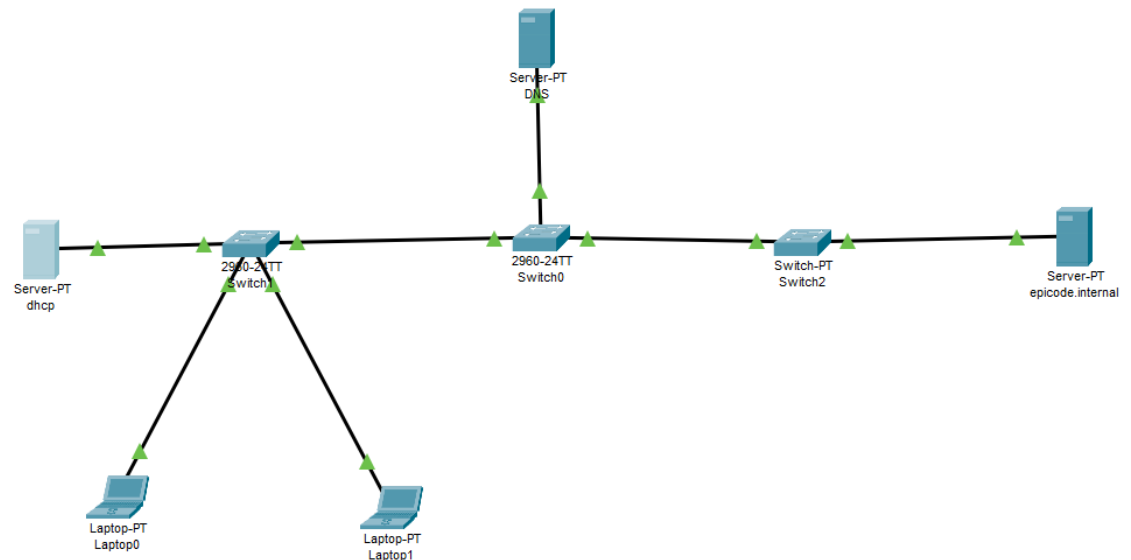


Esercitazione 4 - configurare server DHCP-DNS-HTTP

Riepilogo

Configurare su Cisco Packet trace 2 client e 3 server su cui impostare i servizi DHCP, DNS, HTTP



Fase 1: definizione e configurazione della rete

Configurazione del server DHCP

The screenshot shows a window titled "dhcp" with a tabbed interface. The "Desktop" tab is selected. The "IP Configuration" section is active, showing options for DHCP and Static IP. The Static IP is selected, and the IPv4 Address is set to 192.168.100.1, Subnet Mask to 255.255.255.0, and Default Gateway to 192.168.100.1. The IPv6 Configuration section is also visible, with the Static option selected and the Link Local Address set to FE80::2E0:B0FF:FEB5:B605. The 802.1X section is at the bottom, with the "Use 802.1X Security" checkbox unchecked and the Authentication dropdown set to MD5.

Physical Config Services **Desktop** Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.100.1

Subnet Mask 255.255.255.0

Default Gateway 192.168.100.1

DNS Server

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2E0:B0FF:FEB5:B605

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

☐ Top

configurato ip , subnet e gateway è necessario configurare il servizio DHCP

dhcp

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DHCP

Interface

FastEthernet0

Service

On

Off

Pool Name

serverPool

Default Gateway

192.168.100.1

DNS Server

192.168.100.5

Start IP Address :

192

168

100

0

Subnet Mask:

255

255

255

0

Maximum Number of Users :

256

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	192.168....	192.168....	192.168....	255.255....	256	0.0.0.0	0.0.0.0

Top

Configurazione server HTTP

Dopo aver eseguito anche qui la configurazione dell'ip del server :

