

Taller Configuración Y Certificación de Red Lan

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Topologías de Red

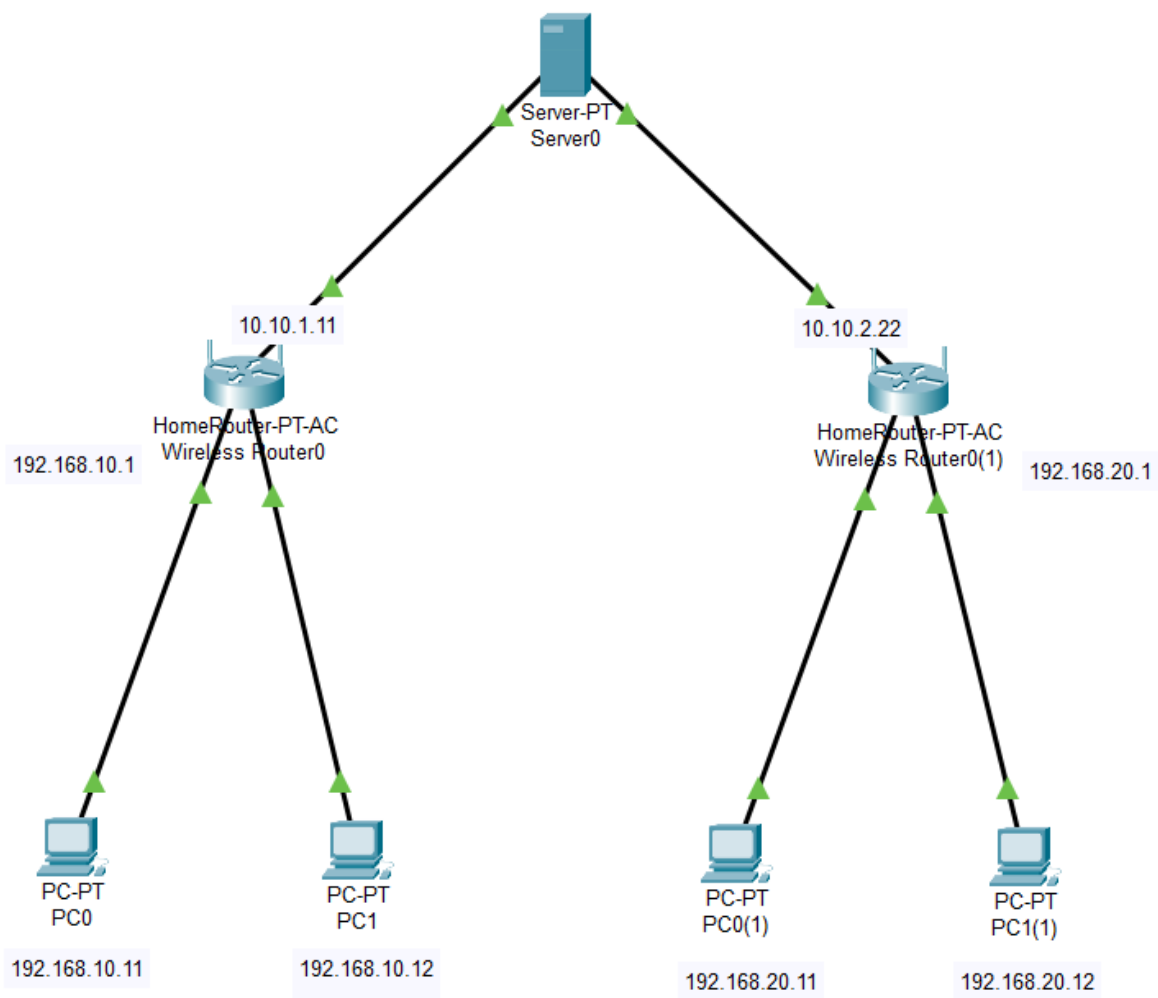
Uriel Castañeda Sierra

04 de Noviembre de 2023

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Red 192.168.10.1	4

Diseño global



Desarrollo y Montaje de la Red

Red 192.168.10.1

Diagrama del montaje Simulacion:

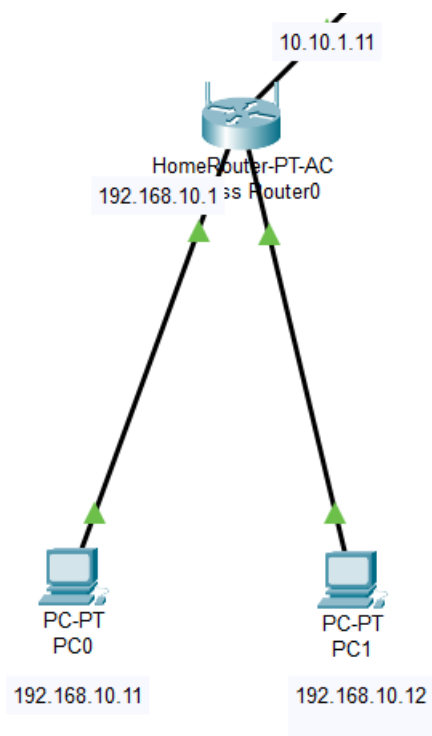


Diagrama del montaje Fisico:



Configuracion del WAN y LAN del Router

Wireless Router0

Physical Config **GUI** Attributes

Setup Setup **Wireless** Security Access Restrictions Applications & Gaming Administration

Basic Setup DDNS MAC Address Clone Advanced

Internet Setup

Internet Connection type: Static IP

Internet IP Address: 10 . 10 . 1 . 11

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 10 . 10 . 1 . 1

DNS 1: 8 . 8 . 8 . 8

DNS 2 (Optional): 0 . 0 . 0 . 0

DNS 3 (Optional): 0 . 0 . 0 . 0

Optional Settings (required by some internet service providers)

Host Name:

Domain Name:

MTU: Size: 1500

Network Setup

Router IP

IP Address: 192 . 168 . 10 . 1

Subnet Mask: 255.255.255.0

DHCP Server: ☐ Enabled ☒ Disabled

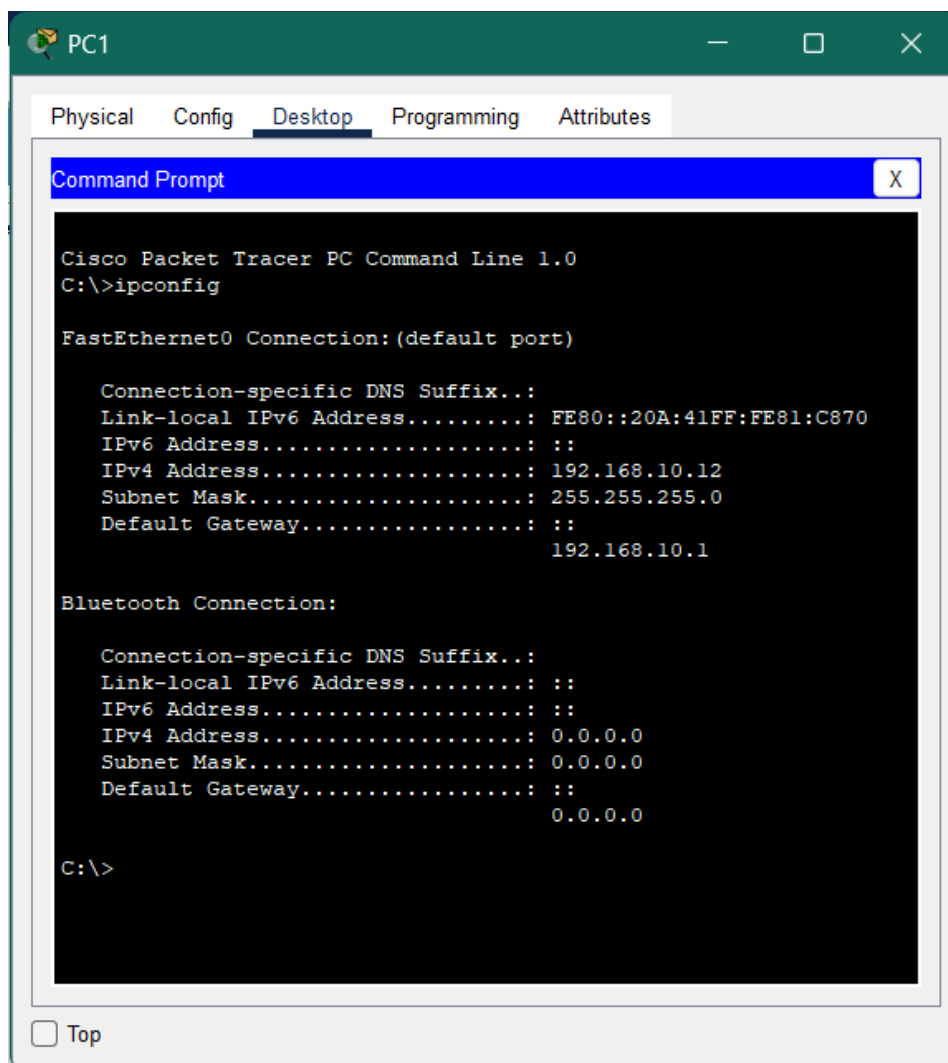
DHCP Reservation

Start IP Address: 192.168.1. 100

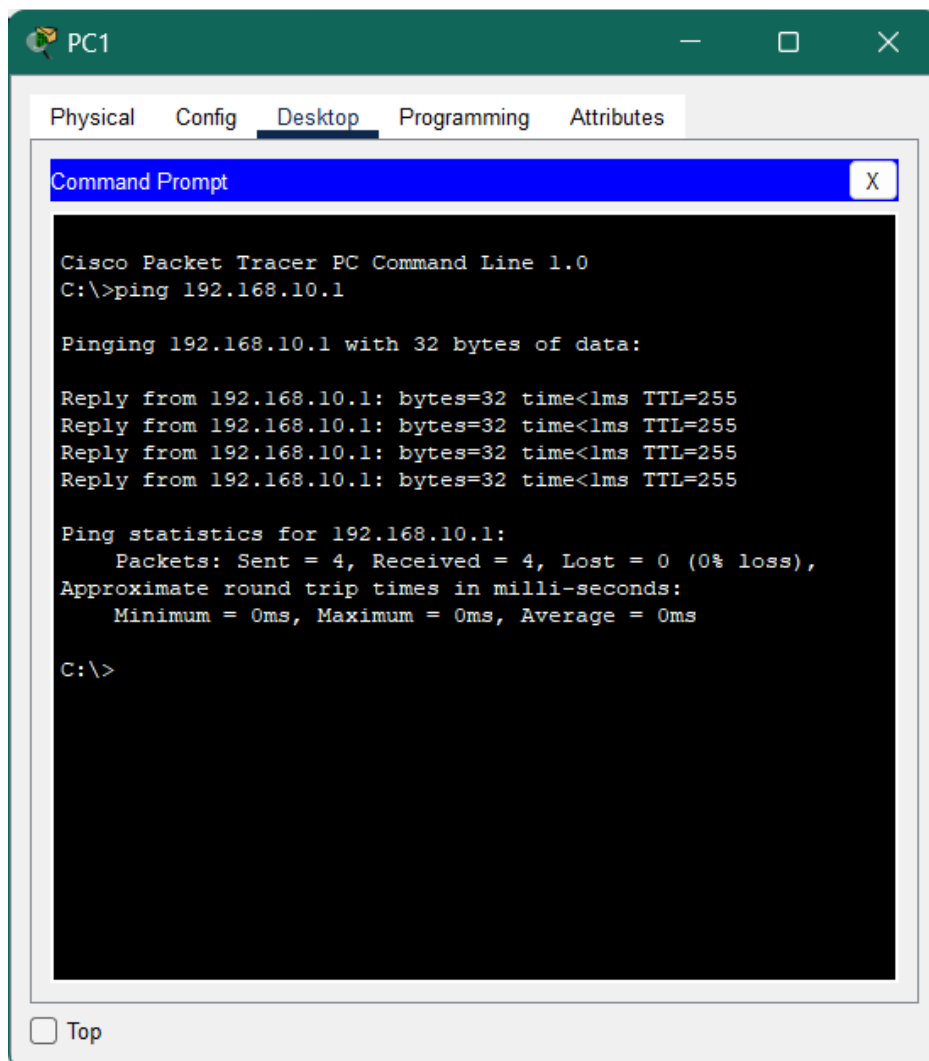
Maximum number of Users: 50

☐ Top

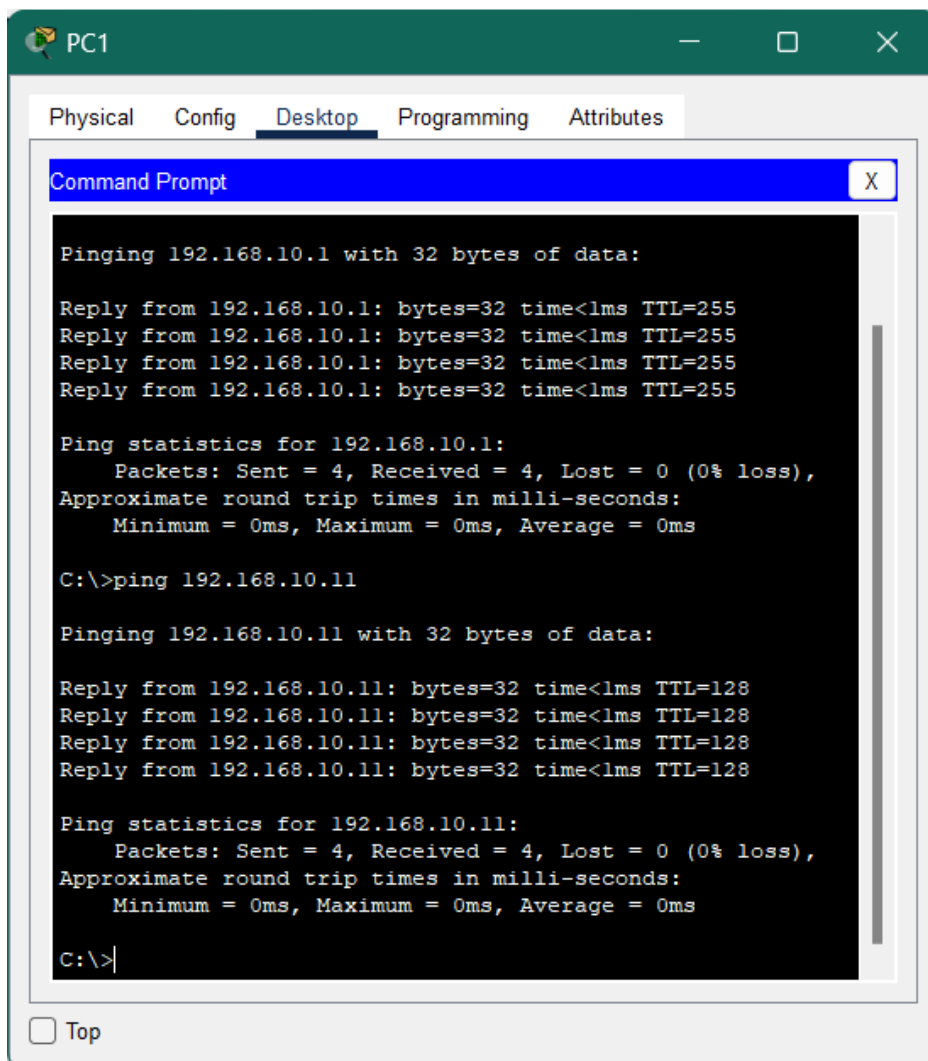
Configuración IP del PC1



Ping del PC1 al Router



