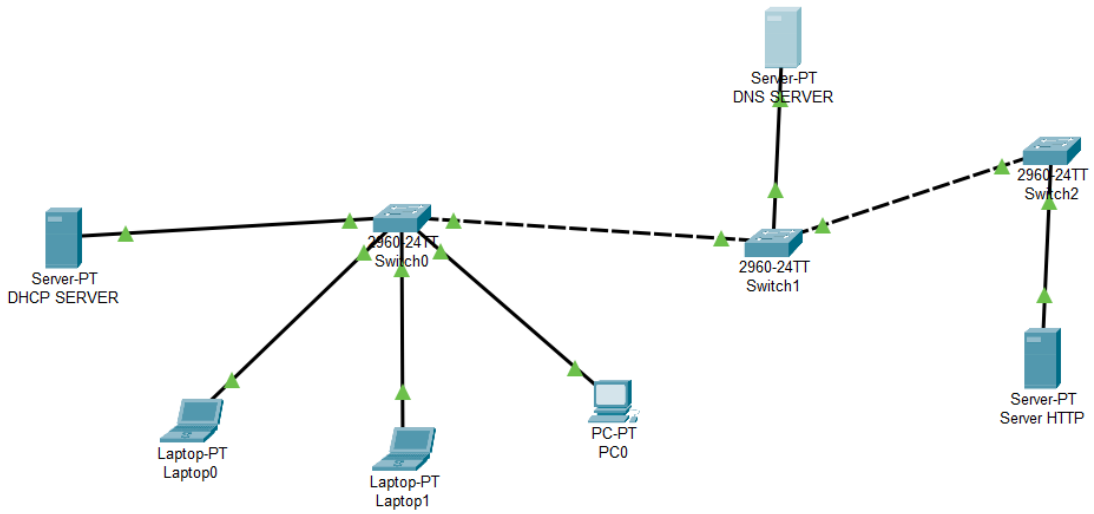
04/11/2023

Ilaria Pedrelli

Packet Tracer: simulazione servizi HTTP-DHCP-DNS

1. Creazione della rete

Ho creato la rete come in figura e come da richiesta per l'esercitazione:



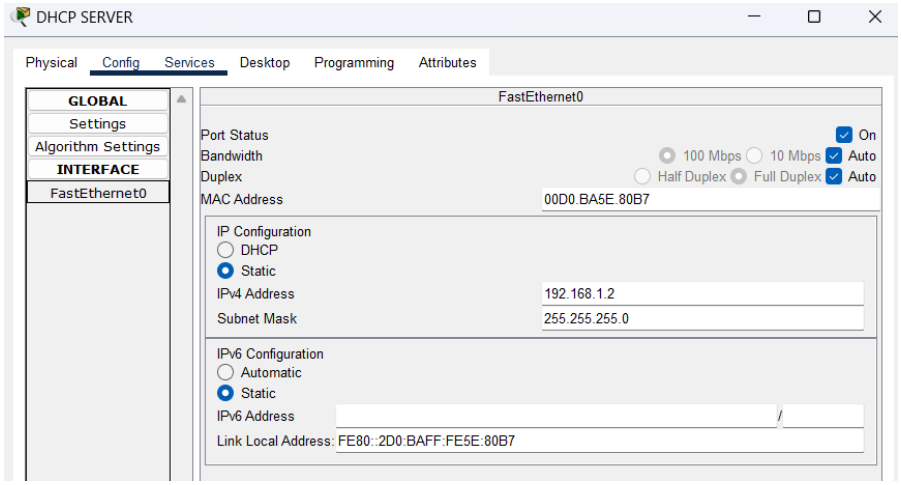
Quindi, ho configurato:

