

SISTEM TERDISTRIBUSI “TUGAS”



Disusun oleh :

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**PROGRAM STUDI SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
UNIVERSITAS SRIWIJAYA
PALEMBANG
2024**

1. Google.com

```
ahmadboy@client: ~  
File Edit View Search Terminal Help  
ahmadboy@client:~$ dig google.com  
;; communications error to 127.0.0.53#53: timed out  
;<>> Dig 9.18.18-Bubuntu0.22.04.1-Ubuntu <>> google.com  
;; global options: +nocomm  
;; Got answer:  
;; -->HEADER<-- opcode: QUERY, status: NOERROR, id: 38462  
;; flags: qr rd ra; QUERY: 1, ANSWER: 6, AUTHORITY: 4, ADDITIONAL: 9  
;; OPT PSEUDOSECTION:  
;; EDNS: version: 0, flags:; udp: 65494  
;; QUESTION SECTION:  
;google.com.  
;; ANSWER SECTION:  
google.com. 80 IN A 74.125.200.102  
google.com. 80 IN A 74.125.200.101  
google.com. 80 IN A 74.125.200.139  
google.com. 80 IN A 74.125.200.138  
google.com. 80 IN A 74.125.200.100  
google.com. 80 IN A 74.125.200.113  
;; AUTHORITY SECTION:  
google.com. 94163 IN NS ns4.google.com.  
google.com. 94163 IN NS ns3.google.com.  
google.com. 94163 IN NS ns2.google.com.  
google.com. 94163 IN NS ns1.google.com.  
;; ADDITIONAL SECTION:  
ns1.google.com. 94161 IN A 216.239.32.10  
ns1.google.com. 94161 IN AAAA 2001:4860:4802:32::a  
ns2.google.com. 94161 IN A 216.239.34.10  
ns2.google.com. 94161 IN AAAA 2001:4860:4802:34::a  
ns3.google.com. 94161 IN A 216.239.36.10  
ns3.google.com. 94161 IN AAAA 2001:4860:4802:36::a  
ns4.google.com. 94161 IN A 216.239.38.10  
ns4.google.com. 94161 IN AAAA 2001:4860:4802:38::a  
;; Query time: 8 msec  
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)  
;; WHEN: Wed Mar 27 23:41:48 EDT 2024  
;; MSG SIZE: 441 bytes
```

Menggunakan perintah Dig pada linux, Disini akan mendapatkan informasi yang meliputi alamat IP terkait dengan domain "google.com", server yang memberikan respons (biasanya server DNS terdekat), serta informasi tambahan seperti TTL (Time To Live) dan jenis rekam (misalnya, A record untuk alamat IP, MX record untuk mail exchange, NS record untuk name server, dan sebagainya).

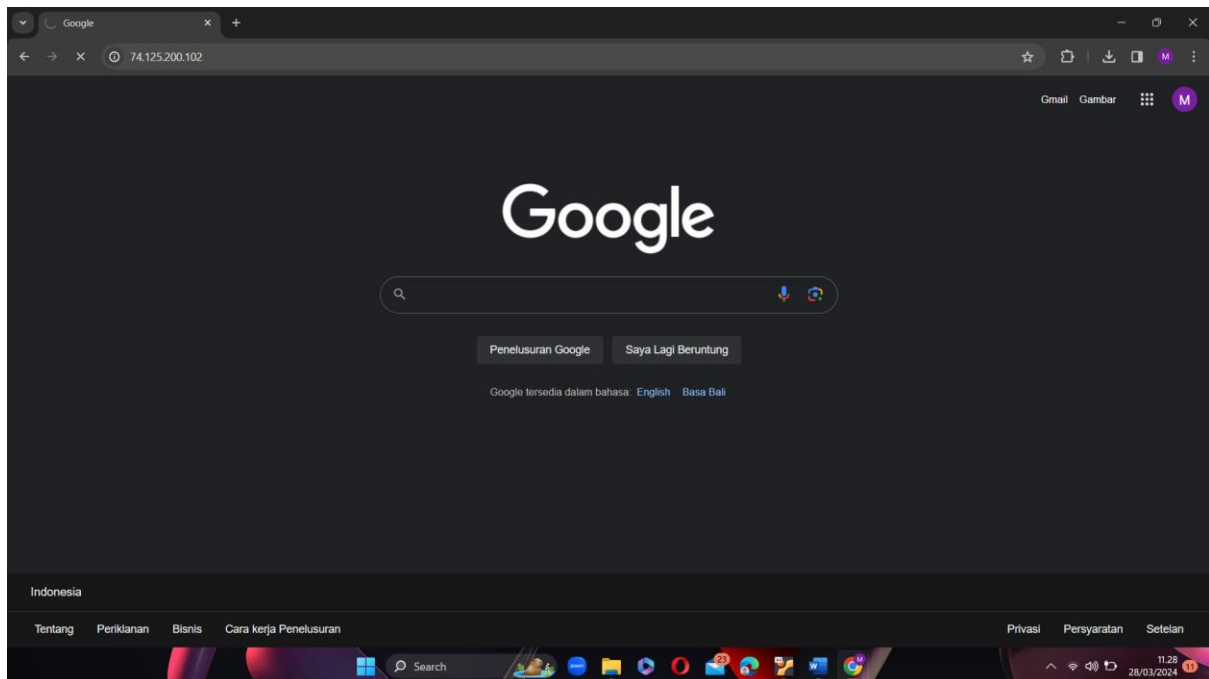
```
Processing triggers for libc-bin (2.35-0ubuntu3.4) ...  
ahmadboy@client:~$ nmap 74.125.200.102  
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-27 23:54 EDT  
Nmap scan report for sa-in-f102.1e100.net (74.125.200.102)  
Host is up (0.039s latency).  
Not shown: 998 filtered ports  
PORT      STATE SERVICE  
80/tcp    open  http  
443/tcp   open  https  
Nmap done: 1 IP address (1 host up) scanned in 5.58 seconds
```

