PROYEK AKHIR
JARINGAN KOMPUTER

Nomor Kelompok	**15**
Anggota Kelompok	**Calvin Wirathama Katoroy / 2306242395**
	Jesie Tenardi / 2306162002
	Fadhlureza Sebastian / 2306161971
Kode Aslab	**EF**
Tipe Soal	**2**
Link Penting	**ProyekAkhir_EF_15** **https://github.com/calvinkatoroy/ProyekAkhir_EF_15**

I. PENDAHULUAN

University of Network merupakan sebuah universitas di Indonesia yang sudah memiliki 3 cabang di berbagai lokasi, yaitu:

- **Papua,**
- **Medan,**
- **Bandung.**

Papua merupakan pusat dari **University of Network**.
University of Network memiliki 4 divisi di setiap cabangnya, yaitu **Administrator**, **Finance**, **Telco**, dan **Engineer**.

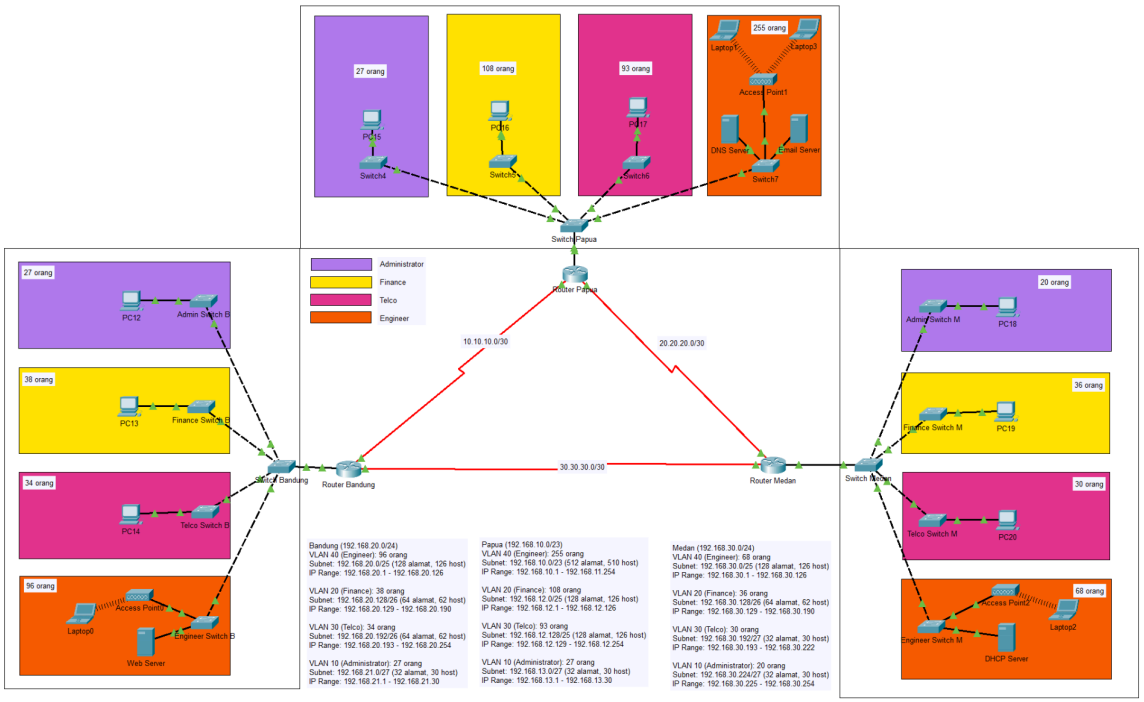
Persyaratan:
Universitas sangat mengutamakan kinerja terbaik, redundansi, skalabilitas, dan ketersediaan dalam infrastruktur jaringannya. Universitas telah membebaskan pengalamatan IP pada jaringannya, maka berikut adalah spesifikasi alamat IP yang saya petakan:

- WLAN : 10.10.0.0/16
- LAN : 192.168.0.0/16
- DMZ :

Persyaratan Teknis:

II.

