

**MARIO MARSICANO**

## **ESERCITAZIONE DEL 10-4-2024**

### **LABORATORIO EPICODE**

Il laboratorio di oggi consiste nella creazione e configurazione di una rete di calcolatori con il tool Cisco Packet Tracer. Creare una rete con due switch e 6 host, 3 host per ogni switch. Questi 6 host devono far parte tutti della stessa rete e devono comunicare tutti tra loro.

### **REPORT**

Come da richiesta, si procede con la creazione di una rete LAN avente un indirizzo madre di **Classe C 192.168.1.0/24** e sapendo di avere un **IP BROADCAST 192.168.1.255**.

Sono Stati configurati il PC0, PC1 e PC2 e collegati fisicamente allo Switch0 tramite Cavo Fast Ethernet CAT5 UTP avente le seguenti configurazioni:

<b>PC</b>	<b>IP HOST</b>	<b>SUBNETMASK</b>	<b>IP GATEWAY</b>	<b>MAC ADDRESS</b>
PC0	192.168.1.2/24	255.255.255.0	192.168.1.1/24	00D0.D319.7E60
PC1	192.168.1.3/24	255.255.255.0	192.168.1.1/24	0090.21BA.EAD0
PC2	192.168.1.4/24	255.255.255.0	192.168.1.1/24	0060.7067.C01E

Successivamente sono stati configurati il PC3, PC4 e PC5 e collegati fisicamente allo Switch1 tramite Cavo Fast Ethernet CAT5 UTP avente le seguenti configurazioni:

<b>PC</b>	<b>IP HOST</b>	<b>SUBNETMASK</b>	<b>IP GATEWAY</b>	<b>MAC ADDRESS</b>
PC3	192.168.1.5/24	255.255.255.0	192.168.1.1/24	00E0.B01E.B489
PC4	192.168.1.36/24	255.255.255.0	192.168.1.1/24	0001.C7AD.0A57
PC5	192.168.1.7/24	255.255.255.0	192.168.1.1/24	000C.856B.CA4D

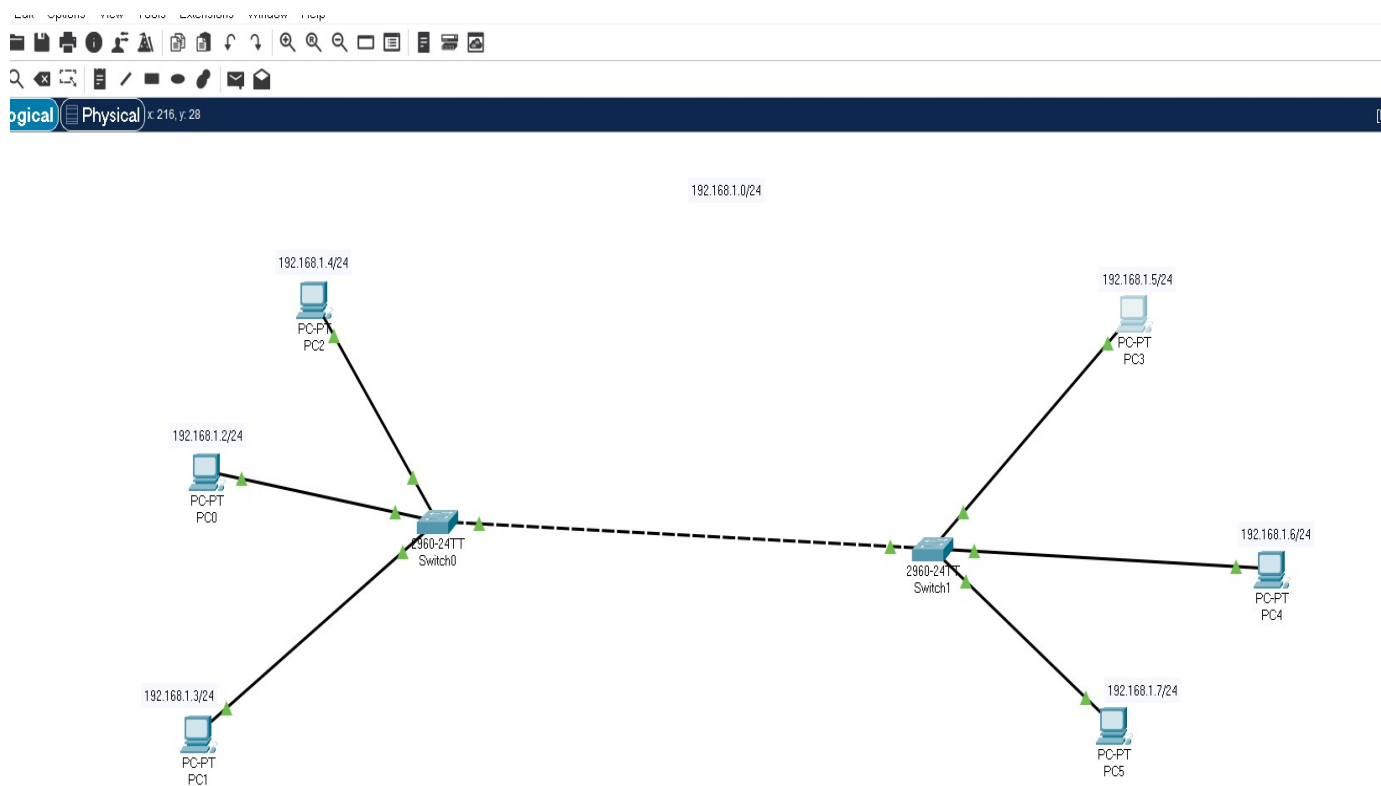
Lo Switch0 e lo Switch1 sono stati collegati assieme per permettere la comunicazione tra i 2 gruppi di 3 HOST in una stessa rete di 6 HOST in toto.

