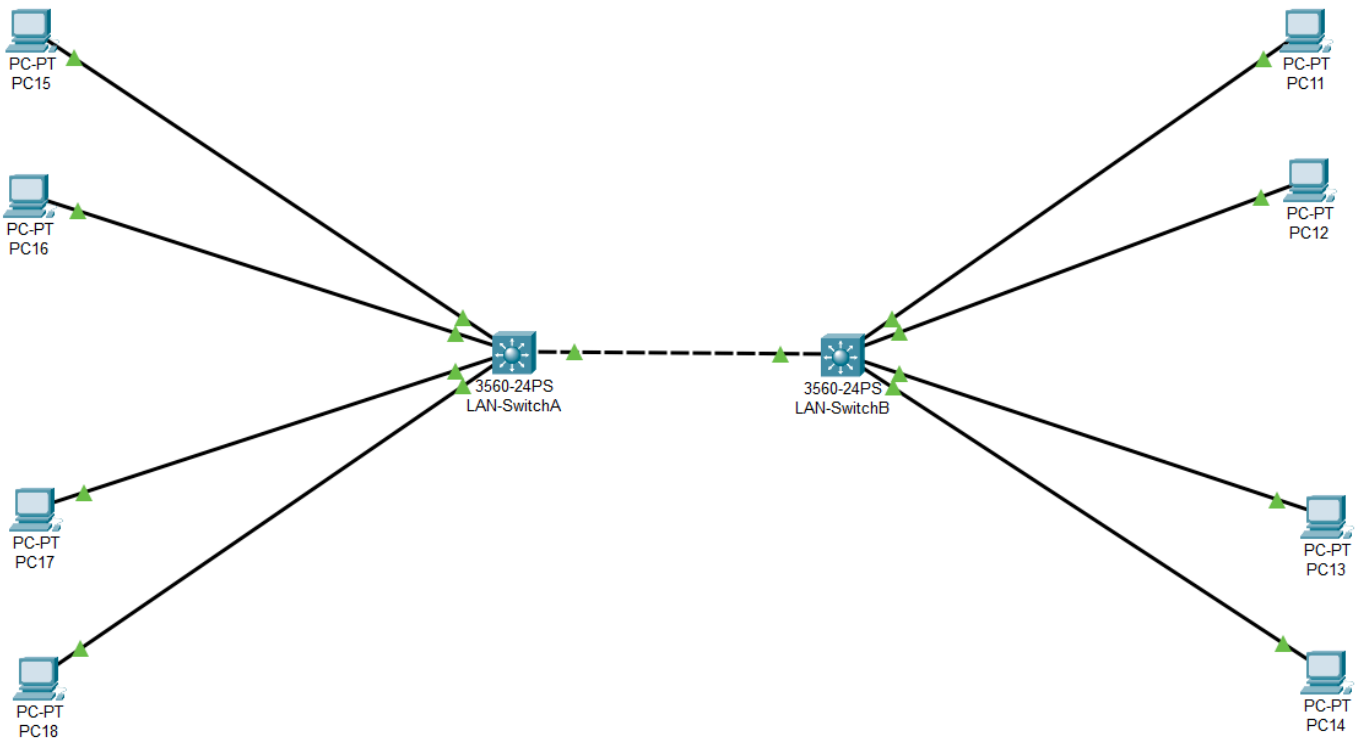


- Logical Network Topology



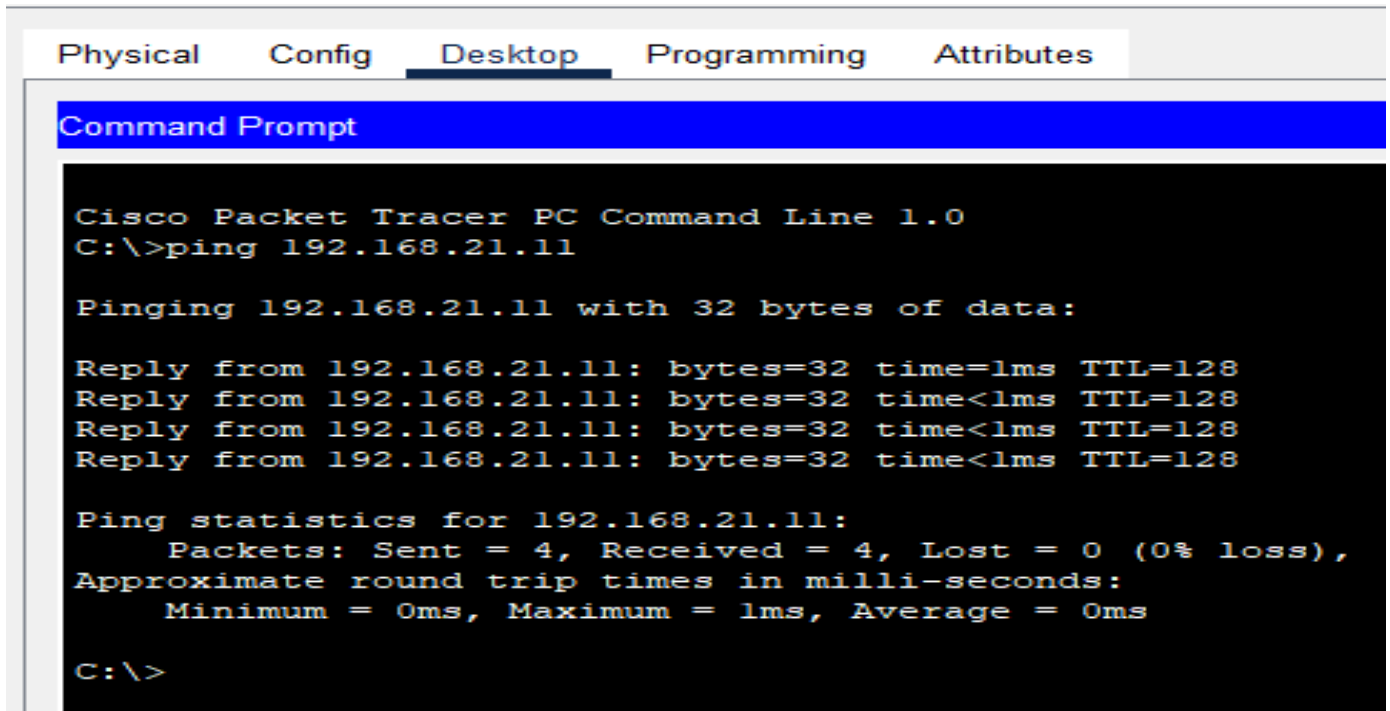
**FIGURE 1.1 – PC / SWITCHPORT CONFIGURATIONS**

Equipment	Address	MASK	Switchport	Mode	VLAN	Switch
PC11	192.168.21.11	255.255.255.0	Fa0/1	Access	10	B
PC12	192.168.21.12	255.255.255.0	Fa0/2	Access	10	B
PC13	192.168.21.13	255.255.255.0	Fa0/3	Access	20	B
PC14	192.168.21.14	255.255.255.0	Fa0/4	Access	20	B
PC15	192.168.21.15	255.255.255.0	Fa0/1	Access	10	A
PC16	192.168.21.16	255.255.255.0	Fa0/2	Access	10	A
PC17	192.168.21.17	255.255.255.0	Fa0/3	Access	20	A
PC18	192.168.21.18	255.255.255.0	Fa0/4	Access	20	A

**FIGURE 1.2 – LAN-SWITCH CONFIGURATIONS**

Display/ Hostname	Trunk Port	Access Ports	Encapsulation Type
LAN-SwitchA	Fa0/24	Fa0/1-4	IEEE 802.1Q
LAN-SwitchB	Fa0/24	Fa0/1-4	IEEE 802.1Q

- Successful Ping from PC 18 (192.168.21.18) to PC 11 (192.168.21.11) (Pre-VLAN)



The screenshot shows the 'Desktop' tab of a PC configuration window. A 'Command Prompt' window is open, displaying the following text:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.21.11

