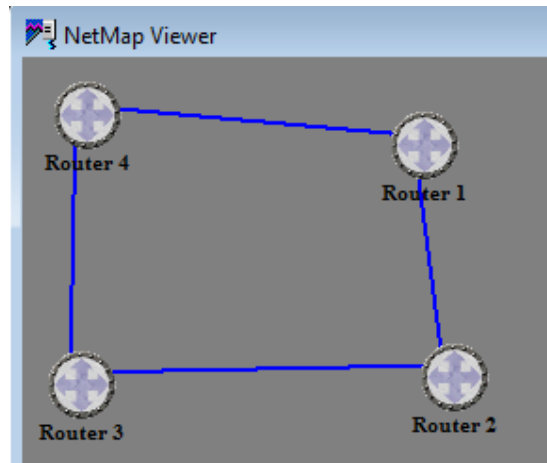


LAPORAN MODUL 2 PRAKTIKUM JARINGAN KOMPUTER

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KELAS : D

1. Membuat desain jaringan dengan 4 router tipe 2514 yang memiliki 2 interface ethernet dan 2 interface serial dan menyetting sesuai tabel



Hostname	Interface	IP	Keterangan
Router1	Ethernet 0	192.168.1.21/24	Ke Router 2
	Ethernet 1	192.168.4.22/24	Ke Router 4
Router2	Ethernet 0	192.168.1.22/24	Ke Router 1
	Ethernet 1	192.168.2.21/24	Ke Router 3
Router3	Ethernet 0	192.168.3.21/24	Ke Router 4
	Ethernet 1	192.168.2.22/24	Ke Router 2
Router4	Ethernet 0	192.168.3.22/24	Ke Router 3
	Ethernet 1	192.168.4.21/24	Ke Router 1

2. Melakukan konfigurasi masing-masing router sehingga antar router bisa terhubung

○ Router 1

```
Boson NetSim™ v5.12 -- Control Panel - [Router1]
File Modes Devices Tools Ordering Language Window Help
eRouters eSwitchs eStations Lab Navigator NetMap Remote Control

Router>
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router1
Router1(config)#interface Ethernet 0
Router1(config-if)#ip address 192.168.1.21 255.255.255.0
Router1(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet0, changed state to up
Router1(config-if)#^Z
%SYS-5-CONFIG_I: Configured from console by console

Router1#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router1(config)#interface Ethernet 1
Router1(config-if)#ip address 192.168.4.22 255.255.255.0
Router1(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet1, changed state to up
Router1(config-if)#exit
Router1(config)#exit
Router1#show ip interface brief
Interface IP-Address OK? Method Status Protocol
Serial0 unassigned YES unset administratively down down
Serial1 unassigned YES unset administratively down down
Ethernet0 192.168.1.21 YES unset up up
Ethernet1 192.168.4.22 YES unset up up
```

○ Router 2

```
Boson NetSim™ v5.12 -- Control Panel - [Router2]
File Modes Devices Tools Ordering Language Window Help
eRouters eSwitchs eStations Lab Navigator NetMap Remote Control

Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router2
Router2(config)#interface Ethernet 0
Router2(config-if)#ip address 192.168.1.22 255.255.255.0
Router2(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet0, changed state to up
Router2(config-if)#exit
Router2(config)#interface Ethernet 1
Router2(config-if)#ip address 192.168.2.21 255.255.255.0
Router2(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet1, changed state to up
Router2(config-if)#exit
Router2(config)#exit
Router2#show ip interface brief
Interface IP-Address OK? Method Status Protocol
Serial0 unassigned YES unset administratively down down
Serial1 unassigned YES unset administratively down down
Ethernet0 192.168.1.22 YES unset up up
Ethernet1 192.168.2.21 YES unset up up
```

- Router 3

```

Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router3
Router3(config)#interface Ethernet 0
Router3(config-if)#ip address 192.168.3.21 255.255.255.0
Router3(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet0, changed state to up
Router3(config-if)#exit
Router3(config)#interface Ethernet 1
Router3(config-if)#ip address 192.168.2.22 255.255.255.0
Router3(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet1, changed state to up
Router3(config-if)#exit
Router3(config)#exit
Router3#show ip interface brief

```

Interface	IP-Address	OK?	Method	Status	Protocol
Serial0	unassigned	YES	unset	administratively down	down
Serial1	unassigned	YES	unset	administratively down	down
Ethernet0	192.168.3.21	YES	unset	up	up
Ethernet1	192.168.2.22	YES	unset	up	up

- Router 4

```

Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Router4
Router4(config)#interface Ethernet 0
Router4(config-if)#ip address 192.168.3.22 255.255.255.0
Router4(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet0, changed state to up
Router4(config-if)#exit
Router4(config)#interface Ethernet 1
Router4(config-if)#ip address 192.168.4.21 255.255.255.0
Router4(config-if)#no shutdown
%LINK-3-UPDOWN: Interface Ethernet1, changed state to up
Router4(config-if)#exit
Router4(config)#exit
Router4#show ip interface brief

```

Interface	IP-Address	OK?	Method	Status	Protocol
Serial0	unassigned	YES	unset	administratively down	down
Serial1	unassigned	YES	unset	administratively down	down
Ethernet0	192.168.3.22	YES	unset	up	up
Ethernet1	192.168.4.21	YES	unset	up	up

3. Melakukan tes koneksi antar router dengan menggunakan “**ping**”
- Router 1 = Tes koneksi ke router 2: 192.168.1.22 & tes koneksi ke router 4: 192.168.4.21

```
Router1>ping 192.168.1.22

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.22, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
Router1>ping 192.168.4.21

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.4.21, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```

- Router 2 = Tes koneksi ke router 1: 192.168.1.21 & tes koneksi ke router 3: 192.168.2.22

```
Router2>ping 192.168.22
% Unrecognized host or address, or protocol not running.

Router2>ping 192.168.1.21

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.21, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
Router2>ping 192.168.2.22

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.2.22, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```

- Router 3 = Tes koneksi ke router 2: 192.168.2.21 & tes koneksi ke router 4: 192.168.3.22

```
Router3>ping 192.168.3.22

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.3.22, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
Router3>ping 192.168.2.21

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.2.21, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```

- Router 4 = Tes koneksi ke router 3: 192.168.3.21 & tes koneksi ke router 1: 192.168.4.22

```
Router4>ping 192.168.3.21
```

```
Type escape sequence to abort.
```

```
Sending 5, 100-byte ICMP Echos to 192.168.3.21, timeout is 2 seconds:
```

```
!!!!
```

```
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```

```
Router4>ping 192.168.4.22
```

```
Type escape sequence to abort.
```

```
Sending 5, 100-byte ICMP Echos to 192.168.4.22, timeout is 2 seconds:
```

```
!!!!
```

```
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms
```