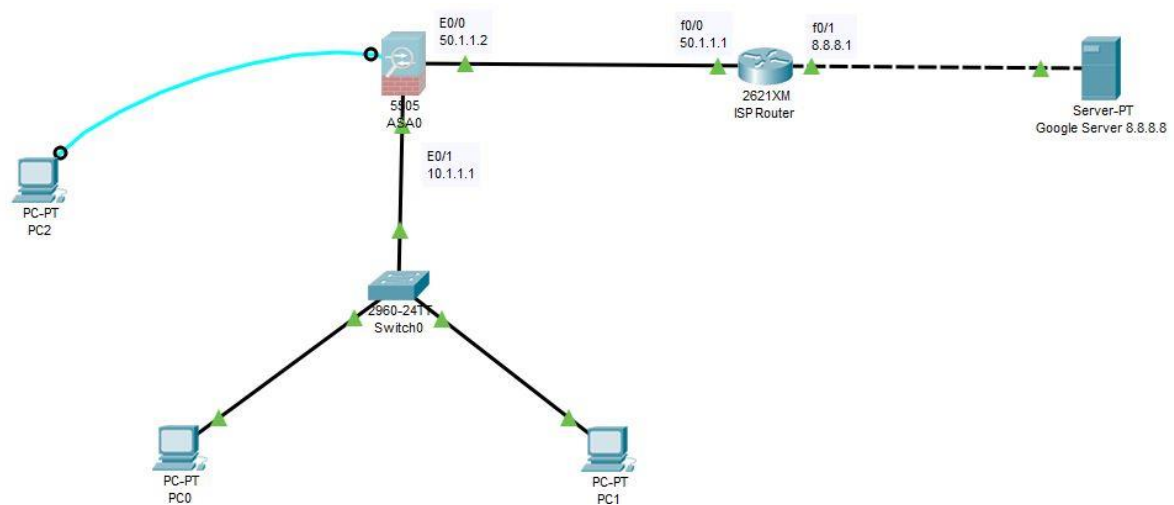


## Scenario 13: Configuring Organisational Hardware Firewall



### ASA Firewall Configurations:

- Go to the console of PC2 to access ASA Server using Terminal application.  

```
en
show running-config
```
- By default DHCP is enabled we need to remove it  

```
conf t
no dhcpd address 192.168.1.5-192.168.1.36 inside
exit
show running-config
```

 (Now there is no dhcp configuration).
- Now we need to remove default VLAN IP address and set it to our environment  

```
conf t
int vlan 1
ip add 10.1.1.1 255.0.0.0
no shut
nameif inside
security-level 100 (inside)
exit
int e0/1
switchport access vlan 1
no shut
exit
int vlan 2
```

```

ip add 50.1.1.2 255.0.0.0
no shut
nameif outside
security-level 0 (outside)
exit
int e0/0
switchport access vlan 2
exit

```

- Configuring DHCP and DNS ASA Server so that PC inside network go IP Address dynamically:
- Go to the console of PC2 to access ASA Server terminal using Terminal.

```

conf t
dhcpd address 10.1.1.10-10.1.1.30 inside
dhcpd dns 8.8.8.8 interface inside

