

# PROJECT REPORT

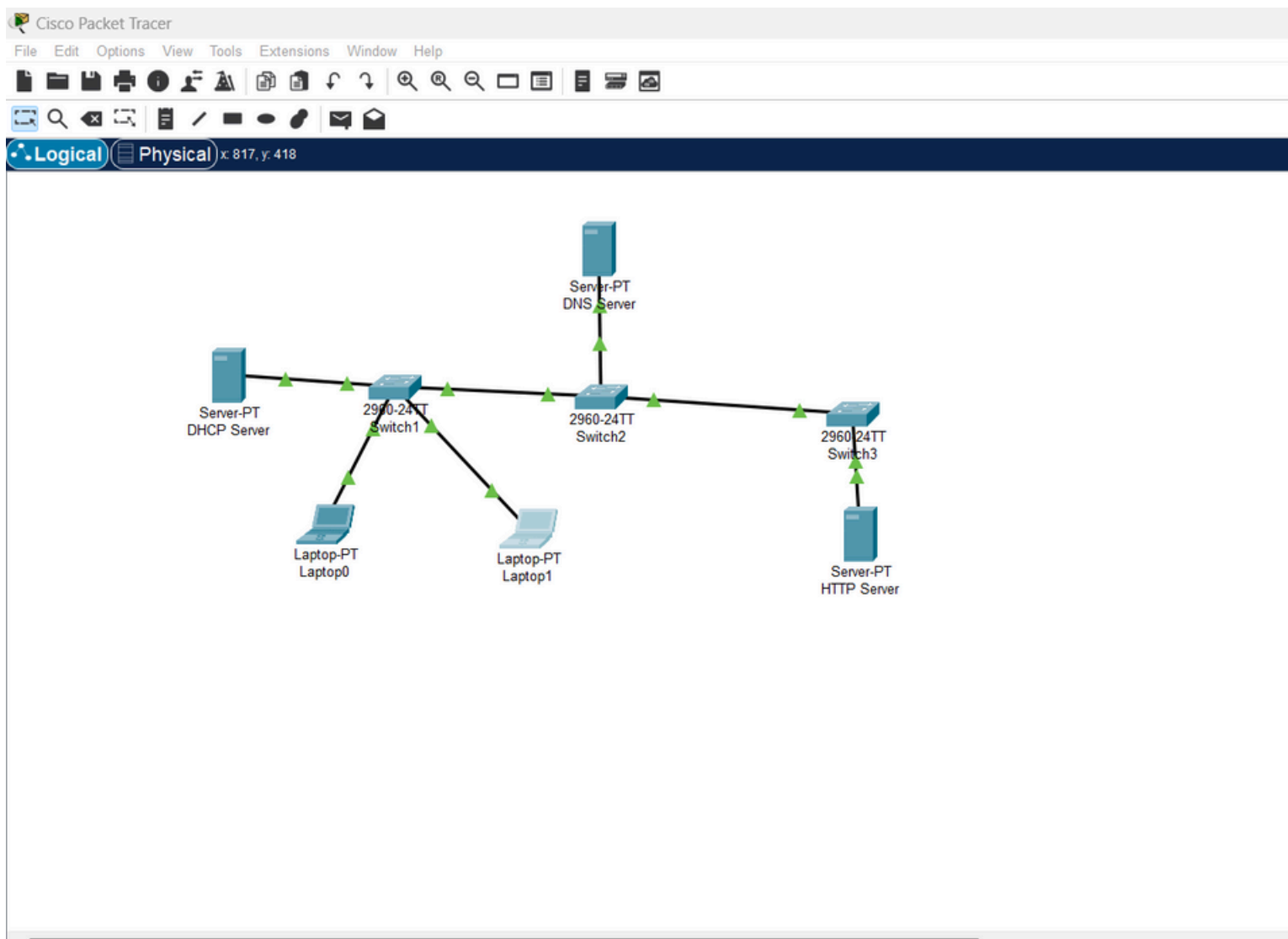
## W2D4 PRATICA

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In risposta all'esercizio di simulare una rete complessa che simuli alcuni servizi applicativi quali http, dhcp e dns e far sì che ciascuno di questi server espleti il suo servizio.

