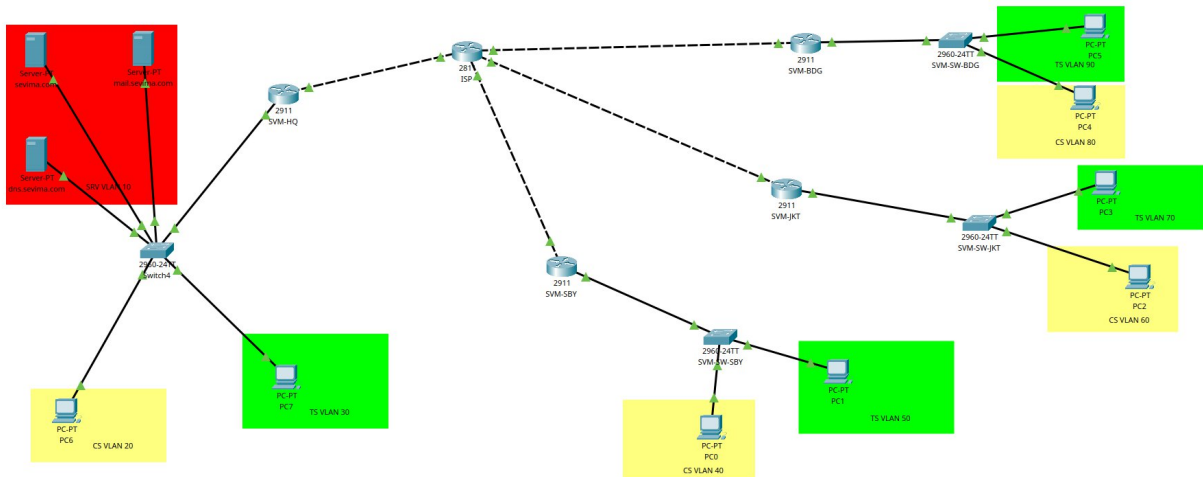


Laporang Pengerjaan Soal Nomor 1

ID Peserta: 01

Nama: Achmad Alif Nasrulloh

Topologi:



DEVICE	INTERFACE	KETERANGAN	IP ADDRESS
ISP	fa0/0		103.111.248.1/30
	fa0/1		103.111.248.5/30
	fa1/0		103.111.248.9/30
	fa0/1		103.111.248.13/30
SVM-SBY	gig0/0	NAT	103.111.248.6/30
	gig0/1	VLAN 40 (CS)	192.168.40.1/24
		VLAN 50 (TS)	192.168.50.1/24
SVM-JKT	gig0/0	NAT	103.111.248.10/30
	gig0/1	VLAN 60 (CS)	192.168.60.1/24
		VLAN 70 (TS)	192.168.70.1/24
SVM-BDG	gig0/0	NAT	103.111.248.14/30
	gig0/1	VLAN 80 (CS)	192.168.80.1/24
		VLAN 90 (TS)	192.168.90.1/24
DNS.SEVIMA.COM			103.111.249.2/24
SEVIMA.COM			103.111.249.3/24
MAIL.SEVIMA.COM			103.111.249.4/24
PC0			DHCP
PC1			DHCP
PC2			DHCP
PC3			DHCP
PC4			DHCP
PC5			DHCP
PC6			DHCP
PC7			DHCP

Konfigurasi:

KONFIGURASI ISP (BGP)

ISP(config)#do sh run

Building configuration...

Current configuration : 1222 bytes

!

version 15.1

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname ISP

!

!

!

!

!

!

!

!

no ip cef

no ipv6 cef

!

!

!

!

license udi pid CISCO2811/K9 sn FTX101789JP-

!

!

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

```
!  
interface FastEthernet0/0  
ip address 103.111.248.1 255.255.255.252  
duplex auto  
speed auto  
!  
interface FastEthernet0/1  
ip address 103.111.248.5 255.255.255.252  
duplex auto  
speed auto  
!  
interface FastEthernet1/0  
ip address 103.111.248.9 255.255.255.252  
duplex auto  
speed auto  
!  
interface FastEthernet1/1  
ip address 103.111.248.13 255.255.255.252  
duplex auto  
speed auto  
!  
interface Vlan1  
no ip address  
shutdown  
!  
router bgp 100  
bgp log-neighbor-changes  
no synchronization  
neighbor 103.111.248.2 remote-as 101  
neighbor 103.111.248.6 remote-as 102  
neighbor 103.111.248.10 remote-as 103  
neighbor 103.111.248.114 remote-as 104  
network 103.111.248.0 mask 255.255.255.252  
network 103.111.248.4 mask 255.255.255.252  
network 103.111.248.8 mask 255.255.255.252  
network 103.111.248.12 mask 255.255.255.252  
!  
ip classless  
!  
ip flow-export version 9  
!  
!  
!  
!  
!  
!
```

```
!  
line con 0  
!  
line aux 0  
!  
line vty 0 4  
  login  
!  
!  
!  
end
```