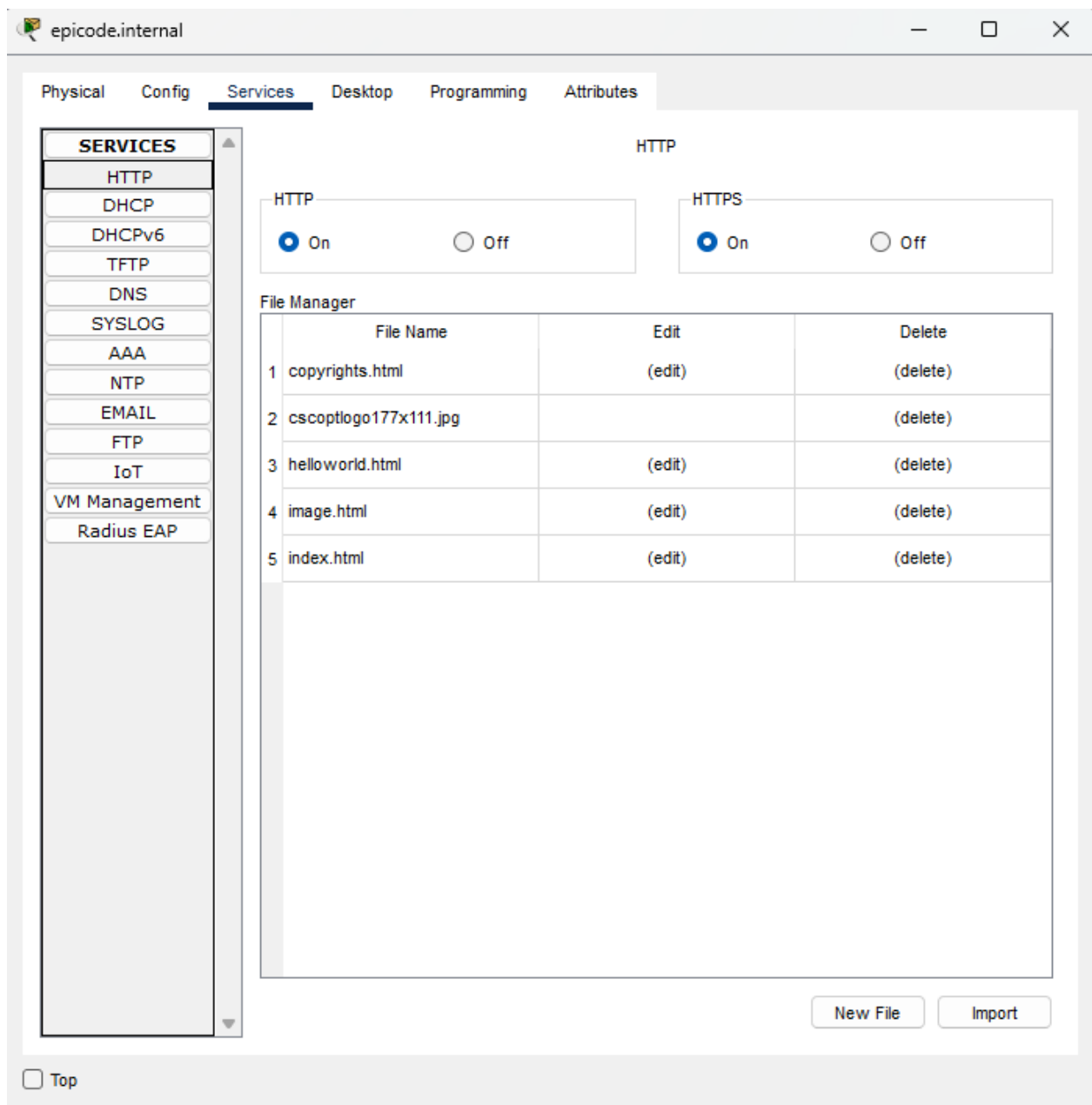
The screenshot shows a web browser window titled 'epicode.internal'. The 'Desktop' tab is selected in the top navigation bar. The 'IP Configuration' section is active, displaying settings for both IPv4 and IPv6. The IPv4 configuration is set to 'Static' with the following values: IPv4 Address (192.168.100.100), Subnet Mask (255.255.255.0), Default Gateway (192.168.100.1), and DNS Server (192.168.100.5). The IPv6 configuration is also set to 'Static' with a Link Local Address of FE80::209:7CFF:FE76:311D. The 802.1X section is expanded, showing 'Use 802.1X Security' as unchecked, 'Authentication' as MD5, and empty fields for 'Username' and 'Password'. A 'Top' link is located at the bottom left of the interface.

