

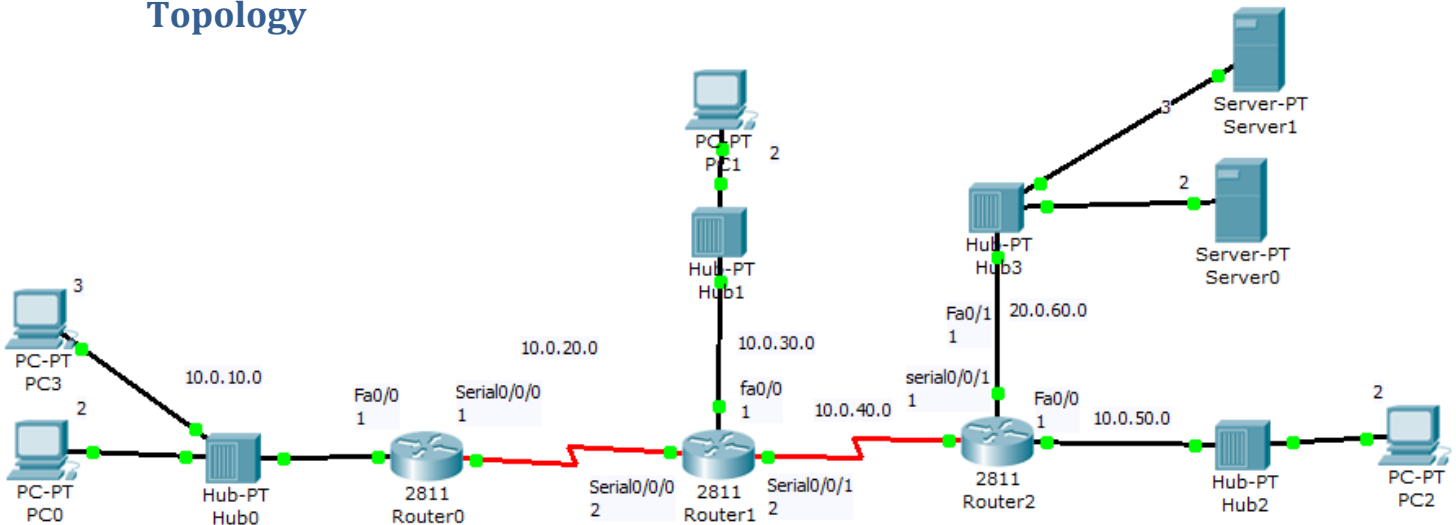
Wireless Lab 01

IP/TCP Layers Network Security I

Equipment

#	Item
4	PCs
4	Hubs
4	Router 2811
2	Server

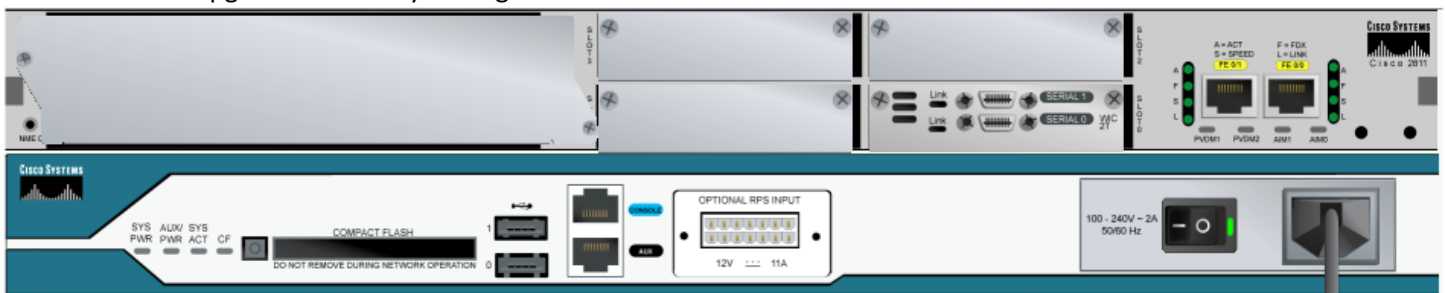
Topology



Steps

1. Basic Configuration

- upgrade routers by adding "WIC-2T"



