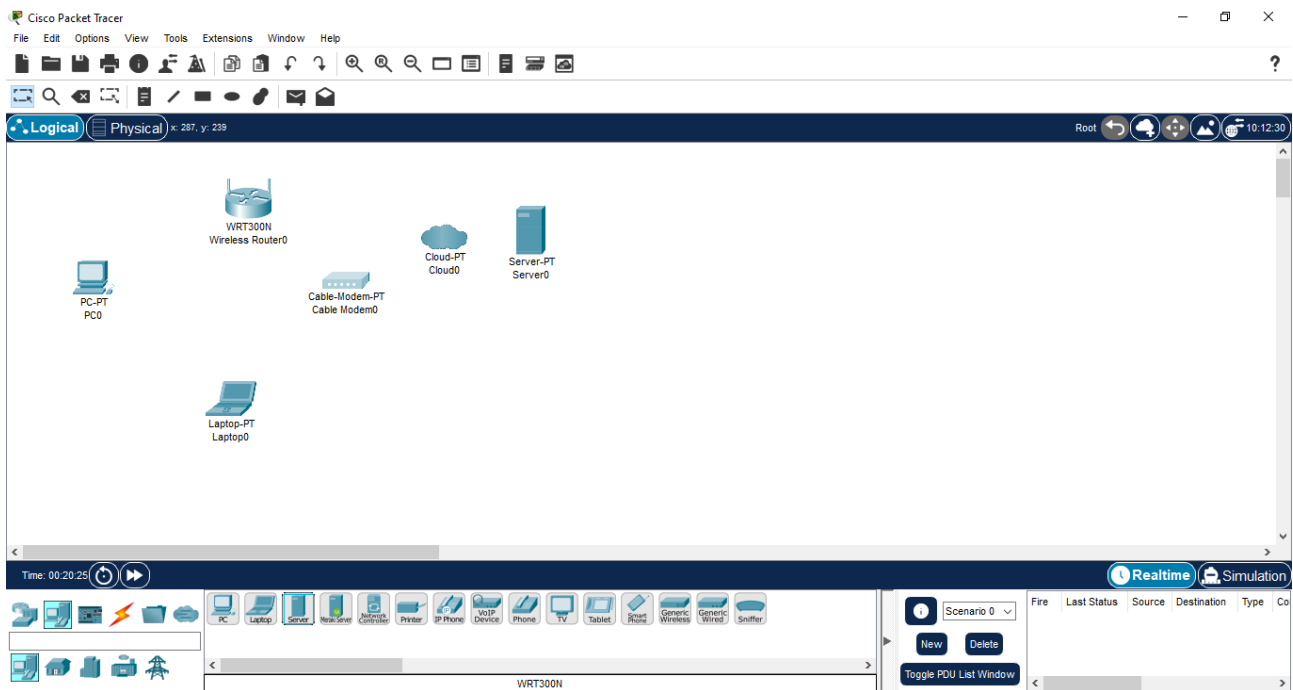


Red doméstica y servidor web con Cisco Packet Tracer

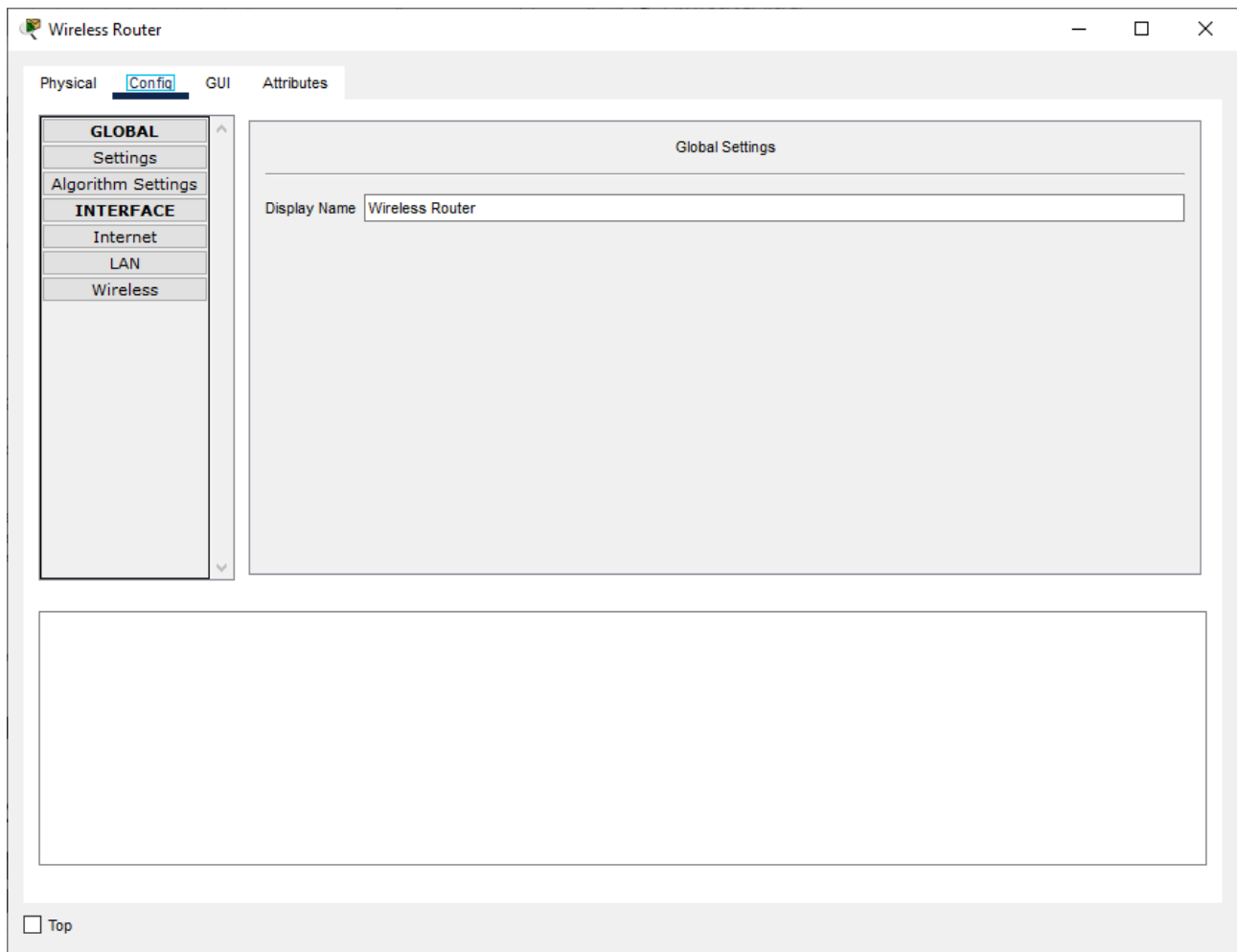
Enrique Rivas Fernández

2º DAW

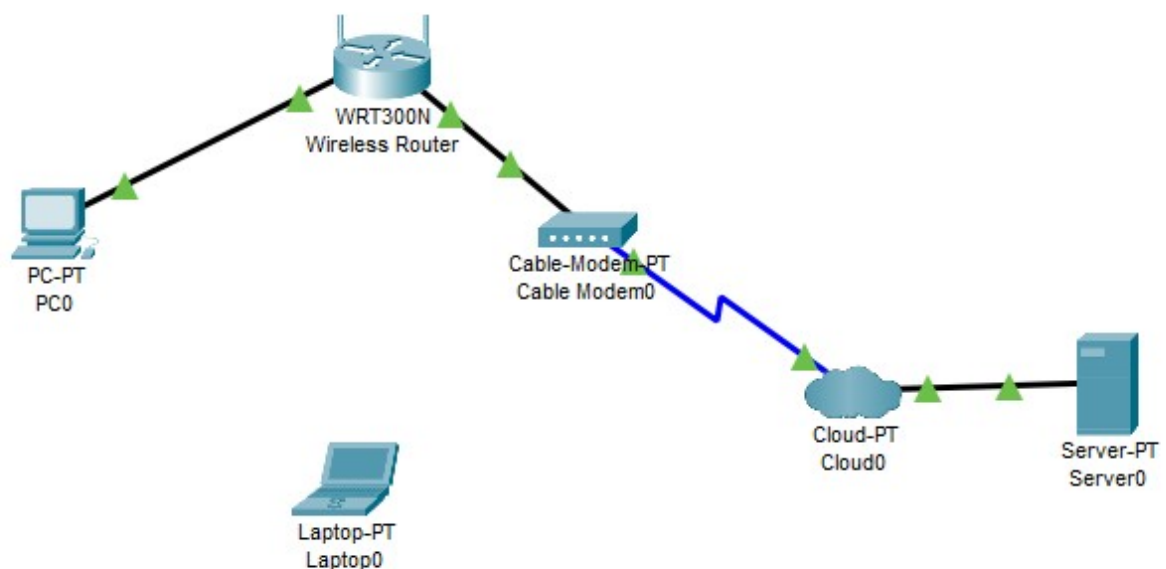
Primero añadimos lo que vamos a usar



luego editamos el nombre del router

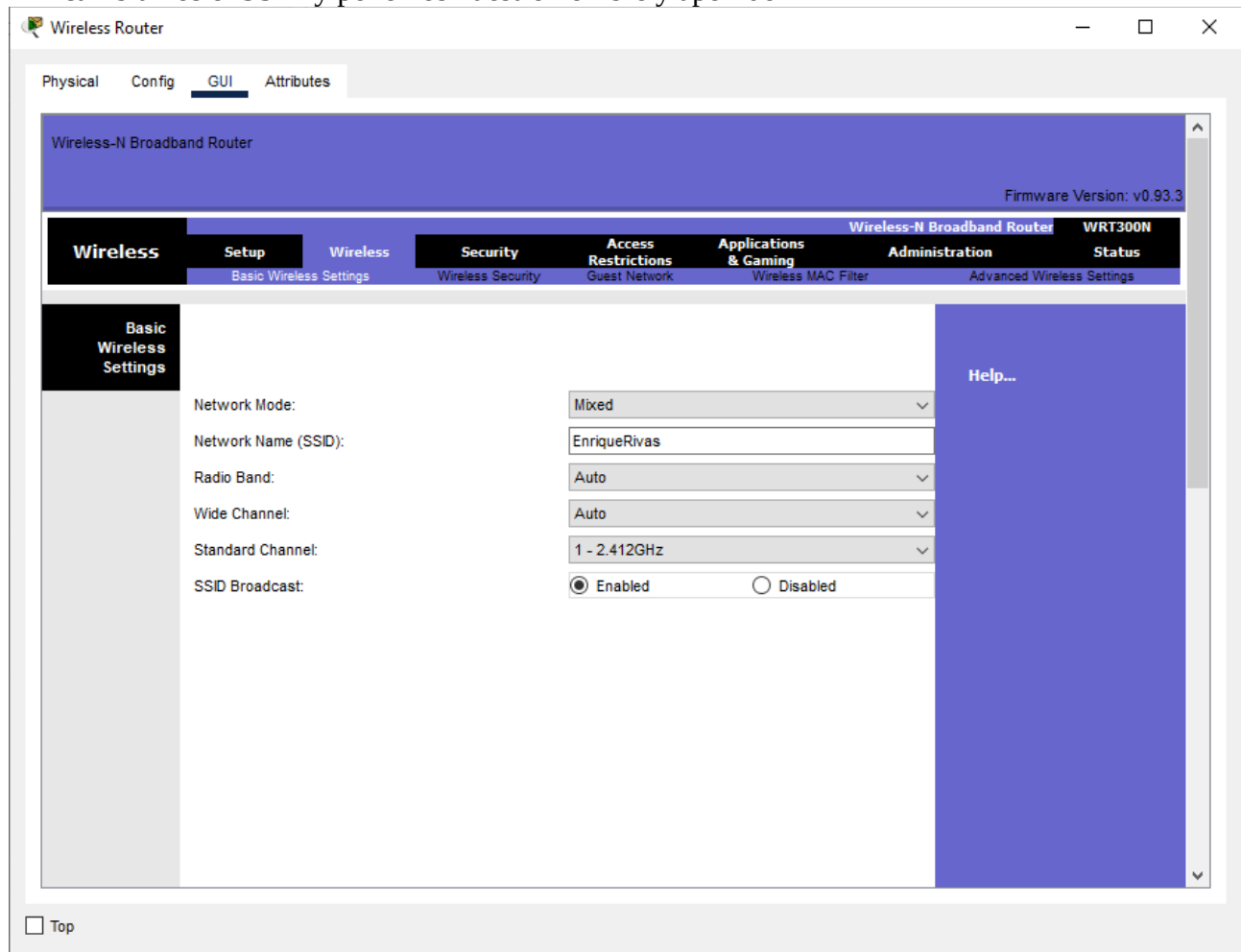


Luego continuamos uniendo todo con cables como se indica en el pdf



Ahora vamos a crear la red inalámbrica en el enrutador inalámbrico, para ello configuramos el router, para ello hacemos doble click en el router, le damos a GUI y luego a wireless

Ahí cambiamos el SSID y ponemos nuestro nombre y apellido



después configuramos la conexión a internet en el router inalámbrico

Physical Config **GUI** Attributes

Setup

Setup

Wireless

Security

Access Restrictions

Applications & Gaming

Administration

Status

Basic Setup

DDNS

MAC Address Clone

Advanced Routing

Wireless-N Broadband Router WRT300N

Internet Setup

Internet Connection type

Automatic Configuration - DHCP ▾

Optional Settings
(required by some internet service providers)

Host Name:

Domain Name:

MTU: Size:

Network Setup

Router IP

IP Address:

Subnet Mask:

DHCP Server Settings

DHCP Server: ☒ Enabled ☐ Disabled

DHCP Reservation

Start IP Address:

Maximum number of Users:

IP Address Range: -

Client Lease Time: minutes (0 means one day)

