



ESERCITAZIONE 4

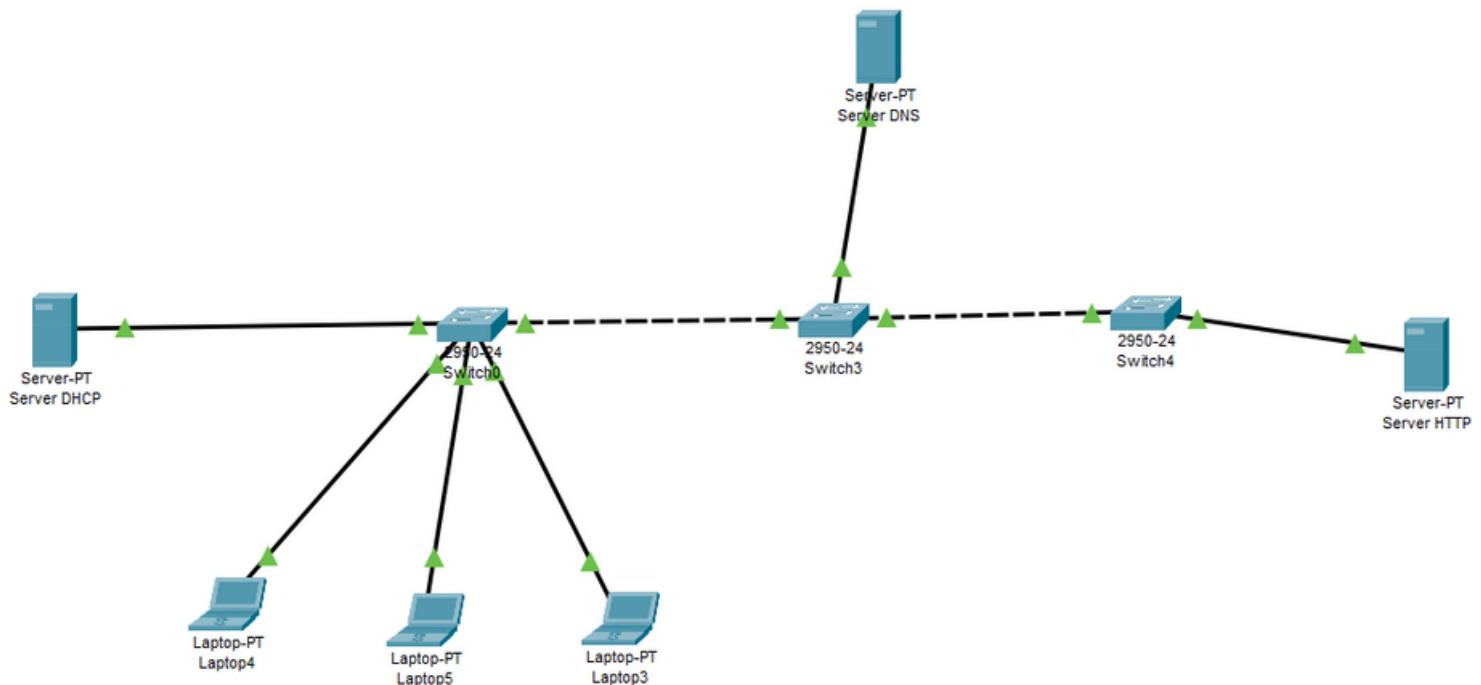
PACKET TRACER

ARCHITETTURA SERVER

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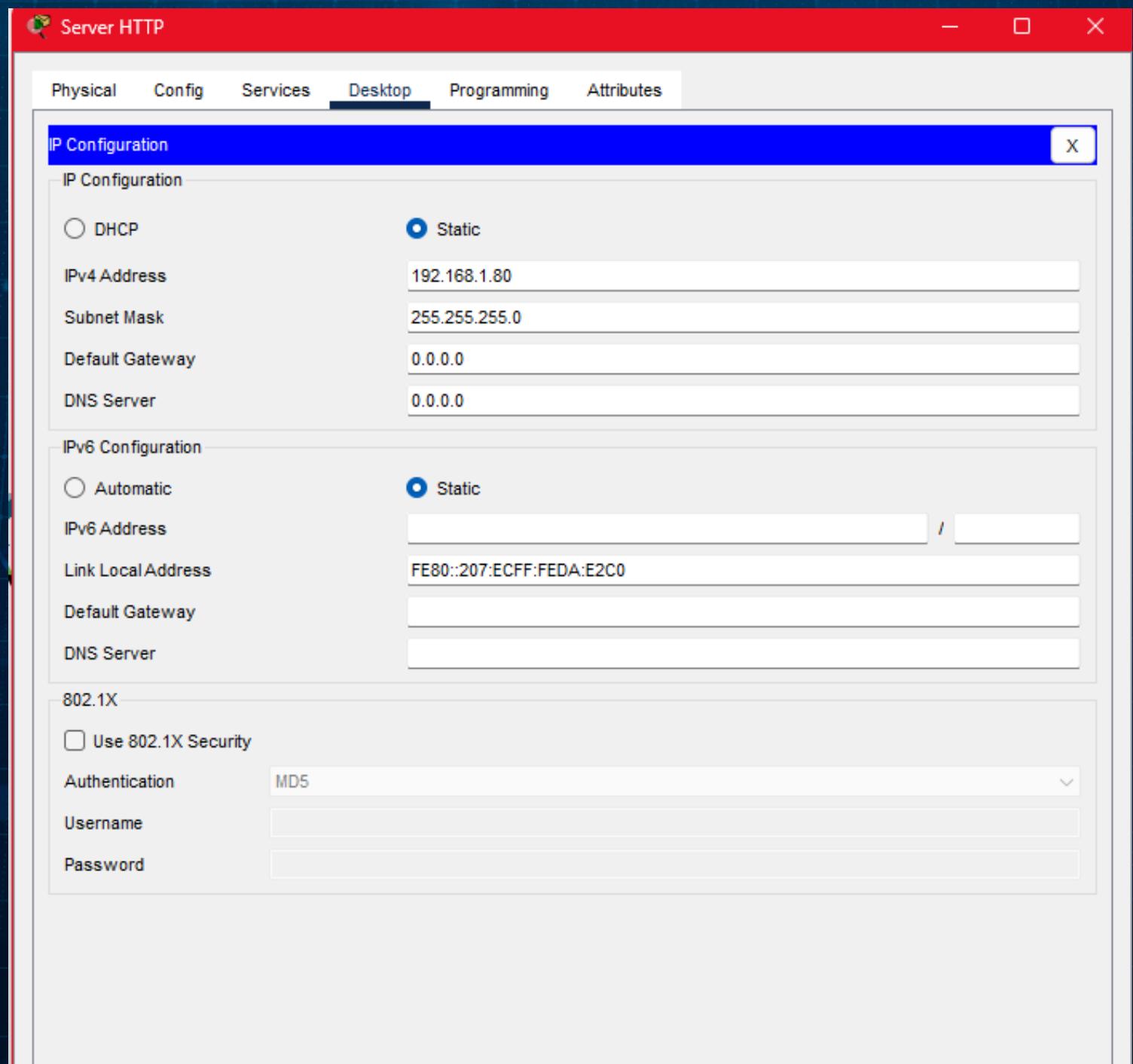
L'esercizio consiste nella creazione e configurazione della rete su Cisco Packet Tracer. Essa deve includere almeno due client, un server DHCP, un server DNS ed uno HTTP.

La rete è configurata schiendo l'immagine qui sotto:



Configurazione Server HTTP

- Ho impostato l'indirizzo IP statico del server in (192.168.1.80)
- In seguito ho attivato su services HTTP e HTTPS



Server HTTP

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Physical Config Services Desktop Programming Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

HTTP

HTTP

On

Off

HTTPS

On

Off

File Manager

File Name	Edit	Delete
1 copyrights.html	(edit)	(delete)
2 cscoptlogo177x111.jpg		(delete)
3 helloworld.html	(edit)	(delete)
4 image.html	(edit)	(delete)
5 index.html	(edit)	(delete)

