

PRE-REQUISITI: NETWORK(2)

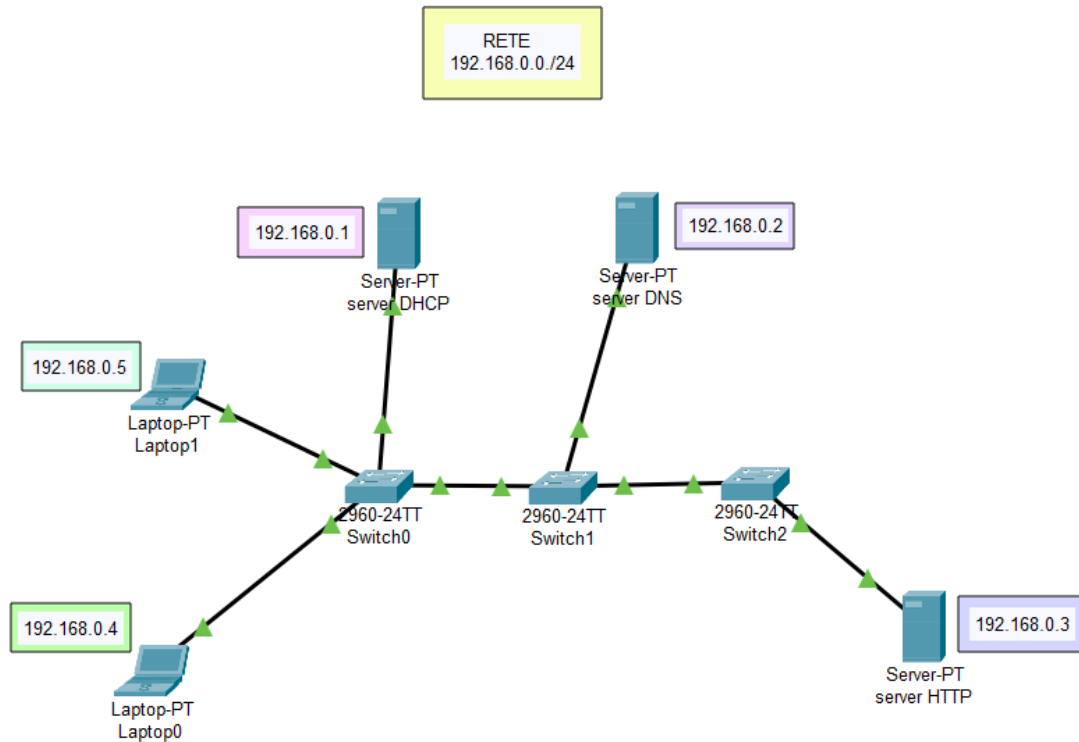
Aggiunta di servizi applicativi alla rete semplice

Configurazione di un servizio DHCP

Configurazione di un servizio DNS

Configurazione di un servizio HTTP

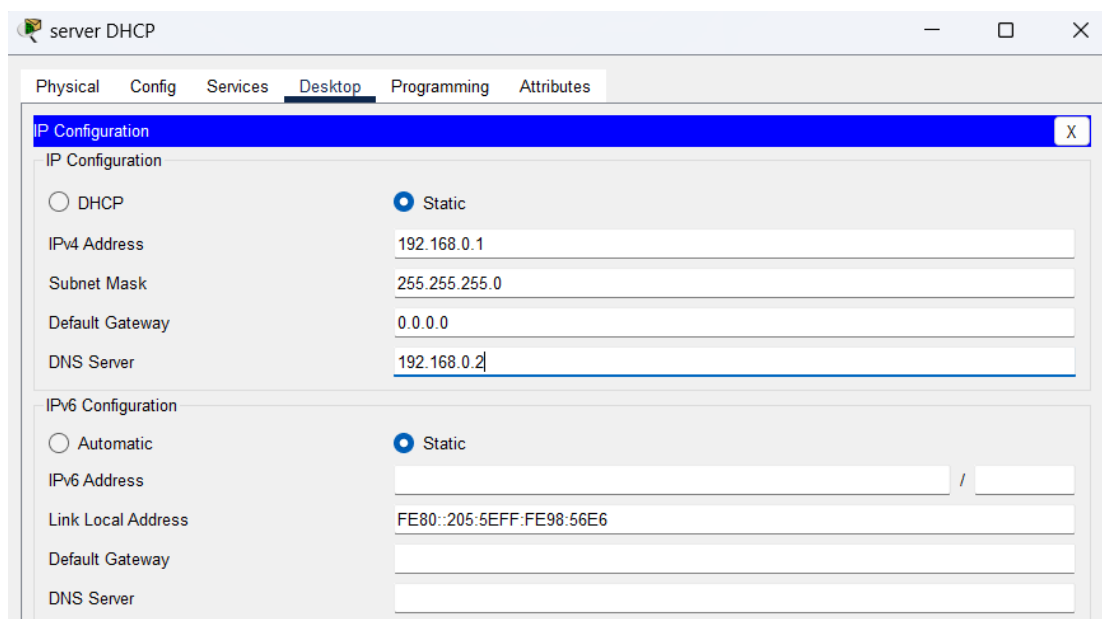
Architettura target:



I) Configurare almeno 2 client in modo tale da ricevere IP dal server DHCP

1. Configurare il server DHCP

- configurare l'indirizzo IP del server DHCP in 'statico'
- inserire IP 192.168.0.1
- nel riquadro 'DNS Server' inserire IP 192.168.0.2



- sempre dal server DHCP andiamo sulla scheda 'Services'
- configurare su 'on'
- nel riquadro 'Start IP Address' immettere 192.168.0.4

The screenshot shows the 'server DHCP' configuration window with the 'Services' tab selected. On the left, a 'SERVICES' list has 'DHCP' highlighted. The main area is titled 'DHCP' and shows the 'FastEthernet0' interface with the 'Service' set to 'On'. Below this, fields for 'Pool Name' (serverPool), 'Default Gateway' (0.0.0.0), 'DNS Server' (0.0.0.0), 'Start IP Address' (192.168.0.4), 'Subnet Mask' (255.255.255.0), 'Maximum Number of Users' (512), 'TFTP Server' (0.0.0.0), and 'WLC Address' (0.0.0.0) are visible. At the bottom, there are 'Add', 'Save', and 'Remove' buttons, and a table listing the configured pool.

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	192.168.0.0	255.255.2...	512	0.0.0.0	0.0.0.0

2. Configurare il server HTTP

- configurare l'indirizzo IP del server HTTP in 'statico'
- inserire IP 192.168.0.3
- nel riquadro 'DNS Server' inserire IP 192.168.0.2