Ping del PC1 al PC0



The screenshot shows a virtual PC1 window with a green title bar. It has five tabs: Physical, Config, Desktop (selected), Programming, and Attributes. A Command Prompt window is open, displaying the results of two ping commands. The first command is 'ping 192.168.10.1', which shows four successful replies with a TTL of 255 and 0ms round trip times. The second command is 'ping 192.168.10.11', which shows four successful replies with a TTL of 128 and 0ms round trip times. The Command Prompt window has a blue title bar and a close button (X).

```
PC1

Physical  Config  Desktop  Programming  Attributes

Command Prompt

Pinging 192.168.10.1 with 32 bytes of data:

Reply from 192.168.10.1: bytes=32 time<1ms TTL=255
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.10.11

Pinging 192.168.10.11 with 32 bytes of data:

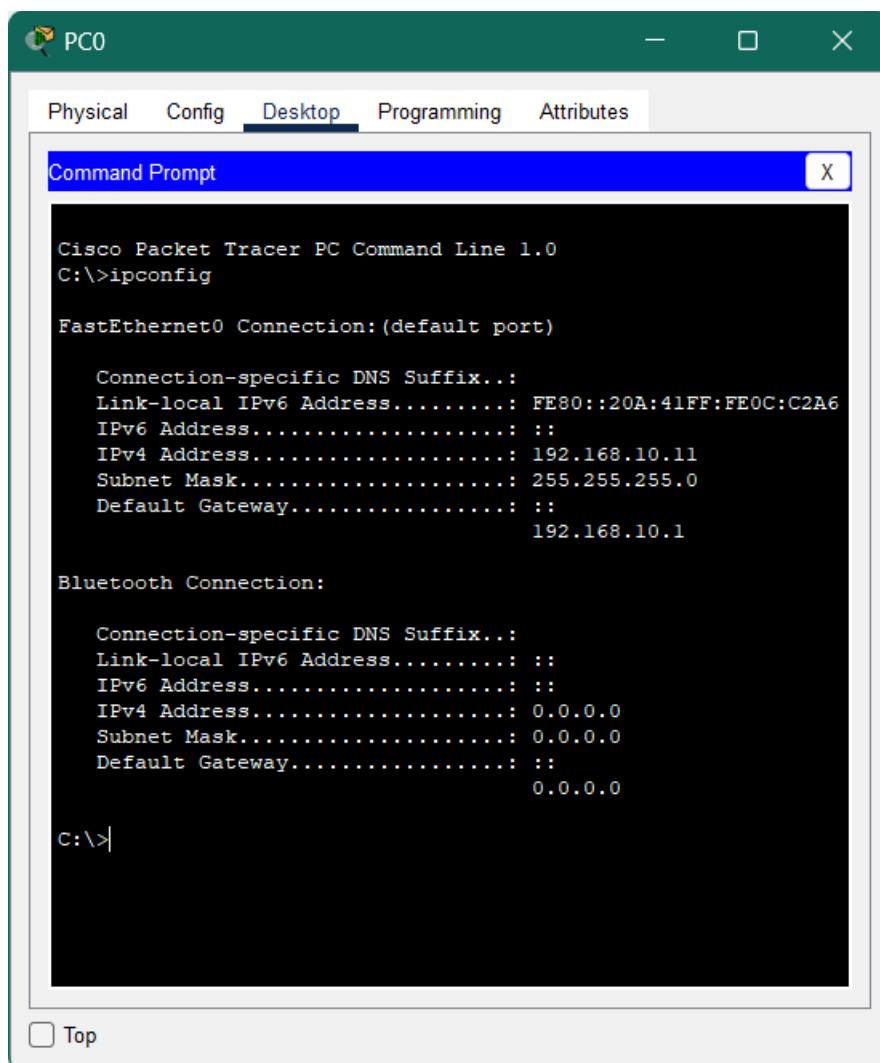
Reply from 192.168.10.11: bytes=32 time<1ms TTL=128
Reply from 192.168.10.11: bytes=32 time<1ms TTL=128
Reply from 192.168.10.11: bytes=32 time<1ms TTL=128
Reply from 192.168.10.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

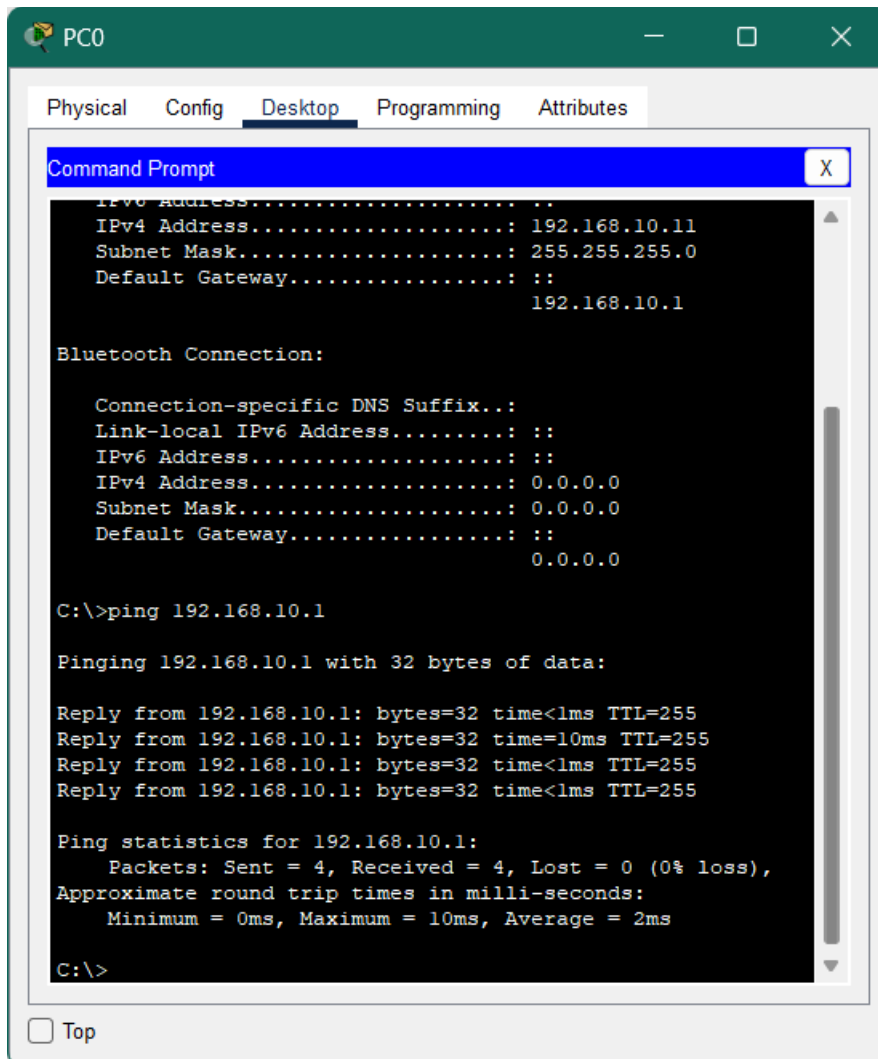
C:\>
```

