Tugas PRE UAS

Konsep Jaringan

Dosen pengampu:

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MENYETING DISTRIBUTIOBN ROUTER 2

1. Menyalakan interface fisik FastEthernet0/0

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
```

2. Menyalakan subinterface FastEthernet0/0.100

```
Router(config-if)#int fa0/0.100
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.100, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.100, changed state to up

Router(config-subif)#enc
Router(config-subif)#encapsulation dot
Router(config-subif)#encapsulation dot1Q 100
Router(config-subif)#ip add 192.168.1.1 255.255.255.0
Router(config-subif)#ex
```

3. Menyalakan subinterface FastEthernet0/0.200

```
Router(config)#int fa0/0.200
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.200, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.200, changed state to up

Router(config-subif)#en
Router(config-subif)#encapsulation dot
Router(config-subif)#encapsulation dot1Q 200
Router(config-subif)#ip add 192.168.2.1 255.255.255.0
Router(config-subif)#ex
```

4. Menyalakan subinterface FastEthernet0/0.300

```
Router(config)#int fa0/0.300
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.300, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.300, changed state to up

Router(config-subif)#enc
Router(config-subif)#encapsulation dot
Router(config-subif)#encapsulation dot1Q 300
Router(config-subif)#ip add 192.168.3.1 255.255.255.0
Router(config-subif)#ex
```
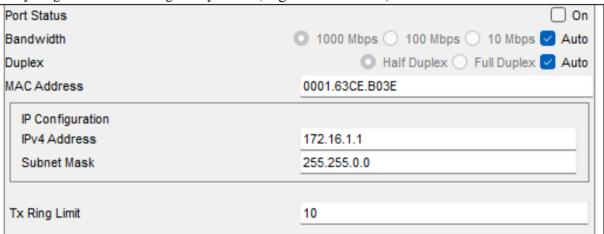
5. Menyalakan subinterface FastEthernet0/0.400

```
Router(config)#int fa0/0.400
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.400, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.400, changed state to up

Router(config-subif)#enc
Router(config-subif)#encapsulation dot
Router(config-subif)#encapsulation dot1Q 400
Router(config-subif)#ip add 192.168.4.1 255.255.255.0
Router(config-subif)#ex
```
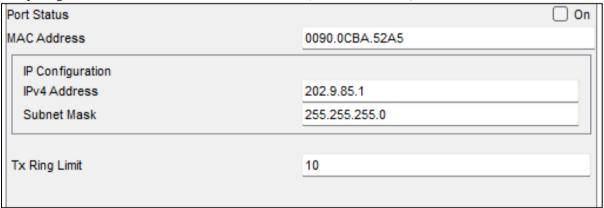
6. Menyimpan konfigurasi ke dalam memori