```

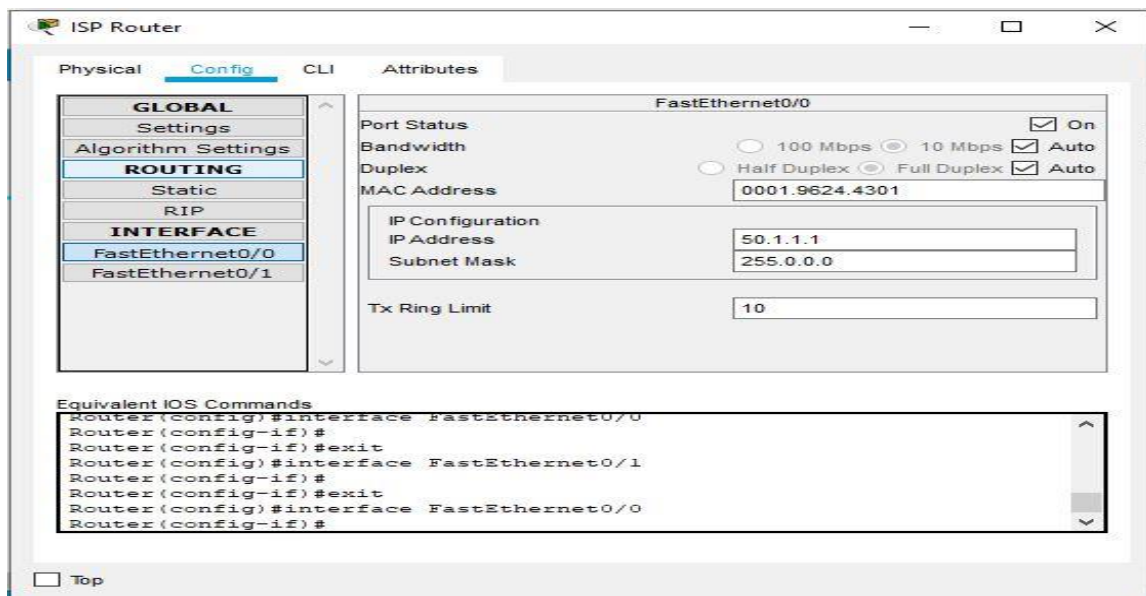
- Configuring Default Route on ASA:

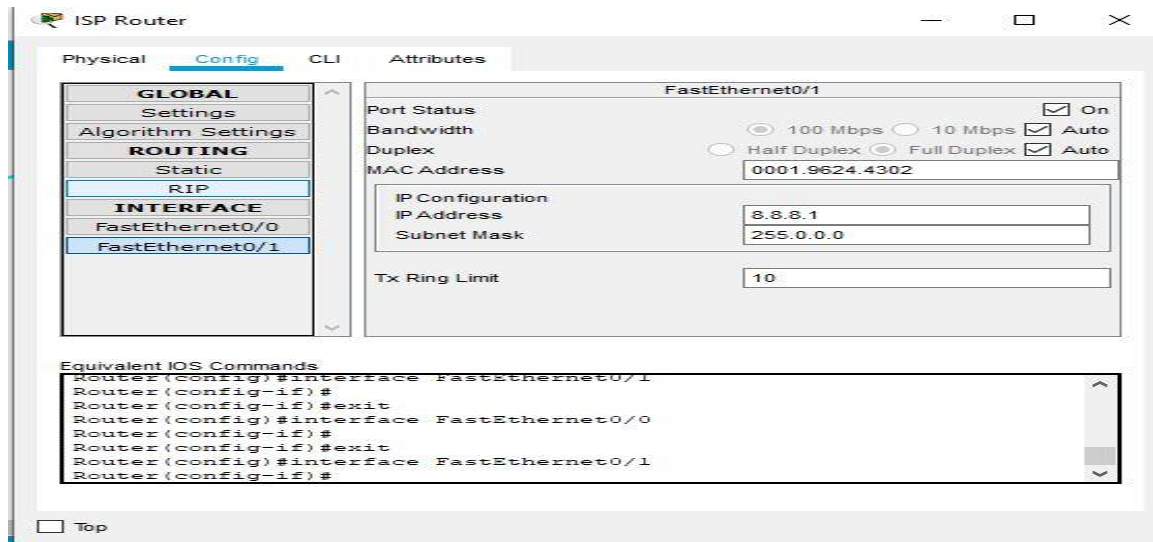
```

route outside 0.0.0.0 0.0.0.0 50.1.1.1

```

### Router Configurations:





- Configuring OSPF Routeing Protocol:
- Go to CLI of router:

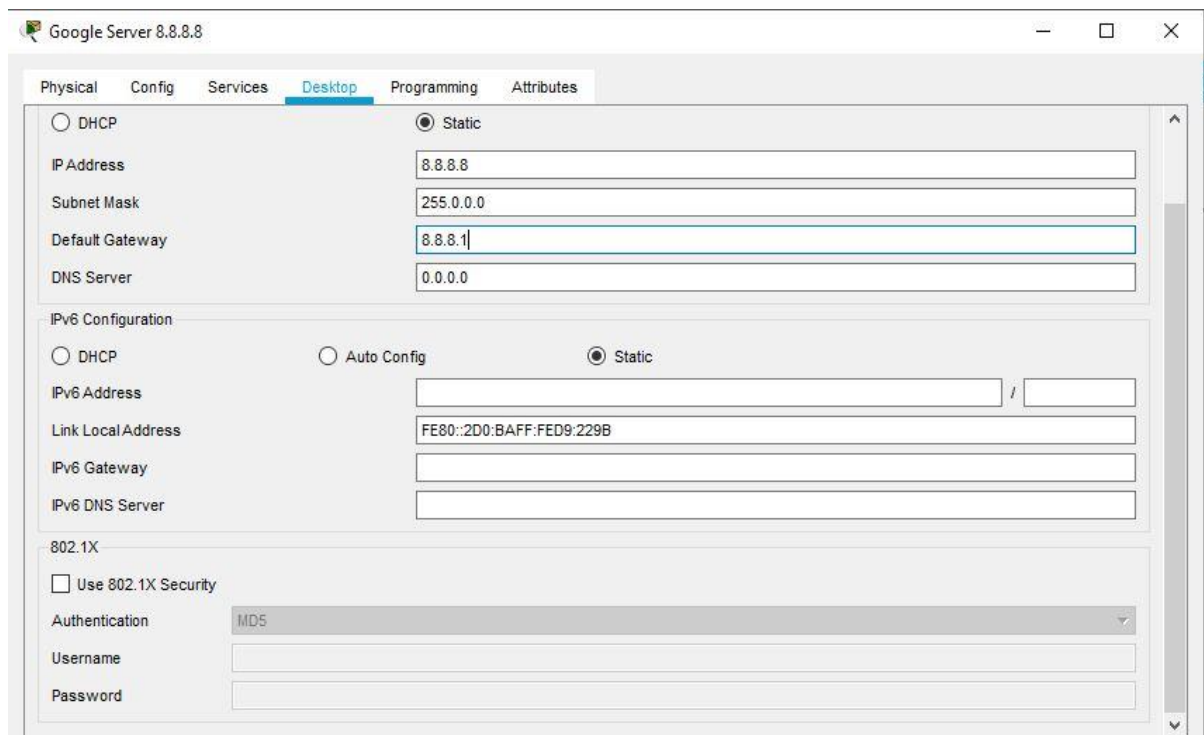
**Conf t**

**router ospf 1**

**net 50.0.0.0 0.255.255.255 area 0**

**net 8.0.0.0 0.255.255.255 area 0**

### Google Server Configurations:



### Assigning IP address to PC0 and PC1:

- Enable DHCP on PC1 and PC2

### Create object Network & Enable NAT on ASA:

- Before do this pass a packet from PC0 to Google Server it should fail
- Go to the console of PC2 to access ASA Server using Terminal application.

**object network ?**

**object network LAN (any Name)**

**subnet 10.0.0.0 255.0.0.0**

**nat ?**

**nat (inside, outside) dynamic interface**

- Now pass a packet from PC0 to Google Server it should fail
- Open CLI of BOTH PCS and ping -t 8.8.8.8 it should fail and minimize

### Create ACL on ASA:

- Go to the console of PC2 to access ASA Server using Terminal application.

**Conf t**

**access-list maherules (general name) ?**

**access-list maherules (general name) extended permit tcp**

**any any**

**access-list maherules (general name) extended permit icmp**

**any any**

**access-group maherules ?**

**access-group maherules in interface outside**

- (now check the CLI of both PCs we will see ping responses)

### On ASA terminal:

**show nat**

**show xlate**

- You should be able to see the NAP/PAT translations