☐ Top

Configuración IP del PC0:



Ping del PC0 al Router:

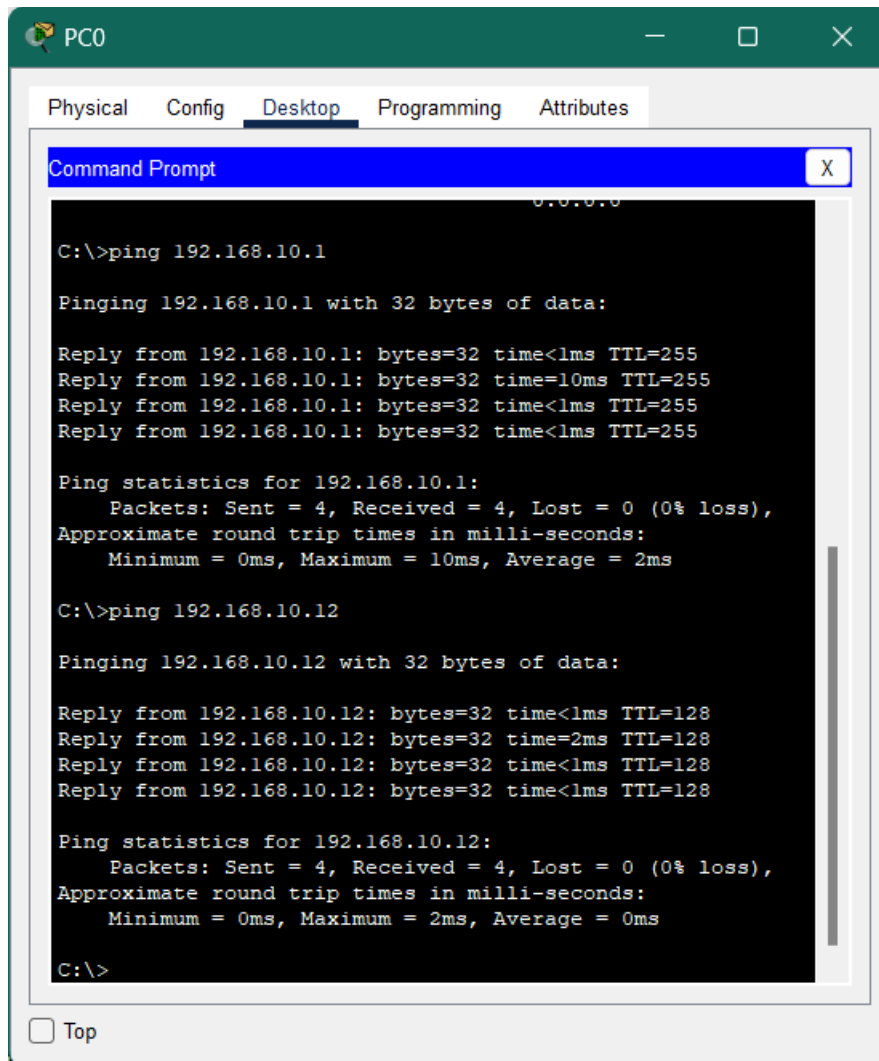


The screenshot shows a window titled "PC0" with tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is active, displaying a "Command Prompt" window. The Command Prompt shows the following configuration and results:

```
IPv6 Address..... ::  
IPv4 Address.....: 192.168.10.11  
Subnet Mask.....: 255.255.255.0  
Default Gateway.....: ::  
                  192.168.10.1  
  
Bluetooth Connection:  
  
Connection-specific DNS Suffix...:  
Link-local IPv6 Address.....: ::  
IPv6 Address.....: ::  
IPv4 Address.....: 0.0.0.0  
Subnet Mask.....: 0.0.0.0  
Default Gateway.....: ::  
                  0.0.0.0  
  
C:\>ping 192.168.10.1  
  
Pinging 192.168.10.1 with 32 bytes of data:  
  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255  
Reply from 192.168.10.1: bytes=32 time=10ms TTL=255  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255  
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255  
  
Ping statistics for 192.168.10.1:  
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),  
    Approximate round trip times in milli-seconds:  
        Minimum = 0ms, Maximum = 10ms, Average = 2ms  
  
C:\>
```

At the bottom left of the Command Prompt window, there is a checkbox labeled "Top".

Ping del PC0 al PC1:



The screenshot shows a window titled "PC0" with tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is active, displaying a "Command Prompt" window. The Command Prompt shows the execution of two ping commands. The first command is "C:\>ping 192.168.10.1", which results in four successful replies from 192.168.10.1 with 32 bytes of data, times less than 1ms, and a TTL of 255. The ping statistics for 192.168.10.1 show 4 packets sent, 4 received, 0 lost (0% loss), and approximate round trip times of 0ms (minimum), 10ms (maximum), and 2ms (average). The second command is "C:\>ping 192.168.10.12", which results in four successful replies from 192.168.10.12 with 32 bytes of data, times less than 1ms, and a TTL of 128. The ping statistics for 192.168.10.12 show 4 packets sent, 4 received, 0 lost (0% loss), and approximate round trip times of 0ms (minimum), 2ms (maximum), and 0ms (average). The Command Prompt window has a "Top" button at the bottom left.

```
C:\>ping 192.168.10.1

Pinging 192.168.10.1 with 32 bytes of data:

Reply from 192.168.10.1: bytes=32 time<1ms TTL=255
Reply from 192.168.10.1: bytes=32 time=10ms TTL=255
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255
Reply from 192.168.10.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.10.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms

C:\>ping 192.168.10.12

Pinging 192.168.10.12 with 32 bytes of data:

Reply from 192.168.10.12: bytes=32 time<1ms TTL=128
Reply from 192.168.10.12: bytes=32 time=2ms TTL=128
Reply from 192.168.10.12: bytes=32 time<1ms TTL=128
Reply from 192.168.10.12: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```