```
Router#write memory
Building configuration...
[OK]
Router#
```

7. Menyeting IP address untuk gateway server (GigabitEthernet6/0)

Port Status		On
Bandwidth	○ 1000 Mbps ○ 100 Mbps ○ 10 Mbps ☑ Auto	
Duplex	○ Half Duplex ○ Full Duplex ☑ Auto	
MAC Address	0001.63CE.B03E	

IP Configuration
IPv4 Address	172.16.1.1
Subnet Mask	255.255.0.0

Tx Ring Limit	10

8. Menyeting IP address untuk GW ROUTER ISP 2 (Fastethernet4/0)

Port Status		On
MAC Address	0090.0CBA.52A5	

IP Configuration
IPv4 Address	202.9.85.1
Subnet Mask	255.255.255.0

Tx Ring Limit	10

9. Menyeting IP address untuk GW ROUTER ISP 1 (Fastethernet5/0)

Port Status	☑ On
MAC Address	0090.0CA8.6A17
IP Configuration	
IPv4 Address	103.24.56.240
Subnet Mask	255.0.0.0
Tx Ring Limit	10

MENYETING VLAN

Tambahkan vlan DTE 100, DEPTK 200, DMEKA 300, dan ADMIN 400 pada switch DISTRIBUTION SW 2, DTE, DEPTK, dan DMEKA.

VLAN Configuration

VLAN Number	400
VLAN Name	ADMIN

[Add]   [Remove]

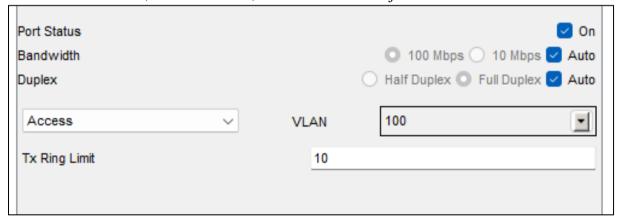| VLAN No	VLAN Name
1	default
100	DTE
200	DEPTIK
300	DMEKA
400	ADMIN
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default

MENYETING SWITCH DISTRIBUTION SW 2

Ganti access Fastethernet0/1, GigabitEthernet6/1, GigabitEthernet7/1, GigabitEthernet8/1 ke trunk.
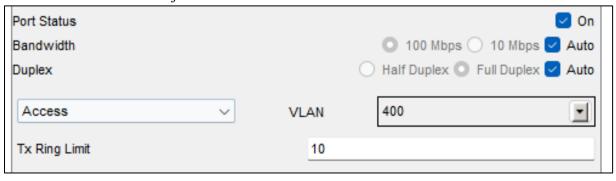

MENYETING SWITCH DTE

1. Ubah Fastethernet0/1, Fastethernet0/2, Fastethernet0/3 menjadi 100 atau DTE
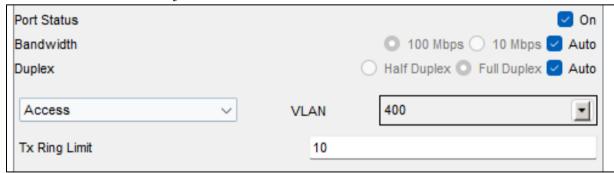

2. Ubah Fastethernet0/4 menjadi 400 atau ADMIN

MENYETING SWITCH DEPTIK

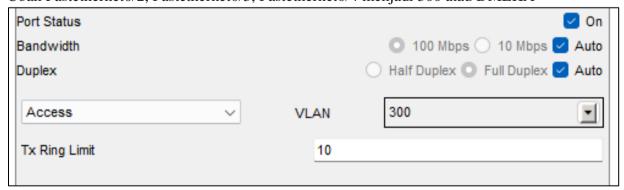1. Ubah Fastethernet0/1, Fastethernet0/2, Fastethernet0/3 menjadi 200 atau DEPTIK

Port Status			✅ On
Bandwidth		⚪ 100 Mbps ⚪ 10 Mbps	✅ Auto
Duplex		⚪ Half Duplex ⚪ Full Duplex	✅ Auto
Access ⌄	VLAN	200	▼
Tx Ring Limit		10	

2. Ubah Fastethernet0/4 menjadi 400 atau ADMIN

Port Status			✅ On
Bandwidth		⚪ 100 Mbps ⚪ 10 Mbps	✅ Auto
Duplex		⚪ Half Duplex ⚪ Full Duplex	✅ Auto
Access ⌄	VLAN	400	▼
Tx Ring Limit		10	

MENYETING SWITCH DMEKA

3. Ubah Fastethernet0/2, Fastethernet0/3, Fastethernet0/4 menjadi 300 atau DMEKA

Port Status			✅ On
Bandwidth		⚪ 100 Mbps ⚪ 10 Mbps	✅ Auto
Duplex		⚪ Half Duplex ⚪ Full Duplex	✅ Auto
Access ⌄	VLAN	300	▼
Tx Ring Limit		10	

4. Ubah Fastethernet0/5 menjadi 400 atau ADMIN

Port Status				On ✓
Bandwidth			100 Mbps ○ 10 Mbps ○	Auto ✓
Duplex			Half Duplex ○ Full Duplex ●	Auto ✓
Access ⌄		VLAN	400 ▼	
Tx Ring Limit			10	

MENYETING PC

VLAN 100:

PC 0:
- IP: 192.168.1.2
- Gateway: 192.168.1.1
- DNS:172.16.1.2

PC 1:
- IP: 192.168.1.3
- Gateway: 192.168.1.1
- DNS:172.16.1.2

PC 2:
- IP: 192.168.1.4
- Gateway: 192.168.1.1
- DNS:172.16.1.2

VLAN 200:

PC 0:
- IP: 192.168.2.2
- Gateway:192.168.2.1
- DNS:172.16.1.2

PC 1:
- IP: 192.168.2.3
- Gateway:192.168.2.1
- DNS:172.16.1.2

PC 2:
- IP: 192.168.2.4
- Gateway:192.168.2.1
- DNS:172.16.1.2

VLAN 300:

PC 0:
- IP: 192.168.3.2
- Gateway:192.168.3.1
- DNS:172.16.1.2

PC 1:
- IP: 192.168.3.3
- Gateway:192.168.3.1
- DNS:172.16.1.2

PC 2:
- IP: 192.168.3.4
- Gateway:192.168.3.1
- DNS:172.16.1.2

VLAN 400:

ADMIN-DTE:
- IP: 192.168.4.2
- Gateway:192.168.4.1
- DNS:172.16.1.2

ADMIN-DEPTIK:
- IP: 192.168.4.3
- Gateway:192.168.4.1
- DNS:172.16.1.2

ADMIN-DMEKA:
- IP: 192.168.4.4
- Gateway:192.168.4.1
- DNS:172.16.1.2

MENGUJI ANTAR VLAN

1. VLAN 100 ke 200

