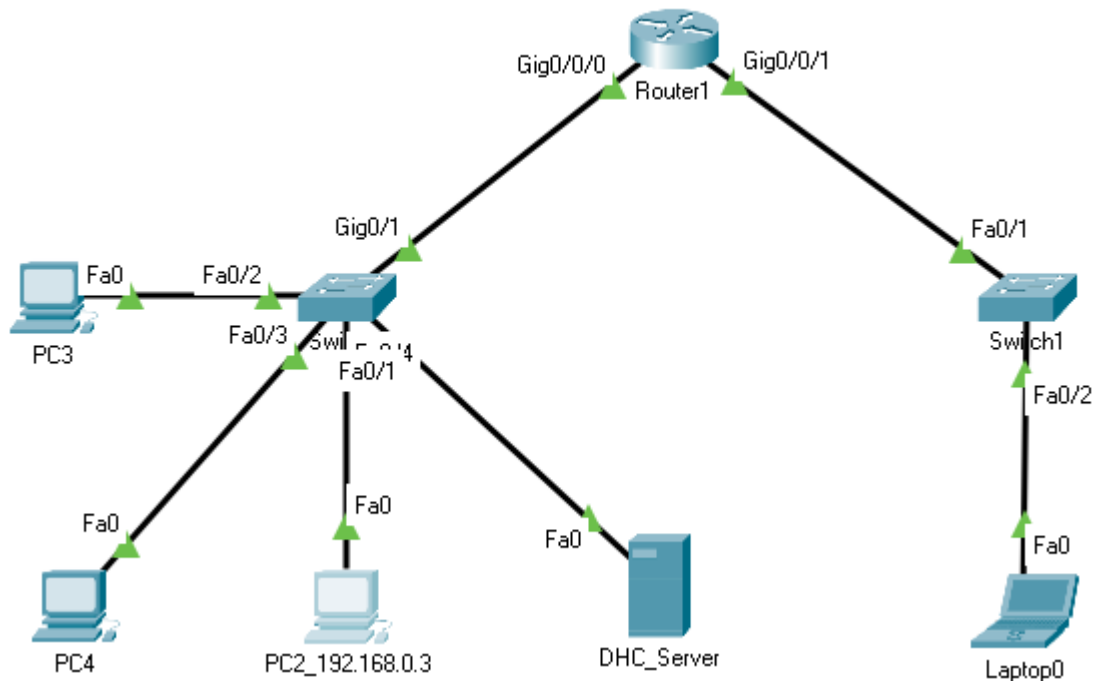


Configurazione di un server DHCP

Obiettivo: Configurare un server DHCP per la distribuzione automatica degli indirizzi IP all'interno di una rete.

Contesto: Due subnet (192.168.0.0 /24 e 192.168.1.0 /24) separate da un router.



Modus operandi:

Configurazione del servizio DHCP nel server

la pool 0 fa riferimento alla subnet 192.168.0.0 e distribuisce il default gateway e ip partendo da 192.168.0.11.

La pool 1 fa riferimento invece alla subnet 192.168.0.1, iniziando a indirizzare dall'ip 192.168.1.11.

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool_0

Default Gateway: 192.168.0.1

DNS Server: 0.0.0.0

Start IP Address: 192 168 0 11

Subnet Mask: 255 255 255 0

Maximum Number of Users: 245

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool_1	192.168.1.1	0.0.0.0	192.168.1.11	255.255.255.0	245	0.0.0.0	0.0.0.0
serverPool_0	192.168.0.1	0.0.0.0	192.168.0.11	255.255.255.0	245	0.0.0.0	0.0.0.0

Configurazione del router

Sull'interfaccia del router NON collegata alla rete del server DHCP ho configurato il comando ip helper-address.