1. Pembuatan Topologi
   Screenshot:

-	Logical
-	
-	Physical

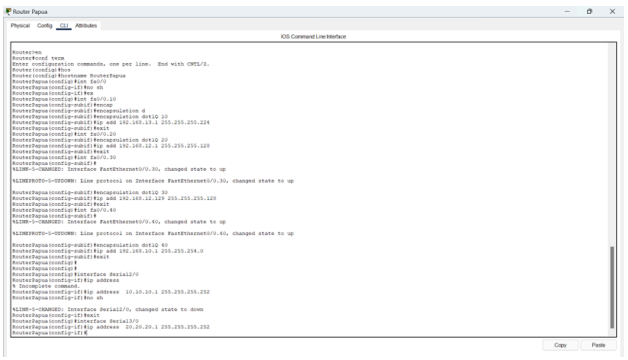
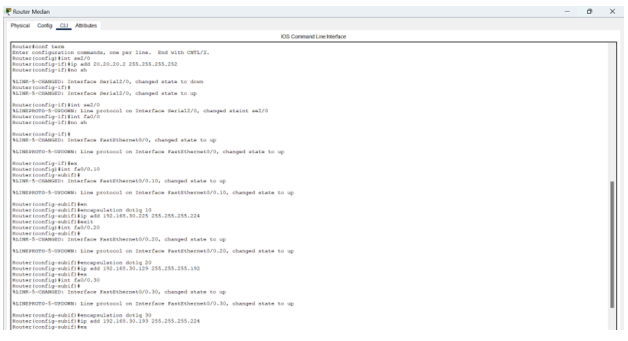
2. Tabel Pengalamatan IP

Cabang	Divisi	Jumlah Pegawai	Subnet	Net. Add.	FUA	LUA	Broad. Add.
Papua	Engineer	255	/23	10.0.0.0	10.0.0.1	10.0.0.254	10.0.0.255
	Finance	108	/25	10.0.2.0	10.0.2.1	10.0.2.126	10.0.2.127
	Telco	93	/25	10.0.2.128	10.0.2.129	10.0.2.254	10.0.2.255
	Admin.	27	/27	10.0.3.0	10.0.3.1	10.0.3.30	10.0.3.31
Bandung	Engineer	96	/25	172.16.0.0	172.16.0.1	172.16.0.126	172.16.0.127
	Finance	38	/26	172.16.0.128	172.16.0.129	172.16.0.190	172.16.0.191
	Telco	34	/26	172.16.0.192	172.16.0.193	172.16.0.254	172.16.0.255
	Admin.	27	/27	172.16.1.0	172.16.1.1	172.16.1.30	172.16.1.31

Medan	Engineer	68	/25	192.168.1.0	192.168.1.1	192.168.1.126	192.168.1.127
	Finance	36	/26	192.168.1.128	192.168.1.129	192.168.1.190	192.168.1.191
	Telco	30	/27	192.168.1.192	192.168.1.193	192.168.1.222	192.168.1.223
	Admin	20	/27	192.168.1.224	192.168.1.225	192.168.1.254	192.168.1.255

