

Workshop No. 1
Packet Tracer Basics

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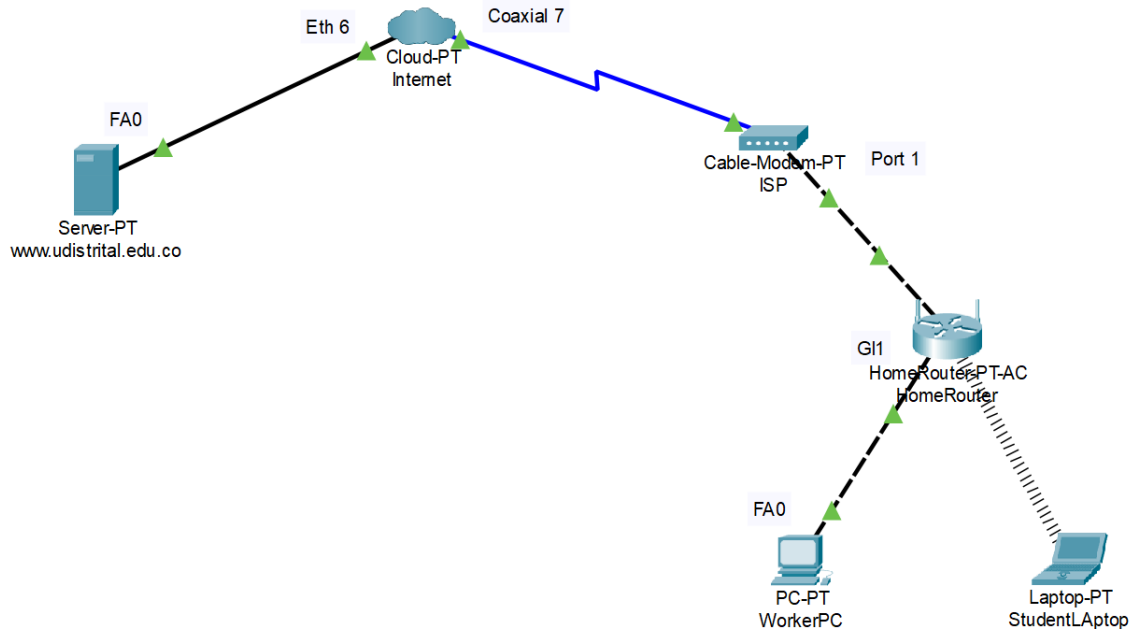


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Solution



As we can see, the connection from the server to Cloud-PT is done using a straight-through copper cable, since it gives us much more speed, although it can be a bit weak, but it is not suitable for such long distances.

From Cloud-PT to the ISP, we see that we use coaxial cable, since it is much cheaper and ideal for long distances due to its rigidity.

From the ISP to the Homerouter and from the Homerouter to the PC (WorkerPC), we could have used any cable, but that would depend on which ports we have active on our PC and on our router. In addition, we chose the crossover cable, which allows us to maintain the same speed when transporting information.

We proceed to configure the different devices and services that we have, as we see below:

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Physical Config Services **Desktop** Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IPv4 Address: 193.168.100.200

Subnet Mask: 255.255.255.0

Default Gateway: 193.168.100.1

DNS Server: 193.168.100.200

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address: /

Link Local Address: FE80::201:43FF:FE0C:2C04

Default Gateway:

DNS Server:

802.1X

☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

☐ Top

Image 1. Server configuration

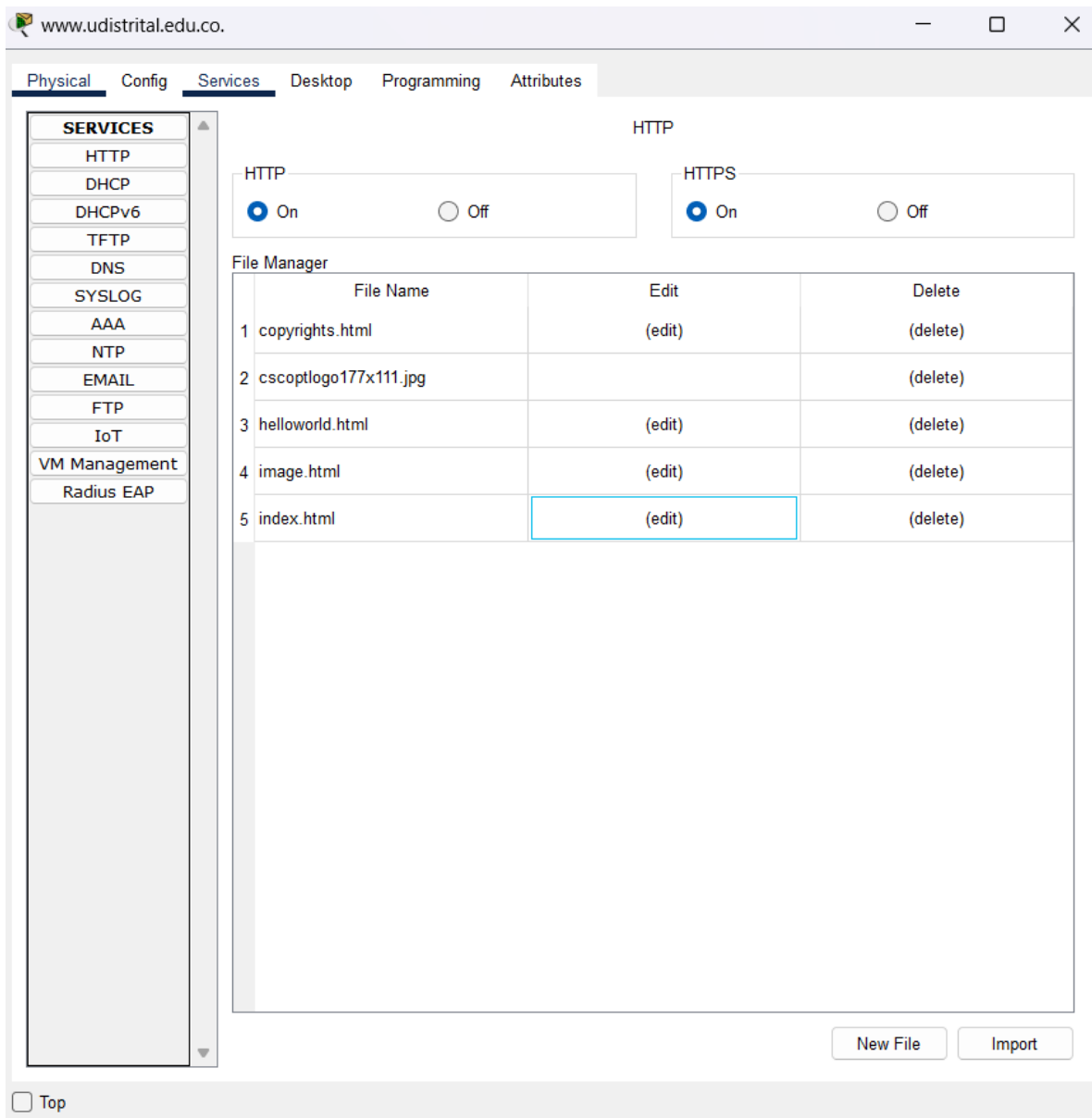


Image 2. Services HTTP

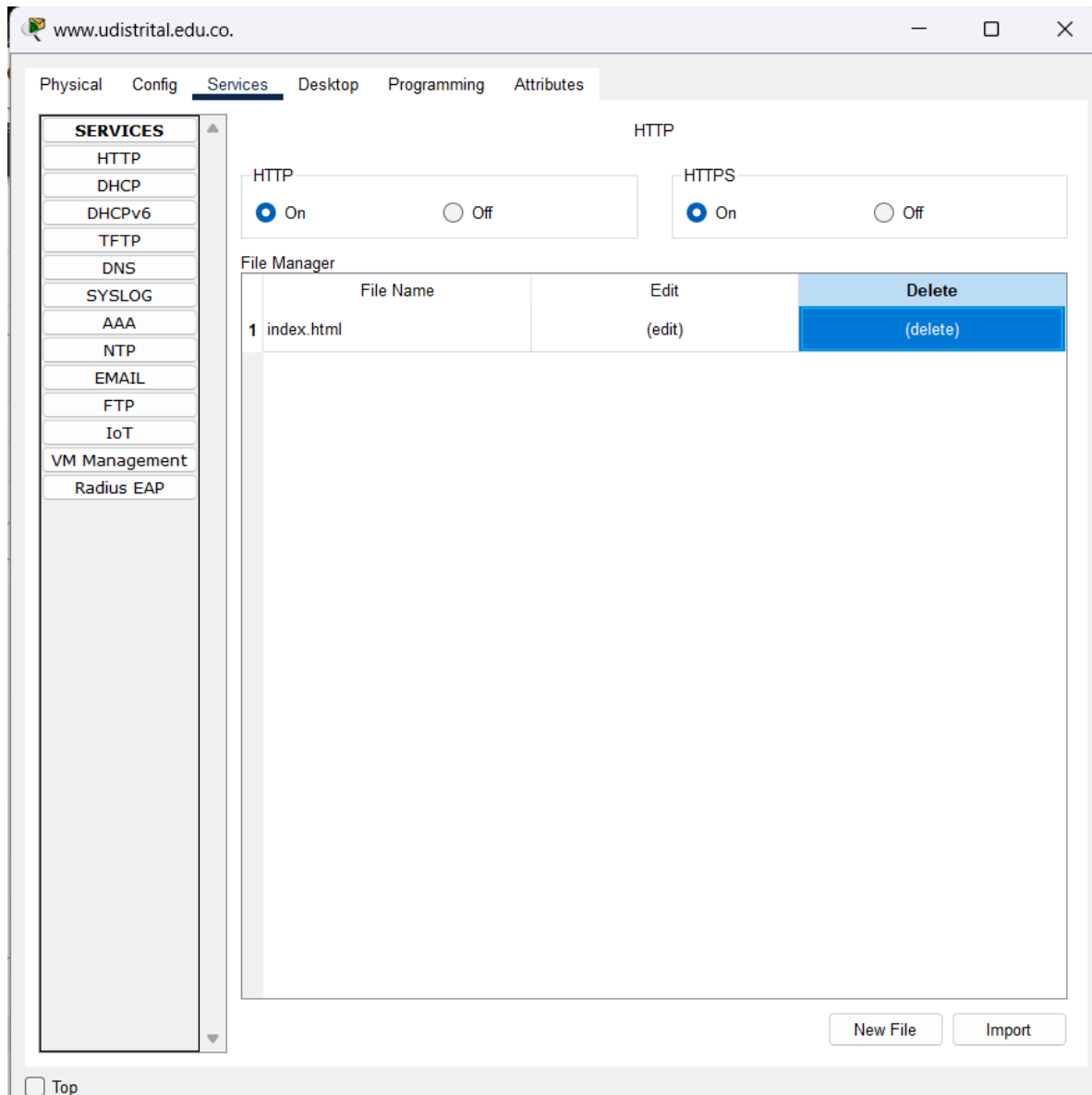


Image 3. Removing HTTP services

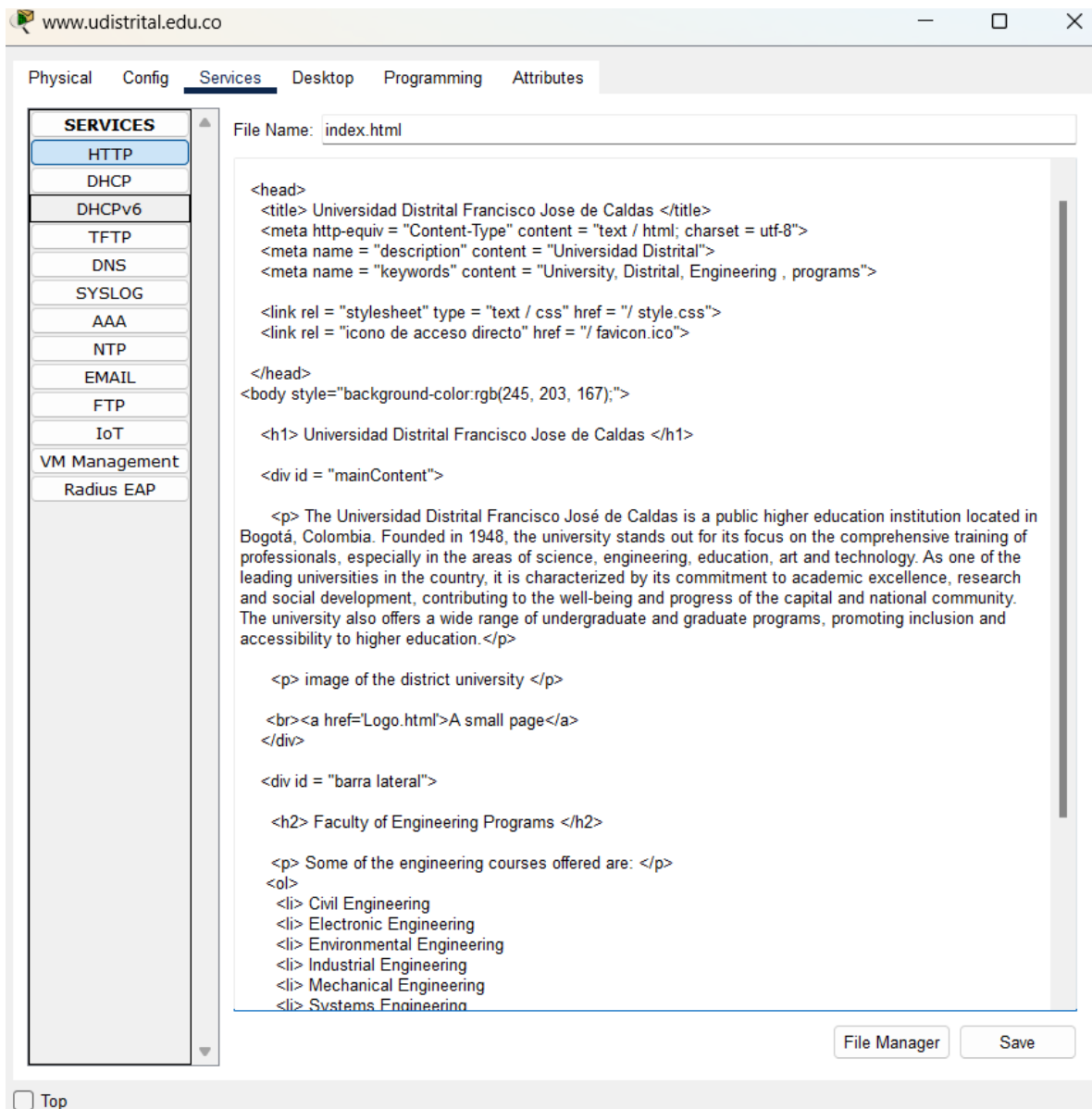


Image 4. Placing the web page code

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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

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: UDPool

Default Gateway: 193.168.100.200

DNS Server: 193.168.100.200

Start IP Address: 193 168 100 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 |
|------------|-----------------|------------|------------------|---------------|----------|-------------|-------------|
| serverPool | 0.0.0.0 | 0.0.0.0 | 193.168.100.0 | 255.255.255.0 | 512 | 0.0.0.0 | 0.0.0.0 |

Image 5. Adding the DHCP service

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Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
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- DNS**
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DNS

DNS Service: ☒ On ☐ Off

Resource Records

Name: Type: A Record

Address:

Add
Save
Remove

| No. | Name | Type | Detail |
|-----|-----------------------|----------|-----------------|
| 0 | www.udistrital.edu.co | A Record | 193.168.100.200 |

