

## **LAPORAN AKHIR PRAKTIKUM**

Mata Praktikum : JARINGAN KOMPUTER  
Kelas : 3IA11  
Praktikum ke- : 3  
Tanggal : 29/10/2024  
Materi : DNS DAN MAIL SERVER  
NPM : 51422161  
Nama : MUHAMMAD TARMIDZI BARIQ  
Ketua Asisten : RAFI  
Jumlah Lembar : 19



**LABORATORIUM TEKNIK INFORMATIKA**

**UNIVERSITAS GUNADARMA**

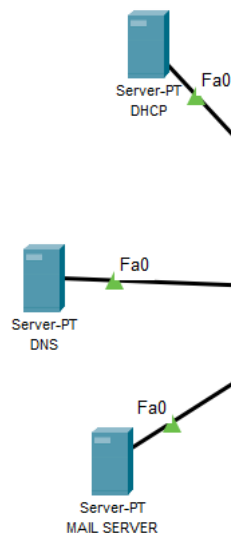
**2024**

Buatlah DNS dan Mail Server dengan syarat 3 Server, 2 Switch, dan 4 PC. User sesuai nama kalian dan Jelaskan langkah langkah nya juga.

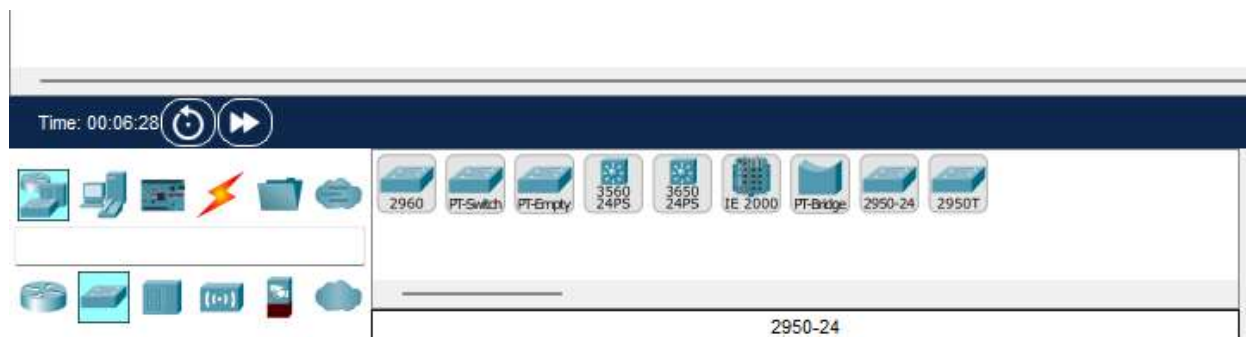
1. Pilih end device -> server -> buat tiga server



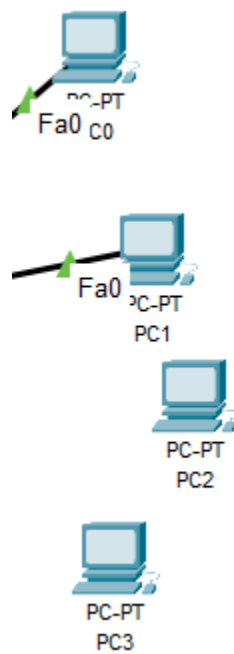
2. rename server dengan server : DHCP, DNS, MAIL SERVER



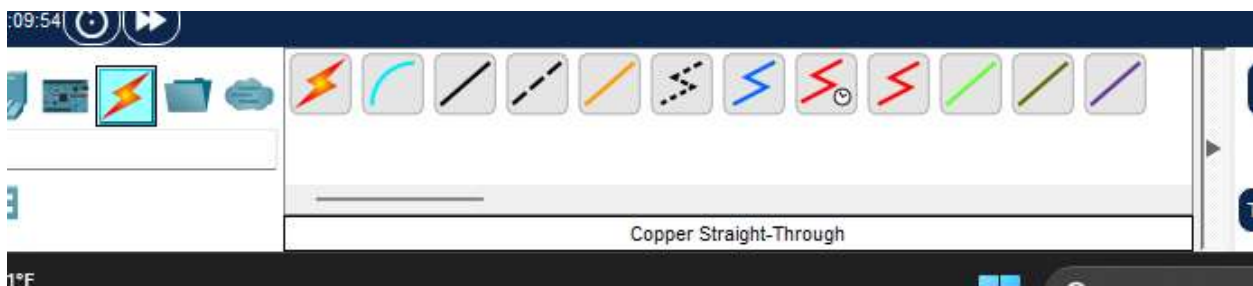
3. Masukkan dua Switch dengan cara: network devices -> switches -> 2950-24

