

ESERCIZIO N°1

Creare una rete composta dalle seguenti postazioni

PC_Guido 192.168.99.100

PC_Paolo 192.168.99.101

PC_Luca 192.168.99.102

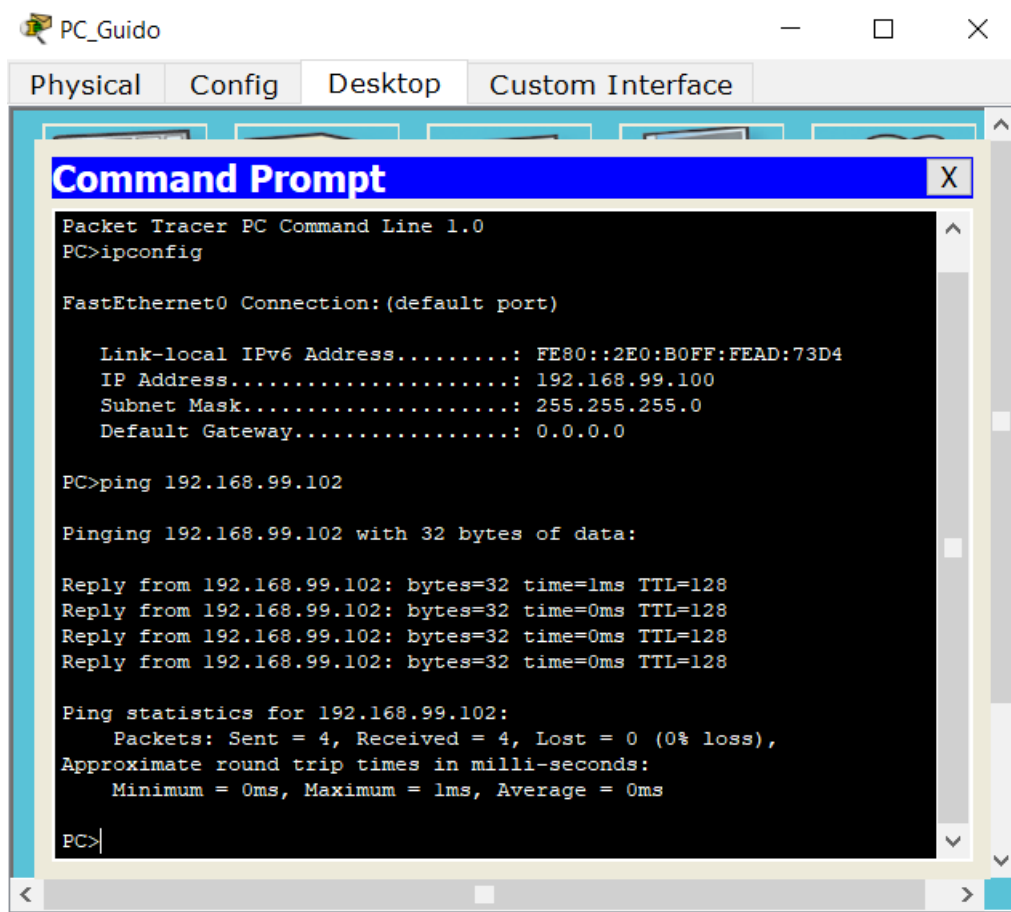
connesse attraverso un hub01.

La SubnetMask è 255.255.255.0

1. Effettuare ping/invio pacchetto tra PC_Guido e PC_Luca, segnalare il risultato nel documento
2. Effettuare ping/invio pacchetto tra PC_Paolo e PC_Luca, segnalare il risultato nel documento.
3. Scrivere sul progetto quante sono le sottoreti e di host che si possono rappresentare con questa configurazione.

