Yohanes Dimas Pratama

A11.2021.13254 - A11.4518

Tugas 3 – Teknik Naming

Verifikasi Koneksi Jaringan

- Ping Ubuntu Server 1 ke Ubuntu Server 2
  Command -> ping 192.168.100.2

```
ubuntu_server1@ubuntuserver1:~$ ping 192.168.100.2
PING 192.168.100.2 (192.168.100.2) 56(84) bytes of data.
64 bytes from 192.168.100.2: icmp_seq=1 ttl=64 time=0.433 ms
64 bytes from 192.168.100.2: icmp_seq=2 ttl=64 time=0.273 ms
64 bytes from 192.168.100.2: icmp_seq=3 ttl=64 time=0.361 ms
64 bytes from 192.168.100.2: icmp_seq=4 ttl=64 time=0.585 ms
64 bytes from 192.168.100.2: icmp_seq=5 ttl=64 time=0.329 ms
64 bytes from 192.168.100.2: icmp_seq=6 ttl=64 time=0.323 ms
64 bytes from 192.168.100.2: icmp_seq=7 ttl=64 time=0.349 ms
64 bytes from 192.168.100.2: icmp_seq=8 ttl=64 time=0.332 ms
64 bytes from 192.168.100.2: icmp_seq=9 ttl=64 time=0.555 ms
64 bytes from 192.168.100.2: icmp_seq=10 ttl=64 time=0.457 ms
64 bytes from 192.168.100.2: icmp_seq=11 ttl=64 time=0.502 ms
^C
--- 192.168.100.2 ping statistics ---
11 packets transmitted, 11 received, 0% packet loss, time 10228ms
rtt min/avg/max/mdev = 0.273/0.409/0.585/0.099 ms
ubuntu_server1@ubuntuserver1:~$
```

- Ping Ubuntu Server 2 ke Ubuntu Server 1
  Command -> ping 192.168.100.1

```
ubuntu_server1@ubuntuserver2:~$ ping 192.168.100.1
PING 192.168.100.1 (192.168.100.1) 56(84) bytes of data.
64 bytes from 192.168.100.1: icmp_seq=1 ttl=64 time=0.392 ms
64 bytes from 192.168.100.1: icmp_seq=2 ttl=64 time=0.486 ms
64 bytes from 192.168.100.1: icmp_seq=3 ttl=64 time=0.359 ms
64 bytes from 192.168.100.1: icmp_seq=4 ttl=64 time=0.545 ms
64 bytes from 192.168.100.1: icmp_seq=5 ttl=64 time=0.470 ms
64 bytes from 192.168.100.1: icmp_seq=6 ttl=64 time=0.375 ms
64 bytes from 192.168.100.1: icmp_seq=7 ttl=64 time=0.431 ms
64 bytes from 192.168.100.1: icmp_seq=8 ttl=64 time=0.440 ms
64 bytes from 192.168.100.1: icmp_seq=9 ttl=64 time=0.458 ms
64 bytes from 192.168.100.1: icmp_seq=10 ttl=64 time=0.639 ms
64 bytes from 192.168.100.1: icmp_seq=11 ttl=64 time=0.262 ms
^C
--- 192.168.100.1 ping statistics ---
11 packets transmitted, 11 received, 0% packet loss, time 10239ms
rtt min/avg/max/mdev = 0.262/0.441/0.639/0.094 ms
ubuntu_server1@ubuntuserver2:~$
```

Konfigurasi Flat Naming

Command -> sudo nano /etc/host

Lalu ketikkan:

192.168.100.1 ubuntu_server1

192.168.100.2 ubuntu_server2

- Ubuntu Server 1

```
  GNU nano 6.2                          /etc/hosts *
127.0.0.1 localhost
127.0.1.1 ubuntu_server1

# The following lines are desirable for IPv6 capable hosts
::1     ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
192.168.100.1 ubuntu_server1
192.168.100.2 ubuntu_server2




^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute     ^C Location    M-U Undo
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line  M-E Redo
```

- Ubuntu Server 2

```
  GNU nano 6.2                          /etc/hosts *
127.0.0.1 localhost
127.0.1.1 ubuntu_server2

# The following lines are desirable for IPv6 capable hosts
::1     ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
192.168.100.1 ubuntu_server1
192.168.100.2 ubuntu_server2




^G Help        ^O Write Out   ^W Where Is    ^K Cut         ^T Execute     ^C Location    M-U Undo
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line  M-E Redo
```

Verifikasi Flat Naming

- Ubuntu Server 1

  Command -> ping ubuntu_server 2

```
ubuntu_server1@ubuntuserver1:~$ ping ubuntu_server2
PING ubuntu_server2 (192.168.100.2) 56(84) bytes of data.
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=1 ttl=64 time=0.370 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=2 ttl=64 time=0.298 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=3 ttl=64 time=2.61 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=4 ttl=64 time=0.429 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=5 ttl=64 time=0.492 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=6 ttl=64 time=0.264 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=7 ttl=64 time=0.382 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=8 ttl=64 time=0.552 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=9 ttl=64 time=0.404 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=10 ttl=64 time=0.272 ms
64 bytes from ubuntu_server2 (192.168.100.2): icmp_seq=11 ttl=64 time=2.17 ms
^C
--- ubuntu_server2 ping statistics ---
11 packets transmitted, 11 received, 0% packet loss, time 10196ms
rtt min/avg/max/mdev = 0.264/0.749/2.608/0.783 ms
ubuntu_server1@ubuntuserver1:~$ _
```