IP Configuration	
<input type="radio"/> DHCP <input checked="" type="radio"/> Static	
IPv4 Address	192.168.100.100
Subnet Mask	255.255.255.0
Default Gateway	192.168.100.1
DNS Server	192.168.100.5

IPv6 Configuration	
<input type="radio"/> Automatic <input checked="" type="radio"/> Static	
IPv6 Address	
Link Local Address	FE80::209:7CFF:FE76:311D
Default Gateway	
DNS Server	

802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

[Top](#)



abilitiamo il servizio HTTP

Configurazione server DNS

infine configuriamo il server DNS seguendo gli step già affrontati nei casi precedenti

The screenshot shows a window titled "DNS" with a tabbed interface. The "Desktop" tab is selected, showing the "IP Configuration" section. The "Static" radio button is selected for both IPv4 and IPv6 configurations. The IPv4 configuration fields are filled with the following values:

Field	Value
IPv4 Address	192.168.100.5
Subnet Mask	255.255.255.0
Default Gateway	192.168.100.1
DNS Server	0.0.0.0

The IPv6 configuration fields are also filled with the following values:

Field	Value
IPv6 Address	/
Link Local Address	FE80::209:7CFF:FE06:6721
Default Gateway	
DNS Server	

The "802.1X" section is also visible, with the "Use 802.1X Security" checkbox unchecked. The "Authentication" dropdown is set to "MD5". The "Username" and "Password" fields are empty.

At the bottom left of the window, there is a "Top" button.

DNS

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

DNS

DNS Service

On

Off

Resource Records

Name

Type

A Record

Address

Add

Save

Remove

No.	Name	Type	Detail
0	epicode.internal	A Record	192.168.100.100

DNS Cache

Top

Configurazione client

The screenshot shows a window titled "Laptop0" with a tabbed interface. The "Desktop" tab is selected, and the "IP Configuration" window is open. The "Interface" dropdown is set to "FastEthernet0". Under "IP Configuration", the "DHCP" radio button is selected, and the "Static" radio button is unselected. The fields for IPv4 Address, Subnet Mask, Default Gateway, and DNS Server are populated with the values 192.168.100.2, 255.255.255.0, 192.168.100.1, and 192.168.100.5 respectively. Under "IPv6 Configuration", the "Automatic" radio button is unselected, and the "Static" radio button is selected. The fields for IPv6 Address, Link Local Address, Default Gateway, and DNS Server are empty. The "802.1X" section has the "Use 802.1X Security" checkbox unselected, and the "Authentication" dropdown is set to "MD5". The "Username" and "Password" fields are empty. A "Top" button is located at the bottom left of the window.

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static

IPv4 Address 192.168.100.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.100.1