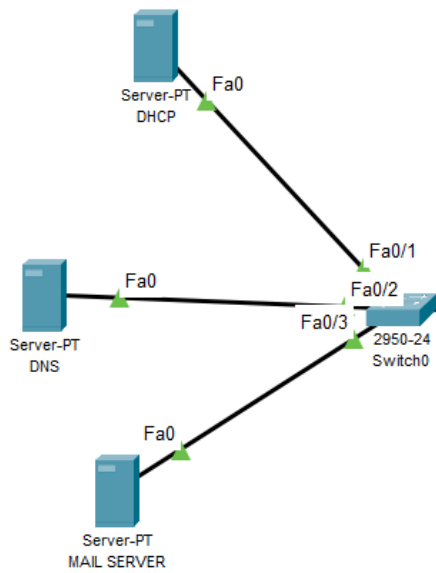


4. masukkan empat PC dengan cara: end devices ->PC

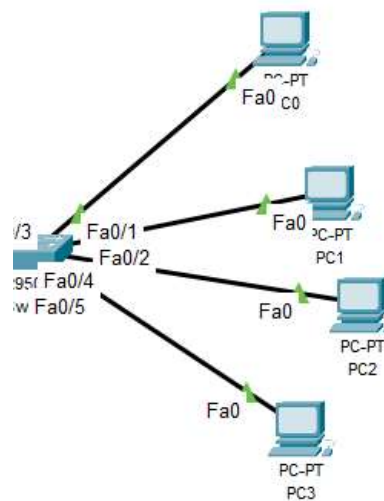
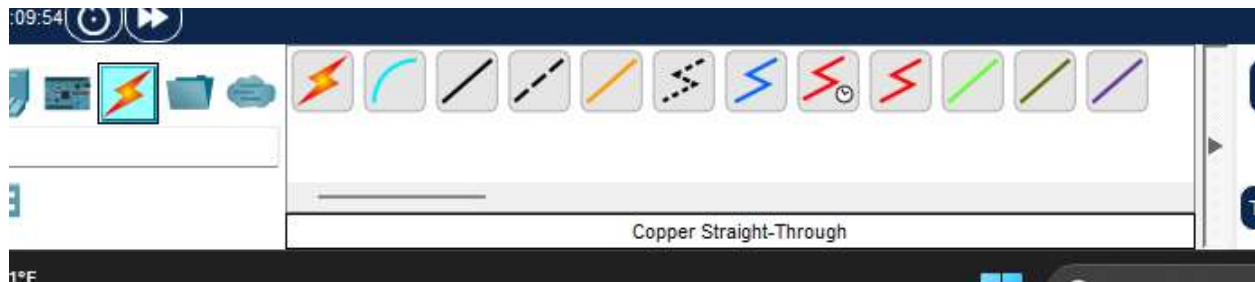


5. Hubungkan SERVER ke Switch dengan kabel Copper Straight Through





6. Hubungkan PC ke Switch dengan kabel Copper Straight Through



## 7. ke server DHCP -> DESKTOP -> IP CONFIGURATION

The screenshot shows the 'DHCP' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing 'Static' IP settings. The fields are filled with the following values:

- IPv4 Address: 192.168.1.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.1.1
- DNS Server: 0.0.0.0

The 'Pool Configuration' section is also visible, showing 'Static' settings with the following values:

- IPv4 Address: (empty)
- Link Local Address: FE80::254:FE50:AC00
- Default Gateway: (empty)
- DNS Server: (empty)

At the bottom, there is a section for '802.1X' settings, including 'Use 802.1X Security' (unchecked), 'Authentication' (none), 'Username' (empty), and 'Password' (empty).

## 8. masih di DHCP, ke services -> DHCP -> Masukkan default, dns, maximum number of users, -> SAVE

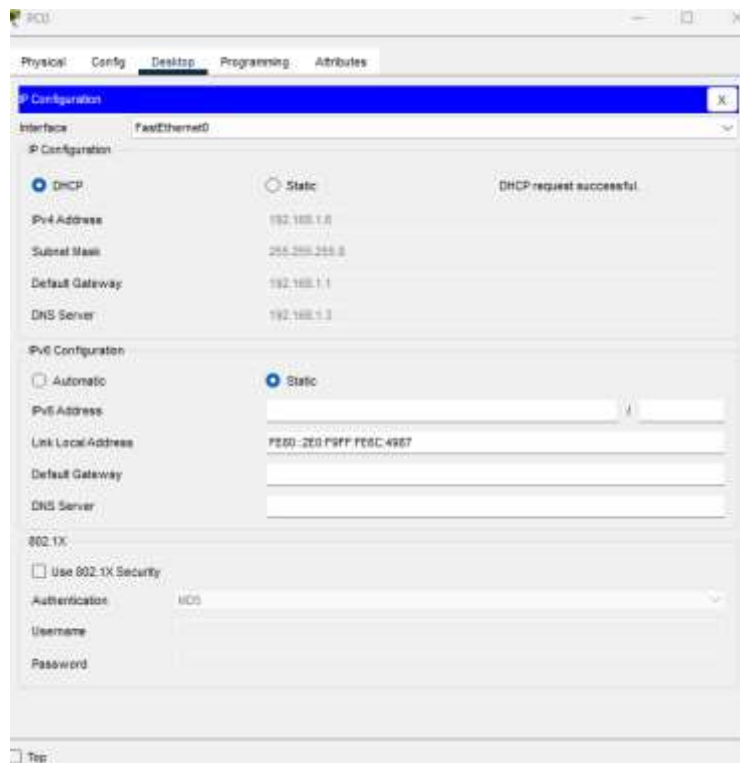
The screenshot shows the 'DHCP' configuration window with the 'Services' tab selected. The 'DHCP' service is enabled. The configuration fields are filled with the following values:

- Interface: FastEthernet0
- Service: On
- Pool Name: serverPool
- Default Gateway: 192.168.1.1
- DNS Server: 192.168.1.3
- Start IP Address: 192.168.1.5
- Subnet Mask: 255.255.255.0
- Maximum Number of Users: 251
- TFTP Server: 0.0.0.0
- WLC Address: 0.0.0.0