Perintah nmap di atas akan memindai host dengan alamat IP 74.125.200.102 dan memberikan informasi tentang port yang terbuka, layanan yang berjalan di setiap port, dan berbagai informasi keamanan terkait host tersebut.

```
ahmadboy@client:~$ nslookup 74.125.200.102  
102.200.125.74.in-addr.arpa      name = sa-in-f102.1e100.net.  
  
Authoritative answers can be found from:  
125.74.in-addr.arpa    nameserver = ns2.google.com.  
125.74.in-addr.arpa    nameserver = ns1.google.com.  
125.74.in-addr.arpa    nameserver = ns4.google.com.  
125.74.in-addr.arpa    nameserver = ns3.google.com.  
ns3.google.com has AAAA address 2001:4860:4802:36::a  
ns2.google.com has AAAA address 2001:4860:4802:34::a  
ns4.google.com has AAAA address 2001:4860:4802:38::a  
ns1.google.com has AAAA address 2001:4860:4802:32::a  
ns3.google.com internet address = 216.239.36.10  
ns2.google.com internet address = 216.239.34.10  
ns4.google.com internet address = 216.239.38.10  
ns1.google.com internet address = 216.239.32.10
```

Menjalankan perintah nslookup pada alamat IP 74.125.200.102 hasilnya akan mencoba menemukan nama host yang terkait dengan alamat IP tersebut (jika ada) dengan mencari rekaman PTR (Pointer Record) di zona in-addr.arpa (zona yang menghubungkan alamat IP ke

nama host). Hasilnya akan memberikan informasi tentang nama host yang terkait dengan alamat IP tersebut (jika ada), serta informasi tambahan seperti nama server DNS yang memberikan respons dan alamat IP server tersebut.



Untuk membuktikan bahwa IP tersebut sama dengan domain maka disini saya mencoba mengakses IP tersebut menggunakan browser dan ternyata IP tersebut merupakan IP dari domain Google.com

2. Twitter.com

```
LinuxX [Berjalan] - Oracle VM VirtualBox
Berkas  Mesin  Tilik  Masukan  Peranti  Bantuan

ahmadboy@master: ~

File Edit View Search Terminal Help
ahmadboy@master:~$ dig twitter.com

; <<>> DiG 9.18.18-0ubuntu0.22.04.1-Ubuntu <<>> twitter.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 32391
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;twitter.com.                IN      A

;; ANSWER SECTION:
twitter.com.                646     IN      A      104.244.42.193

;; Query time: 43 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Mar 28 11:33:20 WIB 2024
;; MSG SIZE rcvd: 56
```

Hasilnya akan mencantumkan alamat IP atau daftar alamat IP yang terkait dengan

domain tersebut, bersama dengan informasi tentang server DNS yang memberikan respons untuk permintaan DNS tersebut. Dengan informasi ini, Anda dapat menyimpulkan detail terkait dengan domain "twitter.com".