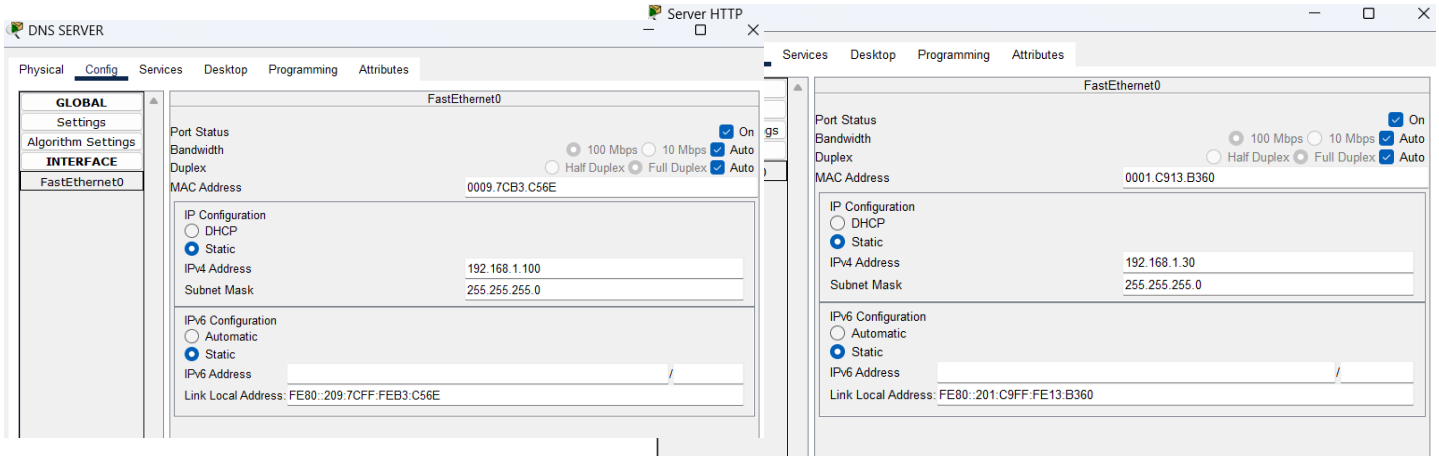
- un Servizio DHCP
- un Servizio DNS
- un servizio HTTP
- 3 Client

2. Assegnazione indirizzi IP

Ho provveduto ad assegnare ai server un indirizzo IP statico

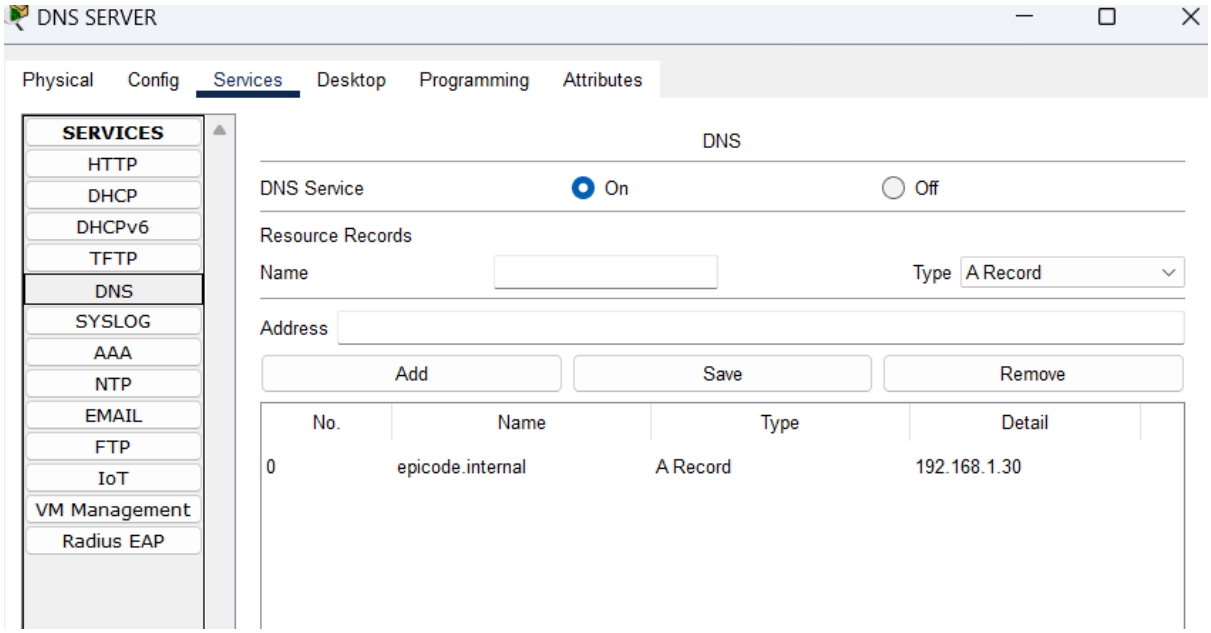
- DHCP: 192.168.1.2
- DNS: 192.168.1.100
- HTTP: 192.168.1.30