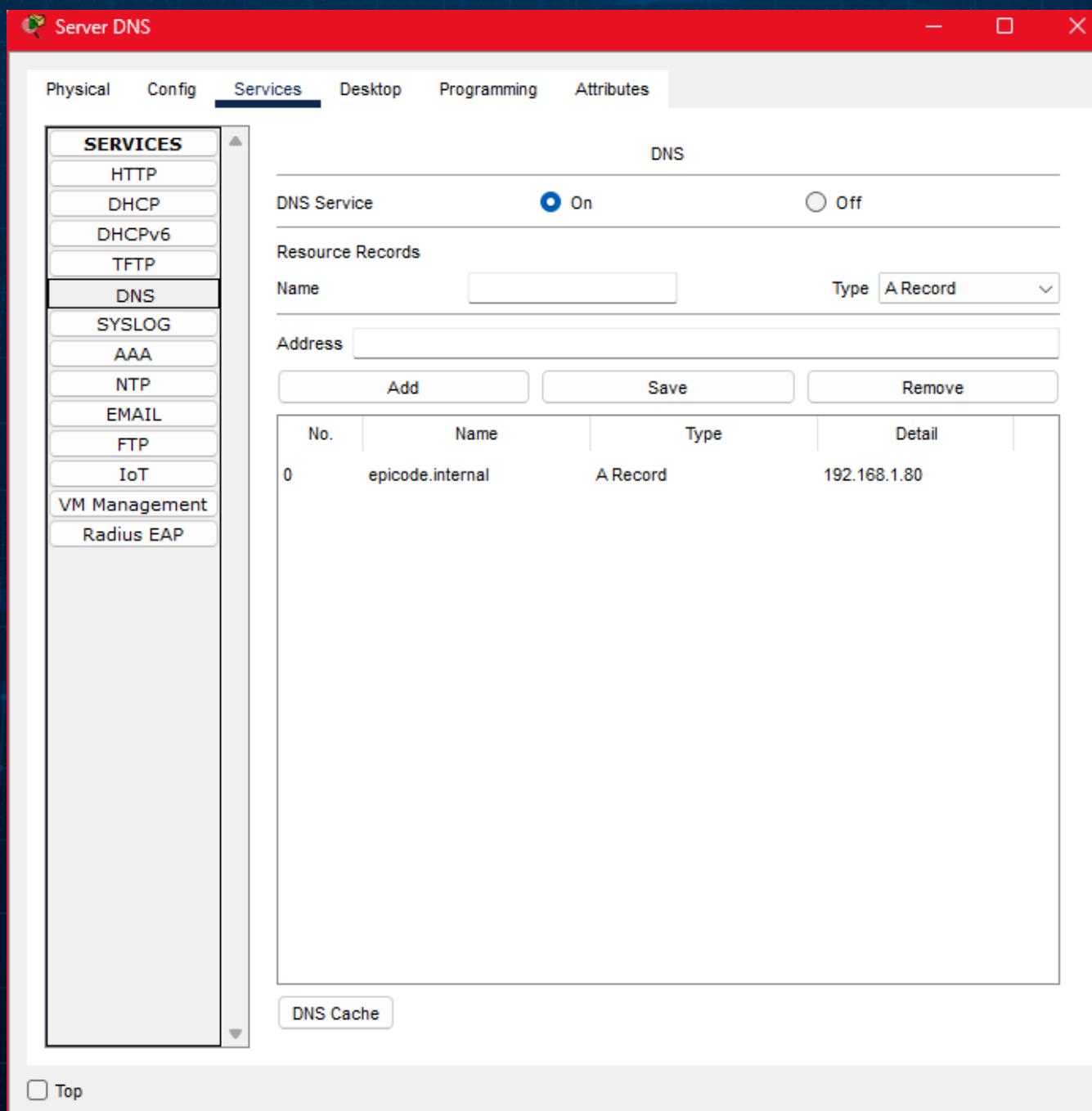
New File

Import

Top

Configurazione Server DNS

- Ho impostato l'indirizzo IP statico del server in 192.168.1.100
- Ho attivato il servizio DNS impostandolo “A record” associando il nome “epicode.internal” all’indirizzo ip del server HTTP (192.168.1.80)



[Physical](#) [Config](#) [Services](#) [Desktop](#) [Programming](#) [Attributes](#)**IP Configuration**