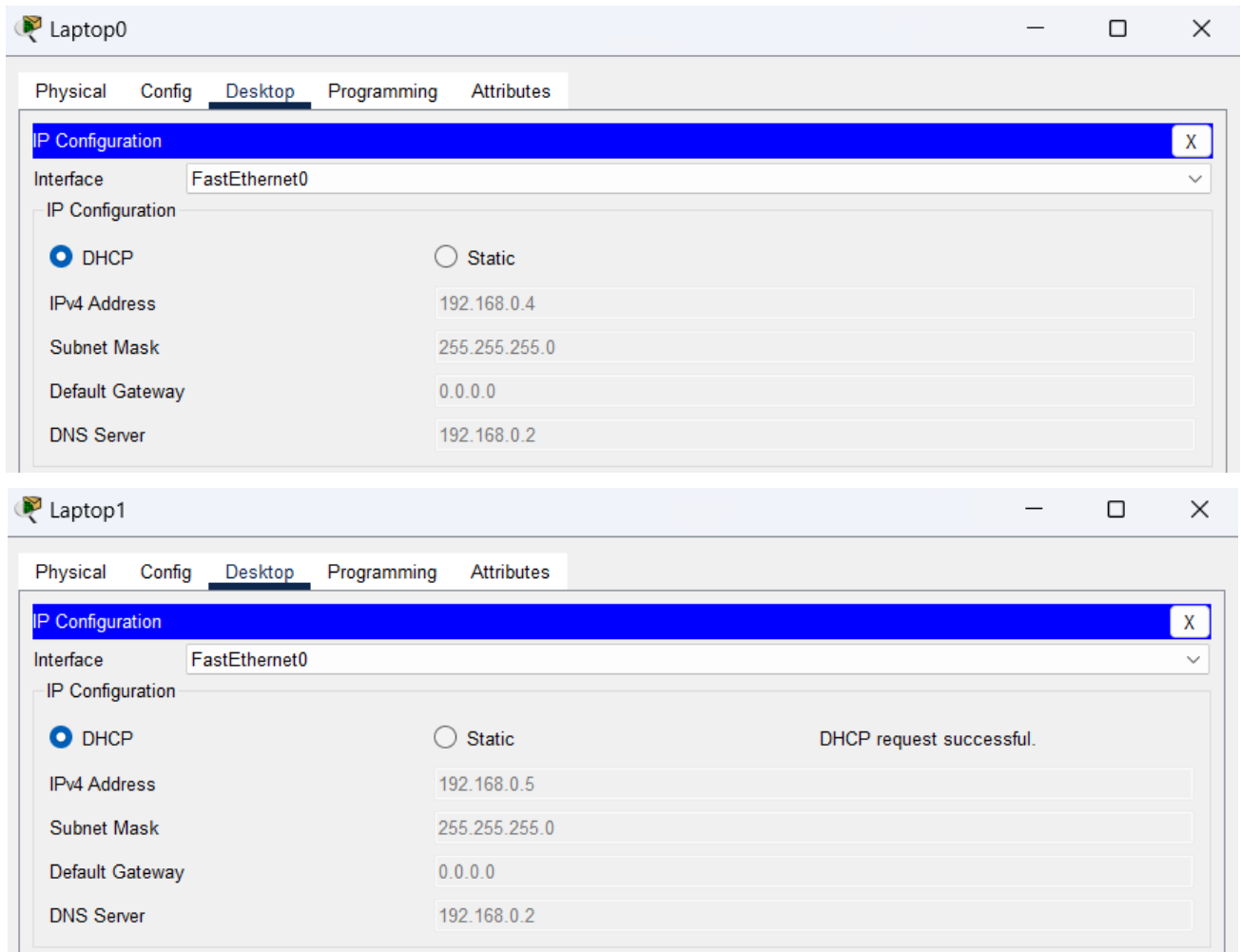
The screenshot shows the 'server HTTP' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section has 'Static' selected. The 'IPv4 Address' is set to 192.168.0.3, 'Subnet Mask' to 255.255.255.0, 'Default Gateway' to 0.0.0.0, and 'DNS Server' to 192.168.0.2. The 'IPv6 Configuration' section also has 'Static' selected, with 'IPv6 Address' empty and 'Link Local Address' set to FE80::202:17FF:FE19:7A6D.

The screenshot shows the 'server HTTP' configuration window with the 'Services' tab selected. On the left, the 'SERVICES' list has 'HTTP' highlighted. The main area is titled 'HTTP' and shows both 'HTTP' and 'HTTPS' services set to 'On'. Below this is a 'File Manager' table listing files for management.

	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)

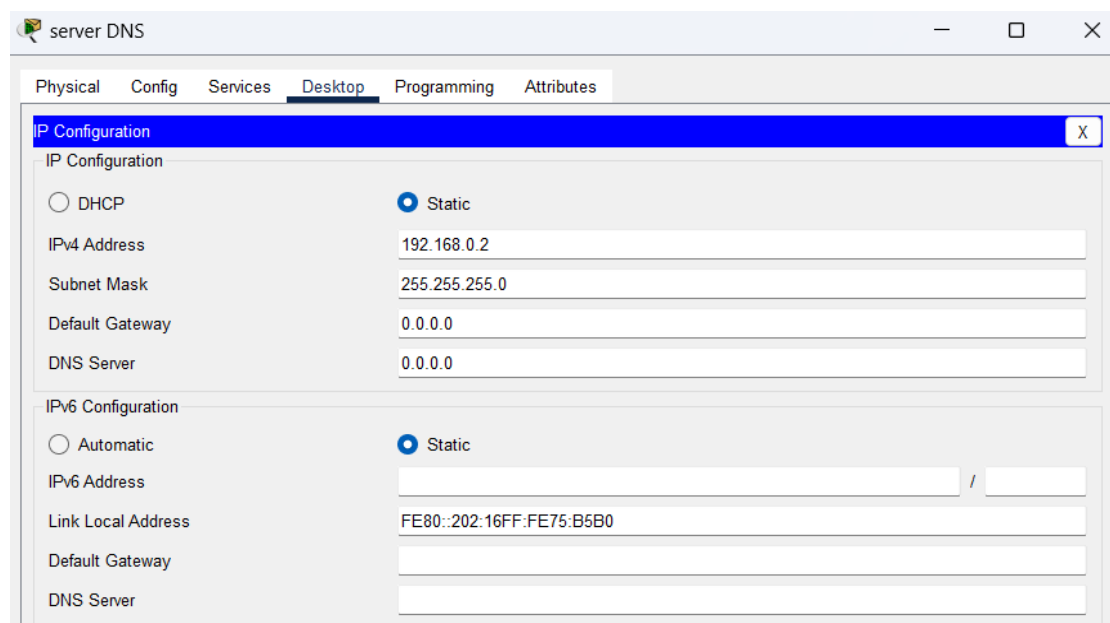
Per verificare che i due client riescano a ricevere l'IP dal server DHCP, bisogna:

- andare sulla scheda 'Desktop'
- e configurare entrambi i client su DHCP
- dovrebbe comparire 'DHCP request successful'



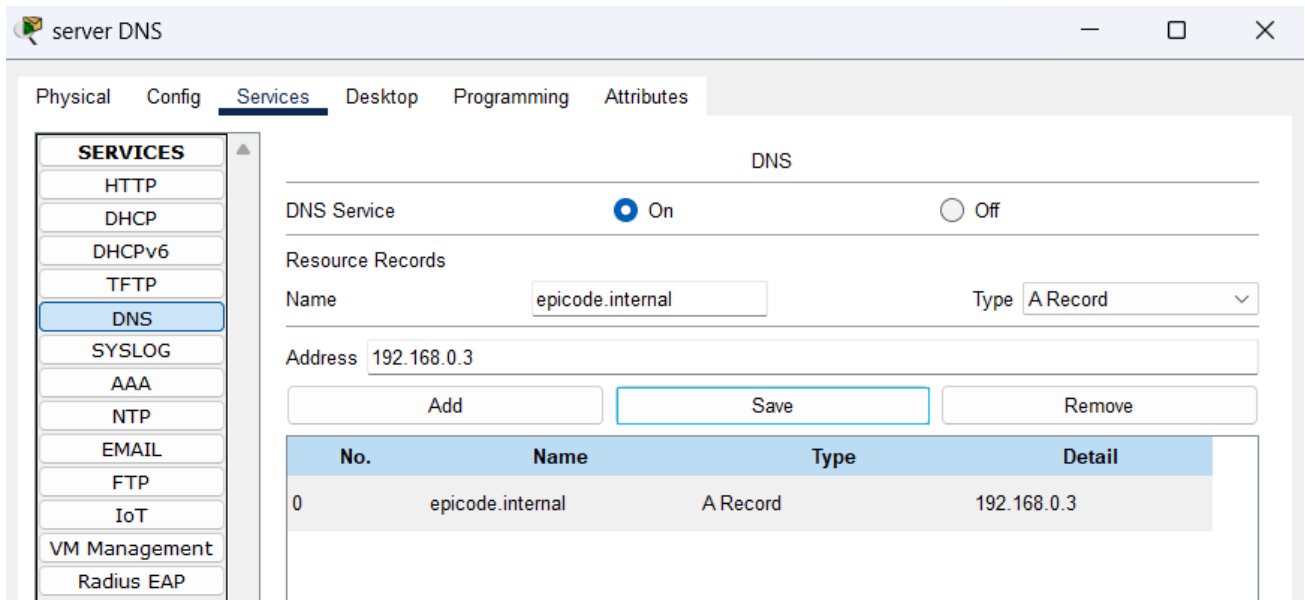
II) Configurare un 'record A' sul server DNS in modo tale da associare il nome <<epicode.internal>> all'IP del server HTTP

1. Configurare IP del server DNS in modalità 'Statica' e assegnare l'IP 192.168.0.2



2. Per configurare un 'record A':

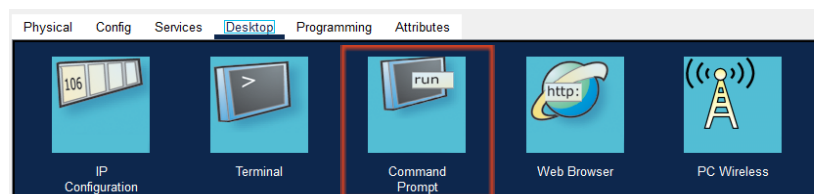
- Andare sulla scheda denominata "Services"
- cliccare su 'DNS'
- configurare il servizio DNS su 'On'
- inserire il nome 'epicode.internal'
- assegnare l'indirizzo 192.168.0.3
- salvare