Image 6. Adding the DNS service

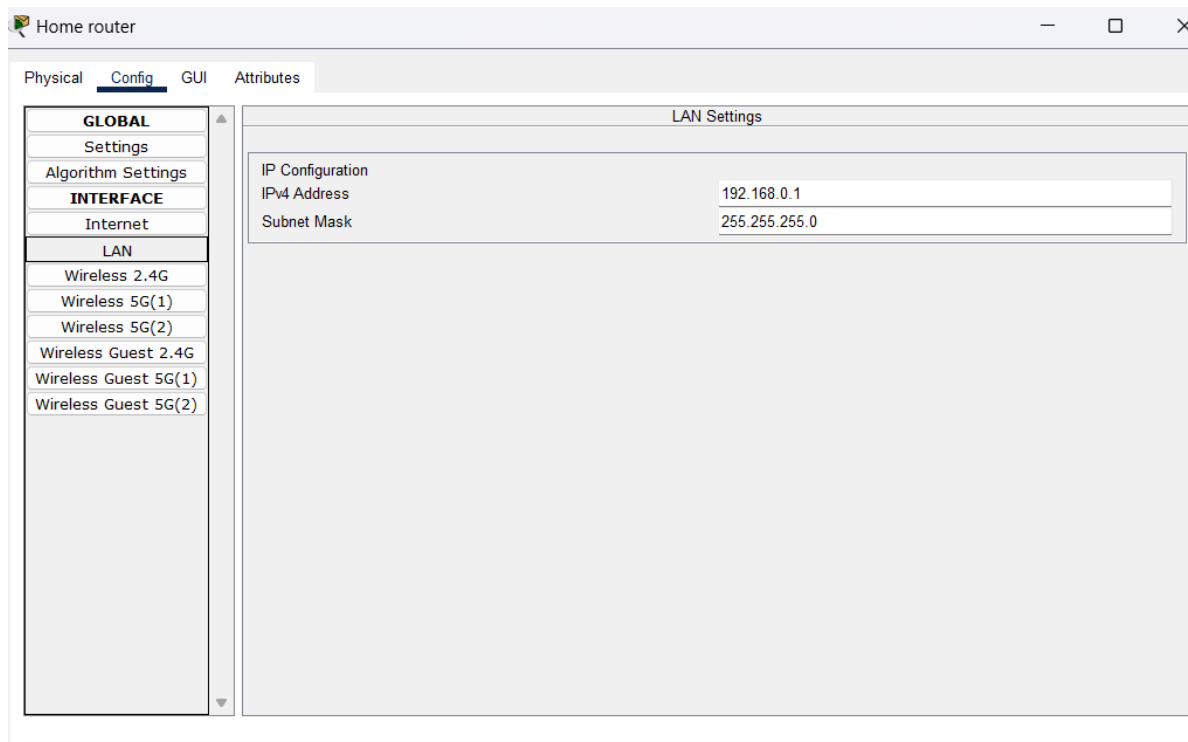


Image 7. Setting up the IP and mask of a wireless router

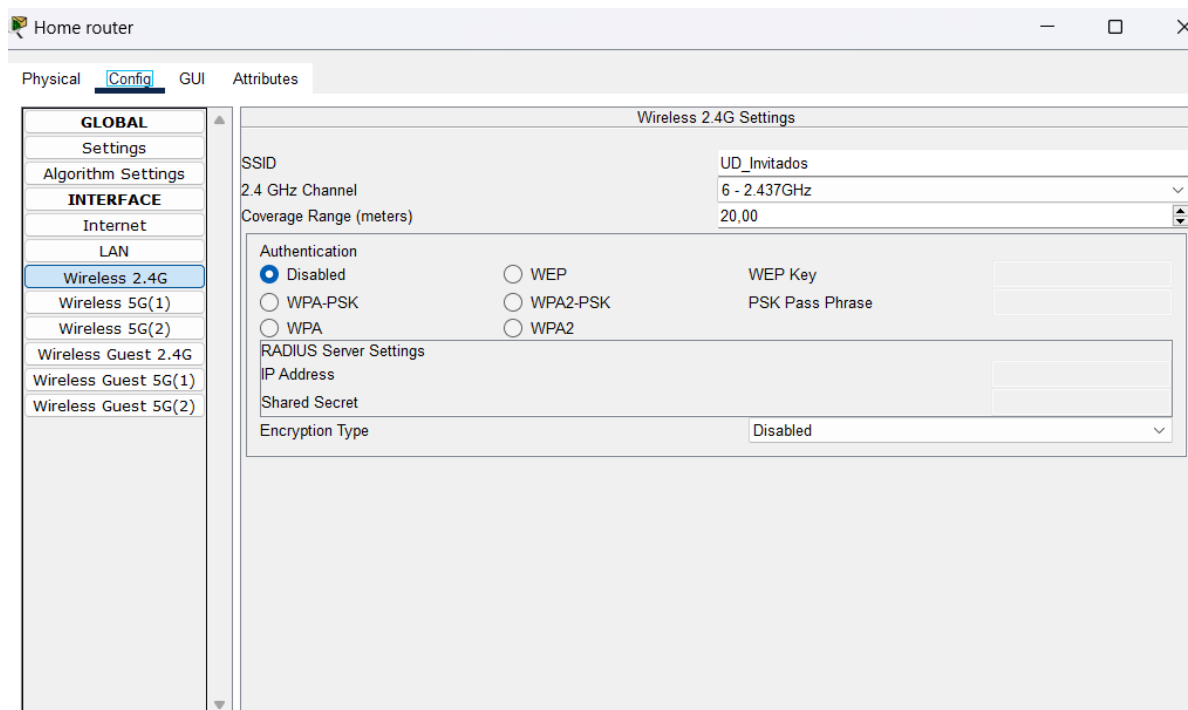