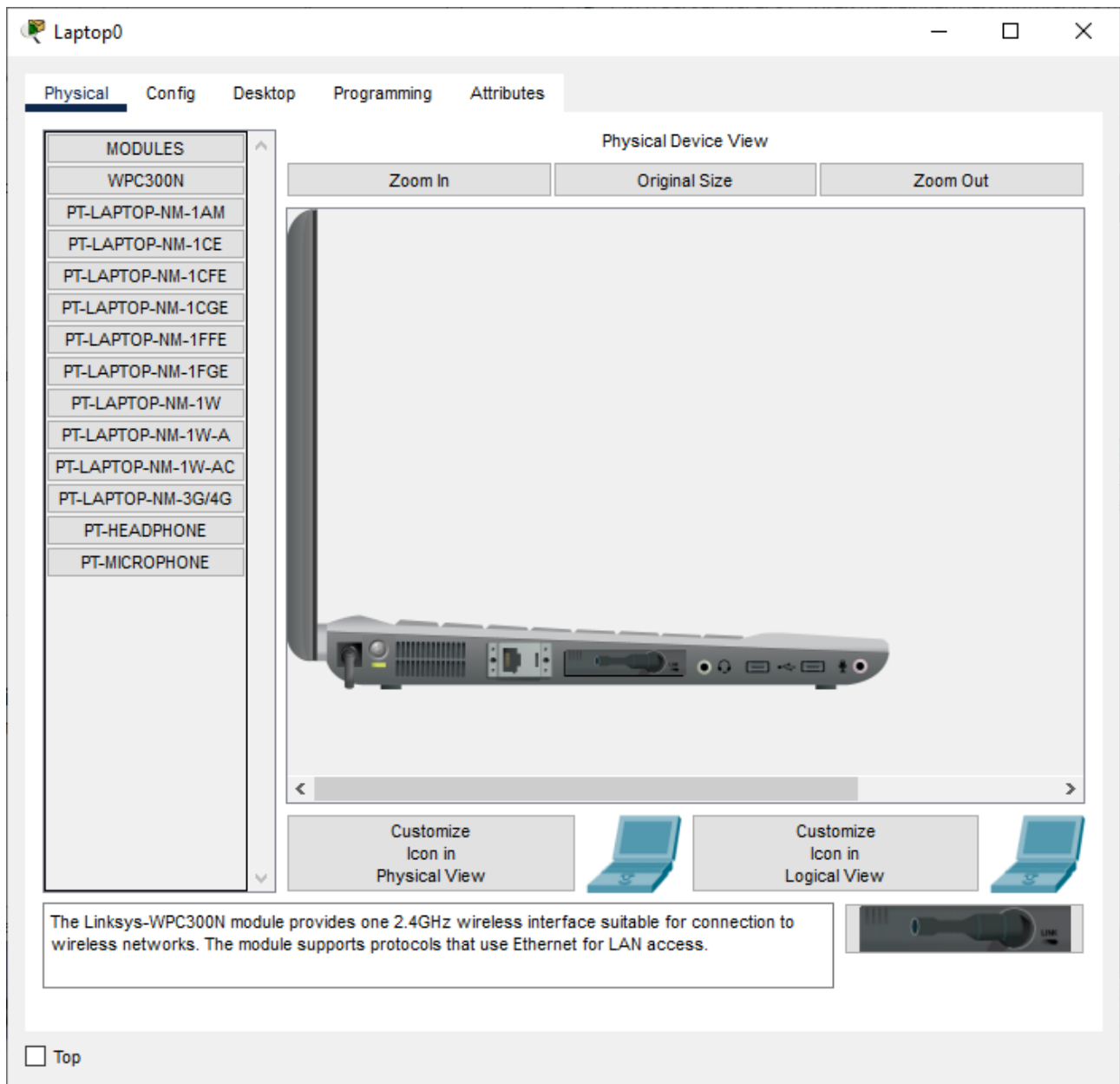
Static DNS 1:

Static DNS 2:

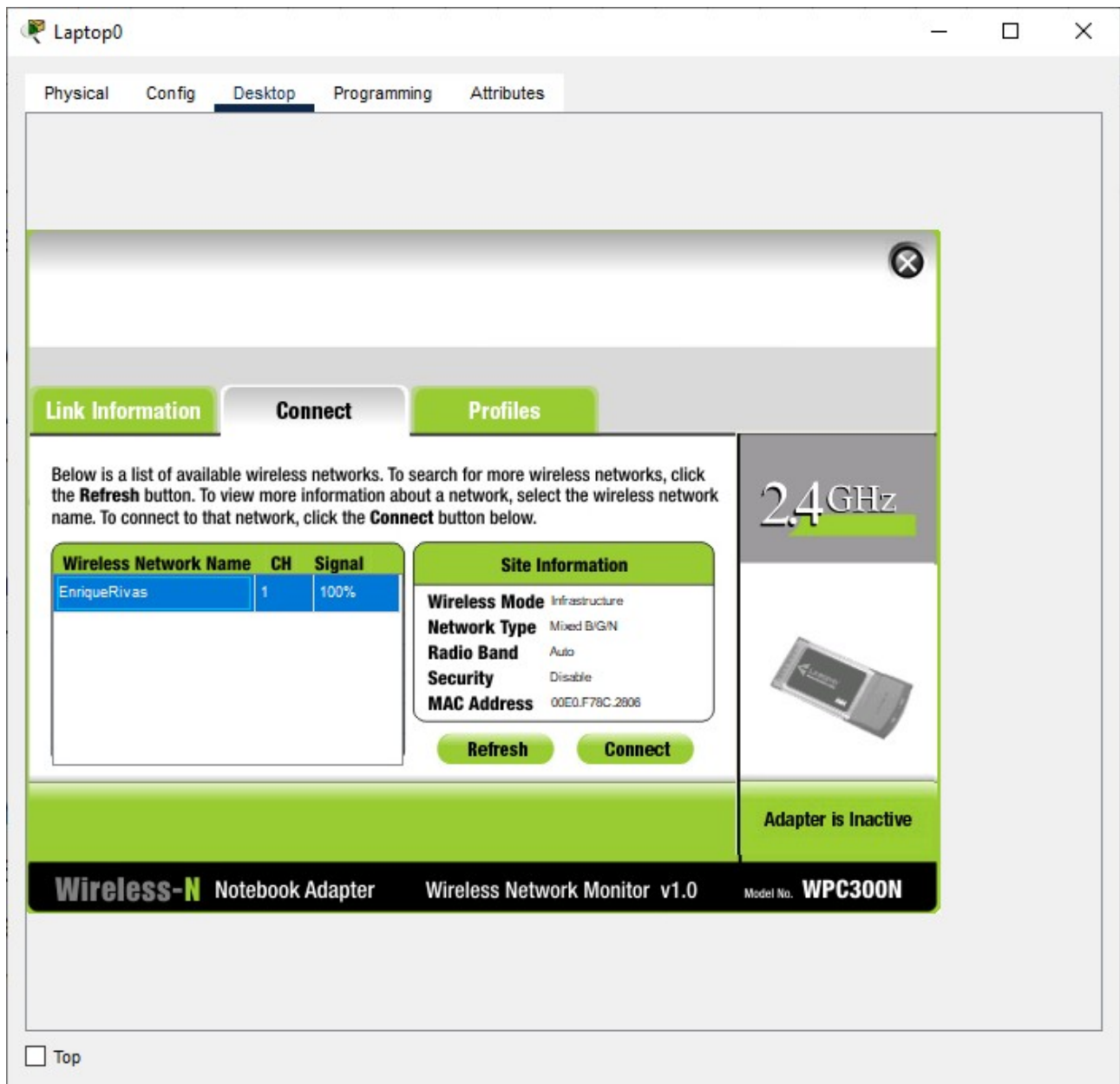
Static DNS 3:

Help...

