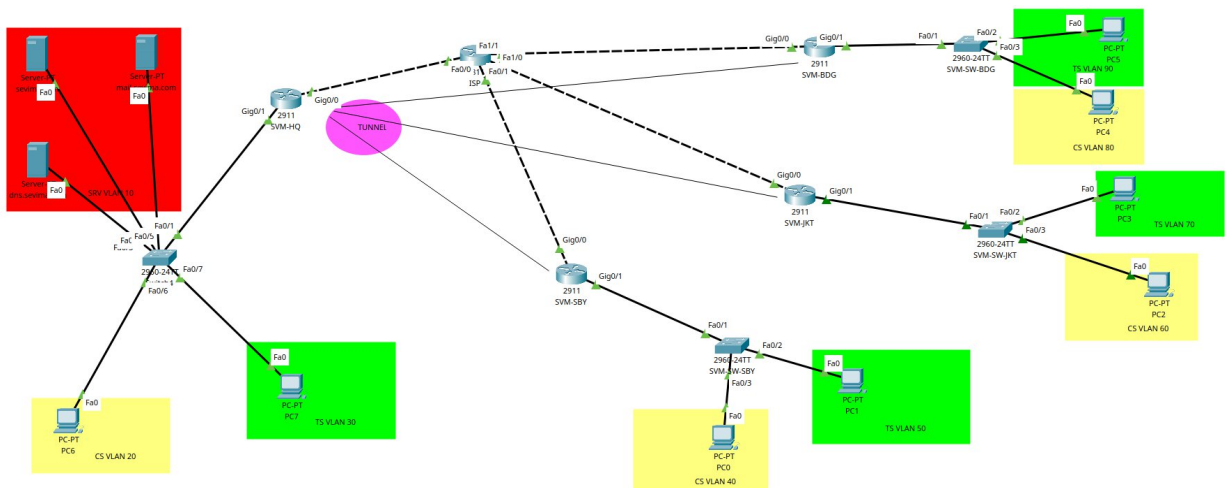


Laporang Pengerjaan Soal Nomor 1

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-HQ	gig0/0	NAT	103.111.248.2/30
	gig0/1.10	VLAN10 (SRV)	103.111.249.1/24
	gig0/1.20	VLAN20 (CS)	192.168.20.1/24
	gig0/1.30	VLAN30 (TS)	192.168.30.1/24
	tun0	TO-SVM-SBY	10.10.10.1/30
	tun1	TO-SVM-JKT	10.10.10.5/30
	tun2	TO-SVM-BDG	10.10.10.9/30
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
	tun0	TO-SVM-HQ	10.10.10.2/30
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
	tun0	TO-SVM-HQ	10.10.10.6/30
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
	tun0	TO-SVM-HQ	10.10.10.10/30
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, OSPF, TUNNEL, NAT, VLAN, DHCP SERVER)

```
SVM-HQ#sh run  
Building configuration...  
  
Current configuration : 2279 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 Tunnel0  
ip address 10.10.10.1 255.255.255.252  
mtu 1476  
tunnel source GigabitEthernet0/0  
tunnel destination 103.111.248.6  
!  
!  
interface Tunnel1  
ip address 10.10.10.5 255.255.255.252  
mtu 1476  
tunnel source GigabitEthernet0/0  
tunnel destination 103.111.248.10  
!  
!  
interface Tunnel2  
ip address 10.10.10.9 255.255.255.252  
mtu 1476  
tunnel source GigabitEthernet0/0  
tunnel destination 103.111.248.14  
!  
!  
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 ospf 101  
  log-adjacency-changes  
  network 10.10.10.0 0.0.0.3 area 0  
  network 192.168.20.0 0.0.0.255 area 0  
  network 192.168.30.0 0.0.0.255 area 0  
  network 10.10.10.4 0.0.0.3 area 0  
  network 10.10.10.8 0.0.0.3 area 0  
!  
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, OSPF, TUNNEL, NAT, VLAN, DHCP SERVER)

```
SVM-SBY#sh run  
Building configuration...  
  