- Connect devices as shown in topology
- Configure PCs

PC0	
IP	10.0.10.2
Subnet mask	255.255.255.0
Gateway	10.0.10.1

PC1	
IP	10.0.30.2

Subnet mask	255.255.255.0
Gateway	10.0.30.1

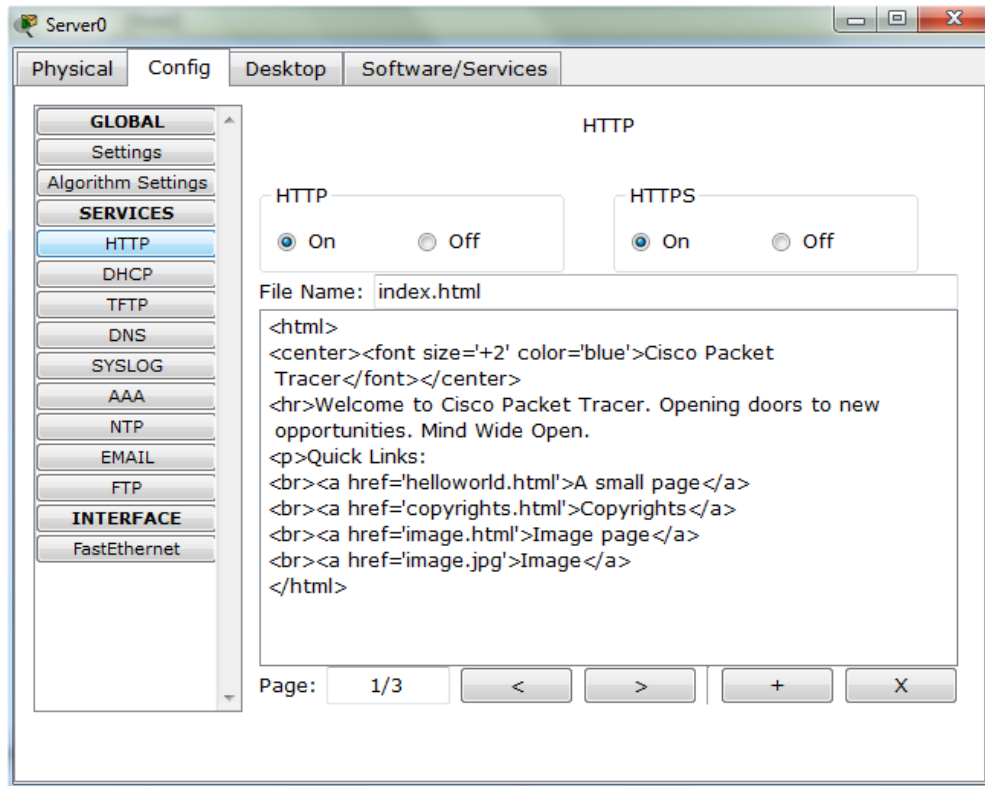
PC3	
IP	10.0.10.3
Subnet mask	255.255.255.0
Gateway	10.0.10.1

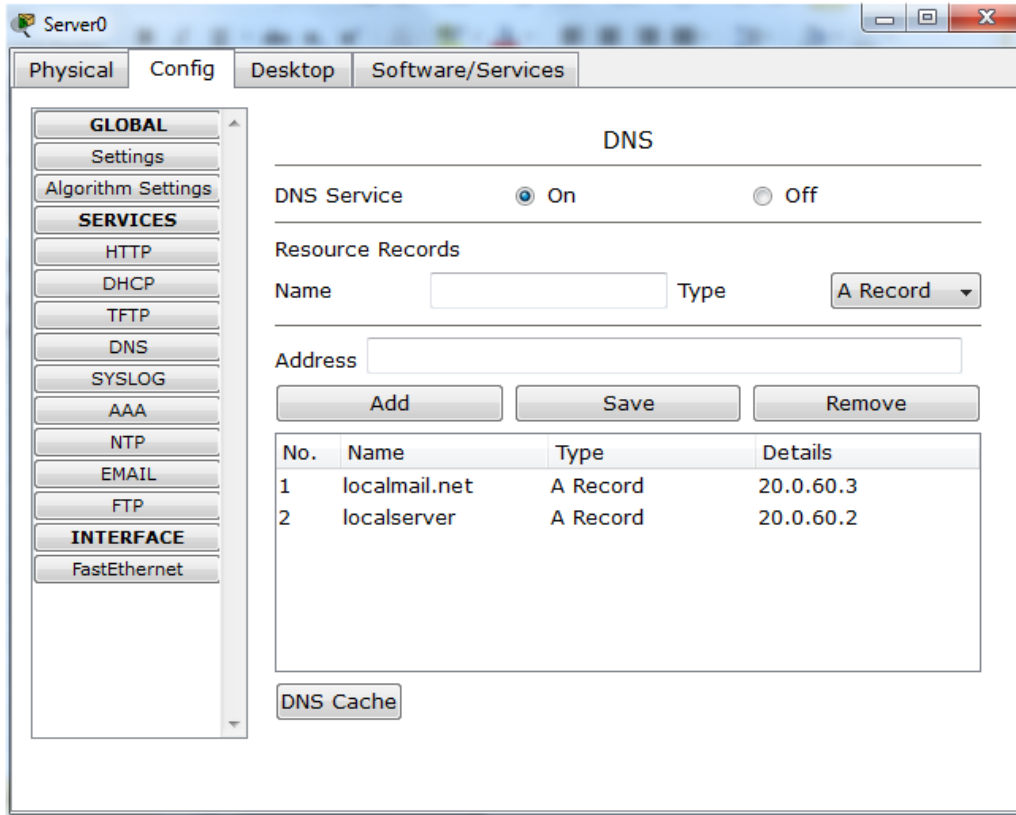
PC2	
IP	10.0.50.2
Subnet mask	255.255.255.0
Gateway	10.0.50.1