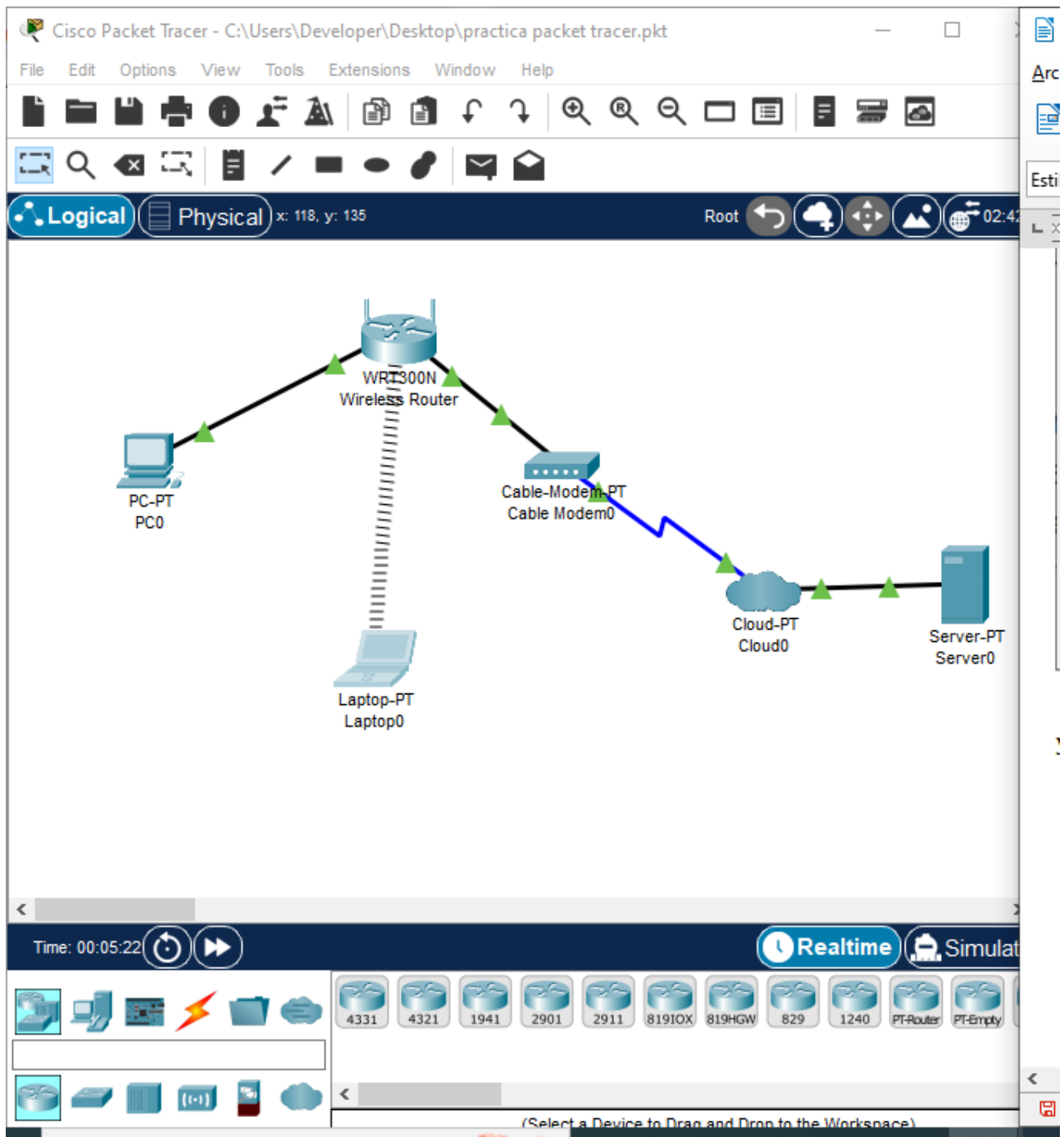
Despues configuramos el portatil, para ello hacemos doble click en el portatil, luego en physical lo apagamos y quitamos el módulo de cobre ethernet y lo reemplazamos por el módulo inalámbrico WPC300N



Luego conectaremos el portátil a la red inalámbrica, para ello en el portatil vamos a desktop, connect y le damos a conectar.



y ya estaría el pc conectado



Ahora configuraremos el pc, para ello hacemos click en el pc, vamos a desktop y a IP configuration y pulsamos en DHCP

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☒ DHCP ☐ Static DHCP request successful.