X

IP Configuration

 DHCP Static

IPv4 Address

192.168.1.100

Subnet Mask

255.255.255.0

Default Gateway

0.0.0.0

DNS Server

0.0.0.0

IPv6 Configuration

 Automatic Static

IPv6 Address

/

Link Local Address

FE80::290:CFF:FE83:2966

Default Gateway

DNS Server

802.1X

 Use 802.1X Security

Authentication

MD5

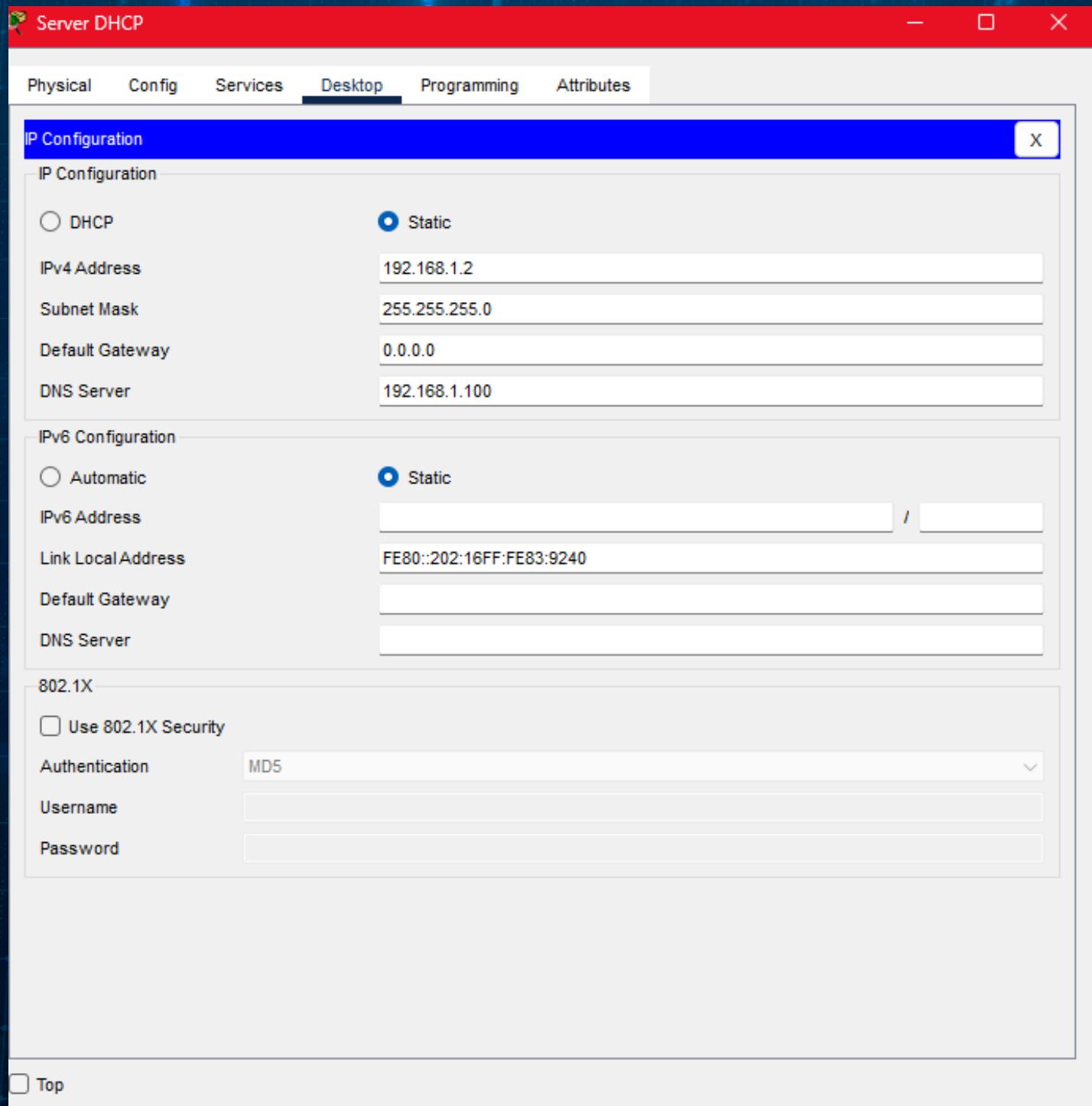
Username

Password

 Top

Configurazione Server DHCP

-Ho impostato un indirizzo IP statico (192.168.1.2) inserendo nella configurazione anche l'IP del server DNS in questo caso (192.168.1.100)