Punto 1

Ping tra pc di guido e pc di luca



```
PC_Guido
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ipconfig

FastEthernet0 Connection:(default port)

    Link-local IPv6 Address.....: FE80::2E0:B0FF:FEAD:73D4
    IP Address.....: 192.168.99.100
    Subnet Mask.....: 255.255.255.0
    Default Gateway.....: 0.0.0.0

PC>ping 192.168.99.102

Pinging 192.168.99.102 with 32 bytes of data:

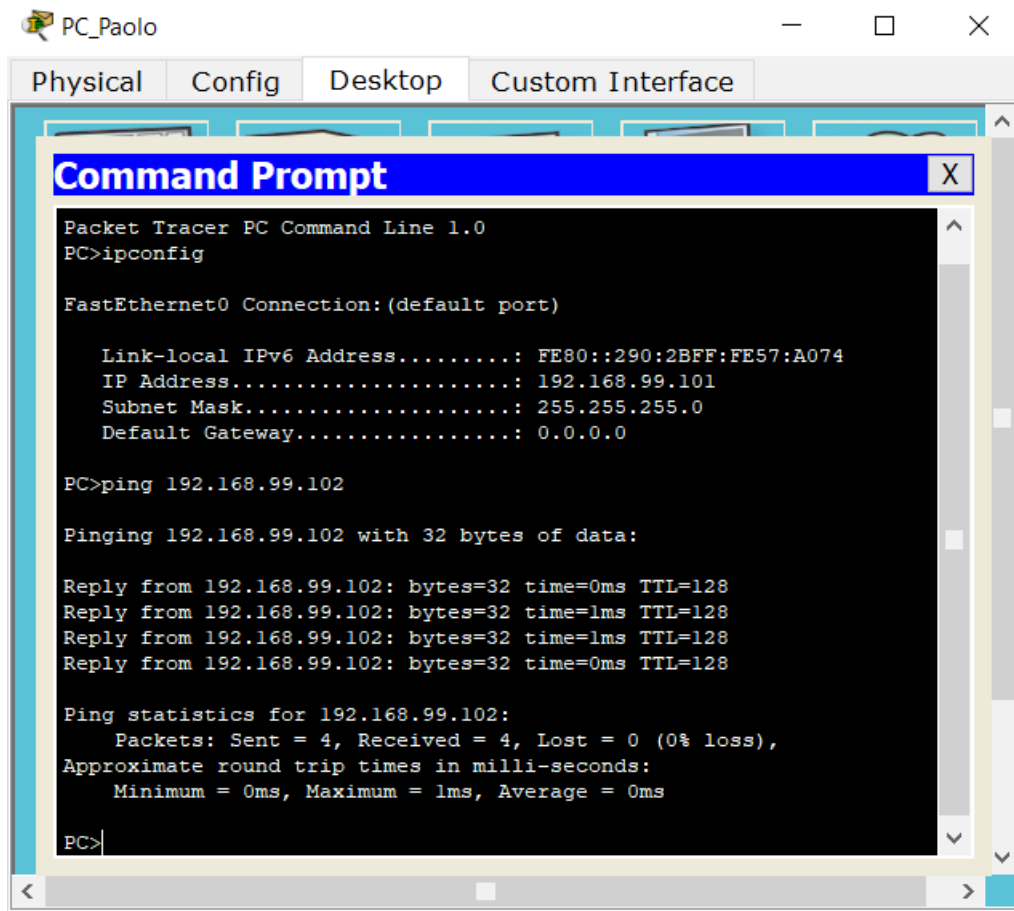
Reply from 192.168.99.102: bytes=32 time=1ms TTL=128
Reply from 192.168.99.102: bytes=32 time=0ms TTL=128
Reply from 192.168.99.102: bytes=32 time=0ms TTL=128
Reply from 192.168.99.102: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.99.102:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>
```

Punto 2

Ping tra pc di guido e pc di luca



```
PC_Paolo
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ipconfig

FastEthernet0 Connection:(default port)

    Link-local IPv6 Address.....: FE80::290:2BFF:FE57:A074
    IP Address.....: 192.168.99.101
    Subnet Mask.....: 255.255.255.0
    Default Gateway.....: 0.0.0.0

PC>ping 192.168.99.102

Pinging 192.168.99.102 with 32 bytes of data:

Reply from 192.168.99.102: bytes=32 time=0ms TTL=128
Reply from 192.168.99.102: bytes=32 time=1ms TTL=128
Reply from 192.168.99.102: bytes=32 time=1ms TTL=128
Reply from 192.168.99.102: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.99.102:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>
```

avviene il ping tra il computer di guido a quello di luca, con i seguenti passaggi
la comunicazione avviene dal computer di guido all'hub che poi trasmette i pacchetti ai computer di luca e di paolo

Cisco Packet Tracer Instructor - C:\Users\Lovera Asia\Desktop\Scuola\Sistemi\Laboratorio\Esercizi\Reti\1_Es001\Es001.pkt

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Time: 02:30:23.170 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0

New Delete

Toggle PDU List Window

Simulation

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
	111.194	--	PC_Gu...	ICMP	
	111.195	PC_Guido	Hub01	ICMP	
	111.196	Hub01	PC_Luca	ICMP	
	111.196	Hub01	PC_Pa...	ICMP	

Reset Simulation ☒ Constant Delay Captured to: 111.196 s

Play Controls Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events ICMP Edit Filters Show All/None

Cisco Packet Tracer Instructor - C:\Users\Lovera Asia\Desktop\Scuola\Sistemi\Laboratorio\Esercizi\Reti\1_Es001\Es001.pkt