3. Konfigurasi IP Address pada Router

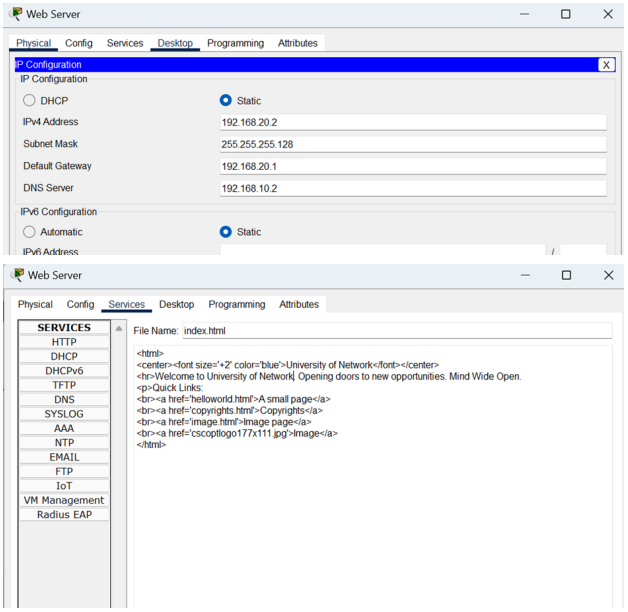
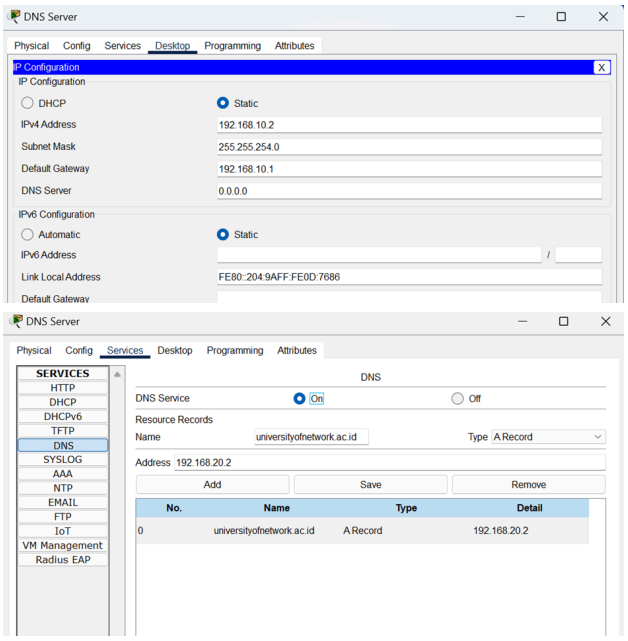
   Screenshot:

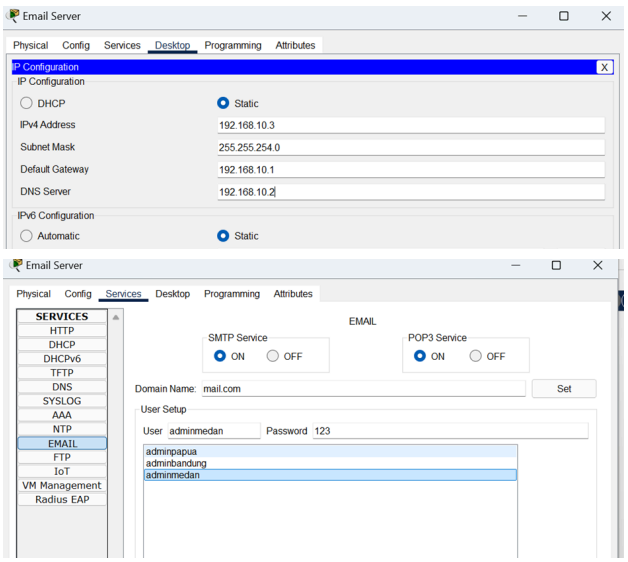
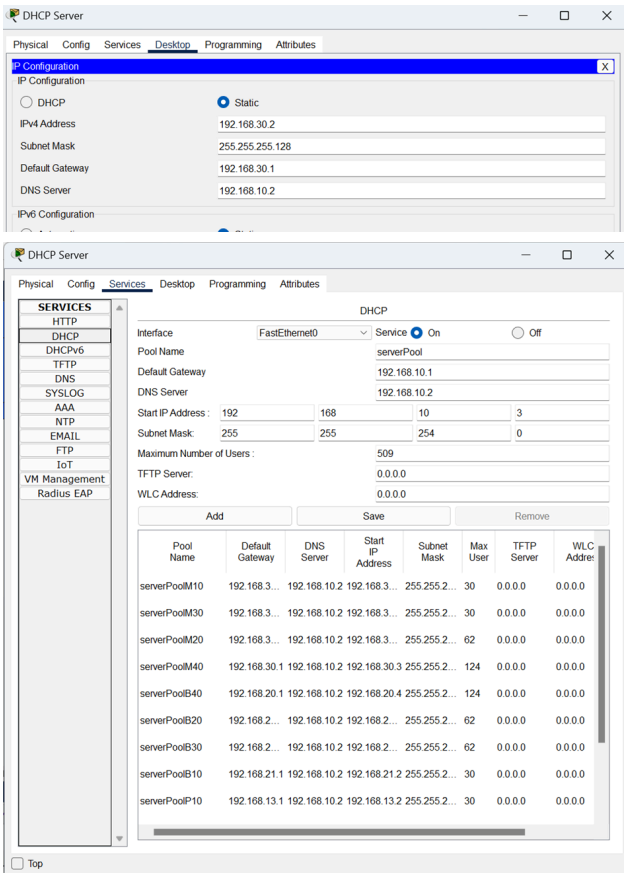
Device	Screenshot
Router Papua	
Router Bandung	
Router Medan	

