# **LAPORAN PRAKTIKUM JARINGAN KOMPUTER**

# **MODUL 6: SPANNING TREE PROTOCOL**



# **DISUSUN OLEH:**

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NIM : L200190237

# **TEKNIK INFORMATIKA**

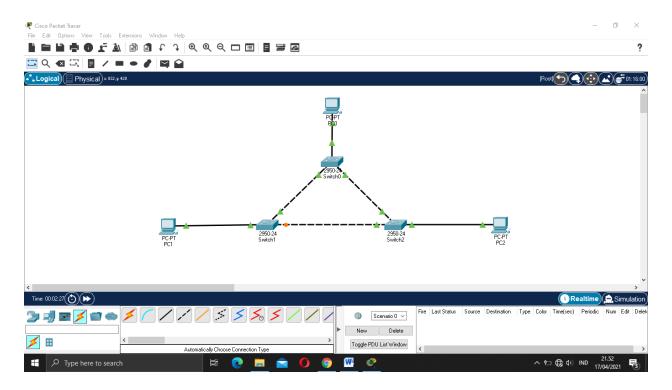
**FAKULTAS KOMUNIKASI DAN INFORMATIKA** 

UNIVERSITAS MUHAMMADIYAH SURAKARTA

#### **KEGIATAN PRAKTIKUM**

#### **KEGIATAN 1. TOPOLOGI 1**

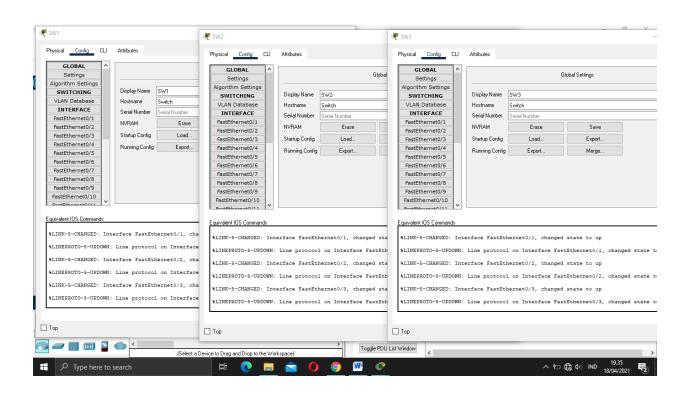
**TUGAS 1A: Membuat topologi** 

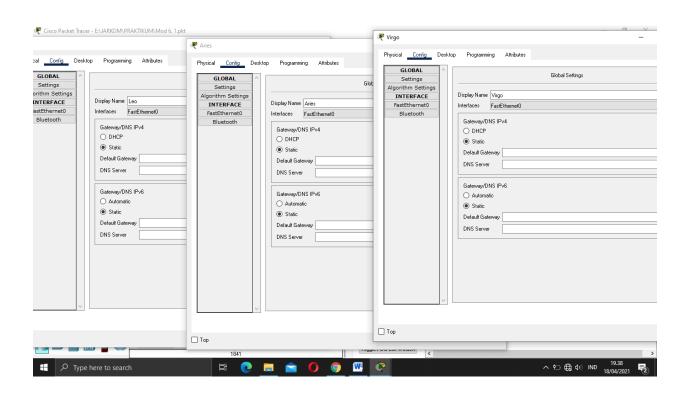


Menghubungkan masing-masing switch dengan 1 PC, lalu menghubungkan 3 switch

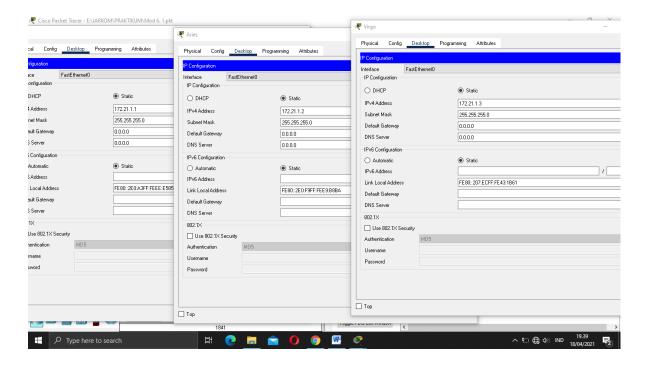
### TUGAS 2A: Langkah pemberian nama switch mulai dari mode user