File Edit Options View Tools Extensions Help

Logical [Root] New Cluster Move Object Set Tiled Background Viewport

Time: 02:34:05.254 Power Cycle Devices PLAY CONTROLS: Back Auto Capture / Play Capture / Forward

Scenario 0

New Delete

Toggle PDU List Window

Simulation

Vis.	Time(sec)	Last Devi	At Devi	Type	Info
	111.194	--	PC_Gu...	ICMP	
	111.195	PC_Guido	Hub01	ICMP	
	111.196	Hub01	PC_Luca	ICMP	
	111.196	Hub01	PC_Pa...	ICMP	
	111.197	PC_Luca	Hub01	ICMP	
	111.198	Hub01	PC_Gu...	ICMP	
	111.198	Hub01	PC_Pa...	ICMP	

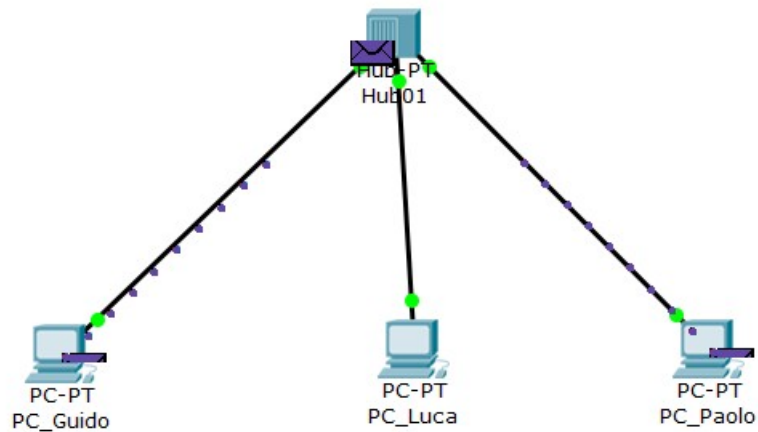
Reset Simulation ☒ Constant Delay Captured to: 333.280 s

Play Controls Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events ICMP Edit Filters Show All/None

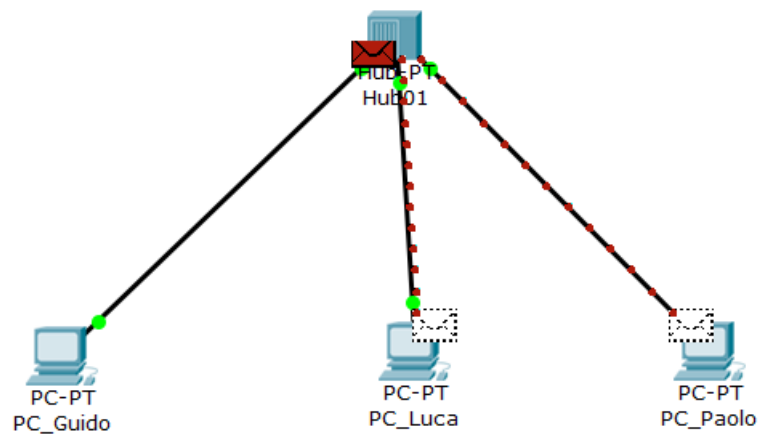
fase 1:

il pacchetto parte dal pc di guido



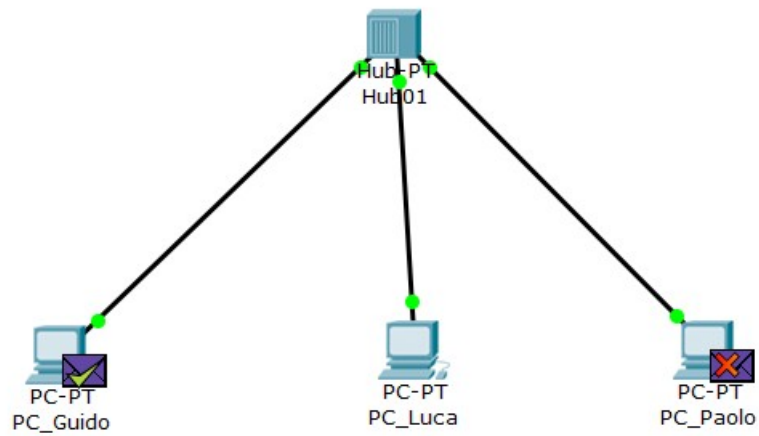
fase 2:

i pacchetti sono stati distribuiti agli altri due PC



fase 3:

i pacchetti sono stati ricevuti correttamente



Punto 3

Con questa configurazione si possono ottenere