- Ubuntu Server 2

  Command -> ping ubuntu_server 1

```
ubuntu_server1@ubuntuserver2:~$ ping ubuntu_server1
PING ubuntu_server1 (192.168.100.1) 56(84) bytes of data.
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=1 ttl=64 time=0.389 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=2 ttl=64 time=0.565 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=3 ttl=64 time=0.364 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=4 ttl=64 time=0.464 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=5 ttl=64 time=0.563 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=6 ttl=64 time=0.511 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=7 ttl=64 time=0.724 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=8 ttl=64 time=0.352 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=9 ttl=64 time=0.358 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=10 ttl=64 time=0.536 ms
64 bytes from ubuntu_server1 (192.168.100.1): icmp_seq=11 ttl=64 time=0.513 ms
^C
--- ubuntu_server1 ping statistics ---
11 packets transmitted, 11 received, 0% packet loss, time 10199ms
rtt min/avg/max/mdev = 0.352/0.485/0.724/0.109 ms
ubuntu_server1@ubuntuserver2:~$ _
```

Melakukan Pemeriksaan Pada Sebuah Domain
Command -> dig dinus.ac.id

- Ubuntu Server 1

```
; <<>> DiG 9.18.12-0ubuntu0.22.04.3-Ubuntu <<>> dinus.ac.id
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 22743
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 5, ADDITIONAL: 8

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

;; ANSWER SECTION:
dinus.ac.id.            3600    IN      A       103.246.107.90

;; AUTHORITY SECTION:
dinus.ac.id.            86400   IN      NS      ns3.dinus.ac.id.
dinus.ac.id.            86400   IN      NS      v6ns3.dinus.ac.id.
dinus.ac.id.            86400   IN      NS      v6ns1.dinus.ac.id.
dinus.ac.id.            86400   IN      NS      ns5.dinus.ac.id.
dinus.ac.id.            86400   IN      NS      ns1.dinus.ac.id.

;; ADDITIONAL SECTION:
ns1.dinus.ac.id.        86400   IN      A       103.246.107.10
ns3.dinus.ac.id.        86400   IN      A       103.246.107.15
ns5.dinus.ac.id.        86400   IN      A       69.65.50.192
v6ns1.dinus.ac.id.      86097   IN      A       103.246.107.10
v6ns1.dinus.ac.id.      86400   IN      AAAA    2001:470:ed8a::10
v6ns3.dinus.ac.id.      86096   IN      A       103.246.107.15
v6ns3.dinus.ac.id.      86400   IN      AAAA    2001:470:ed8a::15

;; Query time: 67 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Tue Oct 24 12:11:15 UTC 2023
;; MSG SIZE  rcvd: 286

ubuntu_server1@ubuntuserver1:~$
```

- Ubuntu Server 2

```
ubuntu_server1@ubuntuserver2:~$ dig dinus.ac.id

; <<>> DiG 9.18.12-0ubuntu0.22.04.3-Ubuntu <<>> dinus.ac.id
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 51276
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

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

;; ANSWER SECTION:
dinus.ac.id.            3593    IN      A       103.246.107.90

;; Query time: 56 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Tue Oct 24 12:11:53 UTC 2023
;; MSG SIZE  rcvd: 56

ubuntu_server1@ubuntuserver2:~$
```

Yohaner Dimas Protama

A11 2021.13254 - A11.4518

No

Date

Tugas 3 - Tehnik Naming

Output yang dihasilkan dari dig dinus.ac.id adalah untuk mengecek informasi DNS dari domain dinus.ac.id.

*Header
Berisi informasi dari:
- opcode : QUERY → Menunjukkan bahwa permintaan bertipe QUERY.
- status : NOERROR → Permintaan DNS berhasil tanpa ada kesalahan.
- id : 22743 → Angka identifikasi yang digunakan dalam konteks sistem operasi untuk mengidentifikasi proses, koneksi, atau objek tertentu.

*Flags
Menunjukkan bahwa ini adalah respon dari server DNS dan server DNS siap untuk menerima permintaan rekursif.

*OPT PSEUDOSECTION
Berisi informasi mengenai opsi tambahan DNS.

*QUESTION SECTION
Menunjukkan bahwa pertanyaan adalah untuk alamat IPv4(A) dari domain dinus.ac.id

*ANSWER SECTION
Jawaban dari server DNS bahwa dinus.ac.id terdiri ke alamat IPv4 103.246.107.90

*Query time : 67 msec
Waktu yang dibutuhkan server DNS untuk merespon, yaitu 67 msec.

*SERVER : 127.0.0.53#53(127.0.0.53)
Alamat IP dan port server yang digunakan, yaitu 127.0.0.53#53(127.0.0.53)

*WHEN : Tue Oct 24 12:11:15 UTC 2023
Waktu ketika permintaan DNS dilakukan, yaitu Tue Oct 24 12:11:15 UTC 2023.

*MSG-SIZE rcvd: 286
Ukuran byte DNS yang diterima, yaitu sebesar 286 byte.