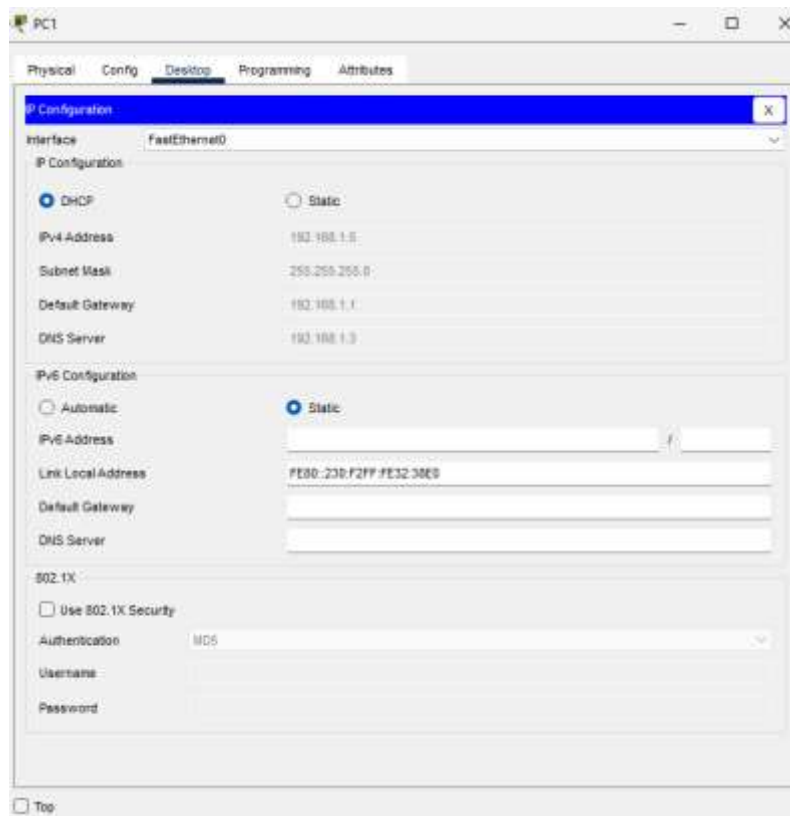
Below the configuration fields, there are buttons for 'Add', 'Save', and 'Remove'. At the bottom, there is a table showing the configuration for the 'serverPool'.

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.168.1.1	192.168.1.3	192.168.1.5	255.255.255.0	251	0.0.0.0	0.0.0.0

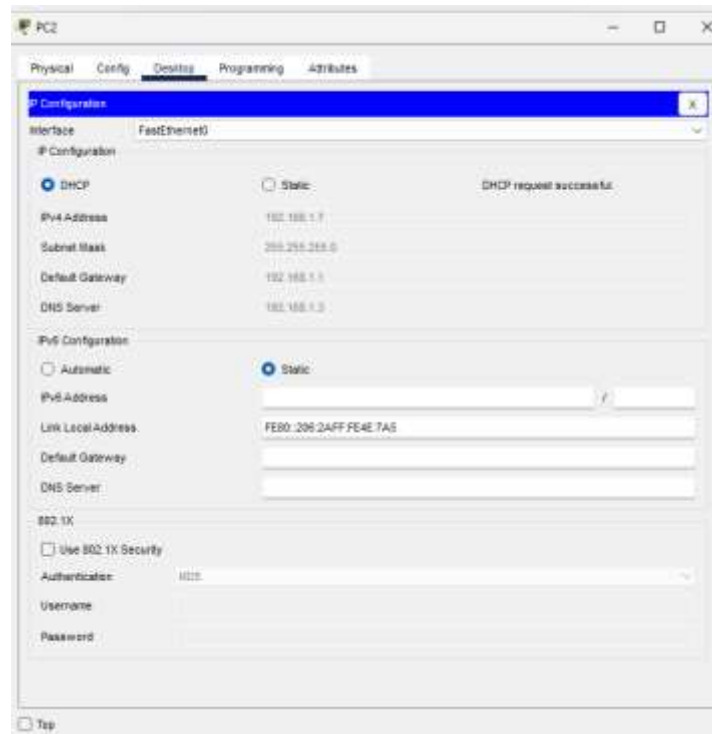
9. PC0 -> DESKTOP -> IP CONFIGURATION -> pilih DHCP



10. PC1 -> DESKTOP -> IP CONFIGURATION -> pilih DHCP



11. PC2 -> DESKTOP -> IP CONFIGURATION -> pilih DHCP



12. PC3 -> DESKTOP -> IP CONFIGURATION -> pilih DHCP



### 13. KE SERVER DNS -> DESKOP -> IP CONFIGURATION

The screenshot shows the 'DNS' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing settings for IPv4 and IPv6. The IPv4 configuration is set to 'Static' with the following values: IPv4 Address: 192.168.1.3, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.1.1, and DNS Server: 8.8.8.8. The IPv6 configuration is also set to 'Static' with the following values: IPv6 Address: (empty), Link Local Address: FE80::261:C7FF:FECD:7265, Default Gateway: (empty), and DNS Server: (empty). The '802.1X' section is also visible, with 'Use 802.1X Security' unchecked, 'Authentication' set to '802.1X', and 'Username' and 'Password' fields empty.

**IP Configuration**

☐ DHCP ☒ Static

IPv4 Address: 192.168.1.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.1.1

DNS Server: 8.8.8.8

**IPv6 Configuration**

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::261:C7FF:FECD:7265

Default Gateway:

DNS Server:

**802.1X**

☐ Use 802.1X Security

Authentication: 802.1X

Username:

Password:

### 14. masih di DNS ke service -> DNS -> DNS Service ON -> Masukkan Address gunadarma.com

The screenshot shows the 'DNS' configuration window with the 'Services' tab selected. The 'DNS Service' is turned 'On'. The 'Resource Records' section is visible, showing a table with one record for 'gunadarma.com' with an 'A Record' type and IP address '192.168.1.3'. The 'DNS Cache' button is at the bottom.