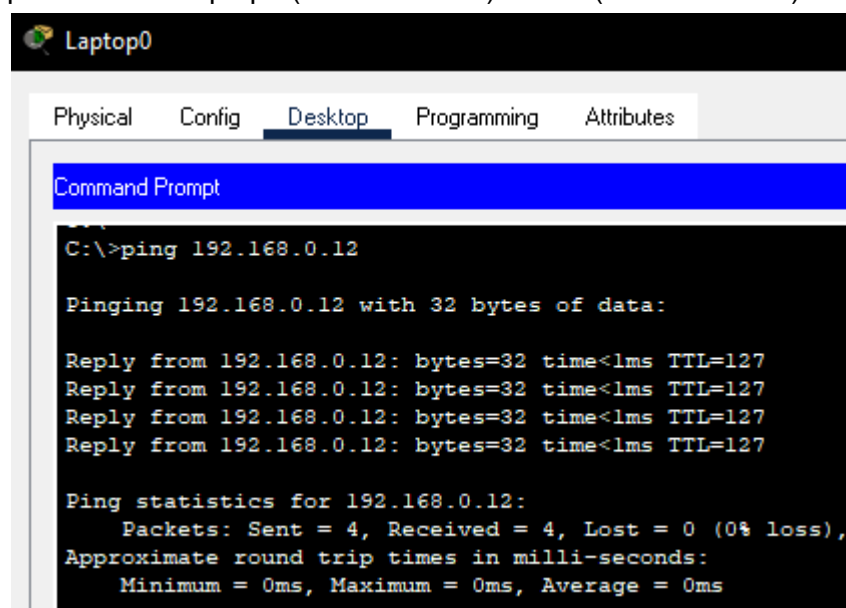
```
Router(config)#interface GigabitEthernet 0/0/1
Router(config-if)#ip helper-address 192.168.0.2
Router(config-if)#
```

Installazione terminali

Infine ho installato nella rete i terminali, PC4, PC3 e laptop0 hanno IP dinamico mentre PC2 e' configurato per avere un IP statico.

Test della rete

primo test tra laptop0 (192.168.1.11) e PC4 (192.168.0.12)



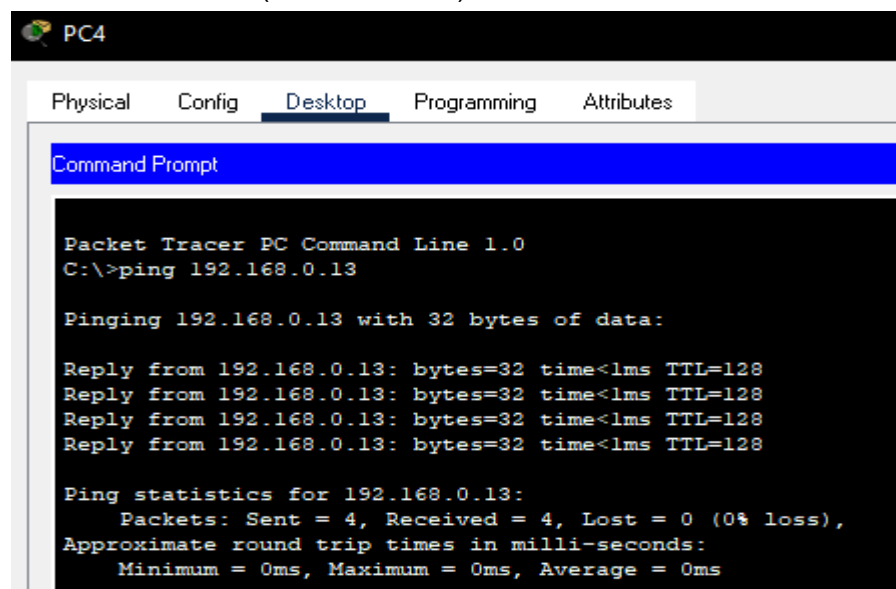
```
Laptop0
Physical  Config  Desktop  Programming  Attributes
Command Prompt
C:\>ping 192.168.0.12

Pinging 192.168.0.12 with 32 bytes of data:

Reply from 192.168.0.12: bytes=32 time<1ms TTL=127
Reply from 192.168.0.12: bytes=32 time<1ms TTL=127
Reply from 192.168.0.12: bytes=32 time<1ms TTL=127
Reply from 192.168.0.12: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.0.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

test tra PC4 e PC3 (192.168.0.13)



```
PC4
Physical  Config  Desktop  Programming  Attributes
Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.13

Pinging 192.168.0.13 with 32 bytes of data:

Reply from 192.168.0.13: bytes=32 time<1ms TTL=128
Reply from 192.168.0.13: bytes=32 time<1ms TTL=128
Reply from 192.168.0.13: bytes=32 time<1ms TTL=128
Reply from 192.168.0.13: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

