

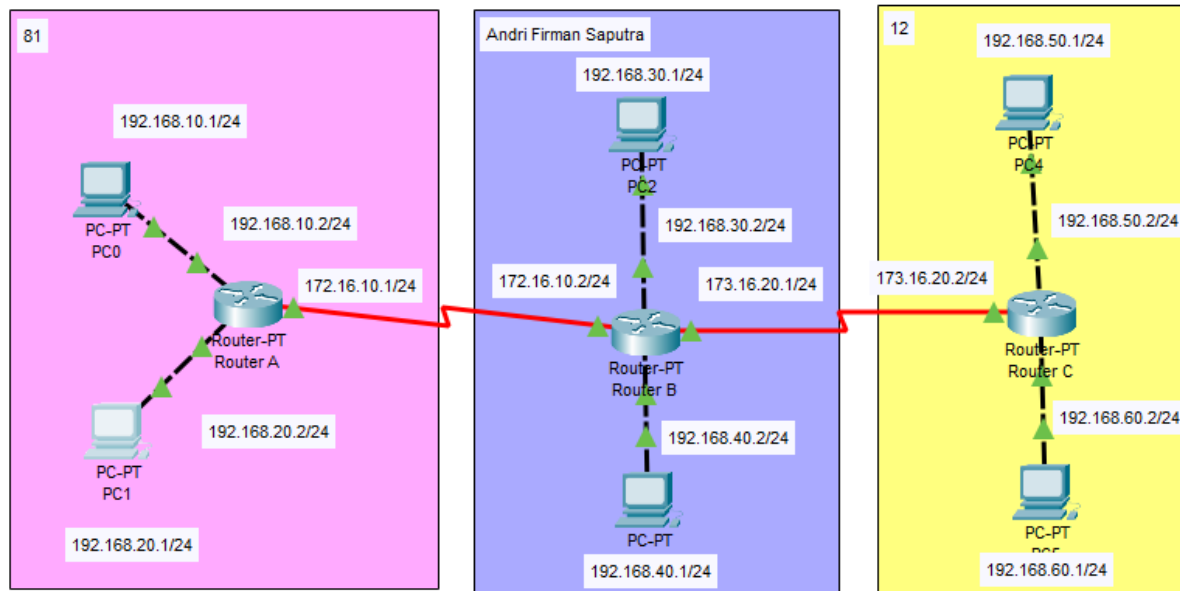
Nama : Andri Firman Saputra

NIM : 201011402125

No. Reg : 1502830101-81

## Tugas Mandiri – Merancang Jaringan Antar lokasi dengan router

### 1. Rancangan Jaringan





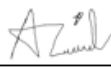
### 2. Jadwal Pengumpulan Data

modul	submodul	contact person	date/place	time	check
Accounting	General Ledger	Bpk. Joso Margono Phone: 081331245753, ext. 223	01 Juli 2022 / Sepada Bogor (User's Office)	9:00 AM	
	Cash Flow	Ibu. Milea Kusmawati Phone: 081345552123, ext. 224	01 Juli 2022 / Sepada Jakarta (User's Office)	12:00 PM	
	Worksheet	Ibu. Yuli Rahimah Phone: 083812323234, ext. 226	01 Juli 2022 / Sepada BSD (User's Office)	1:00 PM	
Human Resource	Payroll	Bpk. Azriel Sumarjadi Phone: 089733123456, 230	02 Juli 2022 / Sepada Bogor (User's Office)	9:00 AM	
	Employee	Bpk. Dirja Sitompul Phone: 081222432334, ext. 227	02 Juli 2022 / Sepada Jakarta (User's Office)	12:00 PM	
Inventory	Stock Opname	Bpk. Hardana Uwais Phone: 089875368684, ext. 228	03 Juli 2022 / Sepada BSD (User's Office)	9:00 AM	
	Goods Process	Bpk. Ganda Mansur Phone: 081277324234, ext. 229	03 Juli 2022 / Sepada Bogor (User's Office)	12:00 PM	