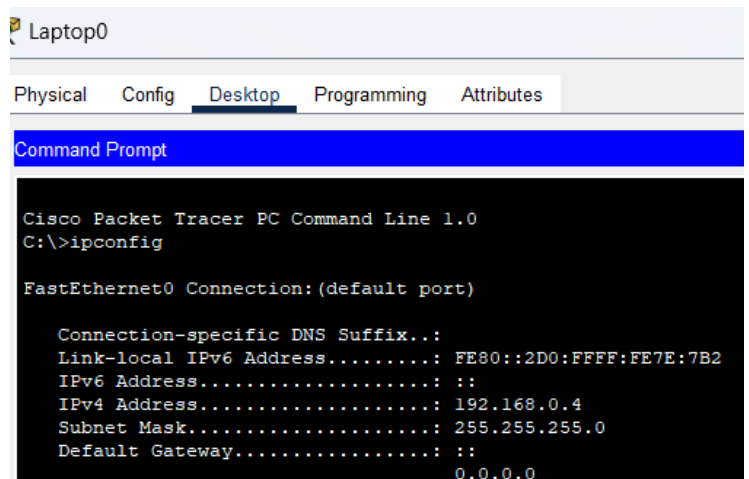
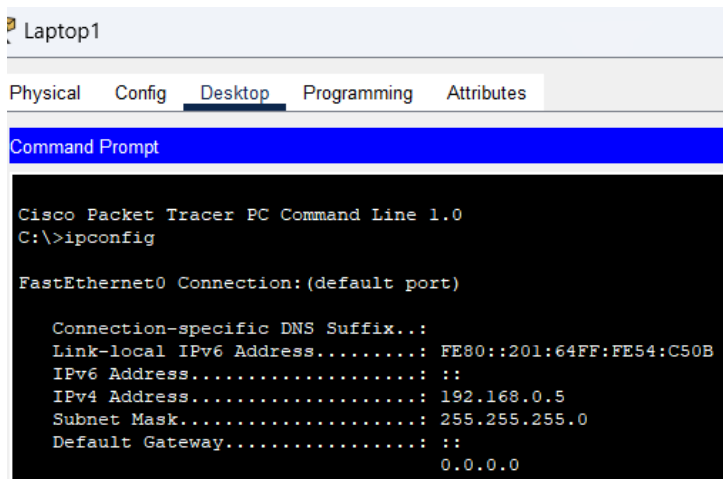
III) Fare ipconfig dai due client

Per verificare l'indirizzo IP dei due client, bisogna:

- andare sulla scheda 'Desktop'
- cliccare su 'Command Prompt'