Current configuration : 1832 bytes  
!  
version 15.1  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname SVM-SBY  
!  
!  
!  
!  
ip dhcp excluded-address 192.168.40.1  
ip dhcp excluded-address 192.168.50.1  
!  
ip dhcp pool CS  
network 192.168.40.0 255.255.255.0  
default-router 192.168.40.1  
dns-server 103.111.249.2  
ip dhcp pool TS  
network 192.168.50.0 255.255.255.0  
default-router 192.168.50.1  
dns-server 103.111.249.2  
!  
!  
!  
ip cef
```



```
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX1524P1T5-
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface Tunnel0
ip address 10.10.10.2 255.255.255.252
mtu 1476
tunnel source GigabitEthernet0/0
tunnel destination 103.111.248.2
!
!
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 ospf 101
log-adjacency-changes
network 192.168.40.0 0.0.0.255 area 0
network 10.10.10.0 0.0.0.3 area 0
network 192.168.50.0 0.0.0.255 area 0
!
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, OSPF, TUNNEL, NAT, VLAN, DHCP SERVER)

SVM-JKT#sh run

Building configuration...

Current configuration : 1864 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 Tunnel0  
ip address 10.10.10.6 255.255.255.252  
mtu 1476  
tunnel source GigabitEthernet0/0  
tunnel destination 103.111.248.2  
!  
!  
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 ospf 101  
log-adjacency-changes  
network 10.10.10.4 0.0.0.3 area 0  
network 192.168.60.0 0.0.0.255 area 0  
network 192.168.70.0 0.0.0.255 area 0  
!  
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, OSPF, TUNNEL, NAT, VLAN, DHCP SERVER)

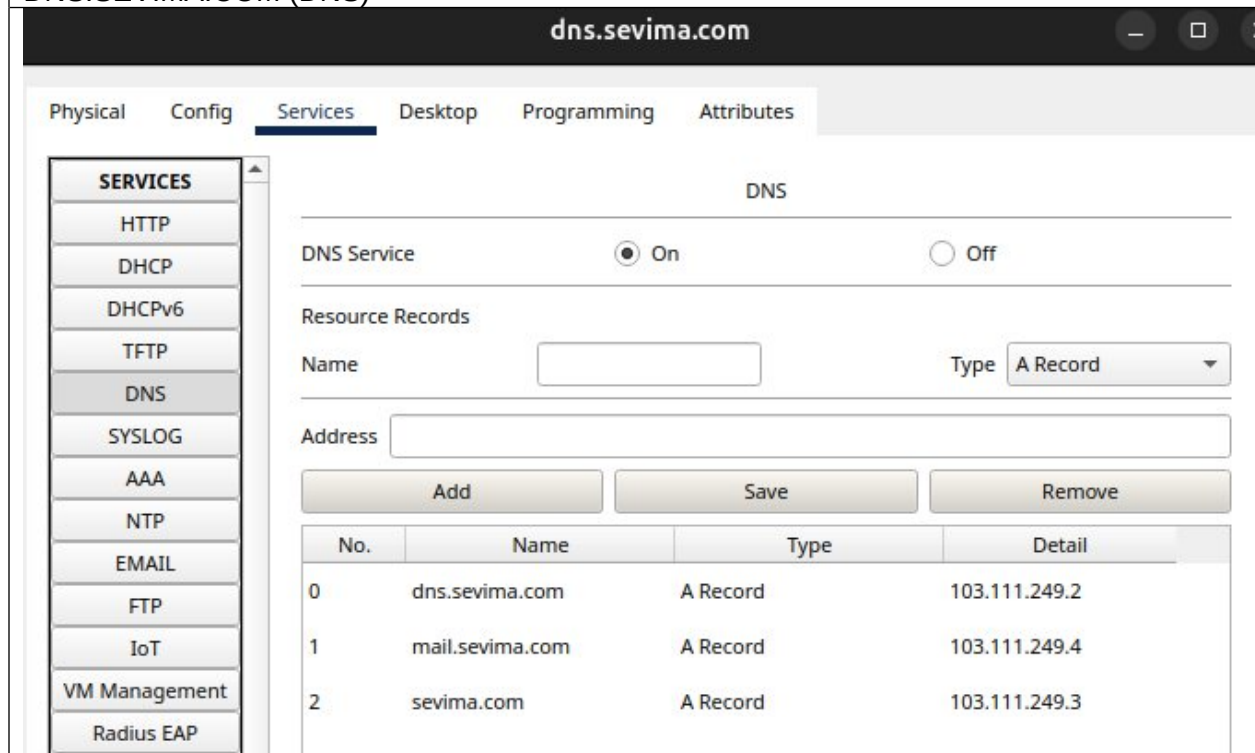
```
SVM-BDG#sh run  
Building configuration...  
  
Current configuration : 1645 bytes  
!  
version 15.1  
no service timestamps log datetime msec  
no service timestamps debug datetime msec  
no service password-encryption  
!  
hostname SVM-BDG  
!  
!  
!  
!  
!  
ip dhcp pool CS  
network 192.168.80.0 255.255.255.0  
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 Tunnel0
ip address 10.10.10.10 255.255.255.252
mtu 1476
tunnel source GigabitEthernet0/0
tunnel destination 103.111.248.2
!
!
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
```