IPv4 Address 192.168.0.101

Subnet Mask 255.255.255.0

Default Gateway 192.168.0.1

DNS Server 208.67.220.220

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:97FF:FEB9:12E0

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

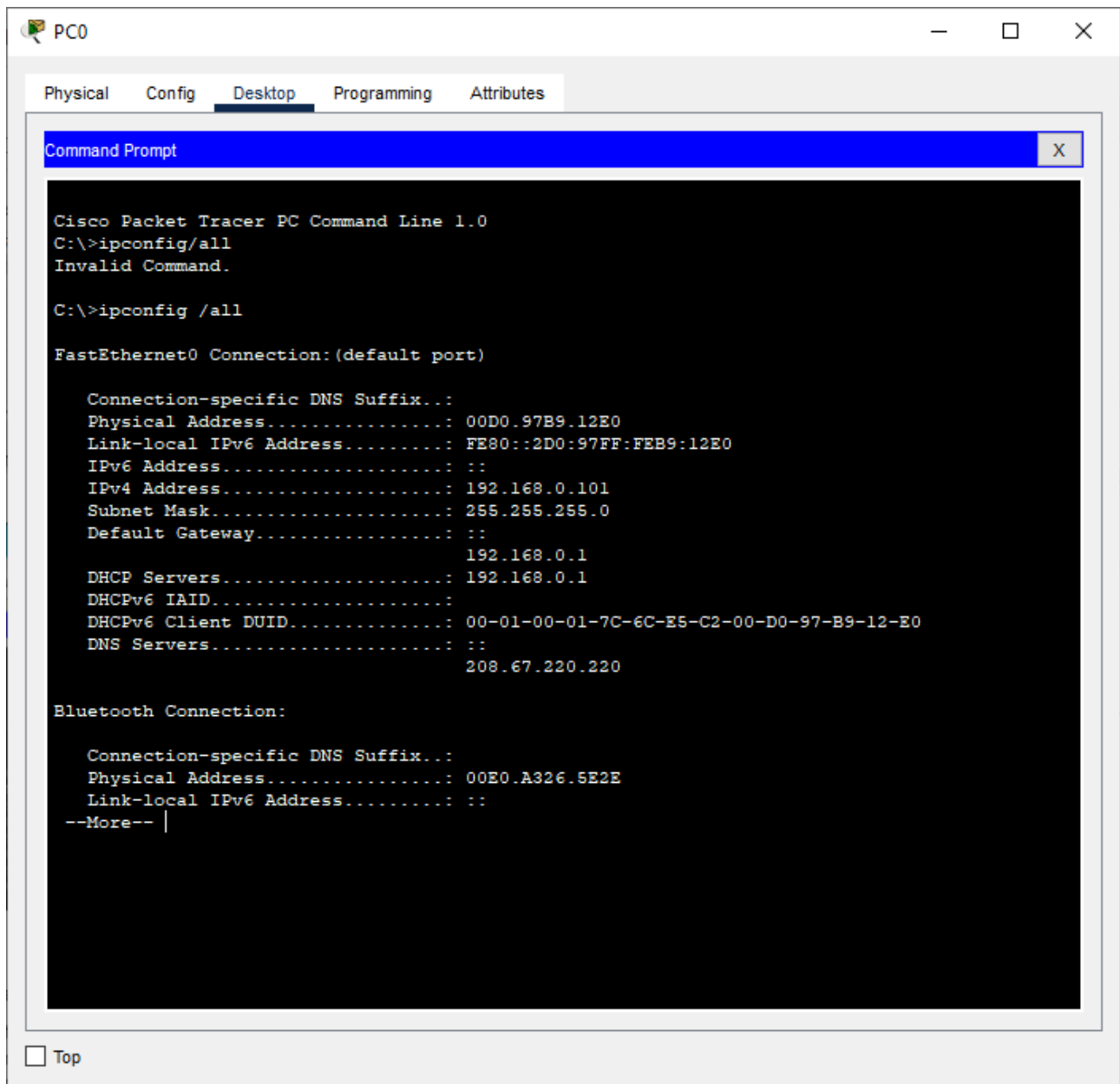
Authentication MD5

Username

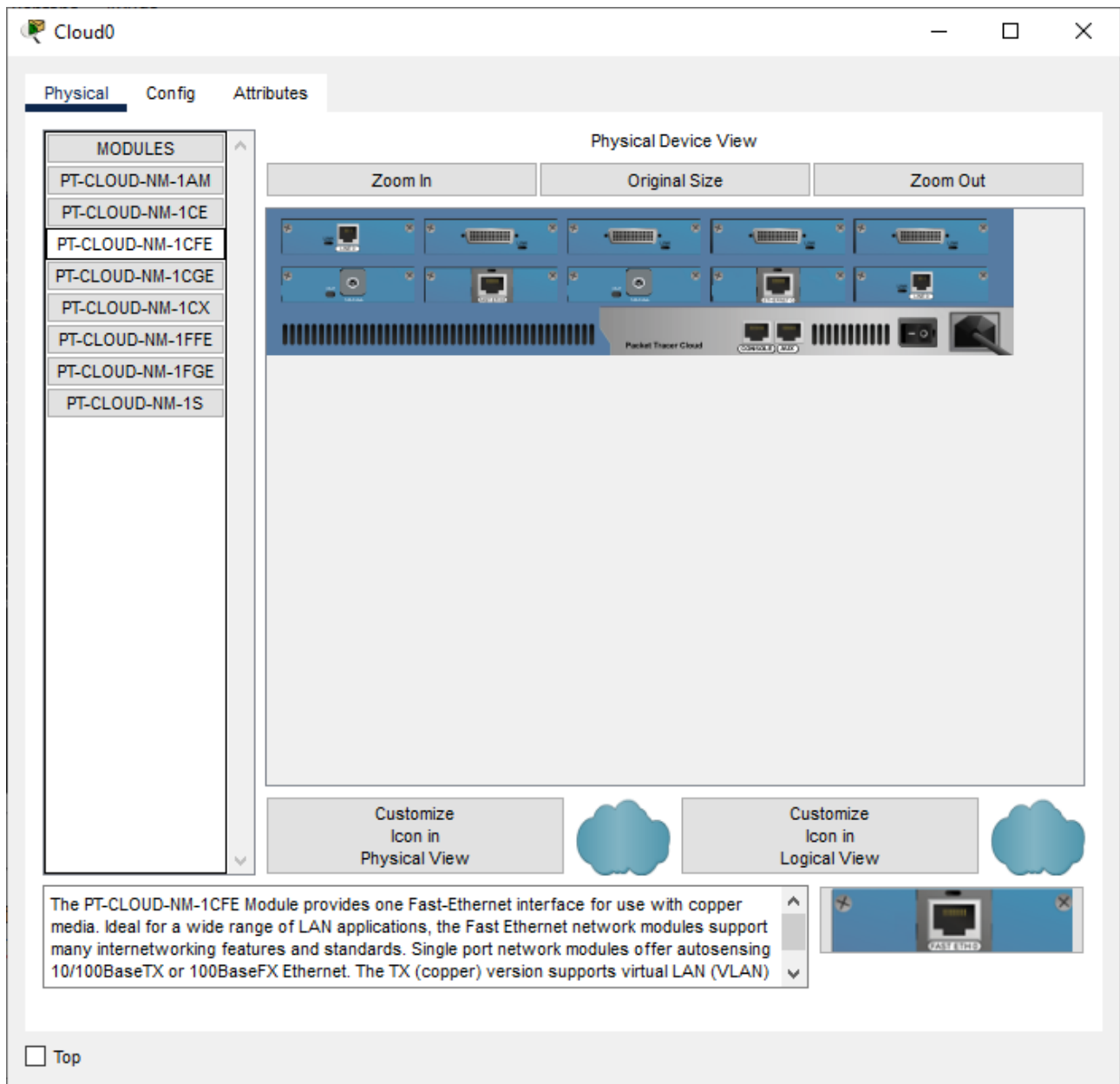
Password

☐ Top

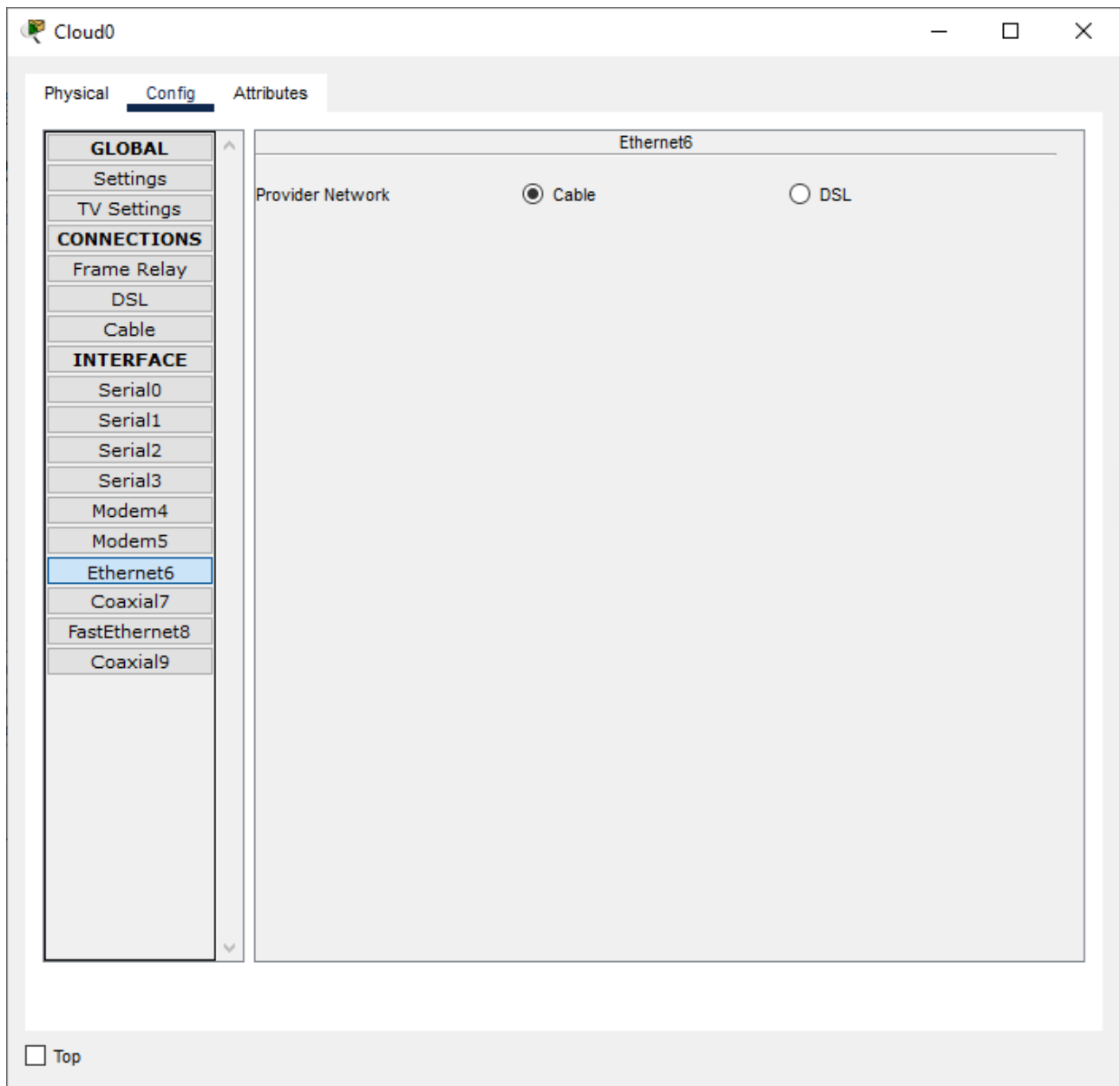
Ahora vamos a command prompt y hacemos ipconfig/all