### 3. Survei Lapangan

Nama	Perancangan jaringan di Lab Sepeda Bogor, Sepeda BSD, dan Sepeda Jakarta dengan Router		
Versi	4.0		
Lokasi	Sepeda Bogor, Sepeda BSD, Sepeda Jakarta	Skala	5 Kilometer
Hari/Tanggal	01 Juli 2022	Jam	09:00:00 - Selesai
Tim Survey	Aisyah, Aria, Bani, Maskur, Dani		
Keterangan	Siap mensurvei lokasi untuk menganalisa kebutuhan jaringan pada perusahaan hotel Sepeda Bogor, Sepeda BSD, Sepeda Jakarta		

### 4. User Requirement

User Requirement		
	Tanggal/Date: 03 Juli 2022	
<b>Data Perusahaan/Company's Information</b>	<b>Data User/User's Information</b>	
Nama Perusahaan/Company's Name :	Nama Perusahaan/Company's Name :	
PT Sepada	PT RisingSun IT	
Alamat Perusahaan/Company's Address :	Alamat User/User's Address :	
Jl. Grand Kahuripan, Desa. Klapa Nunggal, Kec. Klapa Nunggal, Kab. Bogo	Jl. Mutiara 4, desa. Curug, kec. Curug, kab. Bogor	
No. Telp/Telp Number: 089630223411	No. Telp/Telp Number: 087808675313	
No. Fax/Fax Number: (021) 2358-8300	No. Fax/Fax Number: (021) 800-301-1795	
E-mail: ptsepada@gmail.com	E-mail: risingsunit100@gmail.com	
Nama Perwakilan/Representative's Name: Andre Farjri	Nama Perwakilan/Representative's Name : Azriel FachrulRezy	
Tanda Tangan/Signature	Tanda Tangan/Signature	
		
Nama Proyek/Project's Name:	Membangun jaringan agar 3 hotel terhubung antar kota	
Manager Proyek/Project Manager:	Bpk. Azriel FachrulRezy	Tanda Tangan/Signature
		
Nama Modul/Modul's Name:	Hardware	
Nama Sub-Modul/Sub-Modul's Name:	1. Komputer 2. Router 3. Perangkat Jaringan 4. Perangkat Pendukung	

## 5. Unit

Unit	Requirement	Specifications	Price	User
Spada Jakarta				Pegawai Spada
1	Router	AC1200 Wireless	8.000.000	
2	Kabel LAN	cat5	200.000	
2	PC	LG	4.000.000	
Spada BSD				
1	Router	AC1200 Wireless	350.000	
2	Kabel LAN	cat5	200.000	
2	PC	LG	4.000.000	
Spada Bogor				
1	Router	AC1200 Wireless	800.000	
2	Kabel LAN	cat5	200.000	
2	PC	LG	4.000.000	