Server0	
IP	20.0.60.2
Subnet mask	255.255.255.0
Gateway	20.0.60.1

Server1	
IP	20.0.60.3
Subnet mask	255.255.255.0
Gateway	20.0.60.1

Server 0 → web server & DNS server



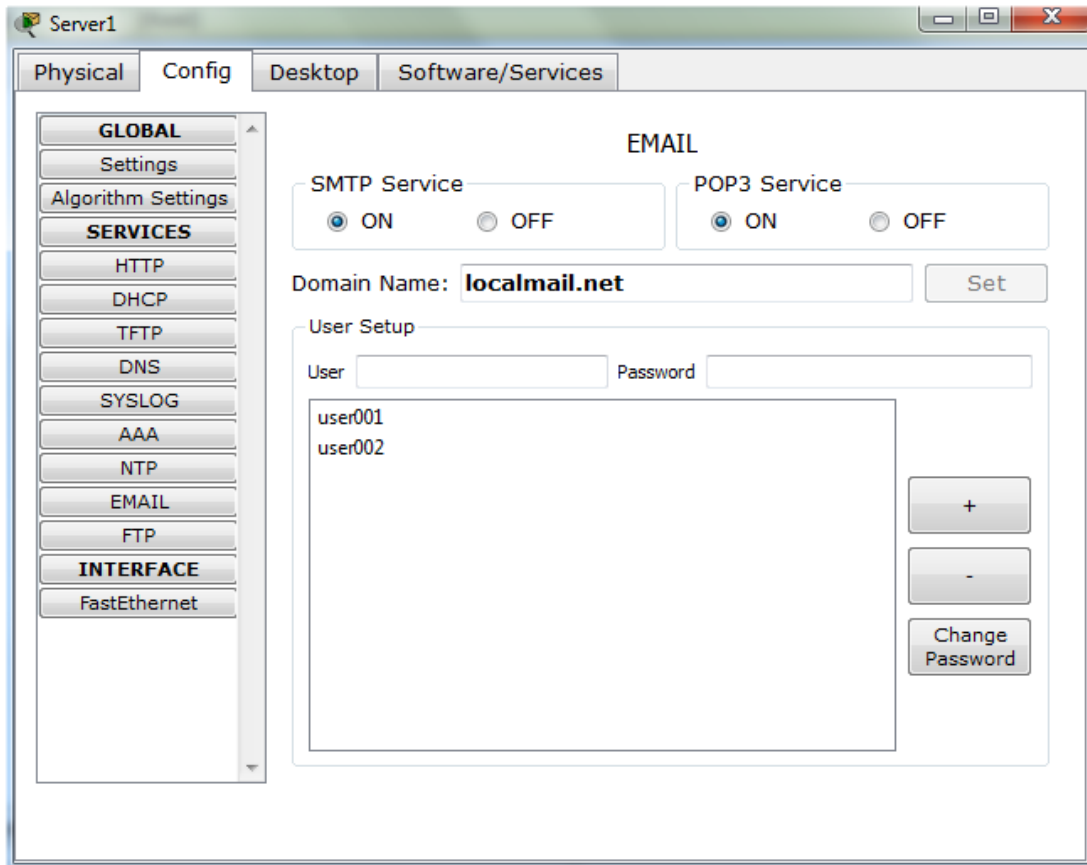


The screenshot shows the configuration window for Server0, specifically the DNS settings. The 'DNS Service' is set to 'On'. Under 'Resource Records', there are two entries:

No.	Name	Type	Details
1	localmail.net	A Record	20.0.60.3
2	localserver	A Record	20.0.60.2

Buttons for 'Add', 'Save', and 'Remove' are visible above the table. A 'DNS Cache' button is located at the bottom left of the main configuration area.

Server 1 → email server

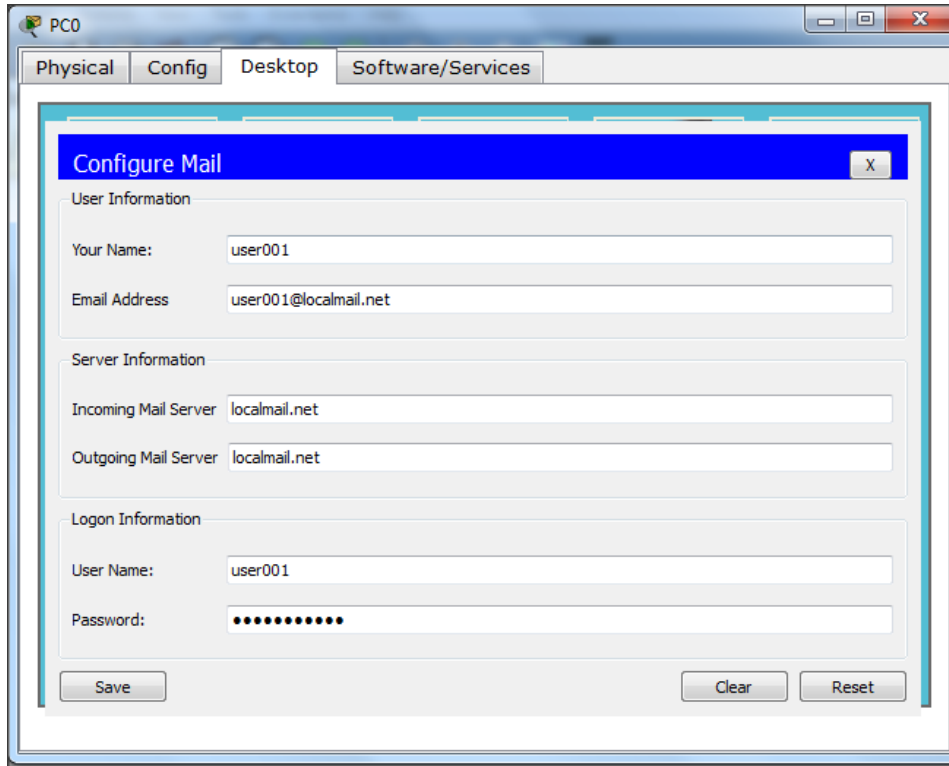


The screenshot shows the configuration window for Server1, specifically the EMAIL settings. The 'SMTP Service' and 'POP3 Service' are both set to 'ON'. The 'Domain Name' is 'localmail.net'. Under 'User Setup', there are two users listed:

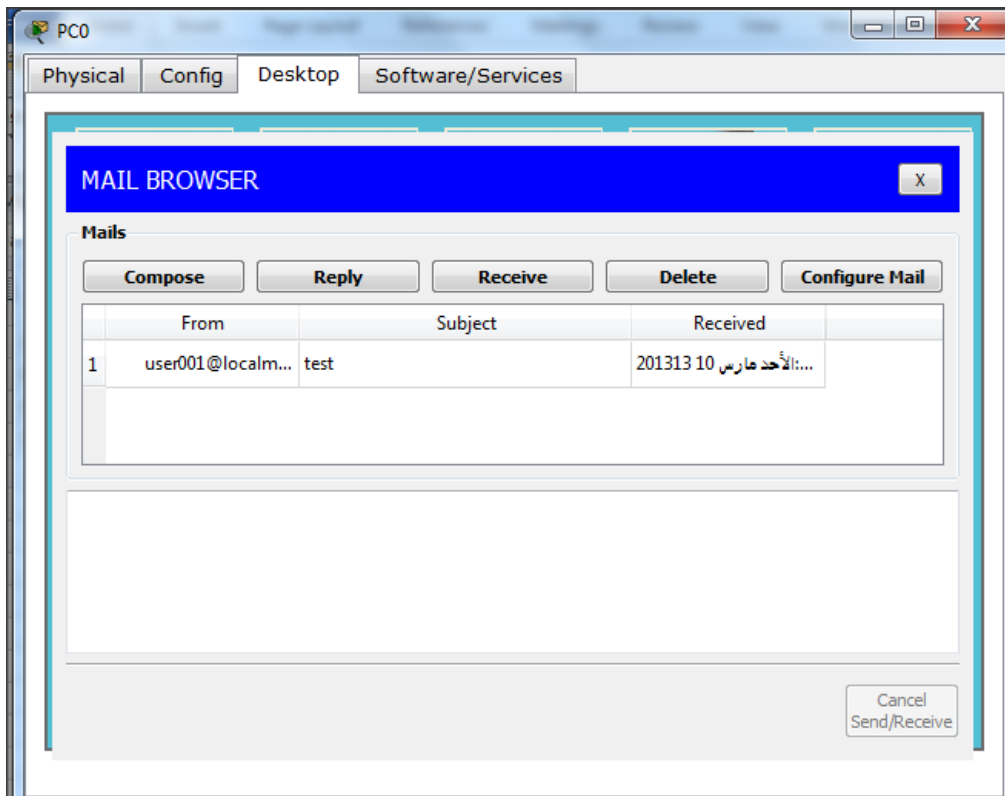
- user001
- user002

Buttons for '+', '-', and 'Change Password' are visible to the right of the user list.

PC0 : email client1



PC3 : email client2





Routers Basic Configuration

```
R en
o config t
u
t enable password EnableRouter0
e line vty 0 4
r password TelnetRouter0
  login
0 exit

interface fa0/0
ip address 10.0.10.1 255.255.255.0
no sh
exit

interface serial0/0/0
ip address 10.0.20.1 255.255.255.0
no sh
clock rate 2000000
exit

interface loopback 0
ip address 1.1.1.1 255.255.255.255
no sh
exit

router rip
network 10.0.10.0
network 10.0.20.0
network 1.1.1.1
end

copy running-config startup-config
```

```
R en
o config t
u
t enable password EnableRouter1
e line vty 0 4
r password TelnetRouter1
  login
1 exit

interface fa0/0
ip address 10.0.30.1 255.255.255.0
```



```
no sh
exit

interface serial0/0/0
ip address 10.0.20.2 255.255.255.0
no sh
exit

interface serial0/0/1
ip address 10.0.40.2 255.255.255.0
no sh
clock rate 2000000
exit

interface loopback 0
ip address 2.2.2.2 255.255.255.255
no sh
exit

router rip
network 10.0.20.0
network 10.0.30.0
network 10.0.40.0
network 2.2.2.2
end

copy running-config startup-config
```

```
R en
o config t
u
t enable password EnableRouter2
e line vty 0 4
r password TelnetRouter2
2 login
exit

interface fa0/0
ip address 10.0.50.1 255.255.255.0
no sh
exit

interface serial0/0/1
ip address 10.0.40.1 255.255.255.0
no sh
exit
```



```

interface loopback 0
ip address 3.3.3.3 255.255.255.255
no sh
exit

interface fa0/1
ip address 20.0.60.1 255.255.255.0
no sh
exit

router rip
network 10.0.50.0
network 10.0.40.0
network 3.3.3.3
network 20.0.60.0
end

copy running-config startup-config
  
```

2. Standard Access list

```

R en
o config t
u access-list 1 deny 10.0.10.0 0.0.0.255
t access-list 1 permit 10.0.30.0 0.0.0.255
e access-list 2 permit 20.0.60.0 0.0.0.255
r end
2
  config t
  interface serial0/0/1
  ip access-group 1 in
  ip access-group 2 out
  end
  
```

Testing	PC0	Ping 20.0.60.2
	PC1	Ping 20.0.60.2
	Server 0	Ping 10.0.10.2 Ping 10.0.30.2