ASSIGNMENT -2

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What is Footprinting ?

Footprinting is one of the most convenient ways for hackers to collect information about targets such as computer systems, devices, and networks. Using this method, hackers can unravel information on open ports of the target system, services running, and remote access probabilities

What is Reconnaissance?

Reconnaissance's most common form involves scanning networks looking for vulnerabilities - such as email messages, websites, social media sites, messaging applications and a company's internal network looking for access to systems and computers running outdated software or security systems

The Website to Perform Footprinting and Reconnaissance is -

http://testphp.vulnweb.com/
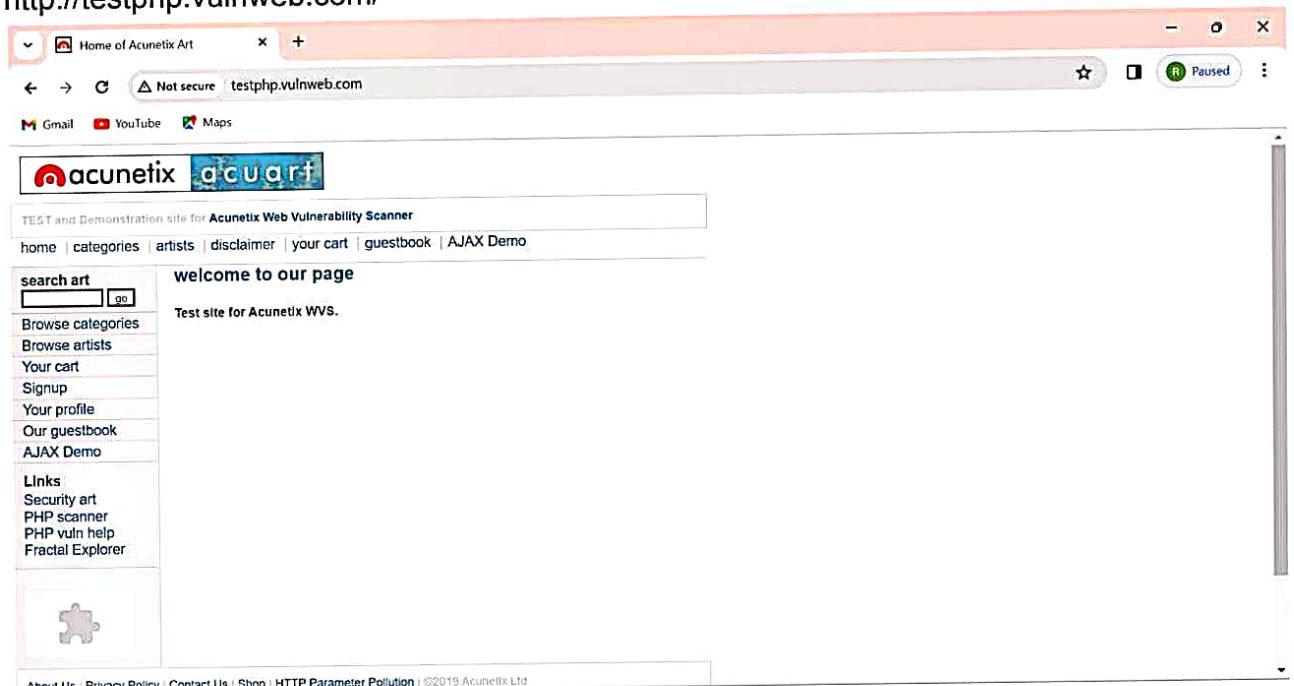
Step 1:open kali linux and change to root user to perform the task and use nslookup on the target for it
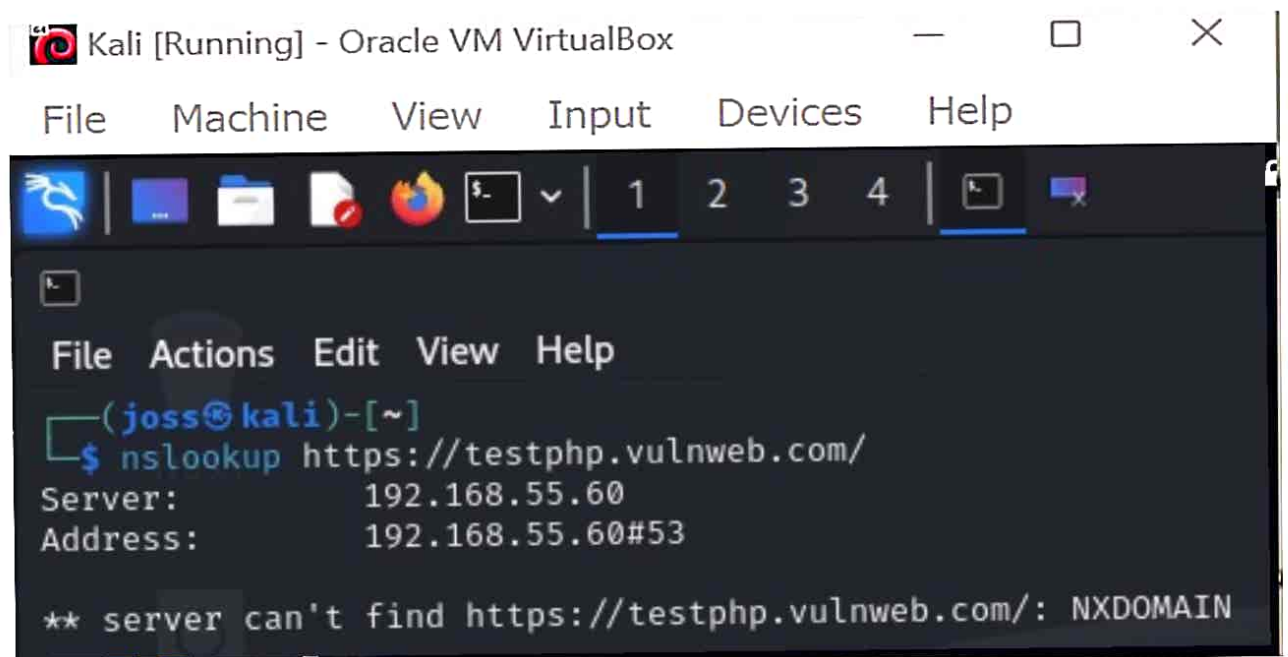
We got the server IP as shown above