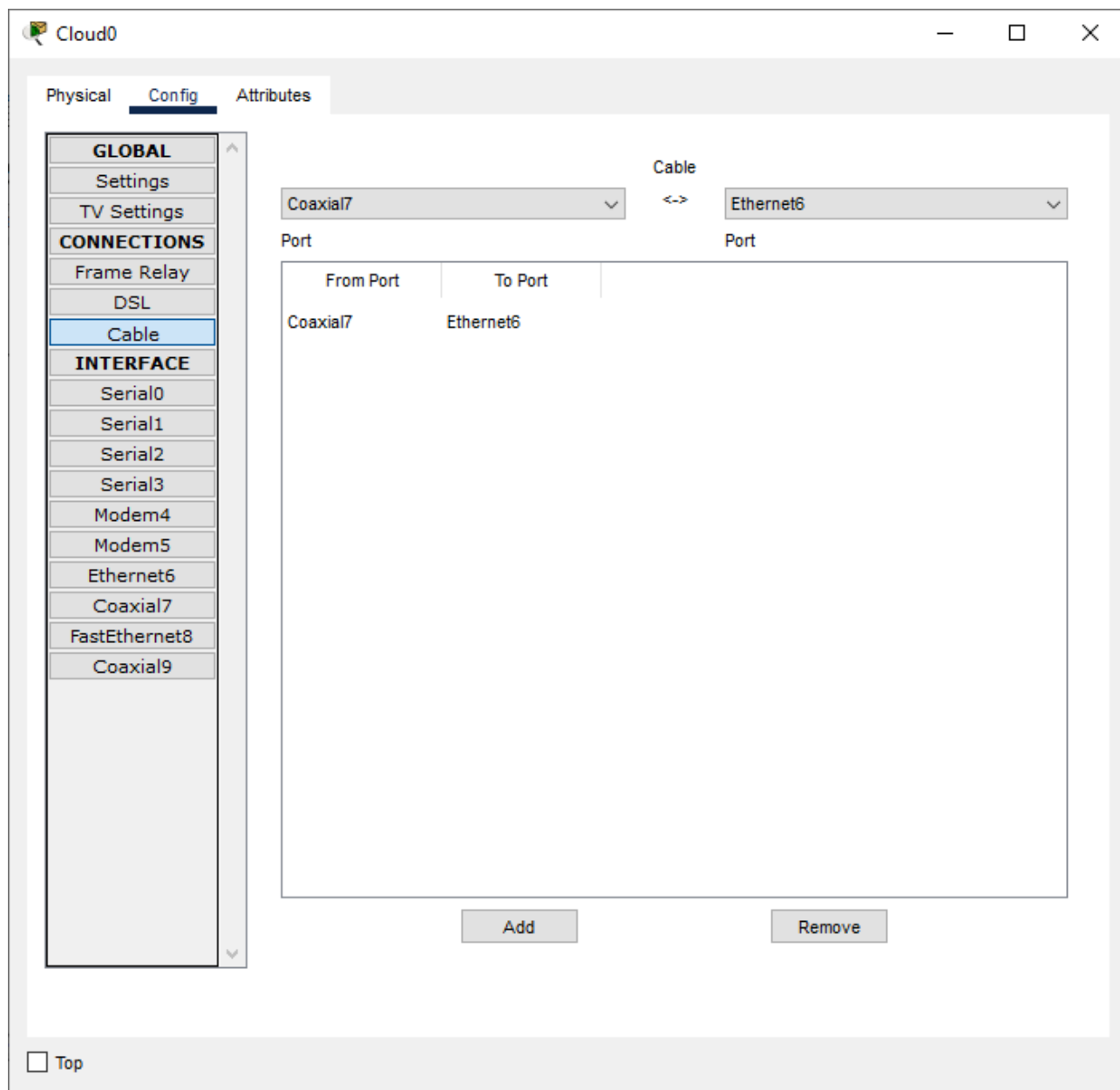
Ahora instalaremos los módulos de red si es necesario, para ello hacemos click en internet cloud y luego hacemos click en physical e instalamos los módulos PT-CLOUD-NM-1CX y PT-CLOUD-NM-1CFE



Ahora le damos a config, ethernet6 y lo ponemos que sea por cable



y luego le damos a cable y lo añadimos



Ahora hay que configurar el servidor, para ello hacemos doble click en el servidor, le cambiamos el nombre a Cisco.com

Cisco.com

Physical **Config** Services Desktop Programming Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0

Global Settings

Display Name

Gateway/DNS IPv4
☐ DHCP
☒ Static
Default Gateway
DNS Server

Gateway/DNS IPv6
☐ Automatic
☒ Static
Default Gateway
DNS Server

☐ Top

y luego vamos a Services y le damos a DHCP y lo configuramos

Cisco.com

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

Interface

FastEthernet0

Service

☒ On

☐ Off

Pool Name

DHCPpool

Default Gateway

208.67.220.220

DNS Server

208.67.220.220

Start IP Address :

208

67

220

1

Subnet Mask:

255

255

255

0

Maximum Number of Users :

50

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 |
|------------|-----------------|-------------|------------------|-------------|----------|-------------|-------------|
| DHCPpool | 208.67.2... | 208.67.2... | 208.67.2... | 255.255.... | 50 | 0.0.0.0 | 0.0.0.0 |
| serverPool | 0.0.0.0 | 0.0.0.0 | 0.0.0.0 | 0.0.0.0 | 512 | 0.0.0.0 | 0.0.0.0 |

<

>

☐ Top

y ahora vamos a DNS y configuramos el servicio DNS

Cisco.com

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

cisco.com

Type

A Record

Address

208.67.220.220

Add

Save

Remove

| No. | Name | Type | Detail |
|-----|-----------|----------|----------------|
| 0 | cisco.com | A Record | 208.67.220.220 |

DNS Cache

☐ Top

y ahora vamos a config, settings y configuramos los ajustes globales del servidores

Cisco.com

Physical **Config** Services Desktop Programming Attributes

GLOBAL

Settings

Algorithm Settings

INTERFACE

FastEthernet0

Global Settings

Display Name Cisco.com

Gateway/DNS IPv4

☐ DHCP

☒ Static

Default Gateway 208.67.220.1

DNS Server 208.67.220.220

Gateway/DNS IPv6

☐ Automatic

☒ Static

Default Gateway

DNS Server

☐ Top

Luego le damos a FastEthernet0 y lo configuramos

The image shows the Cisco Packet Tracer configuration window for the FastEthernet0 interface. The window has a title bar with 'Cisco.com' and standard window controls. Below the title bar are tabs: 'Physical', 'Config' (selected), 'Services', 'Desktop', 'Programming', and 'Attributes'. On the left is a sidebar with a tree view containing 'GLOBAL' (with sub-items 'Settings' and 'Algorithm Settings') and 'INTERFACE' (with 'FastEthernet0' selected). The main area is titled 'FastEthernet0' and contains the following configuration options:

- Port Status:** ☒ On
- Bandwidth:** ☐ 100 Mbps ☒ 10 Mbps ☒ Auto
- Duplex:** ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address:** 000A.416A.825C
- IP Configuration:**
 - ☐ DHCP
 - ☒ Static
 - IPv4 Address:** 208.67.220.220
 - Subnet Mask:** 255.255.255.0
- IPv6 Configuration:**
 - ☐ Automatic
 - ☒ Static
 - IPv6 Address:** [empty field]
 - Link Local Address:** [empty field]

At the bottom left of the window is a 'Top' button with a square icon.