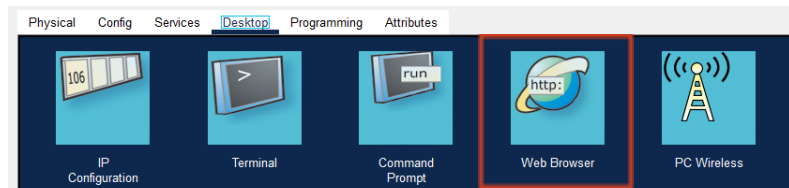


- digitare 'ipconfig' su entrambi i commando prompt dei due client

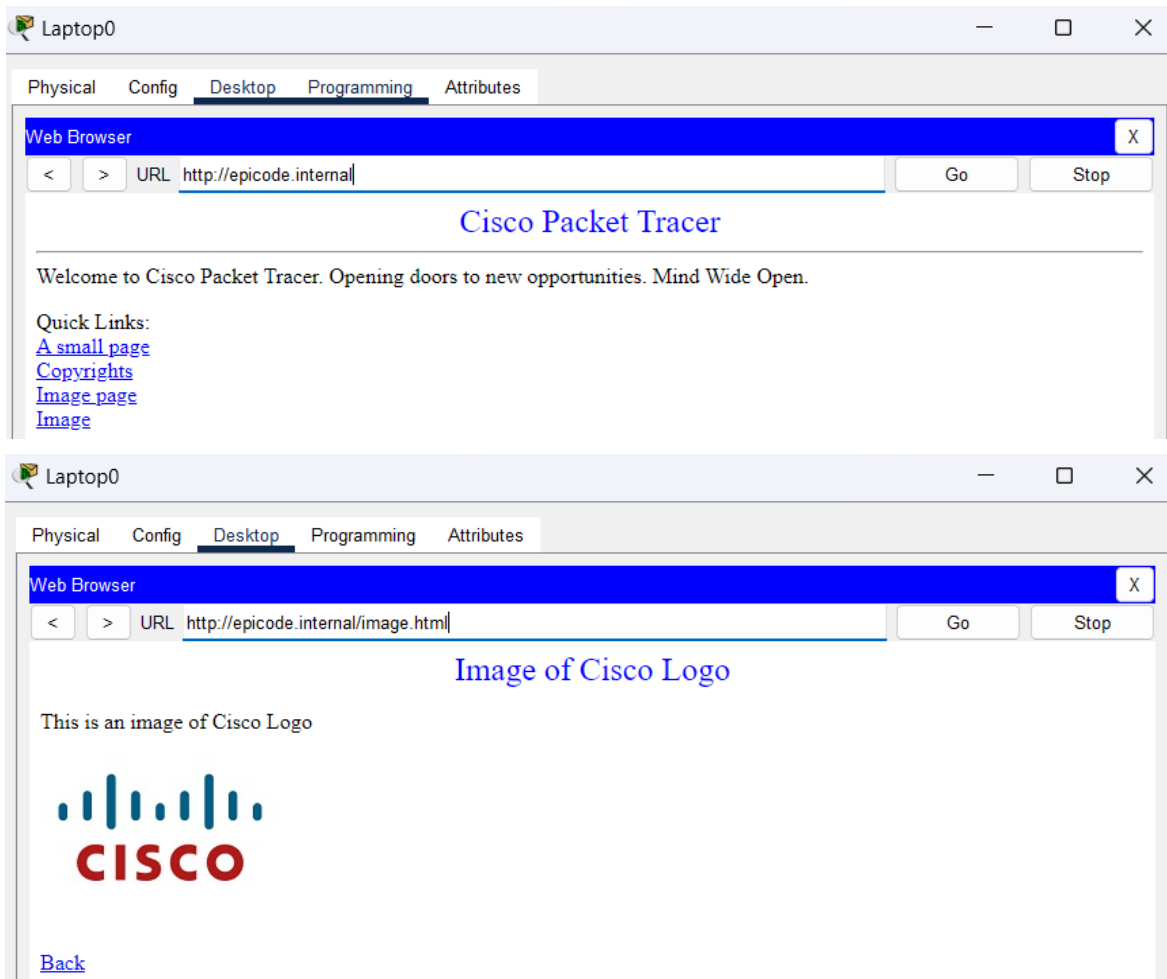


IV) Fare un test per controllare se il DNS mi risolve correttamente `epicode.internal`

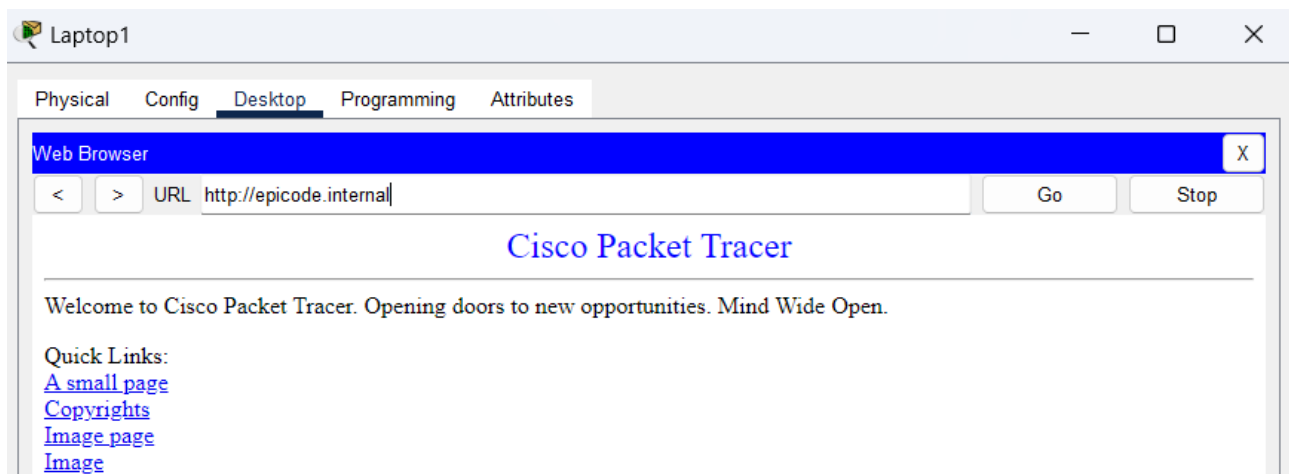
1. Andando sul sito web: quindi andando sulla scheda 'Desktop' e cliccando su 'Web Browser' da entrambi i client (Laptop0 e Laptop1)