3. Konfigurasi pada Server

   Screenshot:

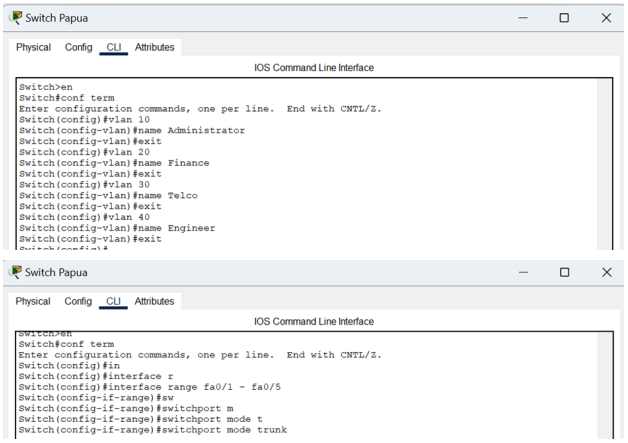
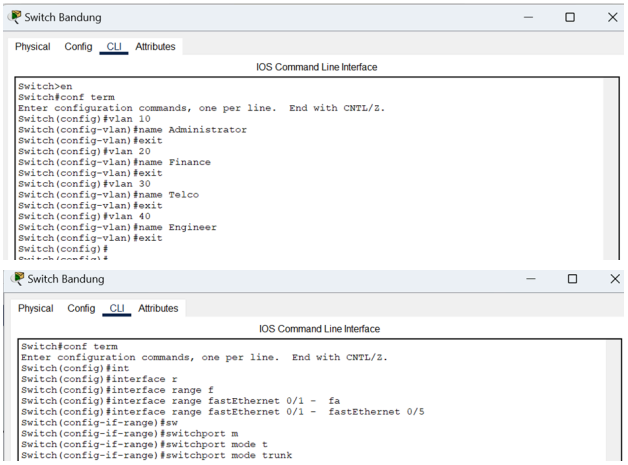
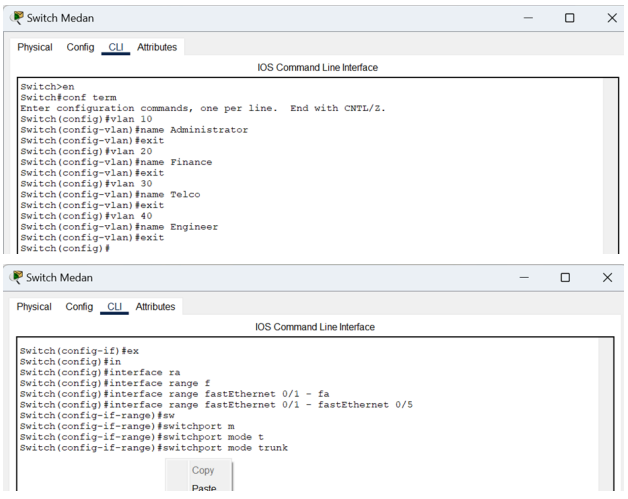
Device	Screenshot
Web Server	
DNS Server	

Email Server	
DHCP Server	

4. Konfigurasi pada Switch

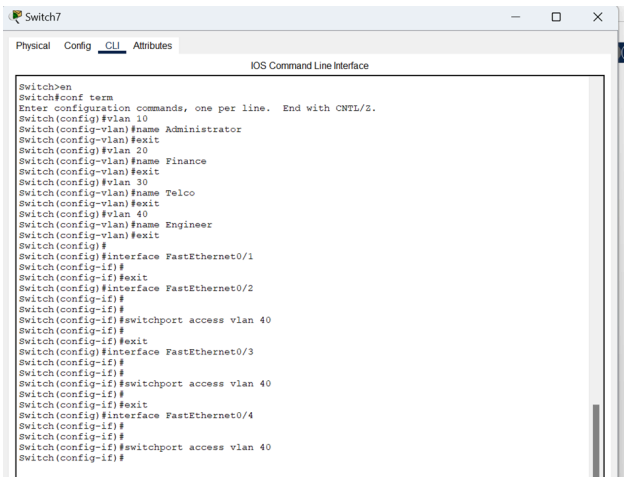
Screenshot:

Device	Screenshot

Switch Papua	
Switch Bandung	
Switch Medan	

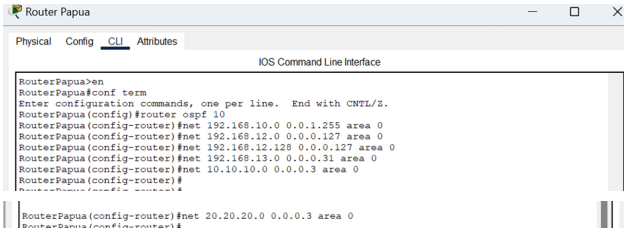
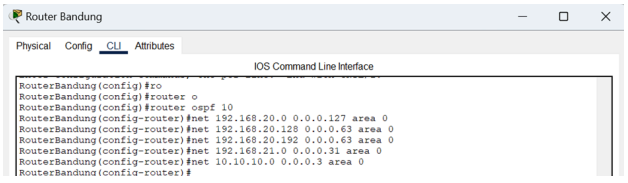
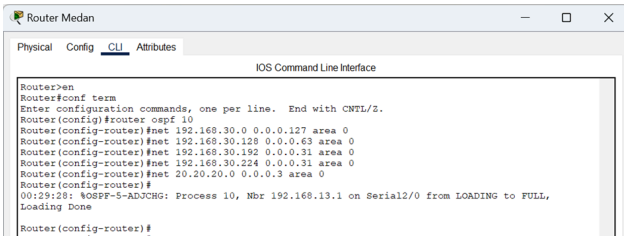
5. Konfigurasi Switchport Mode Access VLAN

Device	Screenshot

Switch	

6. Konfigurasi Routing OSPF pada Router

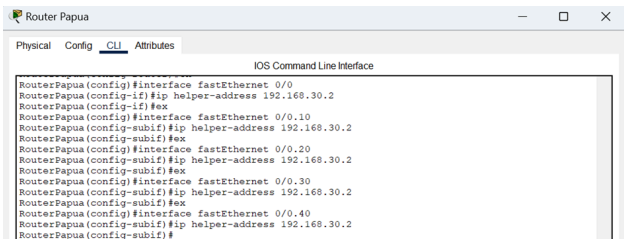
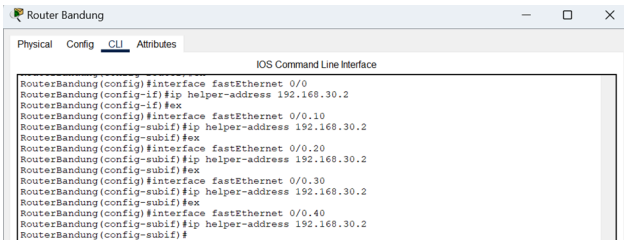
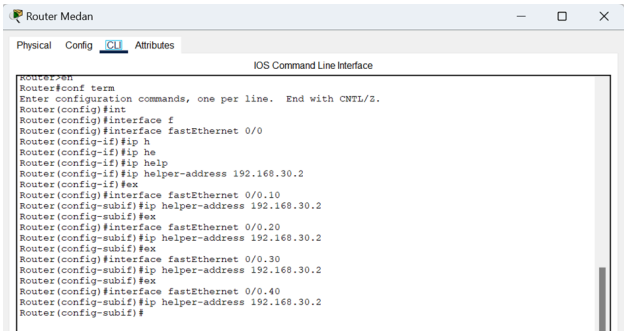
   Screenshot:

Device	Screenshot
Router Papua	
Router Bandung	
Router Medan	

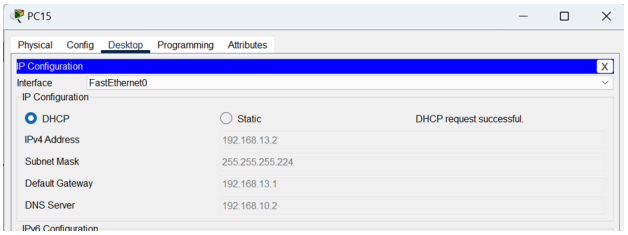
7. Konfigurasi IP Helper Address pada Router

   Screenshot:

Device	Screenshot

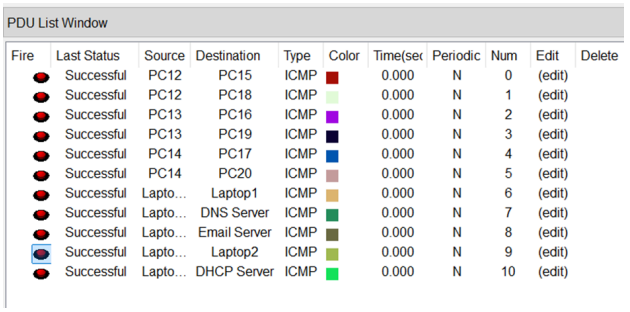
Router Papua	
Router Bandung	
Router Medan	

8. Meminta IP Address DHCP pada End Device

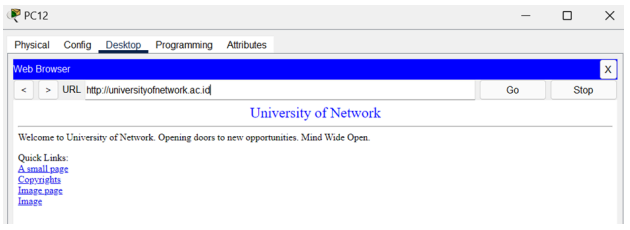
Device	Screenshot
End Device	

9. Tes Ping antar PC dan End Device

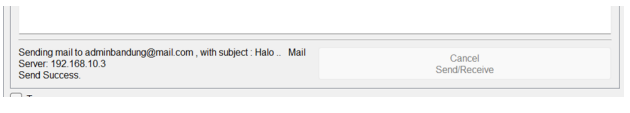
Device	Screenshot

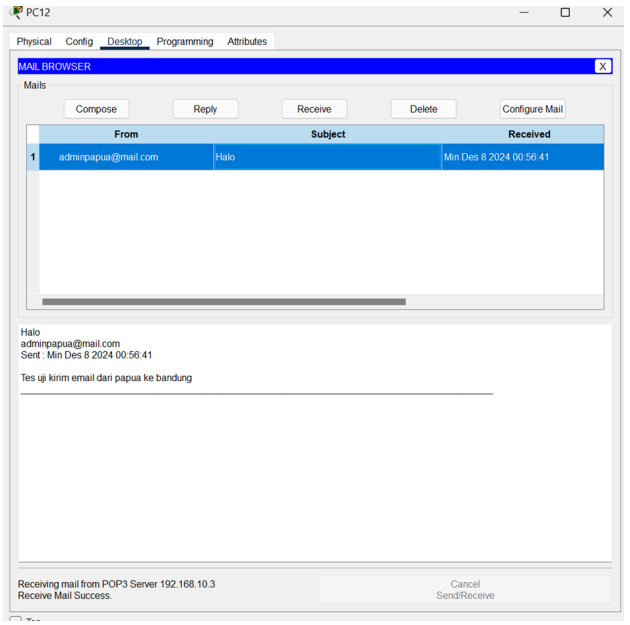
End Device	

10. Uji Akses Web Perusahaan dengan Domain DNS

Device	Screenshot
PC	

11. Uji Kirim E-Mail antar PC Admin

Device	Screenshot
PC Pengirim	

PC Penerima	

PC12
Physical
Config
Desktop
Programming
Attributes
MAIL BROWSER
Mails
Compose
Reply
Receive
Delete
Configure Mail
From
Subject
Received
1
adminpapua@mail.com
Halo
Min Des 8 2024 00:56:41
Halo
adminpapua@mail.com
Sent : Min Des 8 2024 00:56:41
Tes uji kirim email dari papua ke bandung
Receiving mail from POP3 Server 192.168.10.3
Receive Mail Success.
Cancel
Send/Receive