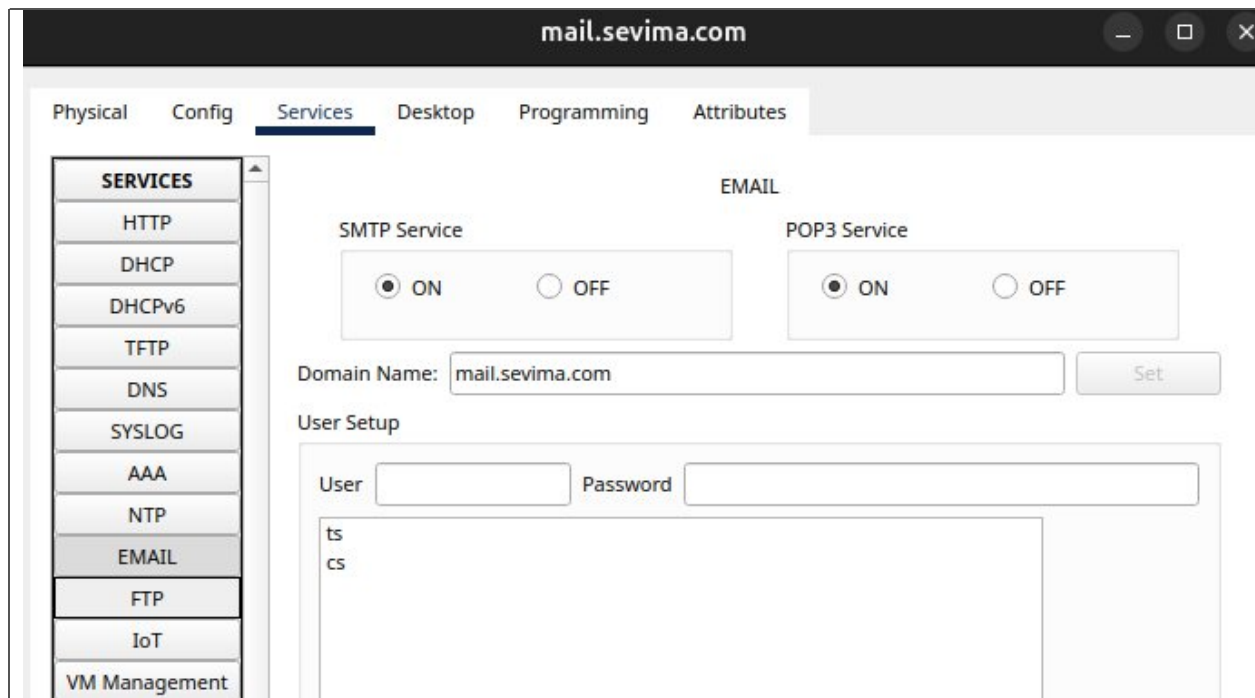
```
ip nat inside
!
interface GigabitEthernet0/1.90
 encapsulation dot1Q 90
 ip address 192.168.90.1 255.255.255.0
 ip nat inside
!
interface GigabitEthernet0/2
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 101
 log-adjacency-changes
 network 10.10.10.8 0.0.0.3 area 0
 network 192.168.80.0 0.0.0.255 area 0
 network 192.168.90.0 0.0.0.255 area 0
!
ip nat inside source list NAT interface GigabitEthernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 103.111.248.13
!
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
```