DNS Server 192.168.100.5

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::20A:F3FF:FE17:86E8

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

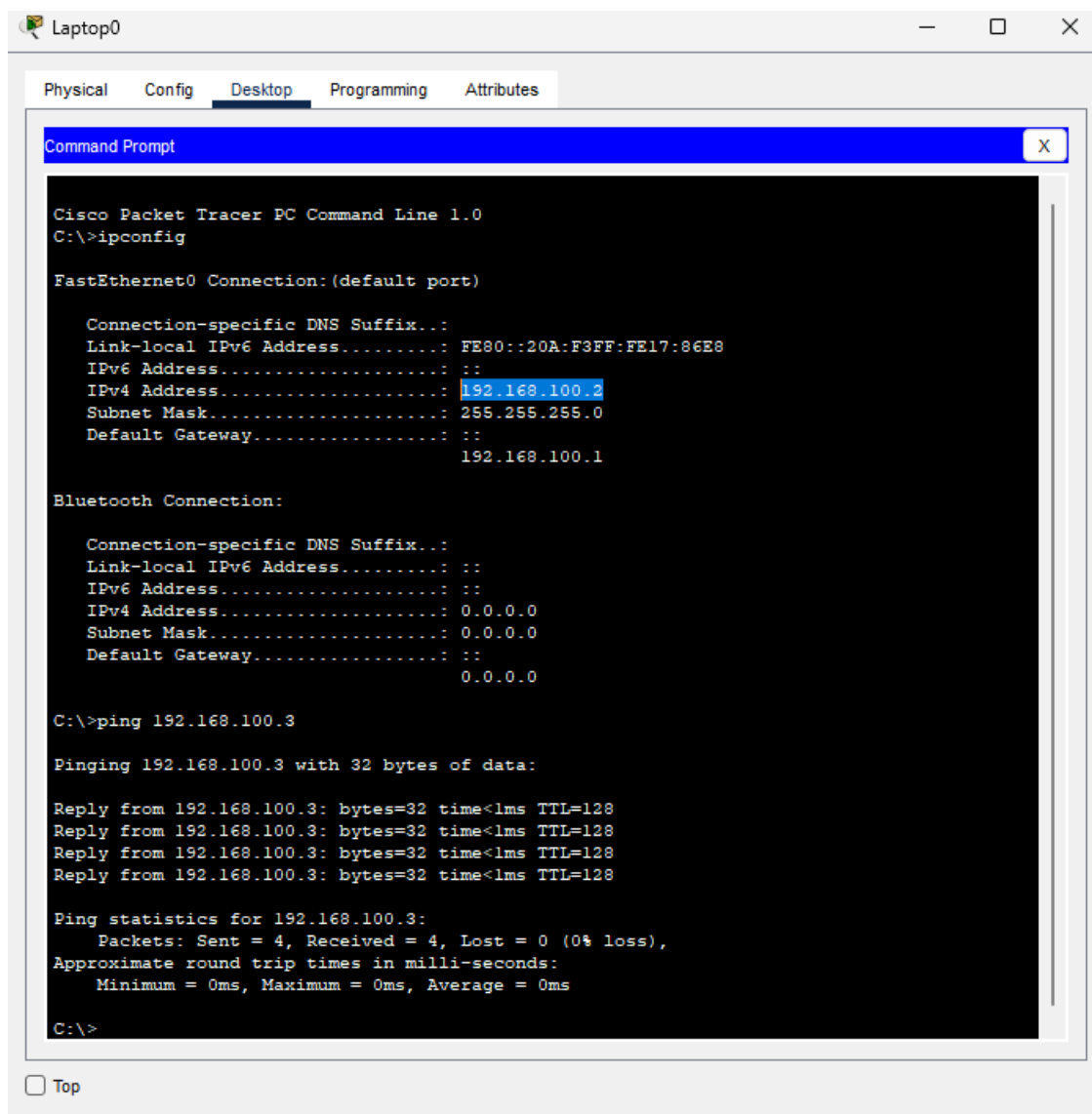
☐ Top

per configurare i client e verificare che si sia impostato il server DHCP correttamente , è bastato impostare nella sezione “ip configuration” DHCP e automaticamente verrà selezionata la

configurazione corretta. NB. Per rendere la configurazione funzionante è stato necessario aggiungere nella configurazione del server DHCP il DNS definito dopo , in modo tale da raggiungere il sito da qualunque client configurato.

Fase 2: Test della rete:

Ping tra i client



```
Laptop0
Physical  Config  Desktop  Programming  Attributes

Command Prompt

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

FastEthernet0 Connection:(default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address . . . . .: FE80::20A:F3FF:FE17:86E8
    IPv6 Address . . . . .: ::
    IPv4 Address . . . . .: 192.168.100.2
    Subnet Mask . . . . .: 255.255.255.0
    Default Gateway . . . . .: ::
                                192.168.100.1

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

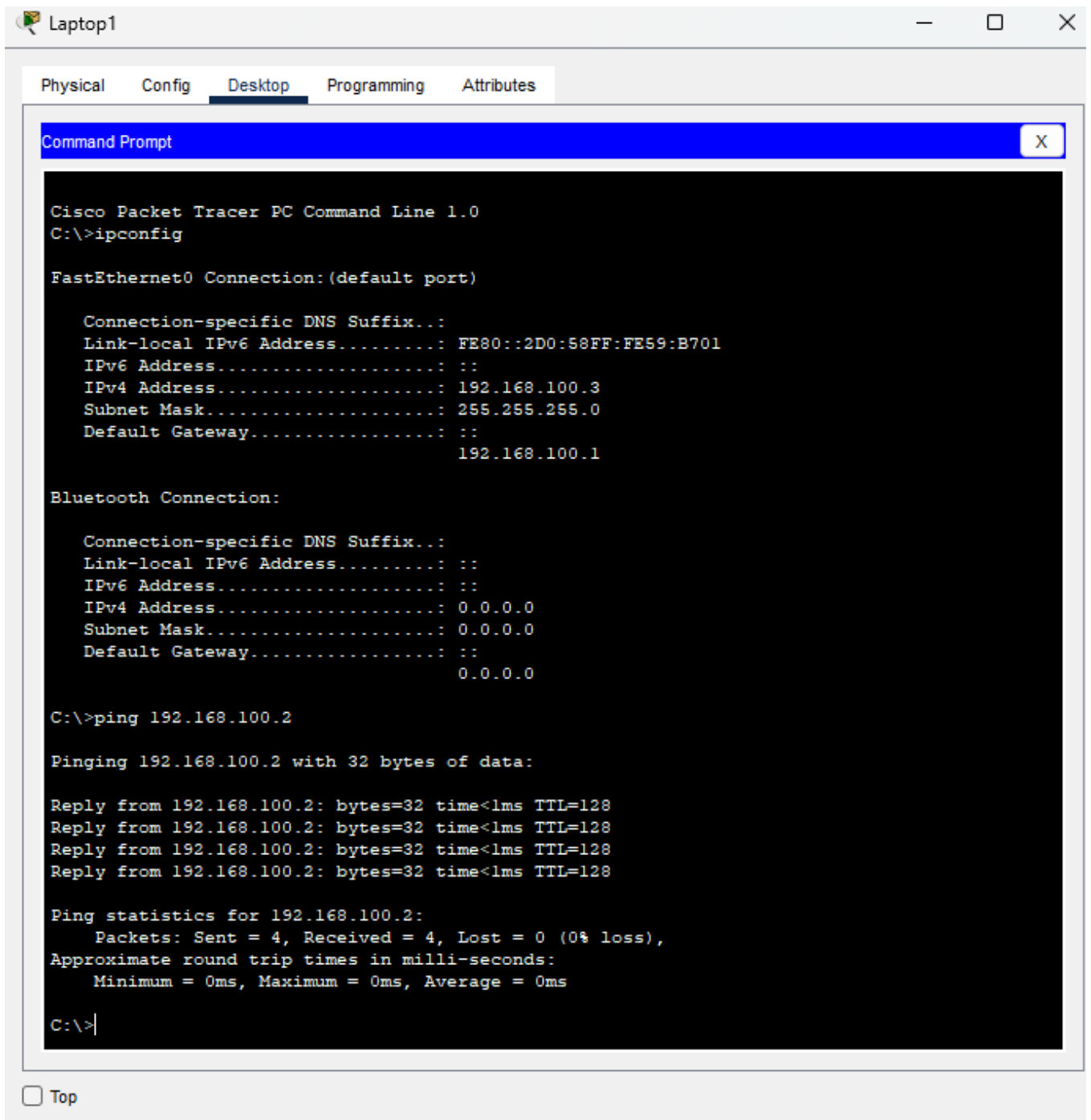
C:\>ping 192.168.100.3

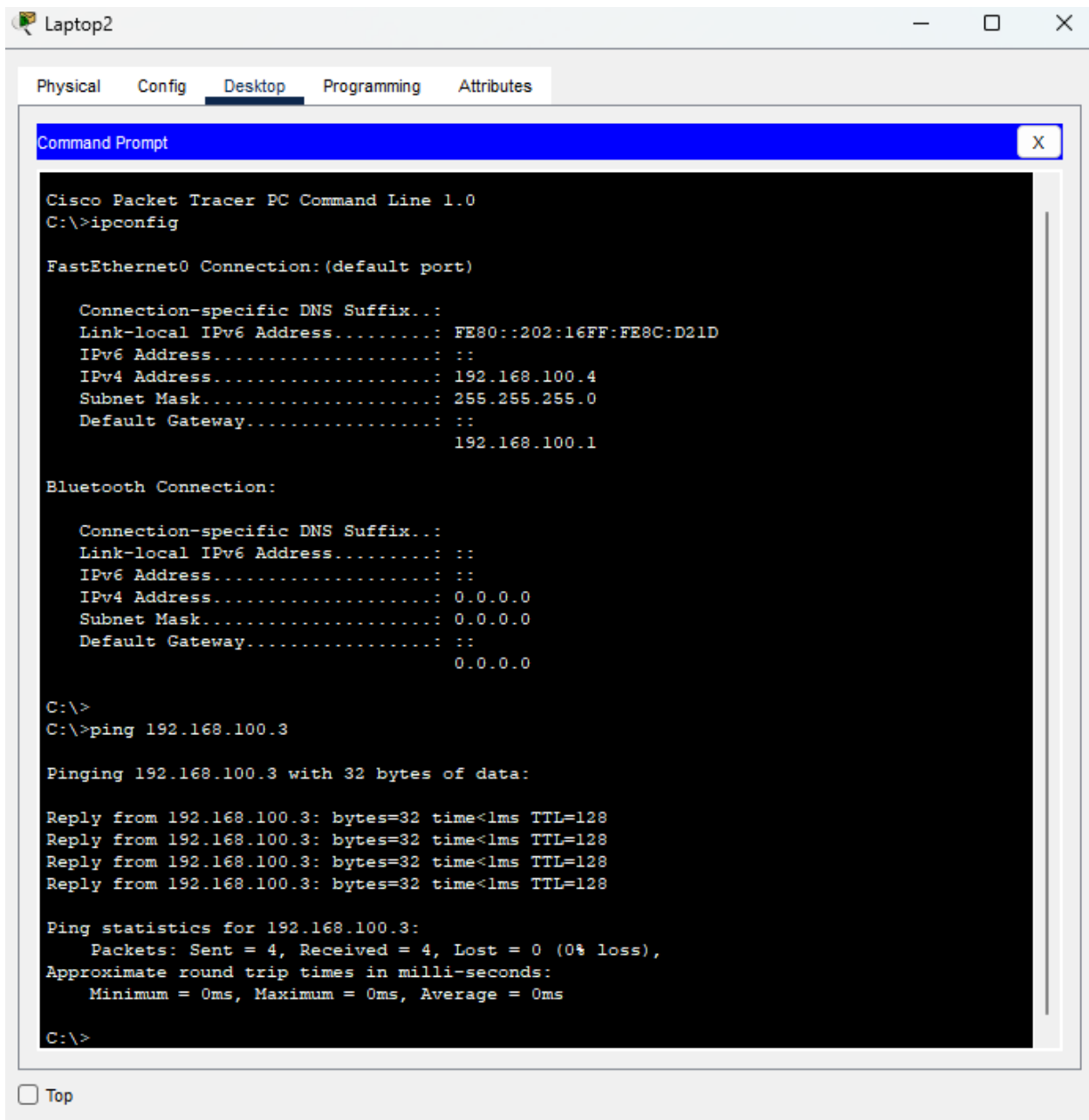
Pinging 192.168.100.3 with 32 bytes of data:

Reply from 192.168.100.3: bytes=32 time<1ms TTL=128
Reply from 192.168.100.3: bytes=32 time<1ms TTL=128
Reply from 192.168.100.3: bytes=32 time<1ms TTL=128
Reply from 192.168.100.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.100.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

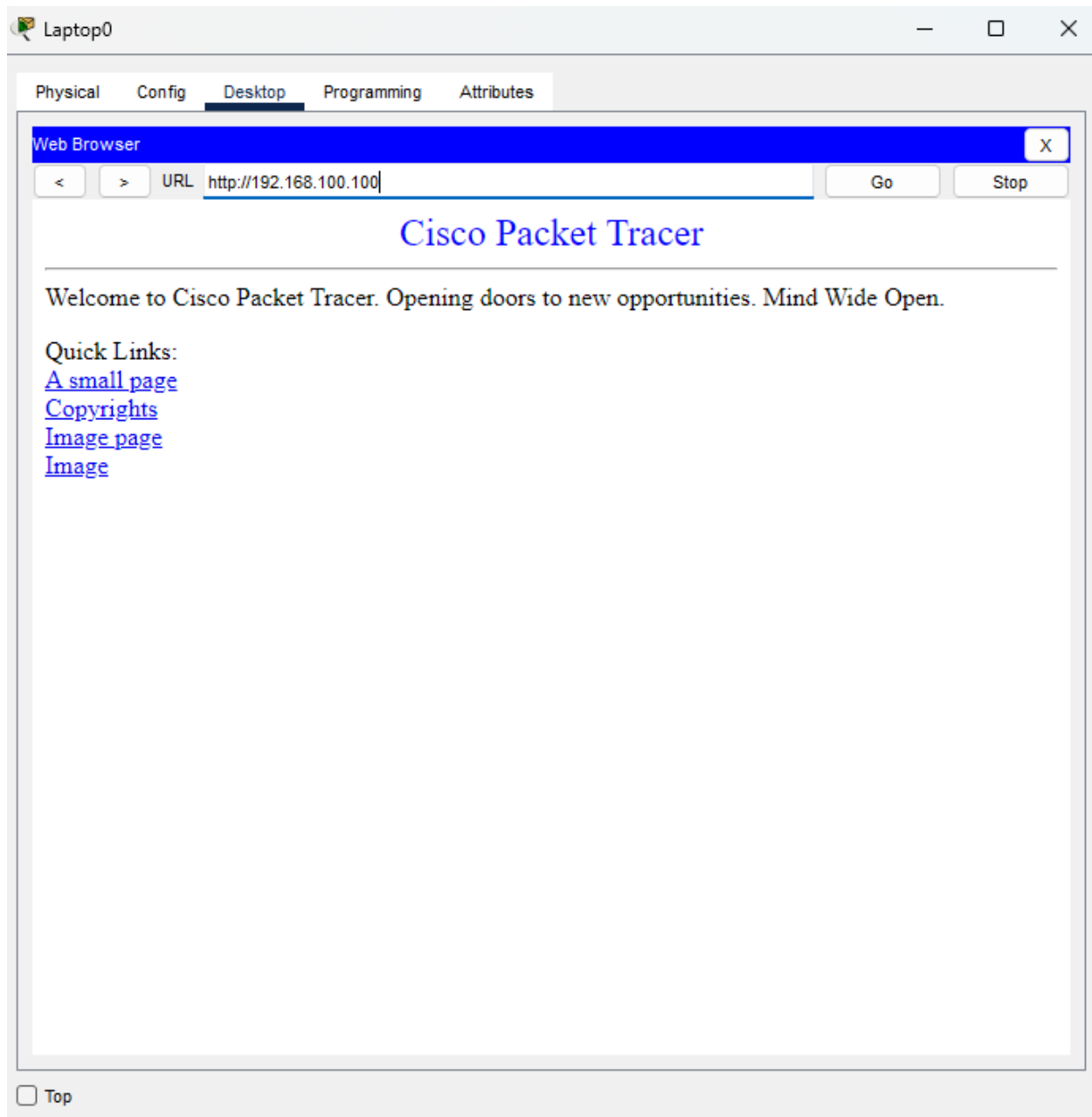


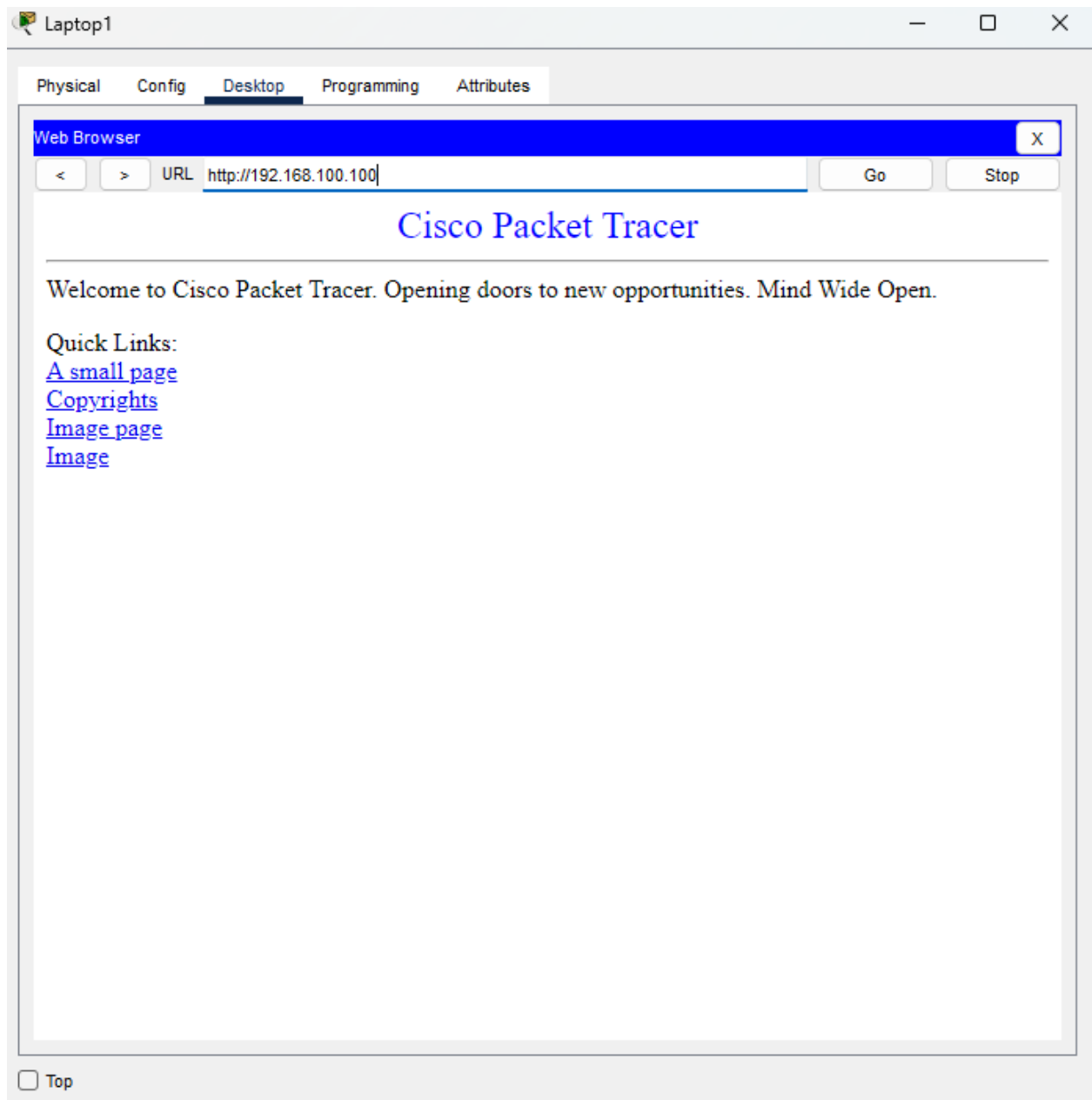