SVM-HQ (BGP, NAT, VLAN, DHCP SERVER)

```
SVM-HQ(config)#do sh run  
Building configuration...  
  
Current configuration : 1636 bytes  
!  
version 15.1  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname SVM-HQ  
!  
!  
!  
!  
!  
ip dhcp pool CS  
  network 192.168.20.0 255.255.255.0  
  default-router 192.168.20.1  
  dns-server 103.111.249.2  
ip dhcp pool TS  
  network 192.168.30.0 255.255.255.0  
  default-router 192.168.30.1  
  dns-server 103.111.249.2  
!  
!  
!  
no ip cef  
no ipv6 cef  
!  
!  
!  
!
```

```
license udi pid CISCO2911/K9 sn FTX1524N1XZ-
```

```
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!
```

```
spanning-tree mode pvst
```

```
!  
!  
!  
!  
!  
!
```

```
interface GigabitEthernet0/0
```

```
ip address 103.111.248.2 255.255.255.252
```

```
ip nat outside
```

```
duplex auto
```

```
speed auto
```

```
!
```

```
interface GigabitEthernet0/1
```

```
no ip address
```

```
duplex auto
```

```
speed auto
```

```
!
```

```
interface GigabitEthernet0/1.10
```

```
encapsulation dot1Q 10
```

```
ip address 103.111.249.1 255.255.255.0
```

```
!
```

```
interface GigabitEthernet0/1.20
```

```
encapsulation dot1Q 20
```

```
ip address 192.168.20.1 255.255.255.0
```

```
ip nat inside
```

```
!
```

```
interface GigabitEthernet0/1.30
```

```
encapsulation dot1Q 30
```

```
ip address 192.168.30.1 255.255.255.0
```

```
ip nat inside
```

```
!
```

```
interface GigabitEthernet0/2
```

```
no ip address
```

```

duplex auto
speed auto
shutdown
!
interface Vlan1
no ip address
shutdown
!
router bgp 101
bgp log-neighbor-changes
no synchronization
neighbor 103.111.248.1 remote-as 100
network 103.111.248.0 mask 255.255.255.252
network 103.111.249.0 mask 255.255.255.0
!
ip nat inside source list NAT interface GigabitEthernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 103.111.248.1
!
ip flow-export version 9
!
!
ip access-list standard NAT
permit 192.168.20.0 0.0.0.255
permit 192.168.30.0 0.0.0.255
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
!
end

```

SVM-SBY (BGP, NAT, VLAN, DHCP SERVER)

SVM-SBY(config)#do sh run
Building configuration...

Current configuration : 1539 bytes

[illegible]

```
!  
!  
!  
!  
interface GigabitEthernet0/0  
 ip address 103.111.248.6 255.255.255.252  
 ip nat outside  
 duplex auto  
 speed auto  
!  
interface GigabitEthernet0/1  
 no ip address  
 duplex auto  
 speed auto  
!  
interface GigabitEthernet0/1.40  
 encapsulation dot1Q 40  
 ip address 192.168.40.1 255.255.255.0  
 ip nat inside  
!  
interface GigabitEthernet0/1.50  
 encapsulation dot1Q 50  
 ip address 192.168.50.1 255.255.255.0  
 ip nat inside  
!  
interface GigabitEthernet0/2  
 no ip address  
 duplex auto  
 speed auto  
 shutdown  
!  
interface Vlan1  
 no ip address  
 shutdown  
!  
router bgp 102  
 bgp log-neighbor-changes  
 no synchronization  
 neighbor 103.111.248.5 remote-as 100  
 network 103.111.248.4 mask 255.255.255.252  
!  
 ip nat inside source list NAT interface GigabitEthernet0/0 overload  
 ip classless  
 ip route 0.0.0.0 0.0.0.0 103.111.248.5  
!  
 ip flow-export version 9
```



```
!  
!  
ip access-list standard NAT  
  permit 192.168.40.0 0.0.0.255  
!  
!  
!  
!  
!  
line con 0  
!  
line aux 0  
!  
line vty 0 4  
  login  
!  
!  
!  
end
```