-Ho attivato il servizio DHCP creando un nuovo pool chiamato “myPool” configurandolo come l’immagine seguente:

Server 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: 0.0.0.0

DNS Server: 0.0.0.0

Start IP Address: 192 168 1 0

Subnet Mask: 255 255 255 0

Maximum Number of Users: 253

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	0.0.0.0	0.0.0.0	192.168....	255.255....	253	0.0.0.0	0.0.0.0
myPool	0.0.0.0	192.168....	192.168....	255.255....	253	0.0.0.0	0.0.0.0

Top

Assegnazione IP client

Dopo tutti i passaggi precedenti è possibile riscontrare l'assegnazione giusta e automatica degli IP ai 3 laptop

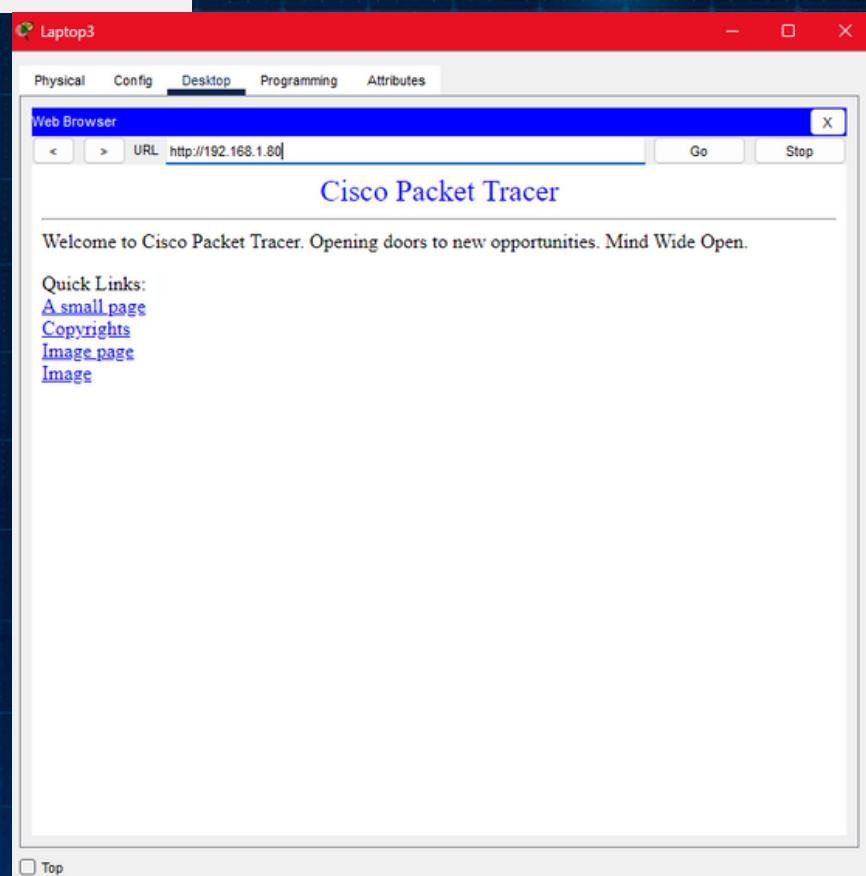
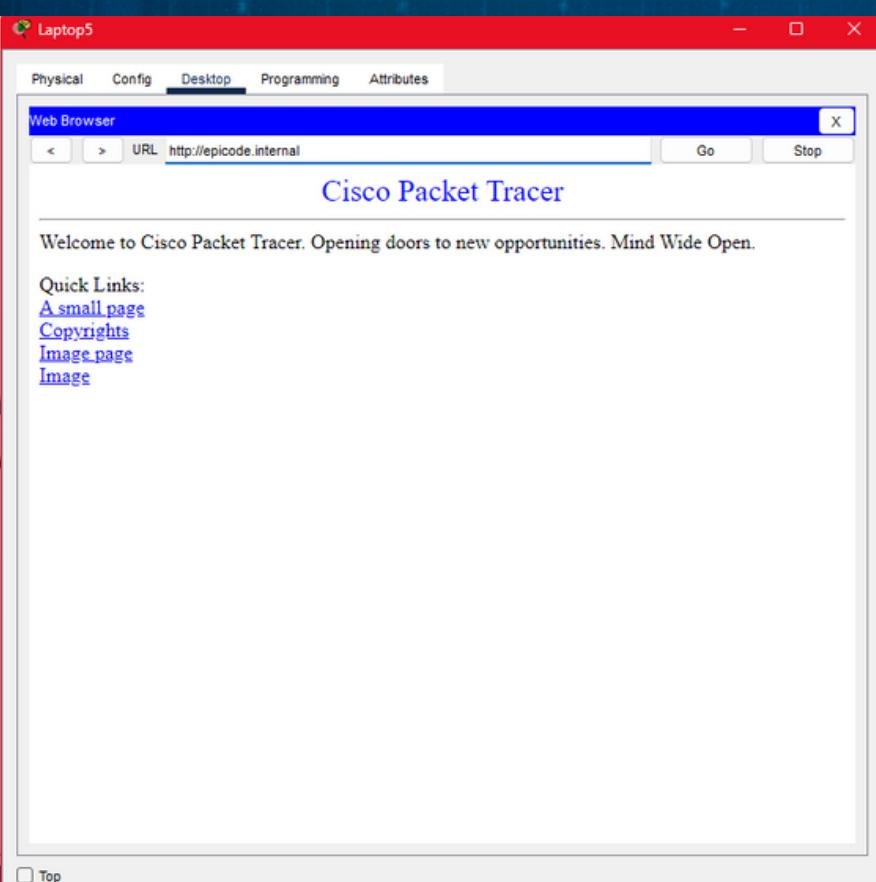
The image displays three separate windows from a network configuration application, each representing a different laptop (Laptop4, Laptop3, and Laptop5). Each window shows the 'IP Configuration' tab selected, with the interface set to 'FastEthernet0'. The configuration details are as follows:

- Laptop4:** IP Address: 192.168.1.4, Subnet Mask: 255.255.255.0, Default Gateway: 0.0.0.0, DNS Server: 192.168.1.100. IPv6 Address: FE80::207:ECFF:FE67:B99C.
- Laptop3:** IP Address: 192.168.1.6, Subnet Mask: 255.255.255.0, Default Gateway: 0.0.0.0, DNS Server: 192.168.1.100. IPv6 Address: FE80::2D0:BAFF:FE17:9279.
- Laptop5:** IP Address: 192.168.1.5, Subnet Mask: 255.255.255.0, Default Gateway: 0.0.0.0, DNS Server: 192.168.1.100. IPv6 Address: FE80::201:42FF:FE06:9284.

In all three configurations, the 'DHCP' radio button is selected for IPv4, and the 'Static' radio button is selected for IPv6. The 802.1X security section is present but appears to be disabled (checkbox unchecked).

Verifica e conclusione

Accedendo sia dal browser che dal prompt possiamo vedere che gli indirizzi sia i ping “<http://epciode.internal>” e “<http://192.168.1.80>” funziona con successo.



Server HTTP

Physical Config Services Desktop **Programming** Attributes

Command Prompt

```
Cisco Packet Tracer SERVER Command Line 1.0
C:\>ping 192.168.1.80

Pinging 192.168.1.80 with 32 bytes of data:

Reply from 192.168.1.80: bytes=32 time=0ms TTL=128
Reply from 192.168.1.80: bytes=32 time=4ms TTL=128
Reply from 192.168.1.80: bytes=32 time=5ms TTL=128
Reply from 192.168.1.80: bytes=32 time=4ms TTL=128

Ping statistics for 192.168.1.80:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 4ms, Maximum = 8ms, Average = 5ms

C:\>|
```

Top

Laptop3

Physical Config Desktop **Programming** Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping epicode.internal

Pinging 192.168.1.80 with 32 bytes of data:

Reply from 192.168.1.80: bytes=32 time<1ms TTL=128
Reply from 192.168.1.80: bytes=32 time=1ms TTL=128
Reply from 192.168.1.80: bytes=32 time<1ms TTL=128
Reply from 192.168.1.80: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.80:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

c:\>|
```

Top