Ahora verificaremos que la pc esta recibiendo información de IPv4

Para ello vamos al Pc, desktop, command prompt, y hacemos los comandos **ipconfig /release** y **ipconfig /renew**.

```
C:\>ipconfig /release

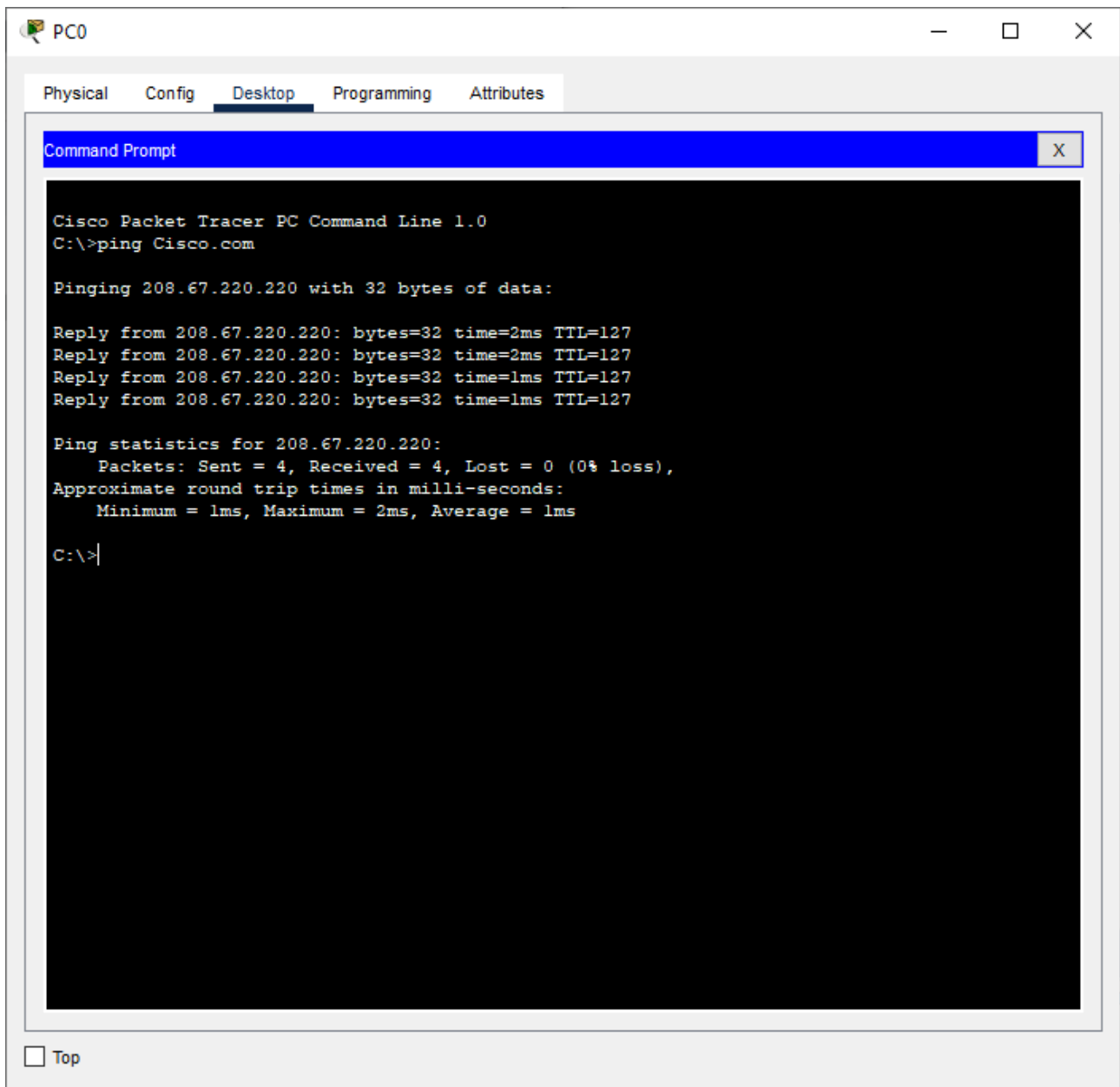
IP Address. . . . .: 0.0.0.0
Subnet Mask. . . . .: 0.0.0.0
Default Gateway. . . . .: 0.0.0.0
DNS Server. . . . .: 0.0.0.0

C:\>ipconfig /renew

IP Address. . . . .: 192.168.0.101
Subnet Mask. . . . .: 255.255.255.0
Default Gateway. . . . .: 192.168.0.1
DNS Server. . . . .: 208.67.220.220

C:\>
```

Ahora tenemos que probar la conectividad al servidor de Cisco.com desde la PC, para ello hacemos el comando ping Cisco.com



Simulation Panel

| Vis. | Time(sec) | Last Device | At Device | Type |
|------|-----------|-----------------|-----------------|------|
| | 0.008 | -- | PC0 | ICMP |
| | 0.009 | PC0 | Wireless Router | ICMP |
| | 0.010 | Wireless Router | Cable Modem0 | ICMP |
| | 0.011 | Cable Modem0 | Cloud0 | ICMP |
| | 0.012 | Cloud0 | Cisco.com | ICMP |
| | 0.013 | Cisco.com | Cloud0 | ICMP |
| | 0.014 | Cloud0 | Cable Modem0 | ICMP |
| | 0.015 | Cable Modem0 | Wireless Router | ICMP |
| | 0.016 | Wireless Router | PC0 | ICMP |
| | 1.020 | -- | PC0 | ICMP |
| | 1.021 | PC0 | Wireless Router | ICMP |
| | 1.022 | Wireless Router | Cable Modem0 | ICMP |
| | 1.023 | Cable Modem0 | Cloud0 | ICMP |
| | 1.024 | Cloud0 | Cisco.com | ICMP |
| | 1.025 | Cisco.com | Cloud0 | ICMP |
| | 1.026 | Cloud0 | Cable Modem0 | ICMP |
| | 1.027 | Cable Modem0 | Wireless Router | ICMP |
| | 1.028 | Wireless Router | PC0 | ICMP |
| | 2.032 | -- | PC0 | ICMP |
| | 2.033 | PC0 | Wireless Router | ICMP |
| | 2.034 | Wireless Router | Cable Modem0 | ICMP |
| | 2.035 | Cable Modem0 | Cloud0 | ICMP |
| | 2.036 | Cloud0 | Cisco.com | ICMP |
| | 2.037 | Cisco.com | Cloud0 | ICMP |

Reset Simulation ☒ Constant Delay Captured to: 2606.443 s

Play Controls

Event List Filters - Visible Events
ICMP Edit Filters Show All/None

Simulation Panel

| Vis. | Time(sec) | Last Device | At Device | Type |
|------|-----------|-----------------|-----------------|------|
| | 1.023 | Cable Modem0 | Cloud0 | ICMP |
| | 1.024 | Cloud0 | Cisco.com | ICMP |
| | 1.025 | Cisco.com | Cloud0 | ICMP |
| | 1.026 | Cloud0 | Cable Modem0 | ICMP |
| | 1.027 | Cable Modem0 | Wireless Router | ICMP |
| | 1.028 | Wireless Router | PC0 | ICMP |
| | 2.032 | -- | PC0 | ICMP |
| | 2.033 | PC0 | Wireless Router | ICMP |
| | 2.034 | Wireless Router | Cable Modem0 | ICMP |
| | 2.035 | Cable Modem0 | Cloud0 | ICMP |
| | 2.036 | Cloud0 | Cisco.com | ICMP |
| | 2.037 | Cisco.com | Cloud0 | ICMP |
| | 2.038 | Cloud0 | Cable Modem0 | ICMP |
| | 2.039 | Cable Modem0 | Wireless Router | ICMP |
| | 2.040 | Wireless Router | PC0 | ICMP |
| | 3.042 | -- | PC0 | ICMP |
| | 3.043 | PC0 | Wireless Router | ICMP |
| | 3.044 | Wireless Router | Cable Modem0 | ICMP |
| | 3.045 | Cable Modem0 | Cloud0 | ICMP |
| | 3.046 | Cloud0 | Cisco.com | ICMP |
| | 3.047 | Cisco.com | Cloud0 | ICMP |
| | 3.048 | Cloud0 | Cable Modem0 | ICMP |
| | 3.049 | Cable Modem0 | Wireless Router | ICMP |
| | 3.050 | Wireless Router | PC0 | ICMP |

Reset Simulation ☒ Constant Delay Captured to: 2606.443 s

Play Controls

Event List Filters - Visible Events
ICMP Edit Filters Show All/None

Ahora nos vamos al Servidor, Services, borramos todo y subimos los 3 archivos que creamos