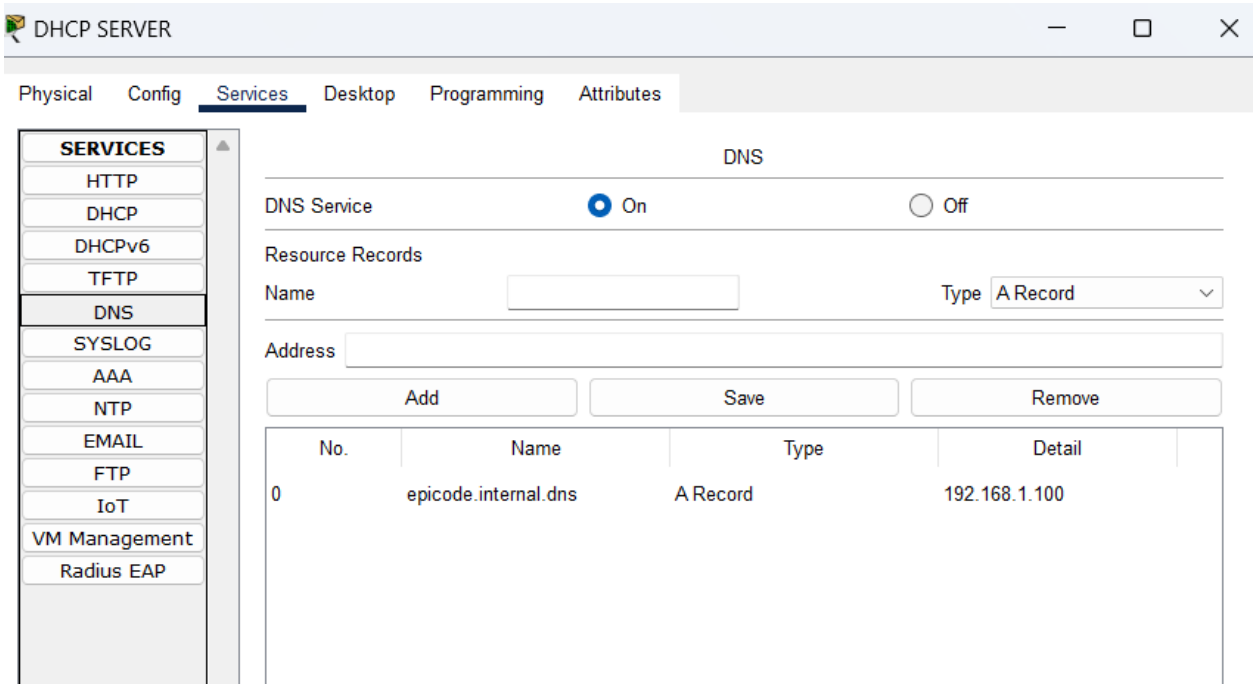


3. Configurazione record A e associazioni

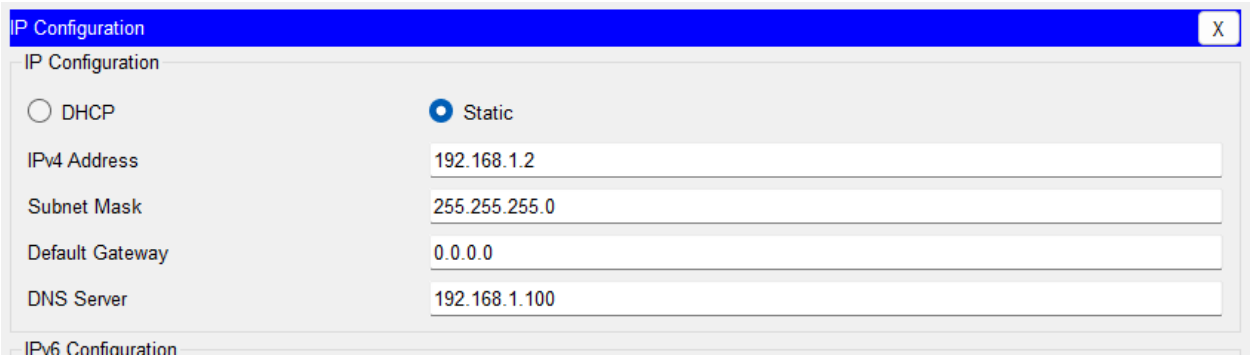
Configuro da “service” un Type A record sul server DNS e associo l’indirizzo IP del server HTTP nominandolo **epicode.internal.**



Successivamente nel server DHCP associo il DNS con la stessa operazione chiamandolo **epicode.internal.dns**.