Mengubah nama PC serta nama masing-masing switch menjadi SW1, SW2, SW3. Dan mengubah semua nama PC menjadi Leo, Aries, Virgo. Cara mengubah nama pada masing-masing switch dan PC ialah dengan mengeklik gambar switch dan PC tersebut lalu pilih configuration





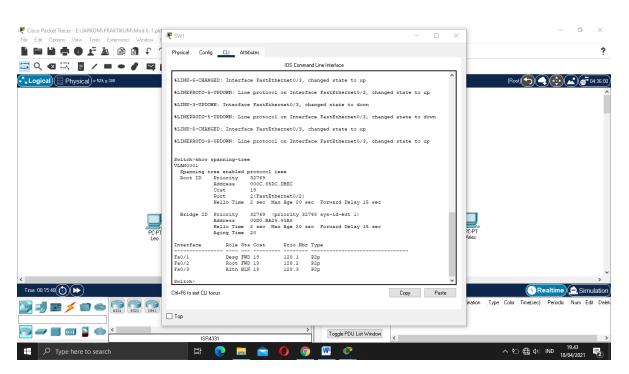
### Mengeset alamat IP pada masing-masing PC



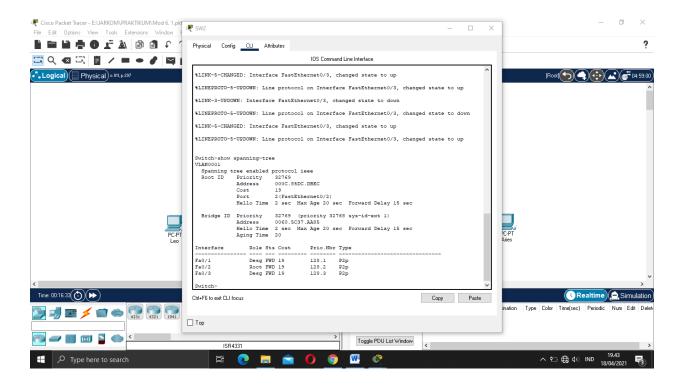
### TUGAS 4A: Capture masing-masing tampilan status STP

Melihat status STP pada masing-masing switch

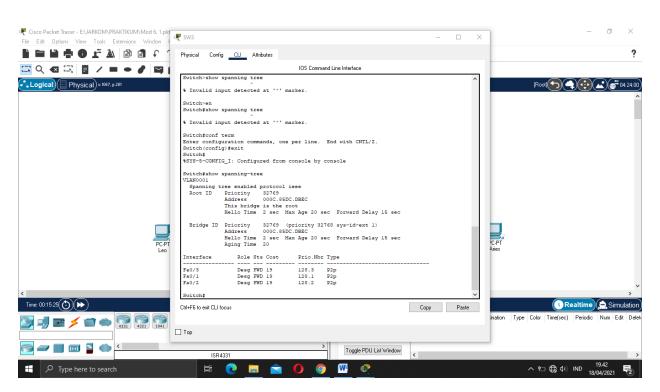
#### SW 1



#### SW2



#### SW3



# TUGAS 4B : Mengisi tabel berikut

# SW1

No.	Variabel	Nilai
1.	Root ID	32769 : 000C.85DC.DBEC
2.	Priority	32769
3.	MAC Adress	000C.85DC.DBEC
4.	Bridge ID	32769 : 000D0.BA29.93A8
	Cost (0/1;0/2;0/3)	0/1 → 19
5.		0/2 → 19
		0/3 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

# SW 2

No.	Variabel	Nilai
1.	Root ID	32769 : 000C.85DC.DBEC
2.	Priority	32769
3.	MAC Adress	000C.85DC.DBEC
4.	Bridge ID	32769 : 0060.5C37.AA85
	Cost (0/1;0/2;0/3)	0/1 → 19
5.		0/2 → 19
		0/3 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