SVM-JKT (BGP, NAT, VLAN, DHCP SERVER)

```
SVM-JKT(config)#do sh run  
Building configuration...  
  
Current configuration : 1571 bytes  
!  
version 15.1  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname SVM-JKT  
!  
!  
!  
!  
ip dhcp excluded-address 192.168.60.1  
ip dhcp excluded-address 192.168.70.1  
!  
ip dhcp pool CS  
  network 192.168.60.0 255.255.255.0  
  default-router 192.168.60.1  
  dns-server 103.111.249.2  
ip dhcp pool TS  
  network 192.168.70.0 255.255.255.0  
  default-router 192.168.70.1  
  dns-server 103.111.249.2
```

```
!  
!  
!  
ip cef  
no ipv6 cef  
!  
!  
!  
!  
license udi pid CISCO2911/K9 sn FTX1524210R-  
!  
!  
!  
!  
!  
!  
!  
!  
!  
spanning-tree mode pvst  
!  
!  
!  
!  
!  
interface GigabitEthernet0/0  
ip address 103.111.248.10 255.255.255.252  
ip nat outside  
duplex auto  
speed auto  
!  
interface GigabitEthernet0/1  
no ip address  
duplex auto  
speed auto  
!  
interface GigabitEthernet0/1.60  
encapsulation dot1Q 60  
ip address 192.168.60.1 255.255.255.0  
ip nat inside  
!  
interface GigabitEthernet0/1.70  
encapsulation dot1Q 70  
ip address 192.168.70.1 255.255.255.0  
ip nat inside  
!  
interface GigabitEthernet0/2  
no ip address
```

```

duplex auto
speed auto
shutdown
!
interface Vlan1
no ip address
shutdown
!
router bgp 103
bgp log-neighbor-changes
no synchronization
neighbor 103.111.248.9 remote-as 100
network 103.111.248.8 mask 255.255.255.252
!
ip nat inside source list NAT interface GigabitEthernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 103.111.248.9
!
ip flow-export version 9
!
!
ip access-list standard NAT
permit 192.168.60.0 0.0.0.255
permit 192.168.70.0 0.0.0.255
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
login
!
!
!
end

```

SVM-BDG (BGP, NAT, VLAN, DHCP SERVER)

```

SVM-BDG(config)#do sh run
Building configuration...

```

```

Current configuration : 1351 bytes

```

```

!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec

```

```

no service password-encryption
!
hostname SVM-BDG
!
!
!
!
!
!
ip dhcp pool CS
network 192.168.80.0 255.255.255.0
default-router 192.168.80.1
dns-server 103.111.249.2
ip dhcp pool TS
network 192.168.90.0 255.255.255.0
default-router 192.168.90.1
dns-server 103.111.249.2
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX152429R3-
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
!
interface GigabitEthernet0/0
ip address 103.111.248.14 255.255.255.252

```

```
ip nat outside
duplex auto
speed auto
!
interface GigabitEthernet0/1
no ip address
duplex auto
speed auto
!
interface GigabitEthernet0/1.80
encapsulation dot1Q 80
ip address 192.168.80.1 255.255.255.0
ip nat inside
!
interface GigabitEthernet0/1.90
encapsulation dot1Q 90
ip address 192.168.90.1 255.255.255.0
ip nat inside
!
interface GigabitEthernet0/2
no ip address
duplex auto
speed auto
shutdown
!
interface Vlan1
no ip address
shutdown
!
ip nat inside source list NAT interface GigabitEthernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 103.111.248.13
!
ip flow-export version 9
!
!
ip access-list standard NAT
permit 192.168.80.0 0.0.0.255
permit 192.168.90.0 0.0.0.255
!
!
!
!
!
line con 0
!
```

```
line aux 0
!  
line vty 0 4  
login  
!  
!  
!  
end
```

SEVIMA.COM (WEB)

sevima.com

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

File Name: index.html

```
<html>  
<center><font size='+2' color='blue'>SEVIMA</font></center>  
<hr>Revolutionize Education.  
</html>
```

DNS.SEVIMA.COM (DNS)

dns.sevima.com

PhysicalConfigServicesDesktopProgrammingAttributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type A Record

Address

AddSaveRemove

No.	Name	Type	Detail
0	dns.sevima.com	A Record	103.111.249.2
1	mail.sevima.com	A Record	103.111.249.4
2	sevima.com	A Record	103.111.249.3

MAIL.SEVIMA.COM (MAIL)

The screenshot shows a web-based configuration interface for a device named 'mail.sevima.com'. The 'Services' tab is active, and the 'EMAIL' service is selected in the left-hand menu. The main area displays the 'EMAIL' configuration section, which includes 'SMTP Service' and 'POP3 Service', both set to 'ON'. The 'Domain Name' is 'mail.sevima.com'. The 'User Setup' section shows a list of users: 'ts' and 'cs'.

mail.sevima.com

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL**
- FTP
- IoT
- VM Management

EMAIL

SMTP Service ☒ ON ☐ OFF

POP3 Service ☒ ON ☐ OFF

Domain Name: mail.sevima.com Set

User Setup

User Password

ts

cs

Uji Coba:

PC7 (DHCP CLIENT)

The screenshot shows a web-based configuration interface for a device named 'PC7'. The 'Desktop' tab is active, and the 'IP Configuration' window is open. The 'Interface' is 'FastEthernet0'. The 'IP Configuration' section shows 'DHCP' selected, with the following values: IPv4 Address (192.168.30.2), Subnet Mask (255.255.255.0), Default Gateway (192.168.30.1), and DNS Server (103.111.249.2).

PC7

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static

IPv4 Address 192.168.30.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.30.1

DNS Server 103.111.249.2

PC7 (DNS & WEB)