Step 2:now use whois command to gather information for needs

joss@kali ~

```
server can t find https://testphp.vulnweb.com/: NXDOMAIN

┌──(joss@kali)-[~]
└─$ whois

┌──(joss@kali)-[~]
└─$ whois 192.168.55.60

#
# ARIN WHOIS data and services are subject to the Terms of Use
# available at: https://www.arin.net/resources/registry/whois/tou/
#
# If you see inaccuracies in the results, please report at
# https://www.arin.net/resources/registry/whois/inaccuracy_reporting/
#
# Copyright 1997-2024, American Registry for Internet Numbers, Ltd.


NetRange:       192.168.0.0 - 192.168.255.255
CIDR:           192.168.0.0/16
NetName:        PRIVATE-ADDRESS-CBLK-RFC1918-IANA-RESERVED
NetHandle:      NET-192-168-0-0-1
Parent:         NET192 (NET-192-0-0-0-0)
NetType:        IANA Special Use
OriginAS:
Organization:   Internet Assigned Numbers Authority (IANA)
RegDate:        1994-03-15
Updated:        2013-08-30
Comment:        These addresses are in use by many millions of independently operated networks, which might be as small as a single computer connected to a home gateway, and are automatically confi
g.  They are only intended for use within a private context  and traffic that needs to cross the Internet will need to use a different, unique address.
Comment:
Comment:        These addresses can be used by anyone without any need to coordinate with IANA or an Internet registry.  The traffic from these addresses does not come from ICANN or IANA.  We are n
n logs or in e-mail records.  Please refer to http://www.iana.org/abuse/answers
Comment:
Comment:        These addresses were assigned by the IETF, the organization that develops Internet protocols, in the Best Current Practice document, RFC 1918 which can be found at:
Comment:        http://datatracker.ietf.org/doc/rfc1918
Ref:            https://rdap.arin.net/registry/ip/192.168.0.0


OrgName:        Internet Assigned Numbers Authority
OrgId:          IANA
Address:        12025 Waterfront Drive
Address:        Suite 300
City:           Los Angeles
StateProv:      CA
PostalCode:     90292
Country:        US
RegDate:
```

Kali [Running] - Oracle VM VirtualBox

File   Machine   View   Input   Devices   Help

We have gathered enough info.

Step 3:Now let use nmap command to find vulnerabilities

```
┌──(joss㉿kali)-[~]
└─$ nmap 192.168.55.60

Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-03-18 10:39 EDT
Nmap scan report for 192.168.55.60
Host is up (0.011s latency).
Not shown: 999 closed tcp ports (conn-refused)
PORT    STATE SERVICE
53/tcp open  domain

Nmap done: 1 IP address (1 host up) scanned in 0.36 seconds
```

We have a open port 53

PORT 53 : The standard port for DNS is port 53. DNS client applications use the DNS protocol to query and request information from DNS servers, and the server returns the results to the client using the same port. Port 53 is used for both TCP and UDP communication.

Vulnerability : An attacker may use this flaw to inject UDP packets to the remote hosts, in spite of the presence of a firewall. Impact: While using a source port equal to 53 UDP packets may be sent by passing the remote firewall, an attacker could inject UDP packets, in spite of the presence of a firewall.