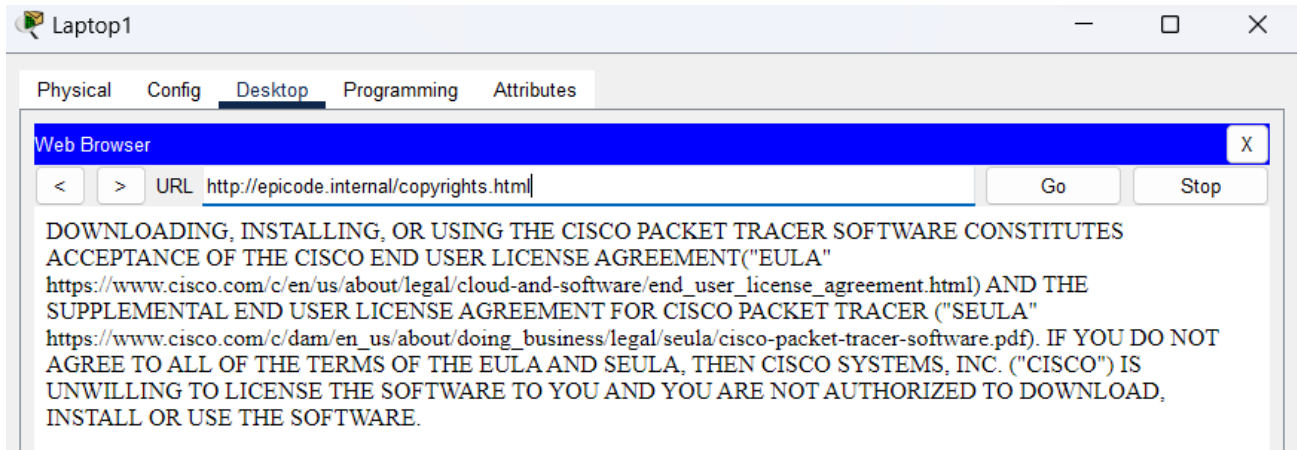


Da Laptop0



Da Laptop1





2. chiedendo la risoluzione da un client

Da Laptop0	Da Laptop1
<ul style="list-style-type: none"> ping 192.168.0.2 (indirizzo server DNS) ping epicode.internal 	<ul style="list-style-type: none"> ping 192.168.0.2 (indirizzo server DNS) ping epicode.internal
<pre> C:\>ping 192.168.0.2 Pinging 192.168.0.2 with 32 bytes of data: Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Ping statistics for 192.168.0.2: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 0ms, Average = 0ms C:\>ping epicode.internal Pinging 192.168.0.3 with 32 bytes of data: Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Reply from 192.168.0.3: bytes=32 time=1ms TTL=128 Ping statistics for 192.168.0.3: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 1ms, Average = 0ms </pre>	<pre> C:\>ping 192.168.0.2 Pinging 192.168.0.2 with 32 bytes of data: Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Reply from 192.168.0.2: bytes=32 time<1ms TTL=128 Reply from 192.168.0.2: bytes=32 time=1ms TTL=128 Reply from 192.168.0.2: bytes=32 time=1ms TTL=128 Ping statistics for 192.168.0.2: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 1ms, Average = 0ms C:\>ping epicode.internal Pinging 192.168.0.3 with 32 bytes of data: Reply from 192.168.0.3: bytes=32 time=1ms TTL=128 Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Reply from 192.168.0.3: bytes=32 time<1ms TTL=128 Ping statistics for 192.168.0.3: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 1ms, Average = 0ms </pre>