# Architettura target

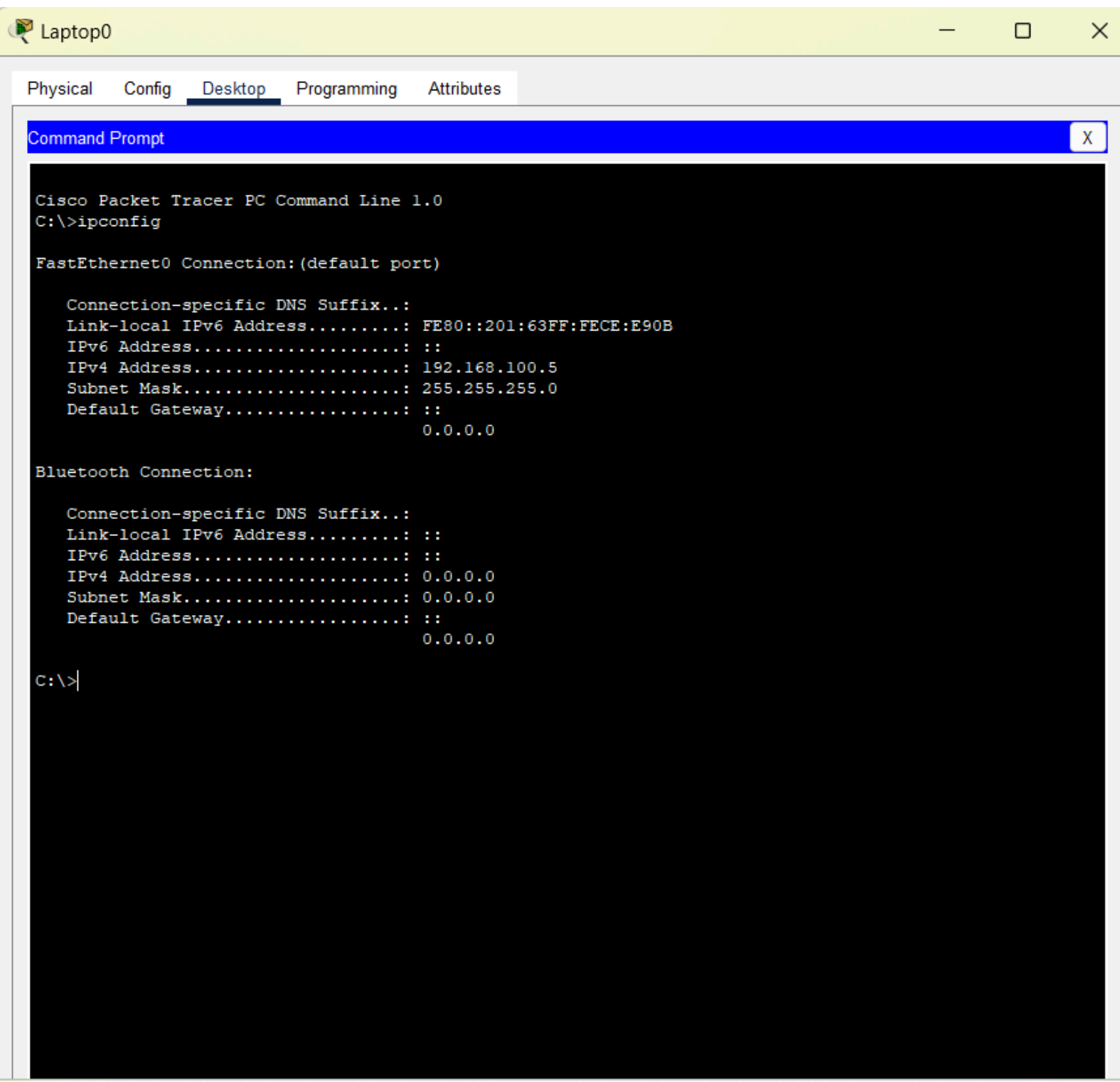


1. Configurare almeno 2 client in modo tale da ricevere IP dal server DHCP
2. Configurare un «record A» sul server DNS in modo tale da associare il nome «epicode.internal» all'IP del server HTTP
3. Fare ipconfig dai due client
4. Fare un test per controllare se il DNS mi risolve correttamente epicode.internal
  - 1) andando sul sito web
  - 2) chiedendo la risoluzione da un client

I sever devono essere statici mentre i laptop vanno impostati su DHCP. Per prima cosa abbiamo settato tutti gli indirizzi IP in maniera arbitraria (e cioè abbiamo dato degli indirizzi simbolici scelti da noi). Poi abbiamo impostato i protocolli dei server.

Come si vede in figura 1 e 2,  
attraverso il comando “ipconfig”  
abbiamo appurato che gli indirizzi IP  
siano stati assegnati ai nostri 2  
devices.