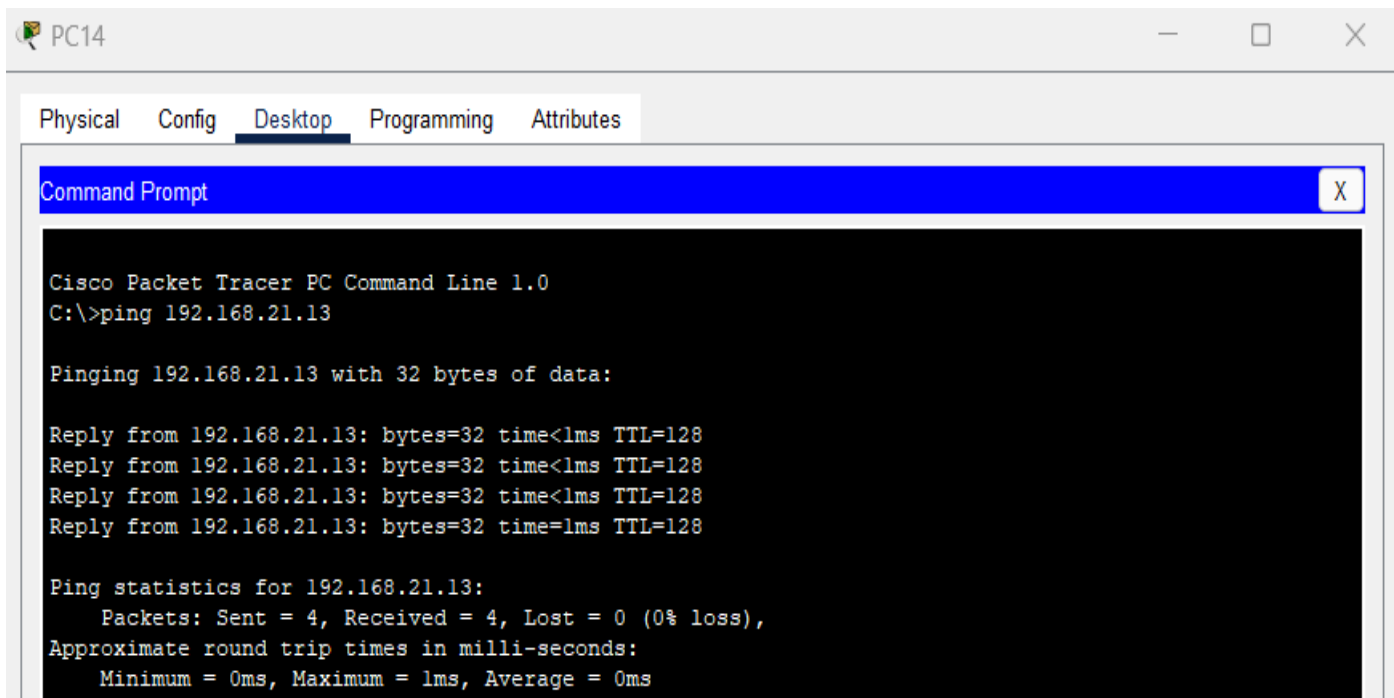
Pinging 192.168.21.11 with 32 bytes of data:

Reply from 192.168.21.11: bytes=32 time=1ms TTL=128
Reply from 192.168.21.11: bytes=32 time<1ms TTL=128
Reply from 192.168.21.11: bytes=32 time<1ms TTL=128
Reply from 192.168.21.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.21.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

- Successful Ping from PC 14 (192.168.21.14) to PC 13 (192.168.21.13) (Within VLAN 20)



The screenshot shows the 'Desktop' tab of a PC configuration window for PC14. A 'Command Prompt' window is open, displaying the following text:

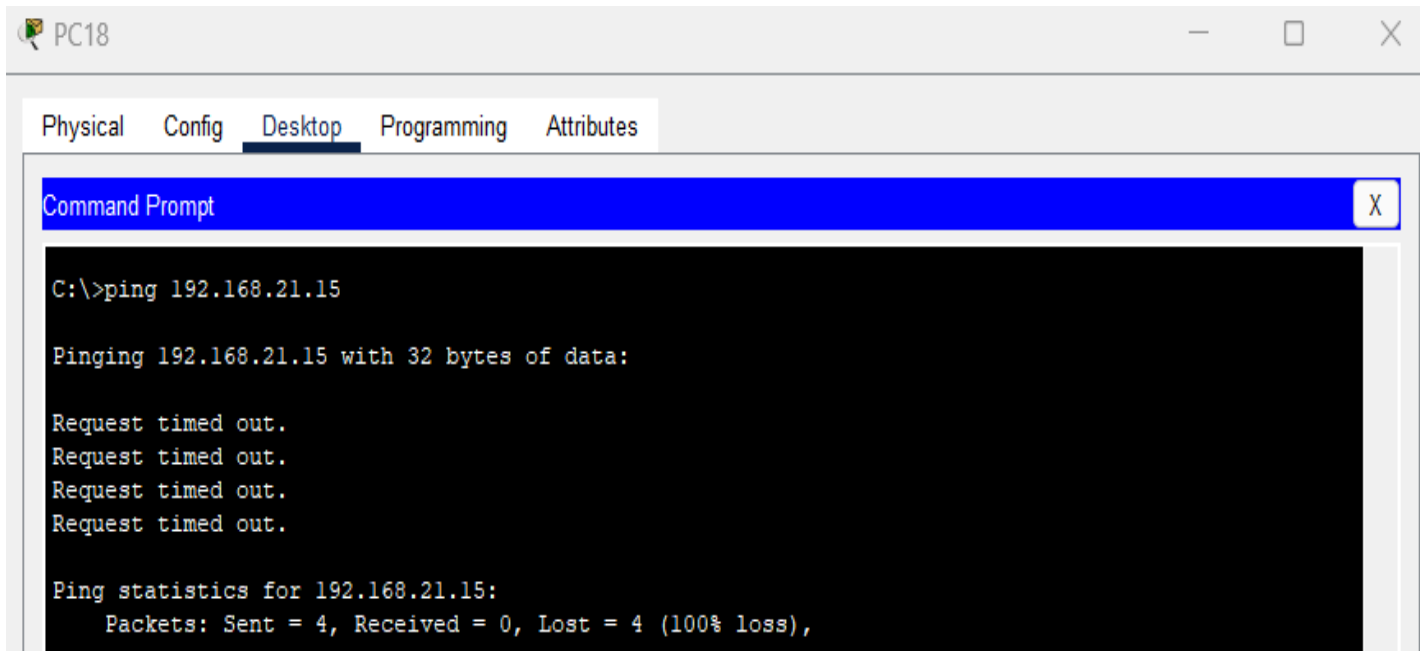
```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.21.13

Pinging 192.168.21.13 with 32 bytes of data:

Reply from 192.168.21.13: bytes=32 time<1ms TTL=128
Reply from 192.168.21.13: bytes=32 time<1ms TTL=128
Reply from 192.168.21.13: bytes=32 time<1ms TTL=128
Reply from 192.168.21.13: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.21.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

- Unsuccessful Ping from PC 18 (192.168.21.18 /vlan 20) to PC 15 (192.168.21.15 /vlan10)



The screenshot shows a window titled "PC18" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the window, there are tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is selected. Within the Desktop tab, there is a "Command Prompt" window. The Command Prompt shows the following text:

```
C:\>ping 192.168.21.15

Pinging 192.168.21.15 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.21.15:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

- Switch A #show ip interface

```
LAN-SwitchA>show ip interface
FastEthernet0/1 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/2 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/3 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/4 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/5 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/6 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/7 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/8 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/9 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/10 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/11 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/12 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/13 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/14 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/15 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/16 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/17 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/18 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/19 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/20 is administratively down, line protocol is down
  Internet protocol processing disabled
```

FastEthernet0/21 is administratively down, line protocol is down  
Internet protocol processing disabled

FastEthernet0/22 is administratively down, line protocol is down  
Internet protocol processing disabled

FastEthernet0/23 is administratively down, line protocol is down  
Internet protocol processing disabled

FastEthernet0/24 is up, line protocol is up  
Internet protocol processing disabled

GigabitEthernet0/1 is down, line protocol is down  
Internet protocol processing disabled

GigabitEthernet0/2 is down, line protocol is down  
Internet protocol processing disabled

Vlan1 is administratively down, line protocol is down  
Internet protocol processing disabled

- Switch A #show vlan

LAN-SwitchA#show vlan

VLAN	Name	Status	Ports
1	default	active	Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Gig0/1 Gig0/2
10	zone10	active	Fa0/1, Fa0/2
20	zone20	active	Fa0/3, Fa0/4
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	-	ieee	-	0	0
1005	trnet	101005	1500	-	-	-	ibm	-	0	0

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Remote SPAN VLANs

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- Switch B #show ip interface

```
LAN-SwitchB#show ip interface
FastEthernet0/1 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/2 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/3 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/4 is up, line protocol is up
  Internet protocol processing disabled
FastEthernet0/5 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/6 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/7 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/8 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/9 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/10 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/11 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/12 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/13 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/14 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/15 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/16 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/17 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/18 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/19 is administratively down, line protocol is down
  Internet protocol processing disabled
FastEthernet0/20 is administratively down, line protocol is down
  Internet protocol processing disabled
```

FastEthernet0/21 is administratively down, line protocol is down  
Internet protocol processing disabled  
FastEthernet0/22 is administratively down, line protocol is down  
Internet protocol processing disabled  
FastEthernet0/23 is administratively down, line protocol is down  
Internet protocol processing disabled  
FastEthernet0/24 is up, line protocol is up  
Internet protocol processing disabled  
GigabitEthernet0/1 is down, line protocol is down  
Internet protocol processing disabled  
GigabitEthernet0/2 is down, line protocol is down  
Internet protocol processing disabled  
Vlan1 is administratively down, line protocol is down  
Internet protocol processing disabled



- Switch B #show vlan

LAN-SwitchB#show vlan

VLAN	Name	Status	Ports
1	default	active	Fa0/5, Fa0/6, Fa0/7, Fa0/8 Fa0/9, Fa0/10, Fa0/11, Fa0/12 Fa0/13, Fa0/14, Fa0/15, Fa0/16 Fa0/17, Fa0/18, Fa0/19, Fa0/20 Fa0/21, Fa0/22, Fa0/23, Gig0/1 Gig0/2
10	zone10	active	Fa0/1, Fa0/2
20	zone20	active	Fa0/3, Fa0/4
1002	fddi-default	active	
1003	token-ring-default	active	
1004	fddinet-default	active	
1005	trnet-default	active	

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	-	ieee	-	0	0
1005	trnet	101005	1500	-	-	-	ibm	-	0	0

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Remote SPAN VLANs

Primary	Secondary	Type	Ports
-----	-----	-----	-----