```
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.2: bytes=32 time<1ms TTL=127
Reply from 192.168.2.2: bytes=32 time<1ms TTL=127
Reply from 192.168.2.2: bytes=32 time=1ms TTL=127

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

2. VLAN 100 ke 300

```
C:\>ping 192.168.3.2

Pinging 192.168.3.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.3.2: bytes=32 time<1ms TTL=127
Reply from 192.168.3.2: bytes=32 time<1ms TTL=127
Reply from 192.168.3.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.3.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3. VLAN 100 ke 400

```
C:\>ping 192.168.4.2

Pinging 192.168.4.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.4.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

4. VLAN 200 ke 300

```
C:\>ping 192.168.3.2

Pinging 192.168.3.2 with 32 bytes of data:

Reply from 192.168.3.2: bytes=32 time<1ms TTL=127
Reply from 192.168.3.2: bytes=32 time<1ms TTL=127
Reply from 192.168.3.2: bytes=32 time=1ms TTL=127
Reply from 192.168.3.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.3.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

5. VLAN 200 ke 400

```
C:\>ping 192.168.4.2

Pinging 192.168.4.2 with 32 bytes of data:

Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time=1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.4.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

6. VLAN 300 ke 400

```
C:\>ping 192.168.4.2

Pinging 192.168.4.2 with 32 bytes of data:

Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127
Reply from 192.168.4.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.4.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

MENYETING ROUTER ISP 1

Lengkapi IP address untuk DISTRIBUTION ROUTER 2 pada port Fastethernet5/0

Port Status		On
MAC Address	0009.7C01.6659	
IP Configuration		
IPv4 Address	103.24.56.240	
Subnet Mask	255.0.0.0	
Tx Ring Limit	10	

MENYETING ROUTER ISP 2

Lengkapi IP address untuk DISTRIBUTION ROUTER 2 pada port Fastethernet4/0

Port Status		On
MAC Address	0001.43AD.334D	
IP Configuration		
IPv4 Address	202.9.85.1	
Subnet Mask	255.255.255.0	
Tx Ring Limit	10	

PENGUJIAN KE GW ROUTER ISP 1 DAN GW ROUTER ISP 2

1. VLAN 100 ke GW ROUTER ISP 1