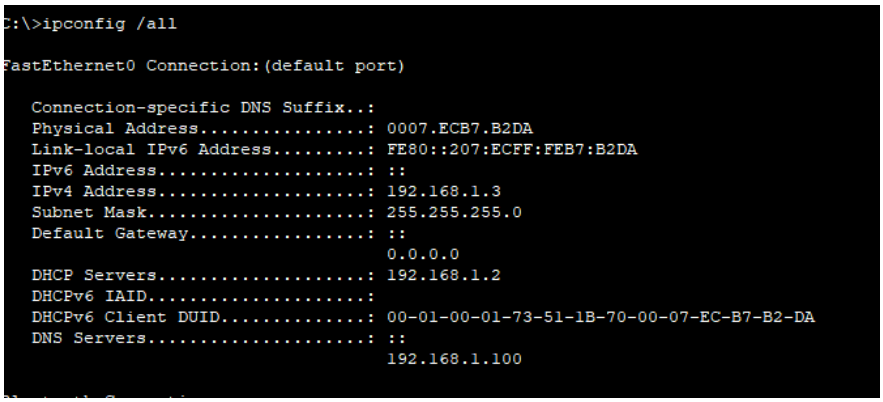
Dopodichè, ho aggiunto l'indirizzo anche in IP configuration accedendo dal Desktop

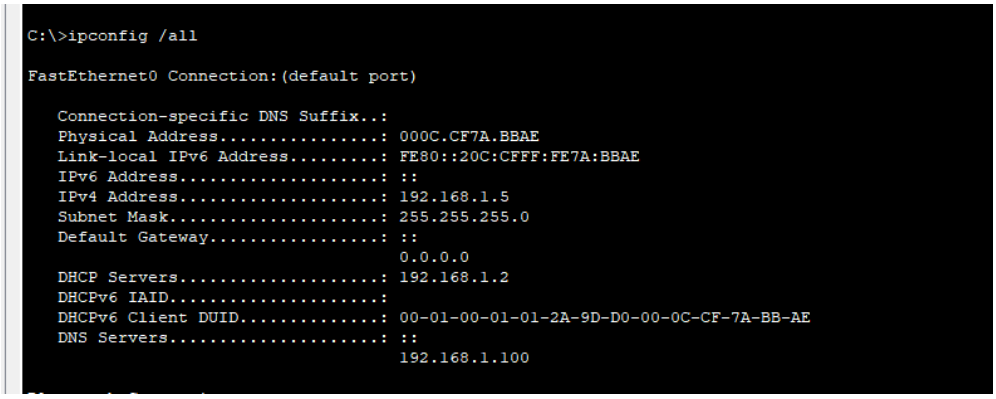


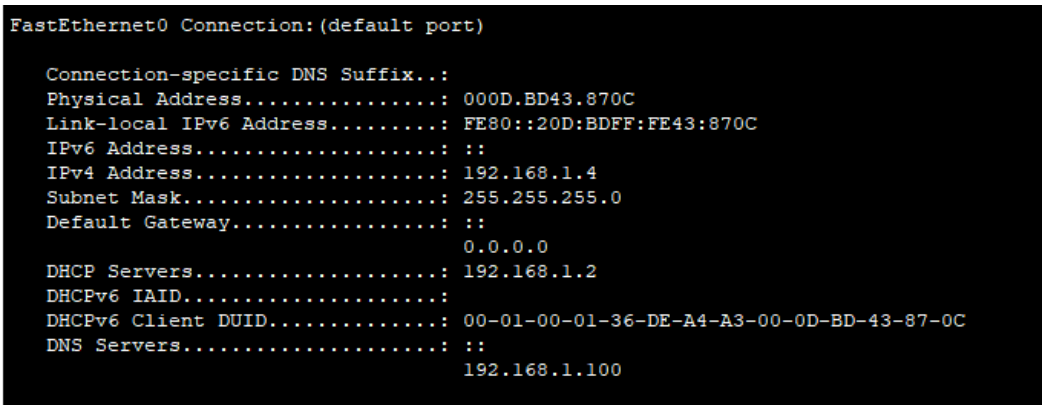
4. Verifica con iPconfig

Verifico dal prompt che i server assegnino un IP al Laptop e che i server DHCP e DNS funzionino con il comando **ipconfig /all.**

Le risposte sono positive.