No.	Variabel	Nilai
1.	Root ID	32769 : 000C.85DC.DBEC
2.	Priority	32769
3.	MAC Adress	000C.85DC.DBEC
4.	Bridge ID	32769 : 000C.85DC.DBEC
	Cost (0/1;0/2;0/3)	0/3 → 19
5.		0/1 → 19
		0/2 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

## TUGAS 4C : Kondisi default switch dan port :

➤ Root Bridge : SW3

Designated Bridge: SW1

Root Port : SW1 ( Fa 0/2 ), SW2 ( Fa 0/2 )

Designated Port: SW1 (0/1), SW2 (0/1, 0/3), SW3 (0/3, 0/2, 0/1)

## TUGAS 4D: Port mana saja yang:

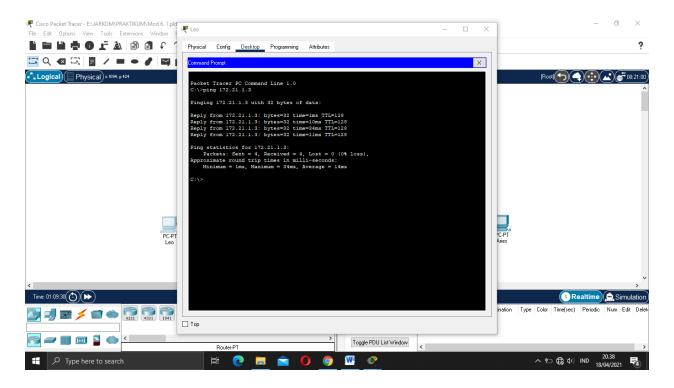
Keadaan forwarding: SW1 (0/1/, 0/2, 0/3), SW2 (0/1, 0/2, 0/3), SW3 (0/3, 0/2, 0/1)

> Keadaan blocking: SW3

## TUGAS 5A: Langkah melakukan ping

- 1. Buka PC Leo lalu buka Desktop
- 2. Pilih comand prompt
- 3. Lalu ketikkan ping dilanjut dengan IP Adrress PC Virgo
- 4. Enter

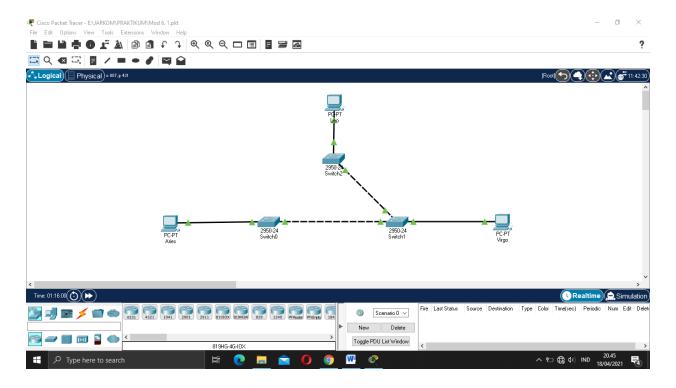
### Hasil ping dari PC Leo ke PC Virgo



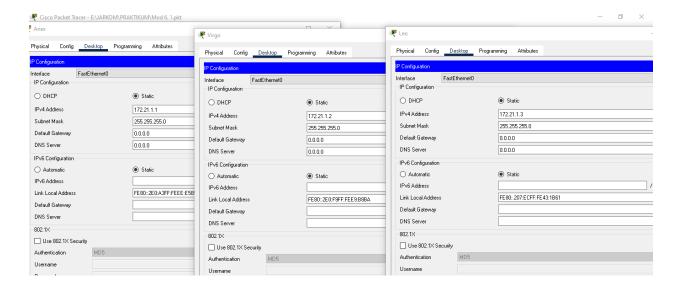
#### **KEGIATAN 2. TOPOLOGI**

Mengubah topologi menjadi topologi berikut:

Dengan mengubah nama PC menjadi Aries, Virgo Leo

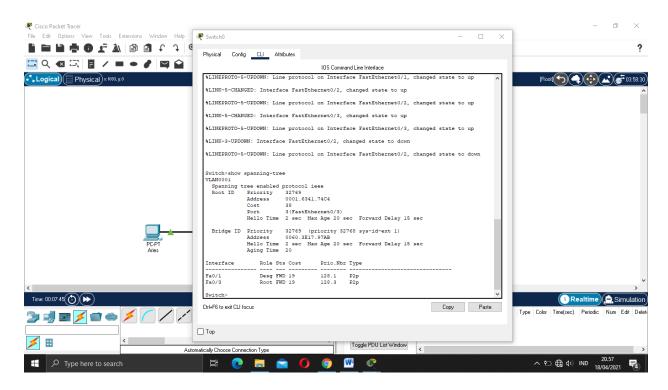


Kemudian, mengeset alamat IP pada masing-masing PC



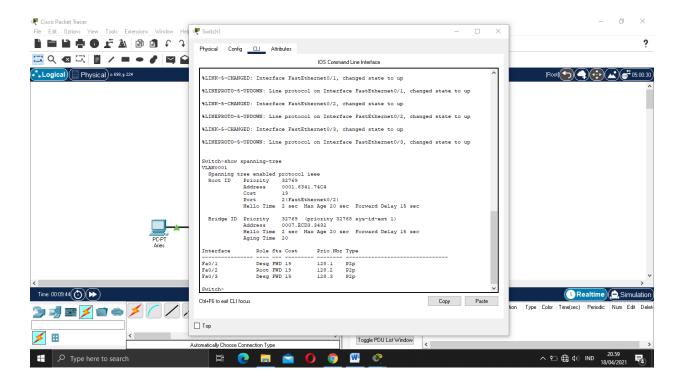
### Melihat status STP pada masing-masing switch

#### Switch0



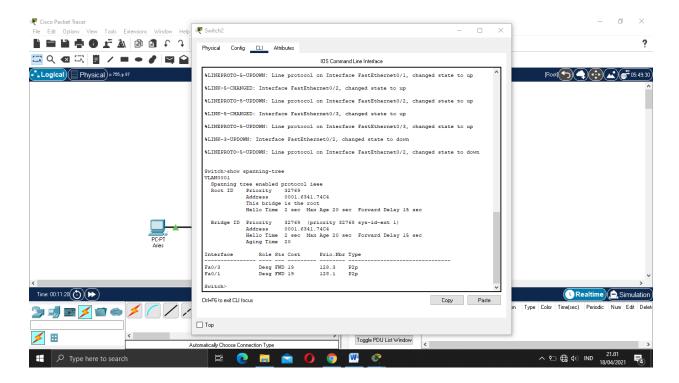
No.	Variabel	Nilai
1.	Root ID	32769 : 0001.6341.74C4
2.	Priority	32769
3.	MAC Adress	0001.6341.74C4
4.	Bridge ID	32769 : 0060.3E17.97AB
5.	Cost (0/1;0/2;0/3)	0/1 → 19
		0/3 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

#### Switch1



No.	Variabel	Nilai
1.	Root ID	32769 : 0001.6341.74C4
2.	Priority	32769
3.	MAC Adress	0001.6341.74C4
4.	Bridge ID	32769 : 0007.ECD3.3432
	Cost (0/1;0/2;0/3)	0/1 → 19
5.		Fa 0/2 → 19
		0/3 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

#### Switch2



No.	Variabel	Nilai
1.	Root ID	32769 : 0001.6341.74C4
2.	Priority	32769
3.	MAC Adress	0001.6341.74C4
4.	Bridge ID	32769 : 0001.6341.74C4
5.	Cost (0/1;0/2;0/3)	0/3 → 19
		0/1 → 19
6.	Hello Time	2 Sec
7.	MaxAge	20 Sec
8.	Forward Delay	15 Sec

> Root bridge : Switch2

> Designated bridge : Switch0, Switch1

Root port : Switch0 (Fa 0/3), Switch1 (Fa 0/2)

Designated port: Switch0 (Fa 0/1), Switch1 (Fa 0/1, 0/3), Switch2 (Fa 0/3, 0/1)

> Forwarding: semua Switch keadaan forward

> Blocking: tidak ada port yang blocking

## Melakukan ping PC Leo terhadap PC Virgo