**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:

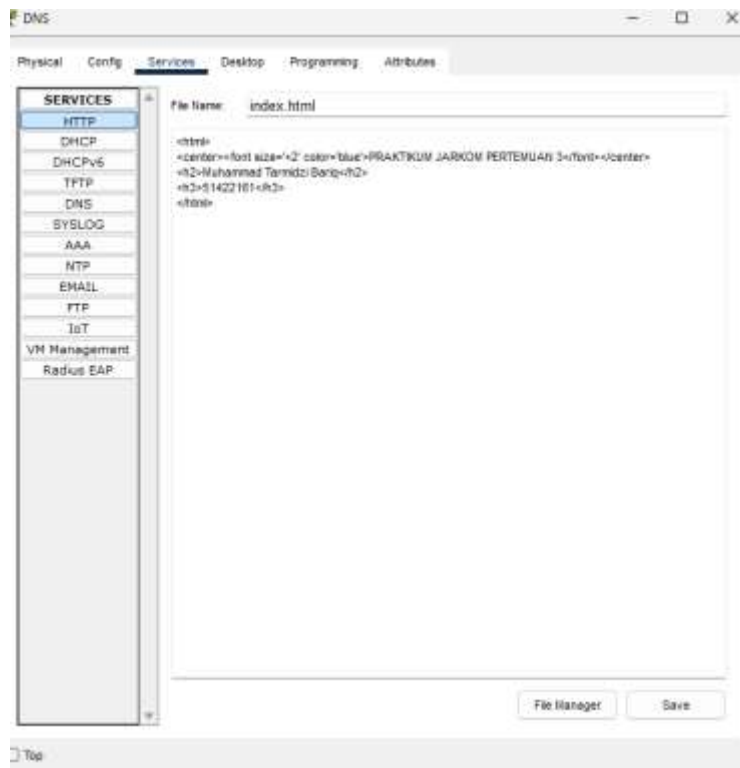
Add Save Remove

No.	Name	Type	Detail
0	gunadarma.com	A Record	192.168.1.3

DNS Cache



15. ke HTTP -> INDEX.HTML -> Masukkan kode HTML seperti berikut



16. Coba test ke PC0/PC1/ PC2/PC3 -> DESKTOP -> WEB BROWSER -> MASUKKAN URL <http://gunadarma.com>

TEST PC0



## TEST PC 1



## TEST PC2



## TEST PC3



17. ke server MAIL SERVER -> DESKTOP -> IP CONFIGURATION

The screenshot shows the 'MAIL SERVER' application window with the 'Desktop' tab selected. The 'IP Configuration' section is active, displaying settings for both IPv4 and IPv6. The IPv4 configuration is set to 'Static' with an IP address of 192.168.1.4, a subnet mask of 255.255.255.0, a default gateway of 192.168.1.1, and a DNS server of 8.8.8.8. The IPv6 configuration is also set to 'Static' with a link-local address of FE80:290:29FF:FE79:CA83. The '802.1X' section is visible at the bottom, with 'Use 802.1X Security' unchecked and 'Authentication' set to 'RADIUS'.

IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IPv4 Address	192.168.1.4
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	8.8.8.8
IPv6 Configuration	
<input type="radio"/> Automatic <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80:290:29FF:FE79:CA83
Default Gateway	
DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	RADIUS
Username	
Password	

18. KE SERVICES -> EMAIL -> masukkan user -> masukkan password 123

The screenshot shows the 'MAIL SERVER' application window with the 'Services' tab selected. The 'EMAIL' section is active, displaying settings for SMTP and POP3 services. Both services are set to 'ON'. The 'Domain Name' is set to 'gunadarma.com'. The 'User Setup' section shows a user named 'tarmidzi bariq' with a password of '123'. A '+' button is visible at the bottom right of the user setup area.

SERVICES	
HTTP	
DHCP	
DHCPv6	
TFTP	
DNS	
SYSLOG	
AAA	
NTP	
EMAIL	
FTP	
IoT	
VM Management	
Radius EAP	

### EMAIL

**SMTP Service**  
☒ ON ☐ OFF

**POP3 Service**  
☒ ON ☐ OFF

**Domain Name:**

**User Setup**  

**User**

**Password**

19. ke PC0 -> email -> configure mail -> masukkan form

PC0

Physical Config **Desktop** Programming Attributes

**Configure Mail** [X]

User Information

Your Name:

Email Address:

Server Information

Incoming Mail Server:

Outgoing Mail Server:

Login Information

User Name:

Password:

20. PC1 -> email -> configure mail -> masukkan form

PC1

Physical Config **Desktop** Programming Attributes

**Configure Mail** [X]

User Information

Your Name:

Email Address:

Server Information

Incoming Mail Server:

Outgoing Mail Server:

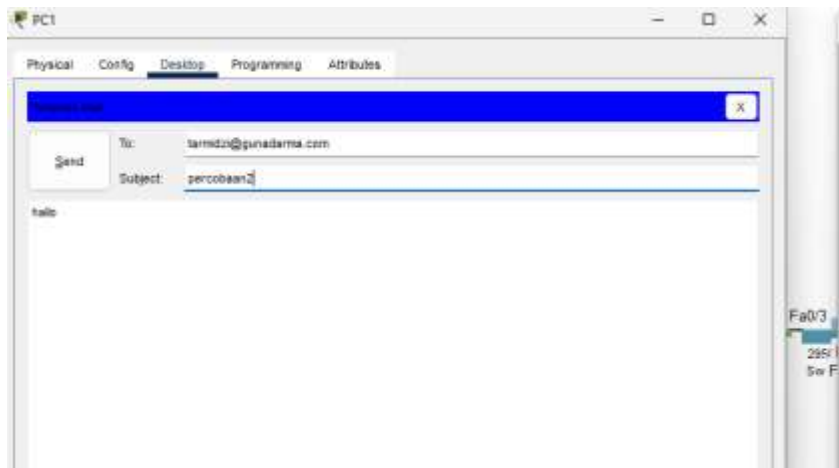
Login Information

User Name:

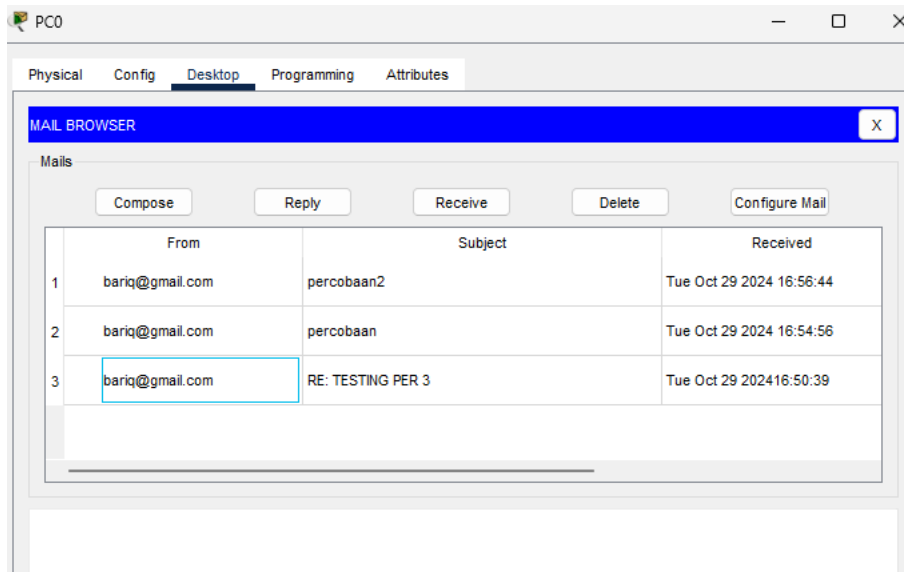
Password:

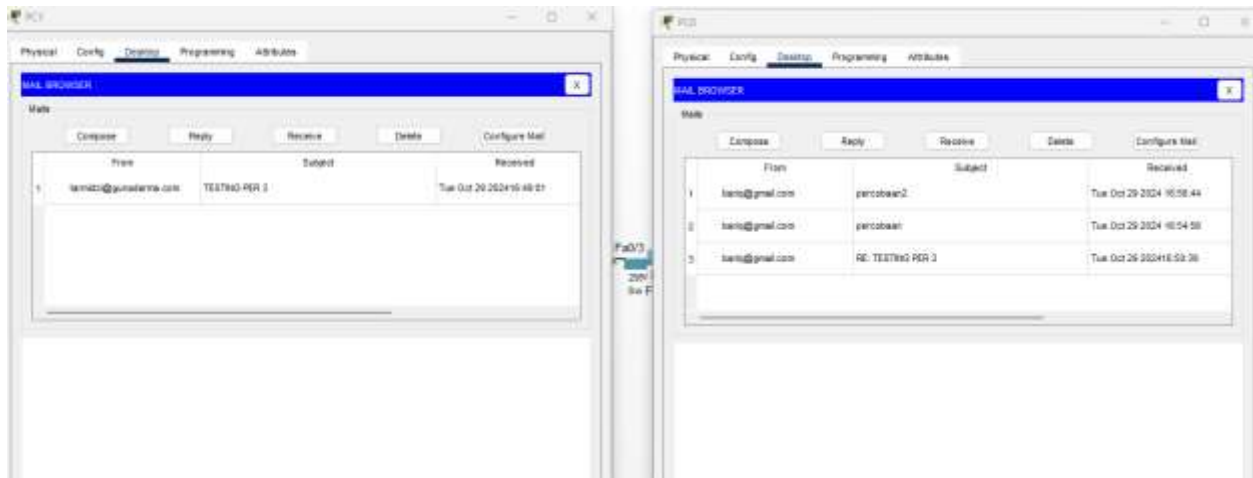
21. lakukan testing PC1 dan PC0

Lakukan compose PC1 -> SEND



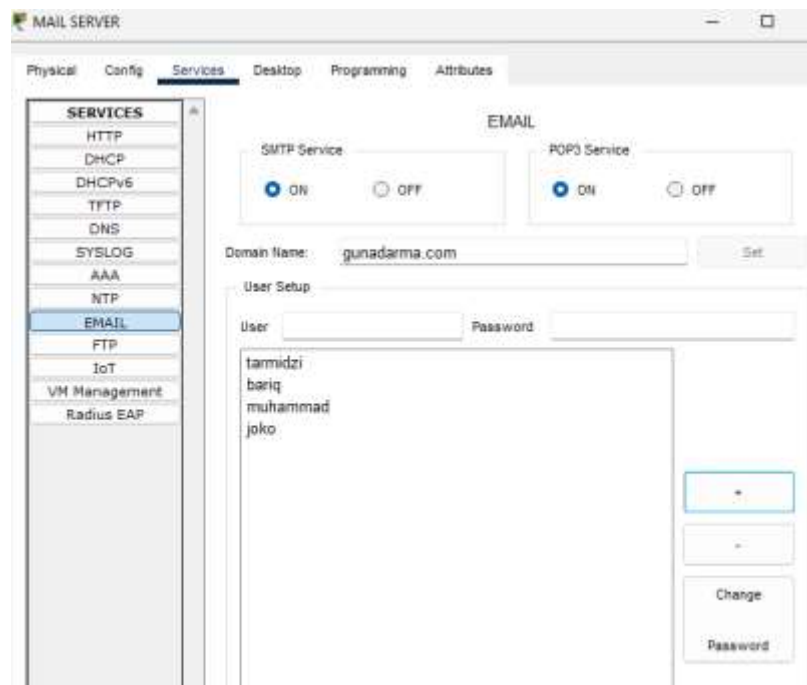
KLIK RECEIVE DI PC0





Percobaan untuk PC2 dan PC3

KE server mail server -> services -> email -> tambahkan user dan password



Ke PC2 -> desktop -> email -> configure email-> masukkan form seperti ini -> save

PC2

Physical Config **Desktop** Programming Attributes

**Configure Mail** X

User Information

Your Name: muhammad

Email Address: muhammad@gunadarma.com

Server Information

Incoming Mail Server: 192.168.1.4

Outgoing Mail Server: 192.168.1.4

Login Information

User Name: muhammad

Password: \*\*\*

Save Remove Clear Reset

Ke PC3 -> desktop -> email -> configure email-> masukkan form seperti ini -> save