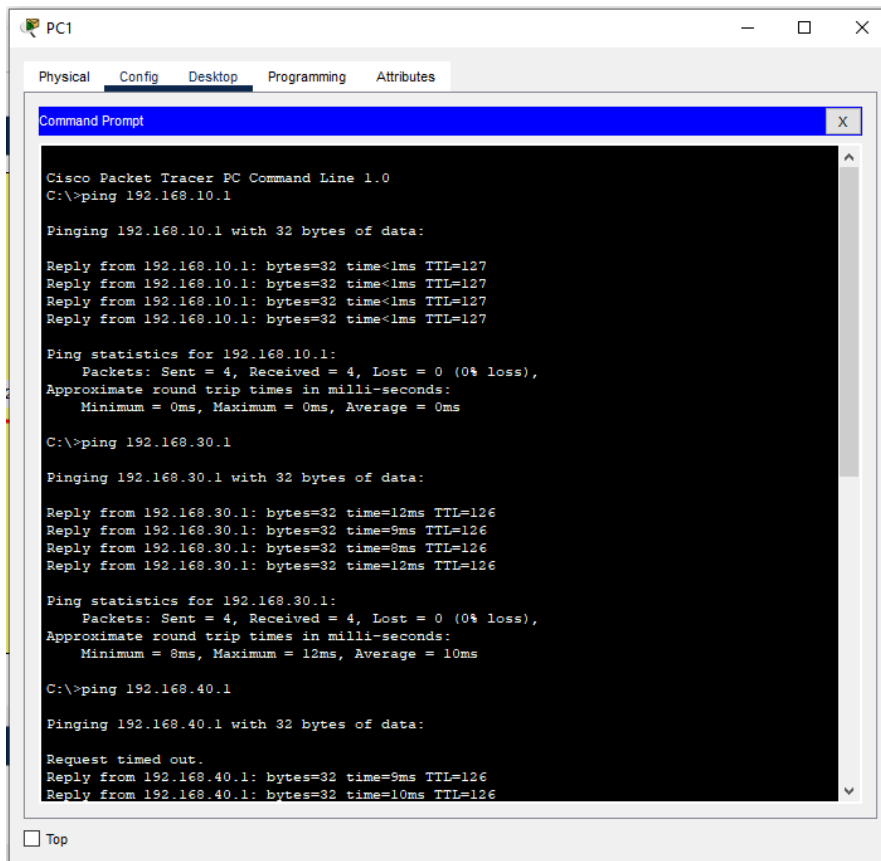
## 6. AKP

No	Perangkat Keras	Volume	Spesifikasi	Keterangan
1	Router	3 bh	AC1200 Wireless Router Four 5-dBi amplified antennas Beamforming optimizes signal Dual band – Smart signal switching Broadband account synchronization	Setiap ruang terkoneksi dengan 1 buah router
2	PC	6 bh	LED LG 22M45H menjadi salah satu seri Monitor dari LG yang menyajikan tampilan dan gambar yang mumpuni. Seri LG LED 22 in 22M45 ini memiliki tampilan layar dengan dimensi 21.5 inch yang bisa menyajikan gambar dengan tampilan Full HD 1080p atau 1920 x 1080 pixel yang cukup mumpuni. Di seri ini sudah ada Mega Contrast Ratio dengan adanya response time yang memiliki detail yang cukup mumpuni. Monitor LED ini sudah dilengkapi dengan Dual Smart Solution yang bisa memudahkan untuk multi tasking.	Setiap ruang dipasang PC yang disesuaikan dengan jumlah user
3	Kabel LAN	6 bh	Kabel Cross-Over RJ-45 Cat5	Setiap ruang dipasang kabel yang disesuaikan dengan jumlah pc
4	Kabel LAN	2 bh	Kabel Serial DCE serial-2 dan serial-3	Setiap ruang dipasang kabel yang disesuaikan dengan jumlah router

## 7. RAB

No	Pekerjaan/Item	Vol	Satuan	Harga Satuan	Harga Total
<b>A</b>	<b>Upah Kerja</b>				
1	Survey Lokasi	3	OH	Rp 300.000	Rp 900.000
2	Desain Jaringan	3	OH	Rp 400.000	Rp 1.200.000
3	Pemasangan Kabel	3	OH	Rp 200.000	Rp 600.000
4	Setup Jaringan Klien	3	OH	Rp 200.000	Rp 600.000
5	Konfigurasi router	3	OH	Rp 200.000	Rp 600.000
Sub-Total Upah Kerja					<b>Rp 3.900.000</b>
<b>B</b>	<b>Material</b>				
1	PC	6	Unit	Rp 4.000.000	Rp 24.000.000
2	Kabel LAN Cross-Over	6	Unit	Rp 100.000	Rp 600.000
3	Kabel LAN DCE	2	Unit	Rp 100.000	Rp 200.000
4	Router	3	Unit	Rp 350.000	Rp 1.050.000
Sub-Total Material					<b>Rp 25.850.000</b>
Total Harga					<b>Rp 29.750.000</b>

## 8. Tes Ping



PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.1

Pinging 192.168.10.1 with 32 bytes of data:

Reply from 192.168.10.1: bytes=32 time<1ms TTL=127
Reply from 192.168.10.1: bytes=32 time<1ms TTL=127
Reply from 192.168.10.1: bytes=32 time<1ms TTL=127
Reply from 192.168.10.1: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.30.1

Pinging 192.168.30.1 with 32 bytes of data:

Reply from 192.168.30.1: bytes=32 time=12ms TTL=126
Reply from 192.168.30.1: bytes=32 time=9ms TTL=126
Reply from 192.168.30.1: bytes=32 time=8ms TTL=126
Reply from 192.168.30.1: bytes=32 time=12ms TTL=126

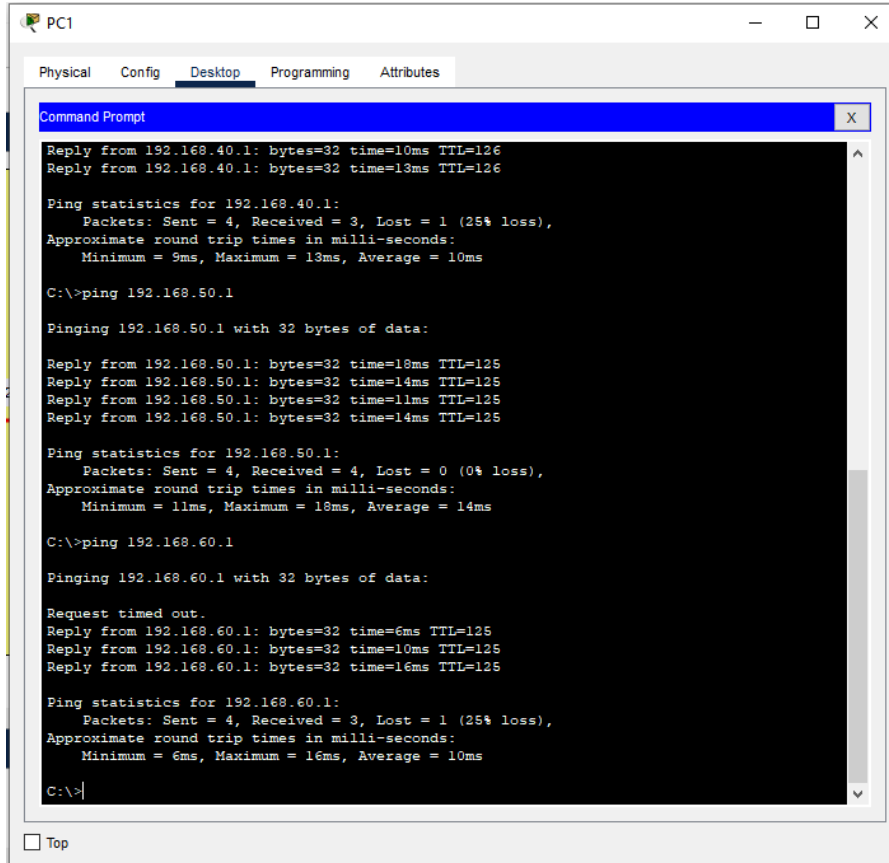
Ping statistics for 192.168.30.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 12ms, Average = 10ms

C:\>ping 192.168.40.1

Pinging 192.168.40.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.40.1: bytes=32 time=9ms TTL=126
Reply from 192.168.40.1: bytes=32 time=10ms TTL=126
```

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PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Reply from 192.168.40.1: bytes=32 time=10ms TTL=126
Reply from 192.168.40.1: bytes=32 time=13ms TTL=126

Ping statistics for 192.168.40.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 9ms, Maximum = 13ms, Average = 10ms

C:\>ping 192.168.50.1

Pinging 192.168.50.1 with 32 bytes of data:

Reply from 192.168.50.1: bytes=32 time=18ms TTL=125
Reply from 192.168.50.1: bytes=32 time=14ms TTL=125
Reply from 192.168.50.1: bytes=32 time=11ms TTL=125
Reply from 192.168.50.1: bytes=32 time=14ms TTL=125

Ping statistics for 192.168.50.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 11ms, Maximum = 18ms, Average = 14ms

C:\>ping 192.168.60.1

Pinging 192.168.60.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.60.1: bytes=32 time=6ms TTL=125
Reply from 192.168.60.1: bytes=32 time=10ms TTL=125
Reply from 192.168.60.1: bytes=32 time=16ms TTL=125

Ping statistics for 192.168.60.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms, Maximum = 16ms, Average = 10ms

C:\>
```

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