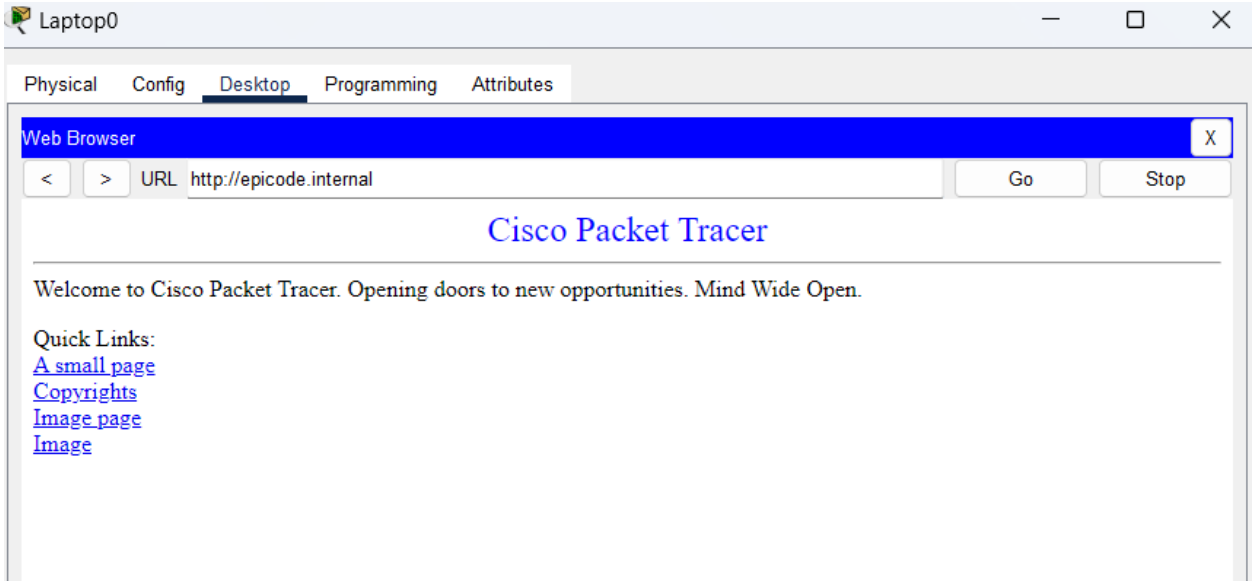


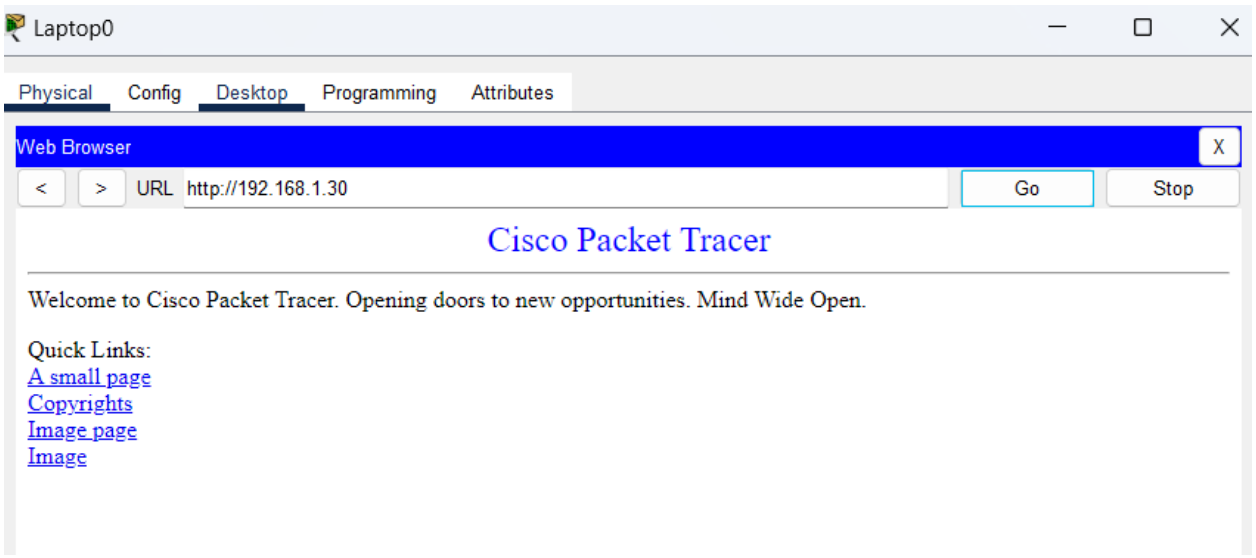




5. Verifica se DNS risolve correttamente epicode.internal

Cercando nel Browser sia la ricerca con http://epicode.internal che http:// 192.168.1.30 danno esito positivo.





La prova è stata ripetuta da un client ed è stata positiva:

```
C:\>ping epicode.internal

Pinging 192.168.1.30 with 32 bytes of data:

Reply from 192.168.1.30: bytes=32 time<1ms TTL=128
Reply from 192.168.1.30: bytes=32 time<1ms TTL=128
Reply from 192.168.1.30: bytes=32 time<1ms TTL=128
Reply from 192.168.1.30: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.30:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```