FIG.1



The screenshot shows a Cisco Packet Tracer PC Command Line window for a device named Laptop0. The window has tabs for Physical, Config, Desktop, Programming, and Attributes, with Desktop selected. The Command Prompt shows the output of the ipconfig command, displaying network configuration details for FastEthernet0 and Bluetooth connections.

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

FastEthernet0 Connection: (default port)

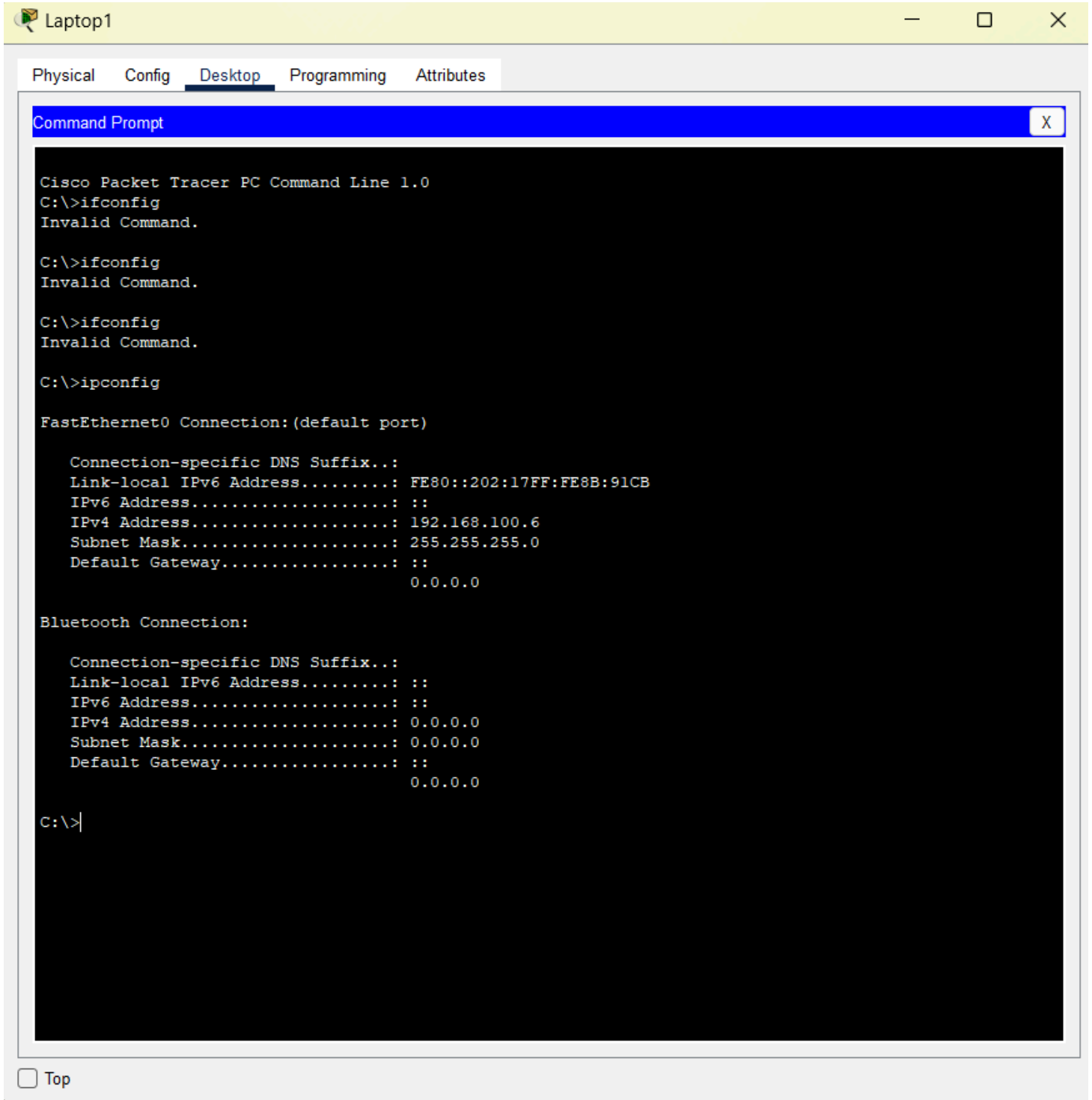
    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::201:63FF:FECE:E90B
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.168.100.5
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                                0.0.0.0