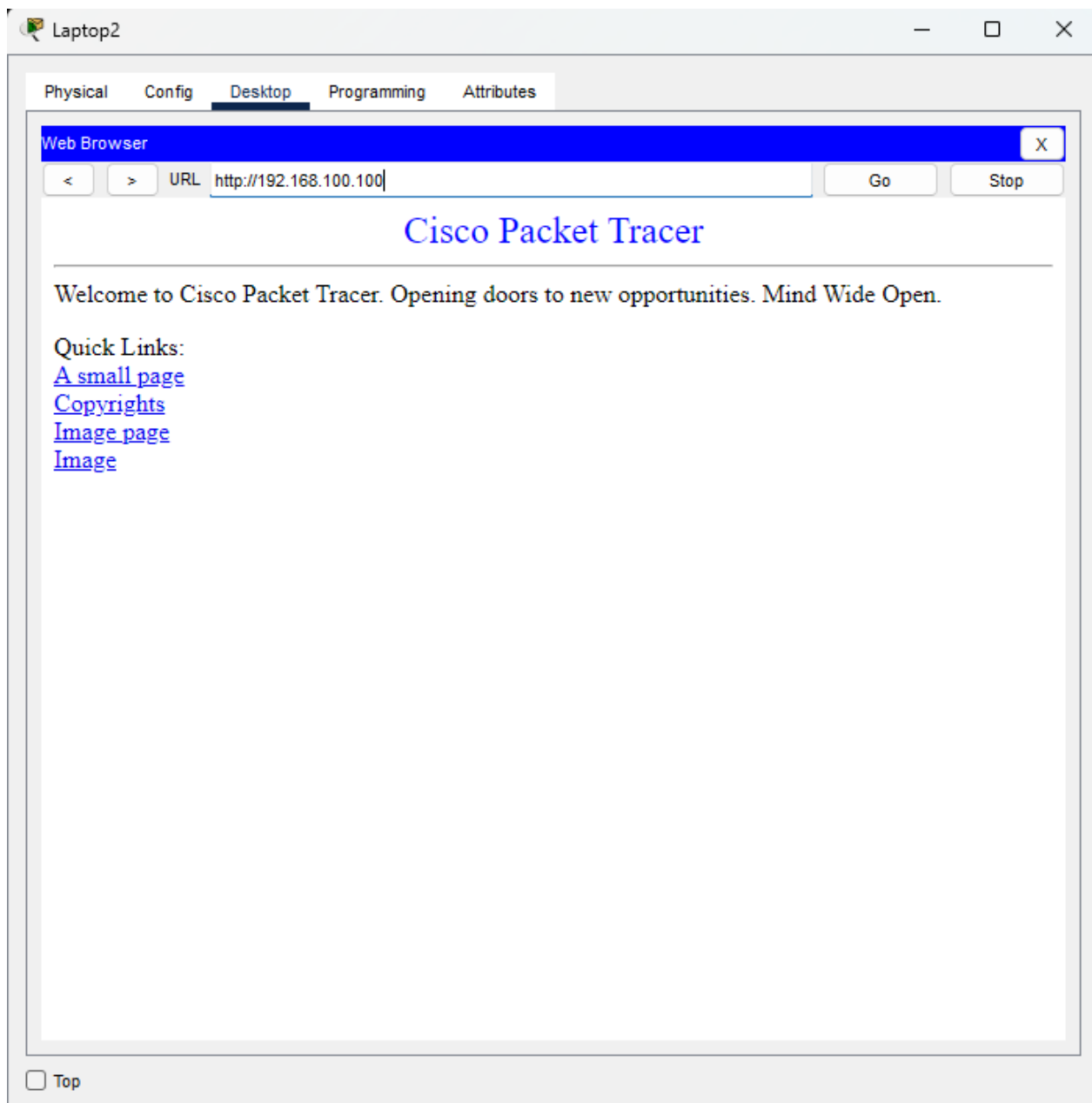
Test server DHCP

com'è possibile vedere nella sezione " configurazione client" è bastato impostare nella tab "ip config" il servizio DHCP per far sì che vengano assegnati gli ip automaticamente.

Test Server HTTP







è dunque possibile raggiungere il sito da qualunque client

Test DNS