PC3

Physical Config **Desktop** Programming Attributes

**Configure Mail** X

User Information

Your Name: joko

Email Address: joko@gunadarma.com

Server Information

Incoming Mail Server: 192.168.1.4

Outgoing Mail Server: 192.168.1.4

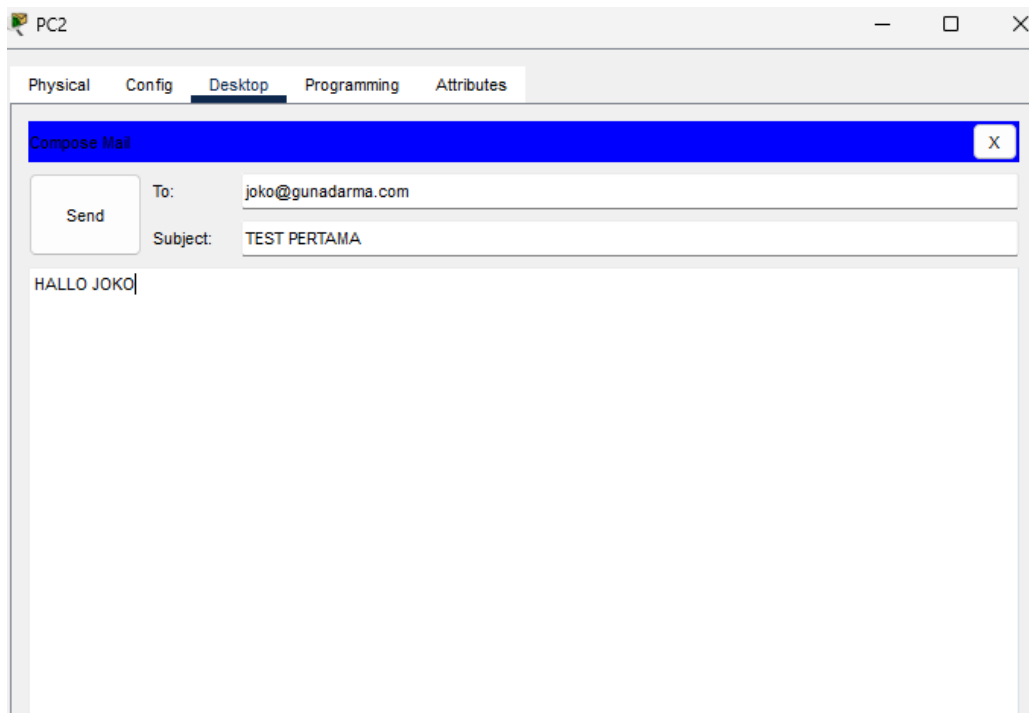
Login Information

User Name: joko

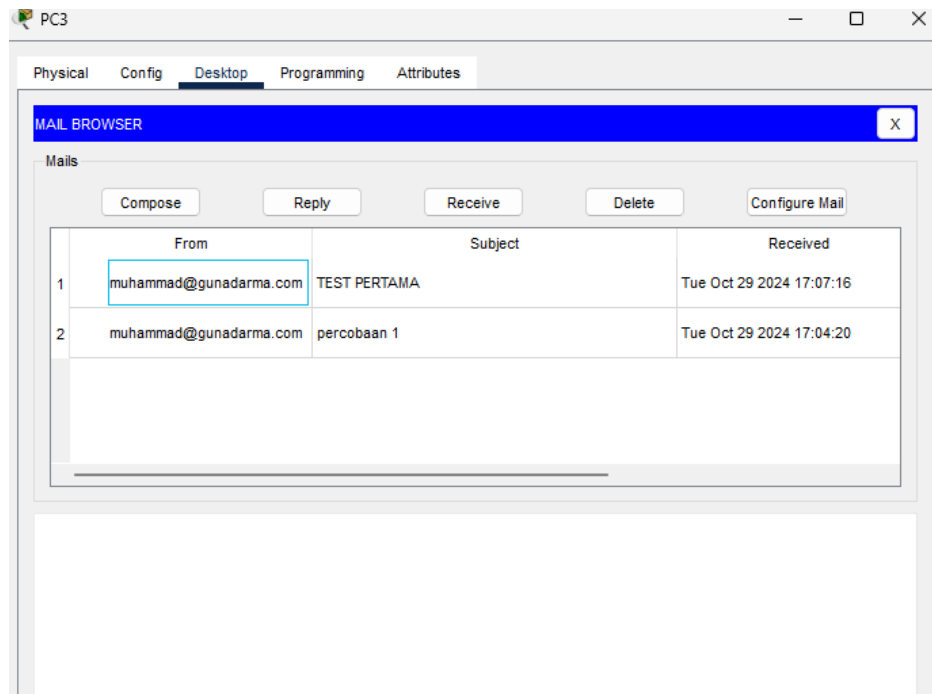
Password: \*\*\*

Save Remove Clear Reset

Ke PC2 -> DESKTOP -> EMAIL -> COMPOSE MAIL -> MASUKKAN PESAN KE JOKO