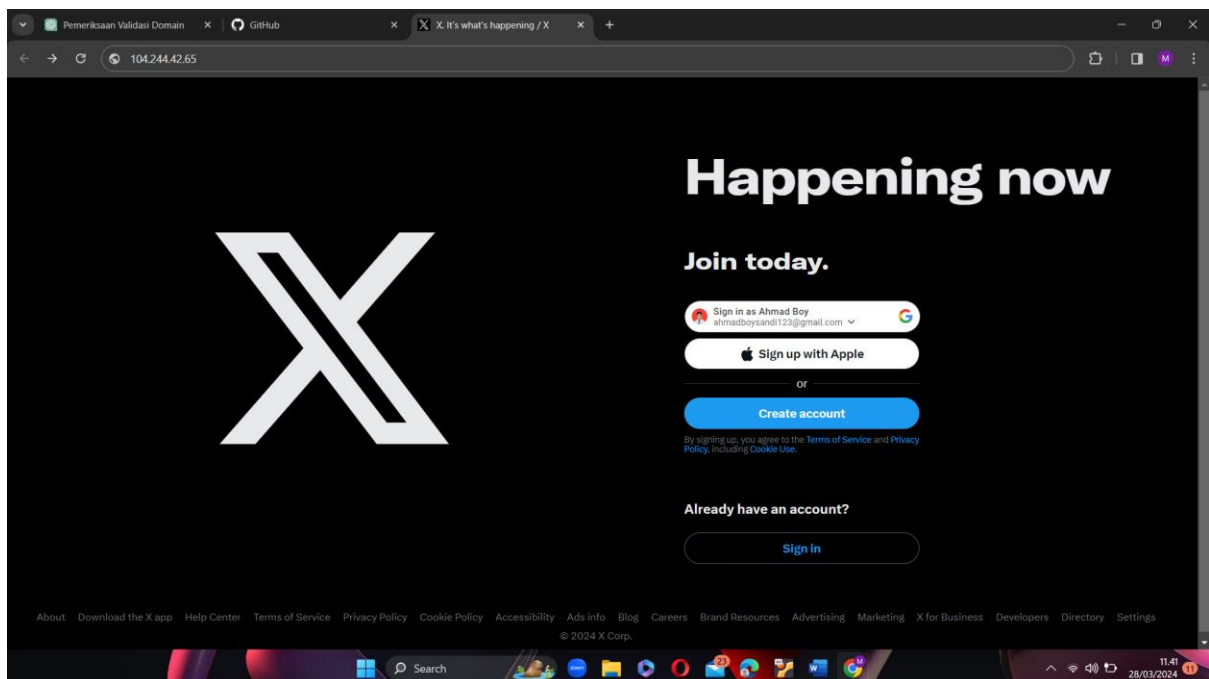
```
ahmadboy@master:~$ nmap twitter.com
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-28 11:34 WIB
Nmap scan report for twitter.com (104.244.42.193)
Host is up (0.12s latency).
Not shown: 998 filtered ports
PORT      STATE SERVICE
80/tcp    open  http
443/tcp   open  https
Nmap done: 1 IP address (1 host up) scanned in 19.99 seconds
```

Perintah ini akan melakukan pemindaian pada alamat IP yang terkait dengan twitter.com untuk melihat layanan apa saja yang tersedia dan port mana yang terbuka. Namun, perlu dicatat bahwa melakukan pemindaian tanpa izin dari pemilik sistem atau jaringan bisa melanggar hukum atau aturan, jadi pastikan Anda memiliki izin sebelum melakukannya

```
ahmadboy@master:~$ nslookup twitter.com
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
Name:   twitter.com
Address: 104.244.42.65
Name:   twitter.com
Address: 104.244.42.1
Name:   twitter.com
Address: 104.244.42.129
Name:   twitter.com
Address: 104.244.42.193
```

Perintah ini akan mencari informasi DNS untuk domain "twitter.com" dan memberikan informasi tentang alamat IP yang terkait dengan domain tersebut, bersama dengan nama server DNS yang memberikan respons.



