4. Google Hacking DataBase [GHDB]

Google Hacking DataBase also called ExploitDB is a website maintained by OffensiveSecurity which also is the developer of Kali Linux OS. It provides a rich set of filters for users with which one can get required information from Google.

The screenshot shows the Google Hacking Database (GHDB) website. The header includes the 'EXPLOIT DATABASE' logo and navigation links for Home, Exploits, Shellcode, Papers, Google Hacking Database, Submit, and Search. The main heading is 'Google Hacking Database (GHDB)' with a subtext 'Search the Google Hacking Database or browse GHDB categories'. Below this is a search bar with a dropdown menu set to 'Any Category' and a 'Search' button. A table of search results is displayed, showing columns for Date, Title, and Category. The table lists various search queries and their corresponding categories, such as 'Files Containing juicy Info' and 'Pages Containing Login Portals'. Below the table, there are four sections: 'Footholds (72)', 'Sensitive Directories (149)', 'Web Server Detection (93)', and 'Files Containing Usernames (20)', each with a brief description of the category.

Date	Title	Category
2018-03-22	<code>inurl:/~PHPB885F2A0-3C92-11d3-A3A9-4C7B08C10000 inurl:/~PHE9568F35-D428-11d2-A769-00AA001ACF42</code>	Files Containing juicy Info
2018-03-22	<code>intitle:"Proberv0." inurl:/proberv.php</code>	Files Containing juicy Info
2018-03-21	<code>"var miner = new CoinHive" intext:document.domain</code>	Web Server Detection
2018-03-21	<code>intitle:Login to CMS Made Simple + inurl:/cmsms</code>	Pages Containing Login Portals
2018-03-20	<code>intitle:"index of" docker-compose.yml</code>	Files Containing juicy Info
2018-03-20	<code>intitle:"index of" .env</code>	Files Containing juicy Info
2018-03-20	<code>inurl:"/forms/frmservlet?config=" login</code>	Pages Containing Login Portals
2018-03-20	<code>intitle:tm4web login login account member password</code>	Pages Containing Login Portals
2018-03-16	<code>filetype:sql intext:password pass passwd intext:username intext:INSERT INTO 'users' VALUES</code>	Files Containing juicy Info
2018-03-16	<code>inurl:/gravity_forms/logs ext:txt</code>	Files Containing juicy Info

Here I searched for some SQL query content in Google with the filter I got from GHDB.



I am able to view all the SQL code contained in their web servers.