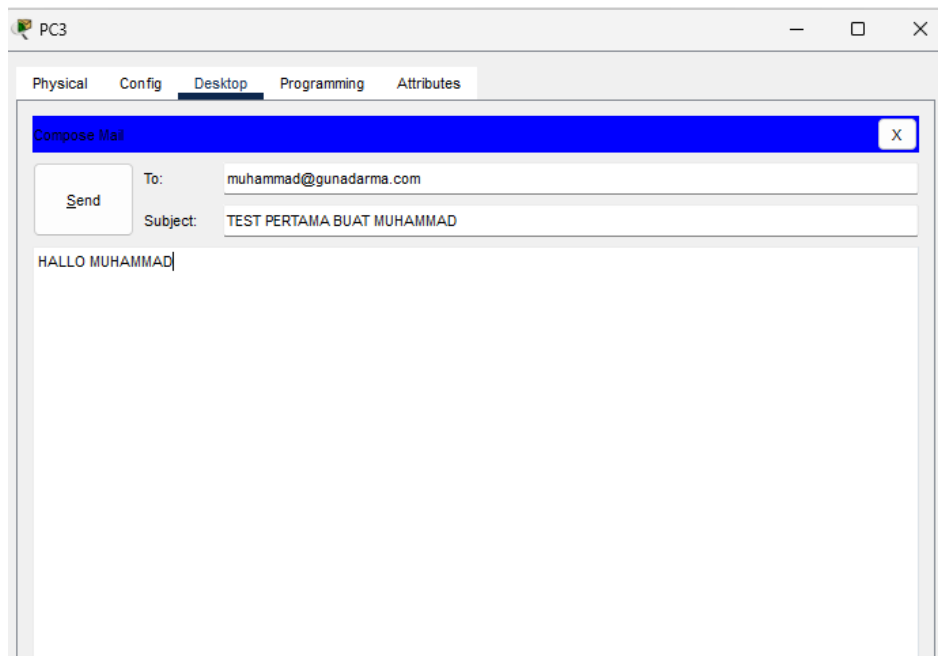


PC3 -> DESKTOP -> EMAIL -> MAIL BROWSER -> RECEIVE

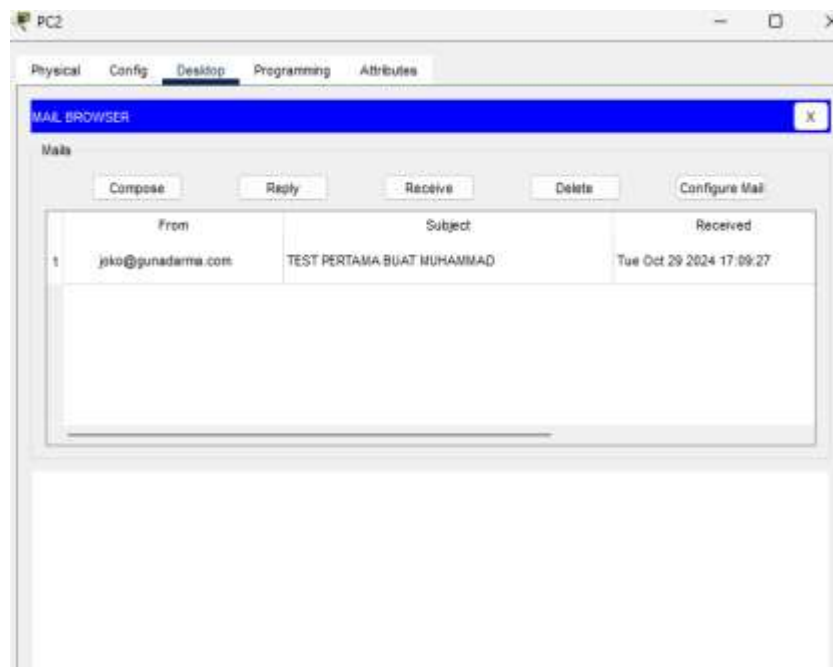


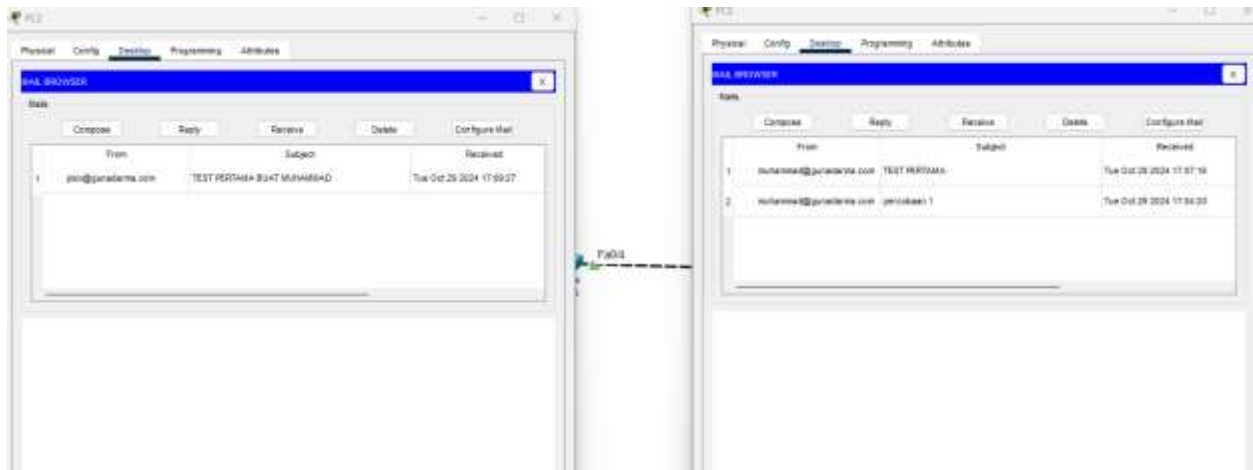


Ke PC3 -> DESKTOP -> EMAIL -> COMPOSE MAIL -> MASUKKAN PESAN KE JOKO

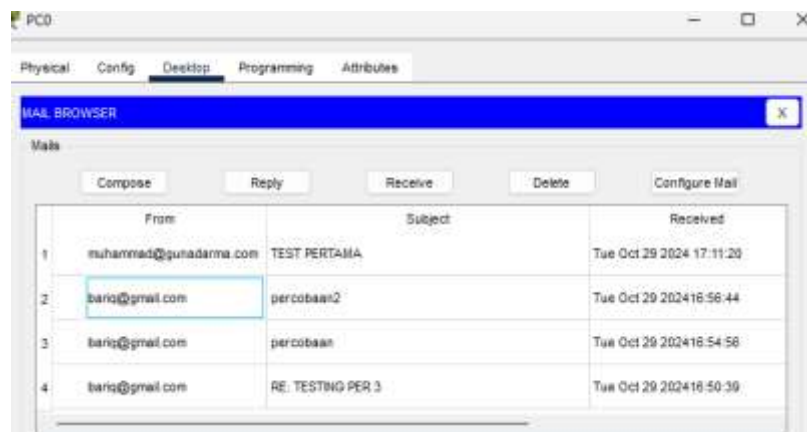
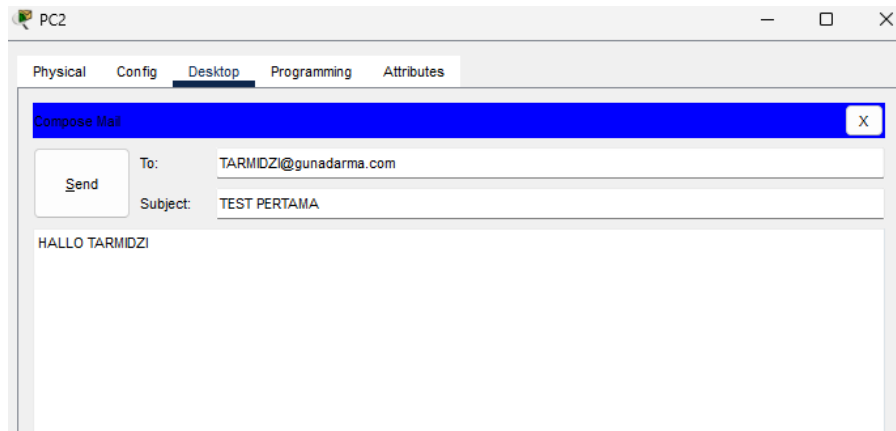


PC2 -> DESKTOP -> EMAIL -> MAIL BROWSER -> RECEIVE

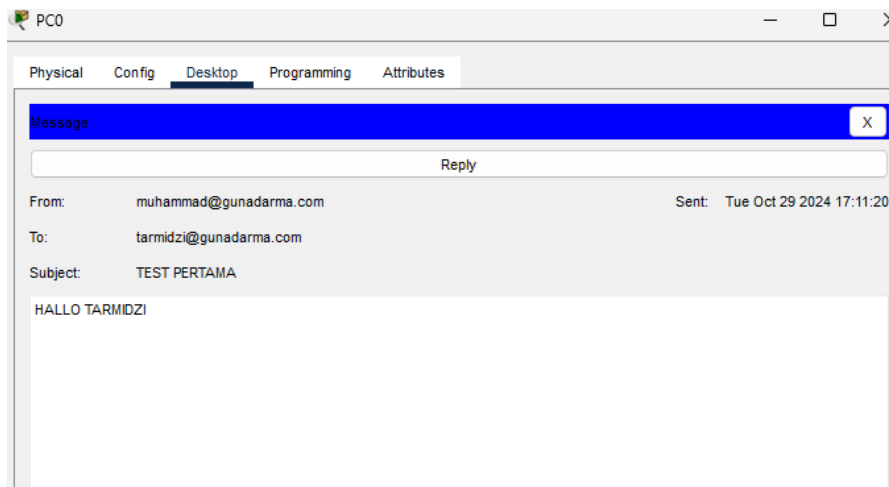




## TEST MAIL PC2 KE PC 0



Klik reply



Hasil reply