3. Stackoverflow

```
LinuxX [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Tilik Masukan Peranti Bantuan
ahmadboy@master: ~
File Edit View Search Terminal Help
ahmadboy@master:~$ dig stackoverflow.net

; <<>> DiG 9.18.18-0ubuntu0.22.04.1-Ubuntu <<>> stackoverflow.net
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 44425
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
;; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;stackoverflow.net.                IN      A

;; AUTHORITY SECTION:
stackoverflow.net.      272     IN      SOA     ns1-07.azure-dns.com. azuredns-hostmaster.microsof
t.com. 1 3600 300 2419200 300

;; Query time: 24 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Mar 28 11:57:25 WIB 2024
;; MSG SIZE rcvd: 132

ahmadboy@master:~$ nmap stackoverflow.net
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-28 11:57 WIB
Failed to resolve "stackoverflow.net".
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.08 seconds
ahmadboy@master:~$ nslookup stackoverflow.net
Server:      127.0.0.53
Address:     127.0.0.53#53
```

```
ahmadboy@master:~$ nmap stackoverflow.net
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-28 11:57 WIB
Failed to resolve "stackoverflow.net".
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.08 seconds
```

```
ahmadboy@master:~$ nslookup stackoverflow.net
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
*** Can't find stackoverflow.net: No answer

ahmadboy@master:~$
```

4. Wikipedia.org

```
LinuxX [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Tilik Masukan Peranti Bantuan
ahmadboy@master: ~
File Edit View Search Terminal Help
ahmadboy@master:~$ dig wikipedia.org
; <<>> DiG 9.18.18-0ubuntu0.22.04.1-Ubuntu <<>> wikipedia.org
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 44017
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 3, ADDITIONAL: 4

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
wikipedia.org.                IN      A

;; ANSWER SECTION:
wikipedia.org.                300     IN      A      103.102.166.224

;; AUTHORITY SECTION:
wikipedia.org.                3599    IN      NS      ns2.wikimedia.org.
wikipedia.org.                3599    IN      NS      ns1.wikimedia.org.
wikipedia.org.                3599    IN      NS      ns0.wikimedia.org.

;; ADDITIONAL SECTION:
ns0.wikimedia.org.            77939   IN      A      208.80.154.238
ns1.wikimedia.org.            77939   IN      A      208.80.153.231
ns2.wikimedia.org.            77939   IN      A      198.35.27.27

;; Query time: 391 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Mar 28 11:49:22 WIB 2024
```

```
ahmadboy@master:~$ nmap wikipedia.org
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-28 11:49 WIB
Nmap scan report for wikipedia.org (103.102.166.224)
Host is up (0.034s latency).
Other addresses for wikipedia.org (not scanned): 2001:df2:e500:ed1a::1
rDNS record for 103.102.166.224: text-lb.eqsin.wikimedia.org
Not shown: 993 closed ports
PORT      STATE      SERVICE
22/tcp    filtered  ssh
80/tcp    open      http
179/tcp   filtered  bgp
443/tcp   open      https
5666/tcp  filtered  nrpe
9090/tcp  filtered  zeus-admin
9100/tcp  filtered  jetdirect
```

```
ahmadboy@master:~$ nslookup wikipedia.org
Server:      127.0.0.53
Address:     127.0.0.53#53

Non-authoritative answer:
Name:   wikipedia.org
Address: 103.102.166.224
Name:   wikipedia.org
Address: 2001:df2:e500:ed1a::1

ahmadboy@master:~$
```

Connected to the wired network

11:50

5. Tokopedia.co.id

```
LinuxX [Berjalan] - Oracle VM VirtualBox
Berkas Mesin Tilik Masukan Peranti Bantuan

ahmadboy@master: ~
File Edit View Search Terminal Help

ahmadboy@master:~$ dig tokopedia.co.id

; <<>> DiG 9.18.18-0ubuntu0.22.04.1-Ubuntu <<>> tokopedia.co.id
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 57831
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;tokopedia.co.id.                IN      A

;; ANSWER SECTION:
tokopedia.co.id.      14400   IN      A      165.160.13.20
tokopedia.co.id.      14400   IN      A      165.160.15.20

;; Query time: 40 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Mar 28 11:54:05 WIB 2024
;; MSG SIZE rcvd: 76
```

```
ahmadboy@master:~$ nmap tokopedia.co.id
Starting Nmap 7.80 ( https://nmap.org ) at 2024-03-28 11:54 WIB
Nmap scan report for tokopedia.co.id (165.160.15.20)
Host is up (0.37s latency).
Other addresses for tokopedia.co.id (not scanned): 165.160.13.20
Not shown: 999 filtered ports
PORT      STATE SERVICE
80/tcp    open  http

Nmap done: 1 IP address (1 host up) scanned in 22.09 seconds
```

```
ahmadboy@master:~$ nslookup tokopedia.co.id
Server:      127.0.0.53
Address:     127.0.0.53#53
```

```
Non-authoritative answer:
Name:   tokopedia.co.id
Address: 165.160.13.20
Name:   tokopedia.co.id
Address: 165.160.15.20
```

```
ahmadboy@master:~$
```



Right Ctrl