```
C:\>ping 103.24.56.240

Pinging 103.24.56.240 with 32 bytes of data:

Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255

Ping statistics for 103.24.56.240:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```
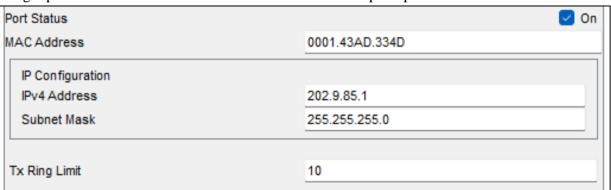
2. VLAN 100 ke GW ROUTER ISP 2

```
C:\>ping 202.9.85.1

Pinging 202.9.85.1 with 32 bytes of data:

Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255

Ping statistics for 202.9.85.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3. VLAN 200 ke GW ROUTER ISP 1

```
C:\>ping 103.24.56.240

Pinging 103.24.56.240 with 32 bytes of data:

Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255

Ping statistics for 103.24.56.240:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

4. VLAN 200 ke GW ROUTER ISP 2

```
C:\>ping 202.9.85.1

Pinging 202.9.85.1 with 32 bytes of data:

Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255

Ping statistics for 202.9.85.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

5. VLAN 300 ke GW ROUTER ISP 1

```
C:\>ping 103.24.56.240

Pinging 103.24.56.240 with 32 bytes of data:

Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time=1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255

Ping statistics for 103.24.56.240:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

6. VLAN 300 ke GW ROUTER ISP 2

```
C:\>ping 202.9.85.1

Pinging 202.9.85.1 with 32 bytes of data:

Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255

Ping statistics for 202.9.85.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

7. VLAN 400 ke GW ROUTER ISP 1

```
C:\>ping 103.24.56.240

Pinging 103.24.56.240 with 32 bytes of data:

Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255
Reply from 103.24.56.240: bytes=32 time<1ms TTL=255

Ping statistics for 103.24.56.240:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

8. VLAN 400 ke GW ROUTER ISP 2

```
C:\>ping 202.9.85.1

Pinging 202.9.85.1 with 32 bytes of data:

Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255
Reply from 202.9.85.1: bytes=32 time<1ms TTL=255

Ping statistics for 202.9.85.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```
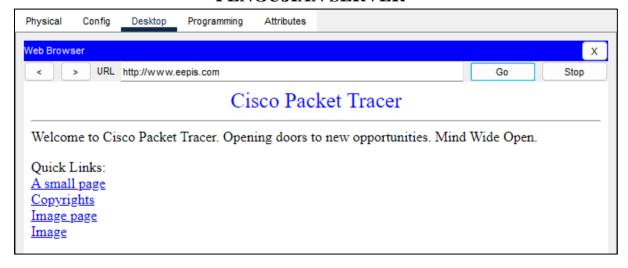
MEMBUAT SERVICE DENGAN IP ADDRESS 172.16.1.2

karena saat melakukan konfigurasi pada pc kita memasukkan 172.16.1.2 (server sebagai penampil www) maka dari itu kita membuat website dengan ip address 172.16.1.2

	DNS	
DNS Service	⬤ On	○ Off

Resource Records

Name		Type	A Record ⌄

Address	

Add	Save	Remove

No.	Name	Type	Detail	
0	www.eepis.com	A Record	172.16.1.2	

PENGUJIAN SERVER

Physical	Config	Desktop	Programming	Attributes	

Web Browser X

<	>	URL	http://www.eepis.com		Go	Stop

Cisco Packet Tracer

Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.

Quick Links:
A small page
Copyrights
Image page
Image

HASIL AKHIR SYSTEM JARINGAN