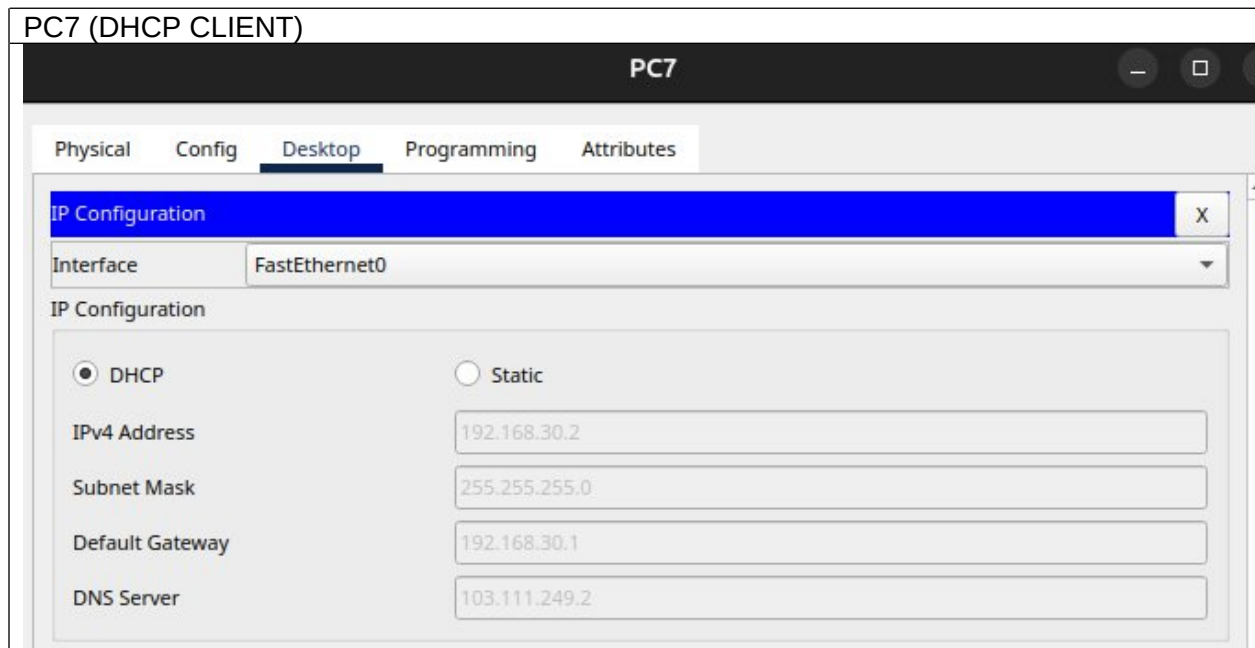
DNS.SEVERIMA.COM (DNS)



MAIL.SEVERIMA.COM (MAIL)



Uji Coba:



PC7 (DNS & WEB)