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:\>
```

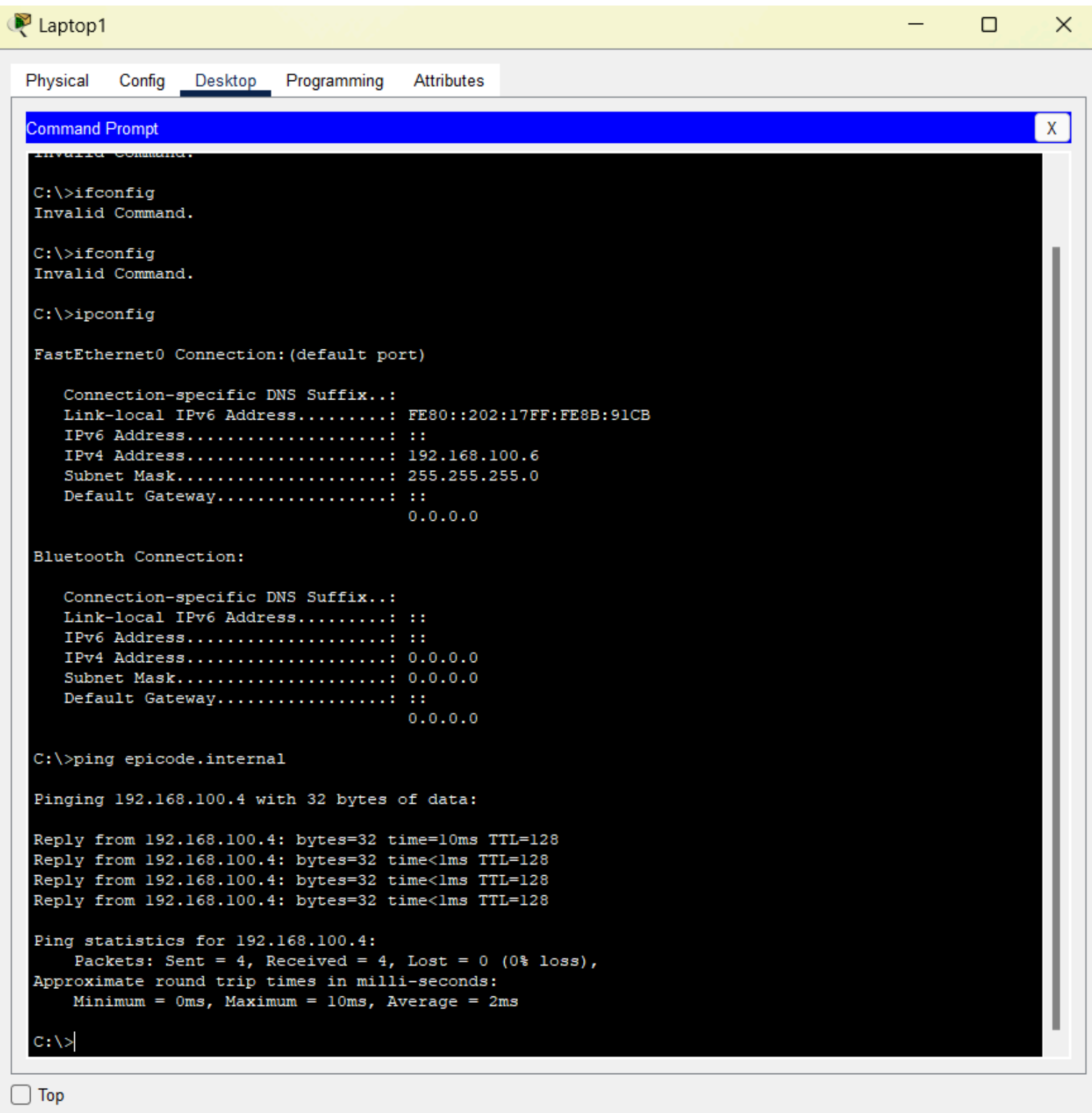
# FIG.2



Il DNS traduce l'indirizzo IP del server HTTP in ciò che impostiamo noi, in questo caso "epicode.internal"

Di seguito vediamo le schermate di test per controllare se il DNS ha risolto correttamente ciò che abbiamo impostato (PING E WEB BROWSER).

# PING “epicode internal”

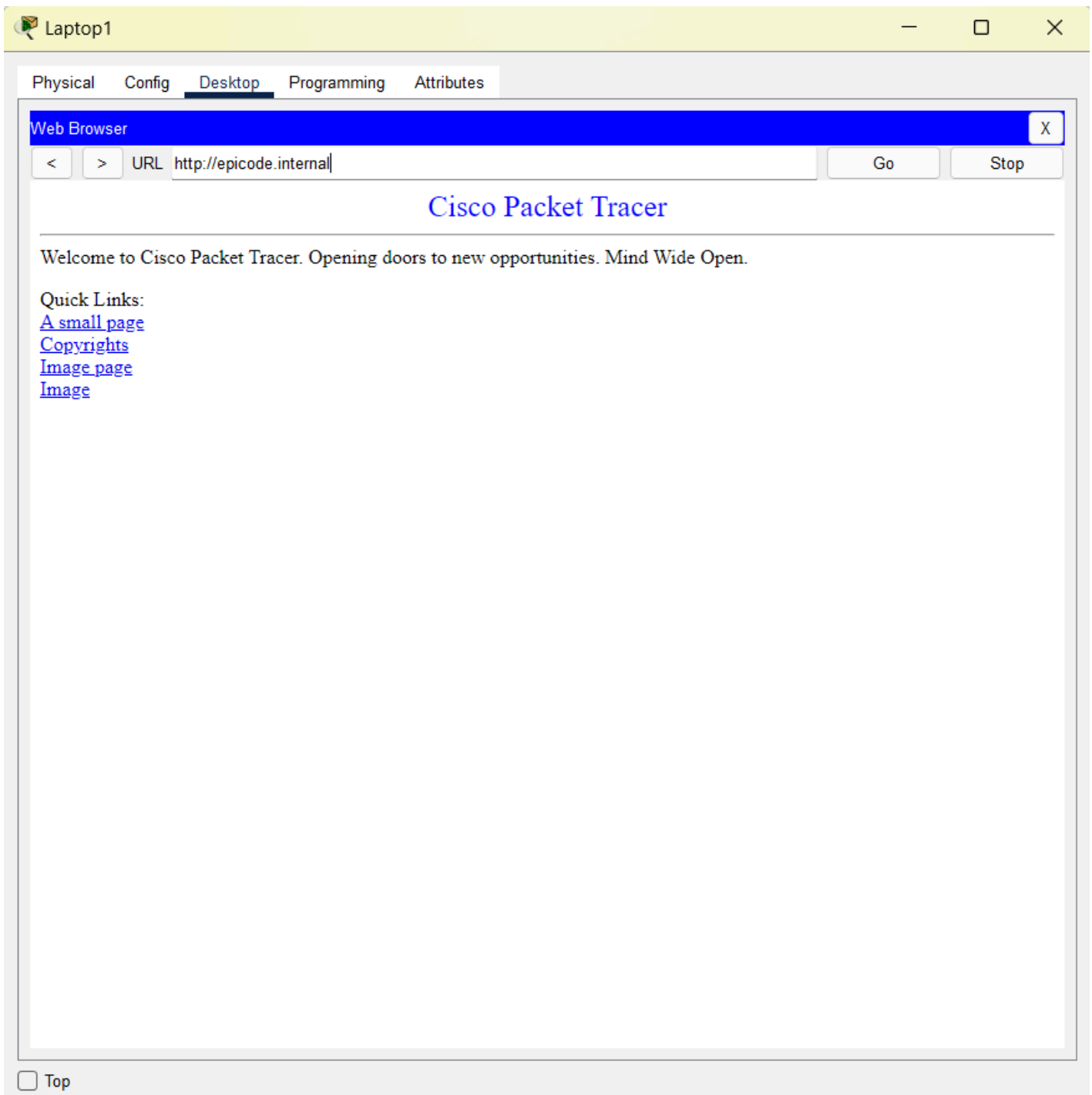


The screenshot shows a Windows Command Prompt window titled "Command Prompt" with a blue title bar. The window is part of a larger application with tabs labeled "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is selected. The Command Prompt shows the following commands and output:

```
Invalid Command.  
C:\>ifconfig  
Invalid Command.  
C:\>ifconfig  
Invalid Command.  
C:\>ipconfig  
  
FastEthernet0 Connection:(default port)  
  
    Connection-specific DNS Suffix...:  
    Link-local IPv6 Address.....: FE80::202:17FF:FE8B:91CB  
    IPv6 Address.....: ::  
    IPv4 Address.....: 192.168.100.6  
    Subnet Mask.....: 255.255.255.0  
    Default Gateway.....: ::  
                                0.0.0.0  
  
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 epicode.internal  
  
Pinging 192.168.100.4 with 32 bytes of data:  
  
Reply from 192.168.100.4: bytes=32 time=10ms TTL=128  
Reply from 192.168.100.4: bytes=32 time<1ms TTL=128  
Reply from 192.168.100.4: bytes=32 time<1ms TTL=128  
Reply from 192.168.100.4: bytes=32 time<1ms TTL=128  
  
Ping statistics for 192.168.100.4:  
    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 window, there is a checkbox labeled "Top".

# WEB URL “epicode internal”





**GRAZIE**