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

Radius EAP

HTTP

HTTP



On



Off

HTTPS



On



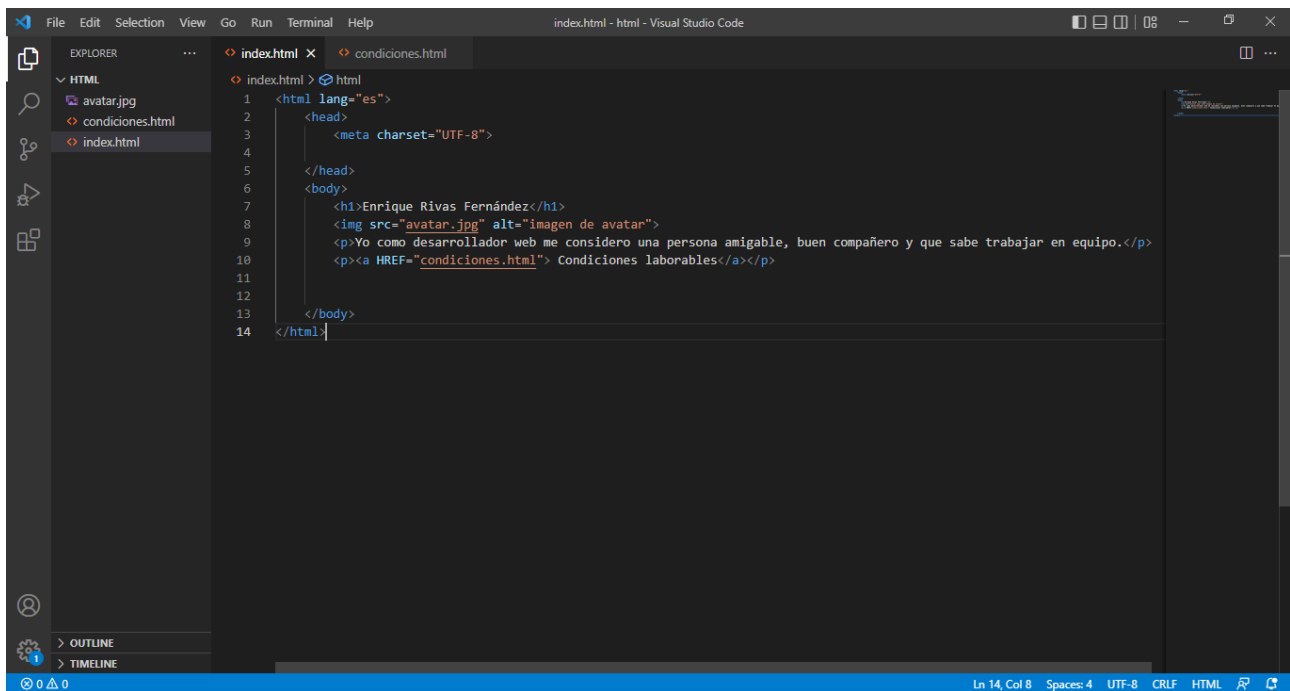
Off

File Manager

| | | | |
|---|------------------|--------|----------|
| 1 | avatar.jpg | | (delete) |
| 2 | condiciones.html | (edit) | (delete) |
| 3 | index.html | (edit) | (delete) |

New File

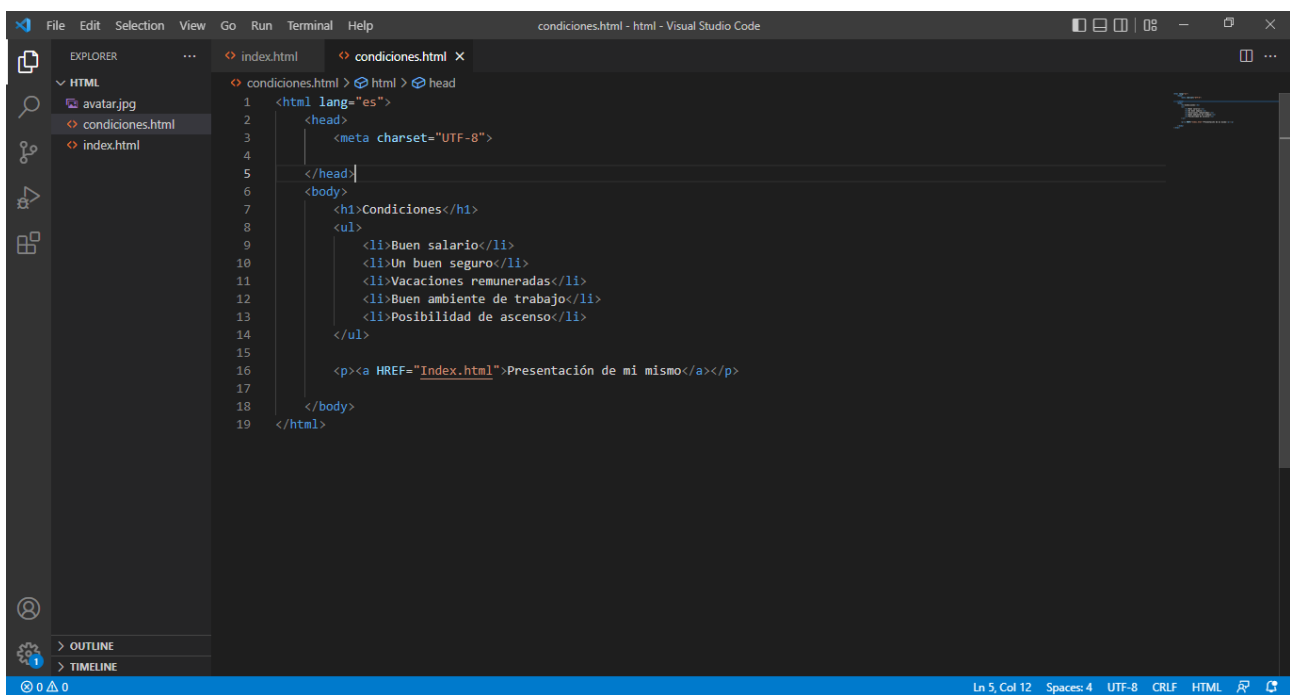
Import



This screenshot shows the Visual Studio Code editor with the 'index.html' file open. The Explorer sidebar on the left shows a project structure with 'HTML' folder containing 'avatar.jpg', 'condiciones.html', and 'index.html'. The main editor area displays the following HTML code:

```
1 <html lang="es">
2   <head>
3     <meta charset="UTF-8">
4   </head>
5   <body>
6     <h1>Enrique Rivas Fernández</h1>
7     
8     <p>Yo como desarrollador web me considero una persona amigable, buen compañero y que sabe trabajar en equipo.</p>
9     <p><a href="condiciones.html"> Condiciones laborales</a></p>
10
11   </body>
12 </html>
```

The status bar at the bottom indicates the cursor is at line 14, column 8, with 4 spaces, UTF-8 encoding, CRLF line endings, and the HTML language mode.



This screenshot shows the Visual Studio Code editor with the 'condiciones.html' file open. The Explorer sidebar on the left shows the same project structure. The main editor area displays the following HTML code:

```
1 <html lang="es">
2   <head>
3     <meta charset="UTF-8">
4   </head>
5   <body>
6     <h1>Condiciones</h1>
7     <ul>
8       <li>Buen salario</li>
9       <li>Un buen seguro</li>
10      <li>Vacaciones remuneradas</li>
11      <li>Buen ambiente de trabajo</li>
12      <li>Posibilidad de ascenso</li>
13    </ul>
14
15    <p><a href="index.html">Presentación de mí mismo</a></p>
16
17   </body>
18 </html>
```

The status bar at the bottom indicates the cursor is at line 5, column 12, with 4 spaces, UTF-8 encoding, CRLF line endings, and the HTML language mode.