In conclusione sono state effettuate, attraverso il protocollo ICMP subordinato al livello 3 e responsabile del software di Ping e Traceroute, alcune misure tra il PC1 e PC3 e in un secondo momento tra il PC5 e PC2 con esiti positivi e senza alcun problema di connettività.

## CREAZIONE DI RETE FORMATA DA:

- 6 HOST
- 2 SWITCH

**3 HOST PER OGNI SWITCH COLLEGATI TRA LORO CHE FORMANO UNA STESSA RETE LAN**



REPORT DI PING TRA PC1 E PC3

PC1

PhysicalConfigDesktopProgrammingAttributes

Command Prompt

Packet Tracer PC Command Line 1.0  
C:\>ping 192.168.1.5  
  
Pinging 192.168.1.5 with 32 bytes of data:  
  
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.5: bytes=32 time<1ms TTL=128  
  
Ping statistics for 192.168.1.5:  
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 0ms, Maximum = 0ms, Average = 0ms  
  
C:\>|

Top

192.168.1.5/24

PC-PT  
PC3

192.168.1.7/24

PC-PT  
PC5

2960-24TT  
Switch0

19HGW8291240PF-RouterPF-Empty18412620XM2621XM2

Scenario 0

NewDelete

Fire	Last Status	Source	Destination	Type	Color	Time(se
	-	Switch0	PC2	ICMP		0.000
	-	PC0	PC3	ICMP		0.000

# REPORT DI PING TRA PC5 E PC2

sktop\Risoluzione esercizi\Esercizio 10-04-2024\Esercitazione 10-04-2024.pkt

18 Window Help

PC5

Physical Config Desktop Programming Attributes

Command Prompt

Packet Tracer PC Command Line 1.0  
C:\>ping 192.168.1.4  
  
Pinging 192.168.1.4 with 32 bytes of data:  
  
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128  
Reply from 192.168.1.4: bytes=32 time=1ms TTL=128  
Reply from 192.168.1.4: bytes=32 time=17ms TTL=128  
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128  
  
Ping statistics for 192.168.1.4:  
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 0ms, Maximum = 17ms, Average = 4ms  
  
C:\>

☐ Top

# CONFIGURAZIONI DI PING PC1 E PC3

acer - C:\Users\mymar\Desktop\Risoluzione esercizi\Esercizio 10-04-2024\Esercitazione 10-04-2024.pkt

s View Tools Extensions Window Help

PC1

Physical Config Desktop Programming Attributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

DHCP

Static

IPv4 Address

192.168.1.3

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

IPv6 Configuration

Automatic

Static

IPv6 Address

Link Local Address

FE80::290:21FF:FEBA:EAD0

Default Gateway

DNS Server

802.1X

Use 802.1X Security

Authentication

MD5

Username

Password

Top

PC3

Physical Config Desktop Programming Attributes

IP Configuration

InterfaceFastEthernet0

IP Configuration

DHCP

Static

IPv4 Address

192.168.1.5

Subnet Mask

255.255.255.0

Default Gateway

192.168.1.1

DNS Server

0.0.0.0

IPv6 Configuration

Automatic

Static

IPv6 Address

Link Local Address

FE80::2E0:B0FF:FE1E:B489

Default Gateway

DNS Server

802.1X

Use 802.1X Security

Authentication

MD5

Username

Password

Top

4331

4321

1941

1901

2911

81910X

81910X

829

1240

PE1A00

PE1B00

1841

300000

300100

12

Scenario 0

Fire

Last Status

Source

Destination

Type

Color

Time(sec)

Periodic

Num

Edit

Delete

-

Switch0

PC2

ICMP

0.000

N

0

(edit)

## CONFIGURAZIONI DI PING PC5 E PC2

sktop\Risoluzione esercizi\Esercizio 10-04-2024\Esercitazione 10-04-2024.pkt

18 Window Help



192.168.1.4/24

PC2

2960-24TT Switch0

PC5

Physical Config Desktop Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Reply from 192.168.1.4: bytes=32 time<1ms TTL=128
Reply from 192.168.1.4: bytes=32 time=1ms TTL=128
Reply from 192.168.1.4: bytes=32 time=17ms TTL=128
Reply from 192.168.1.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 17ms, Average = 4ms

C:\>
```

☐ Top