Image 8. setting the Wireless

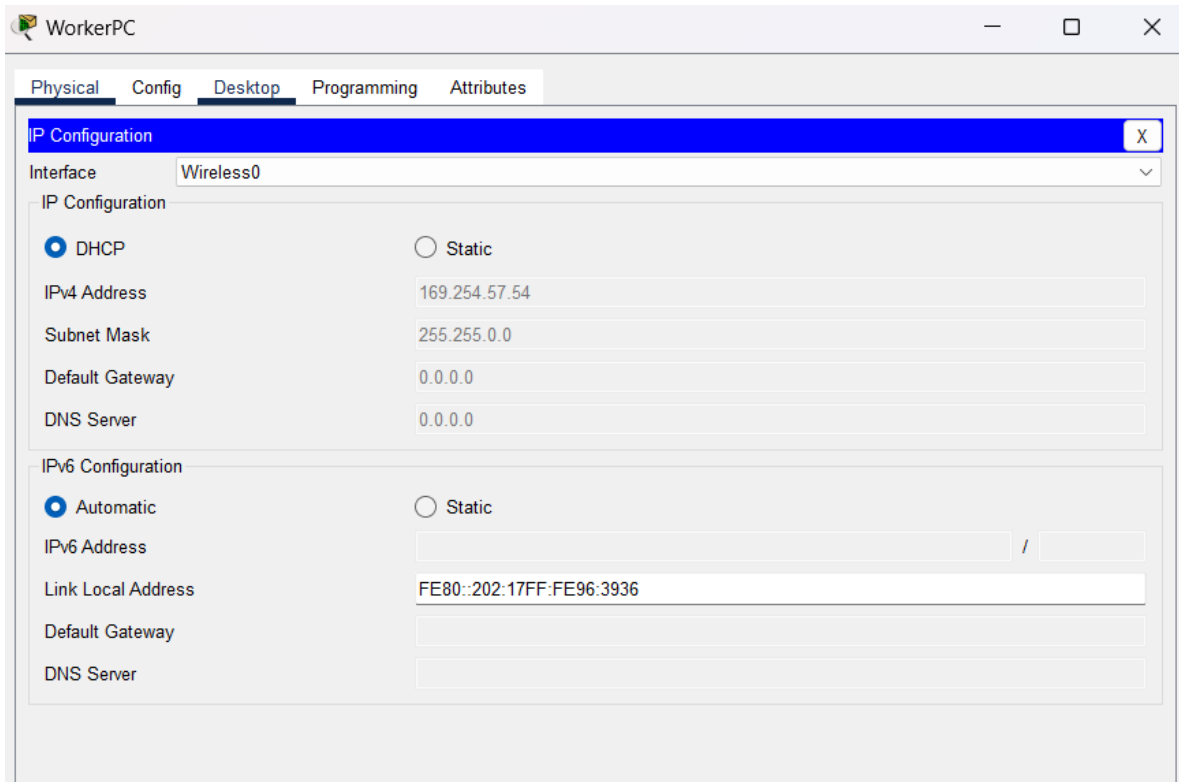


Image 9. Setting up the IP and mask of a wireless PC

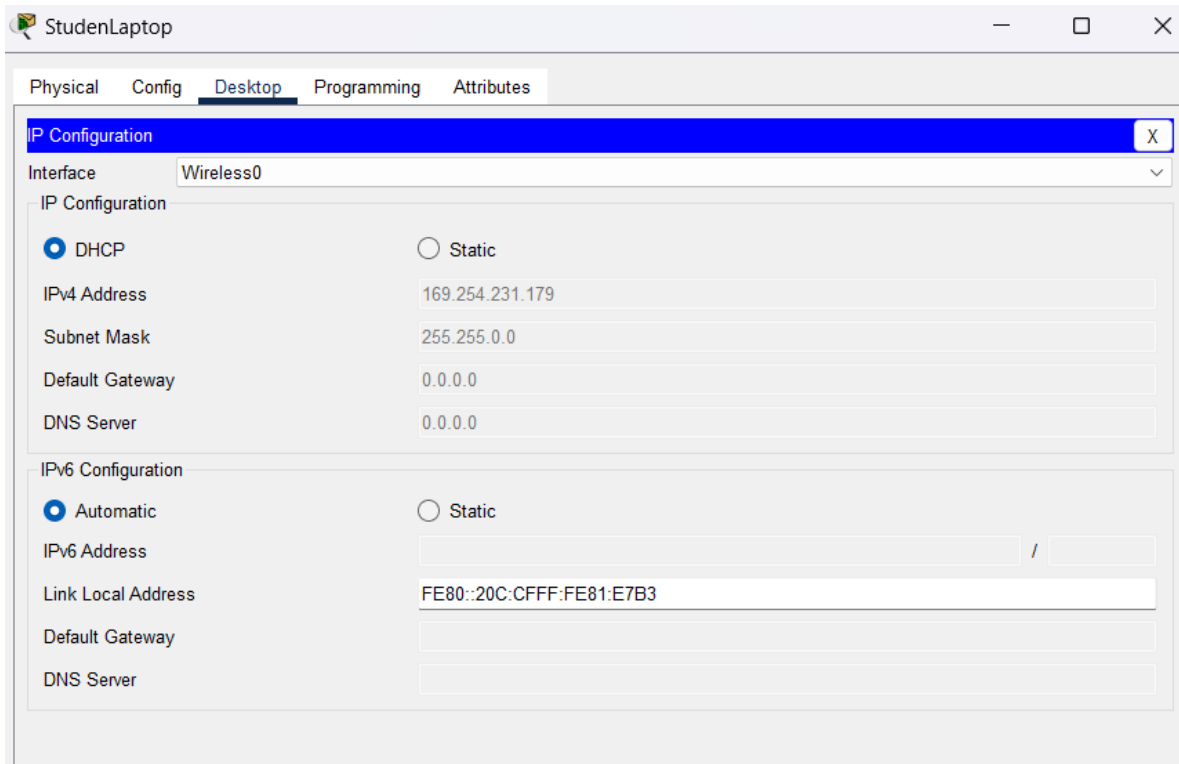


Image 10. setting IP laptop

Checking the network, we access the university page created from the PC.



Image 11. network connection check

Checking the network, we access the university page created from the Laptop.

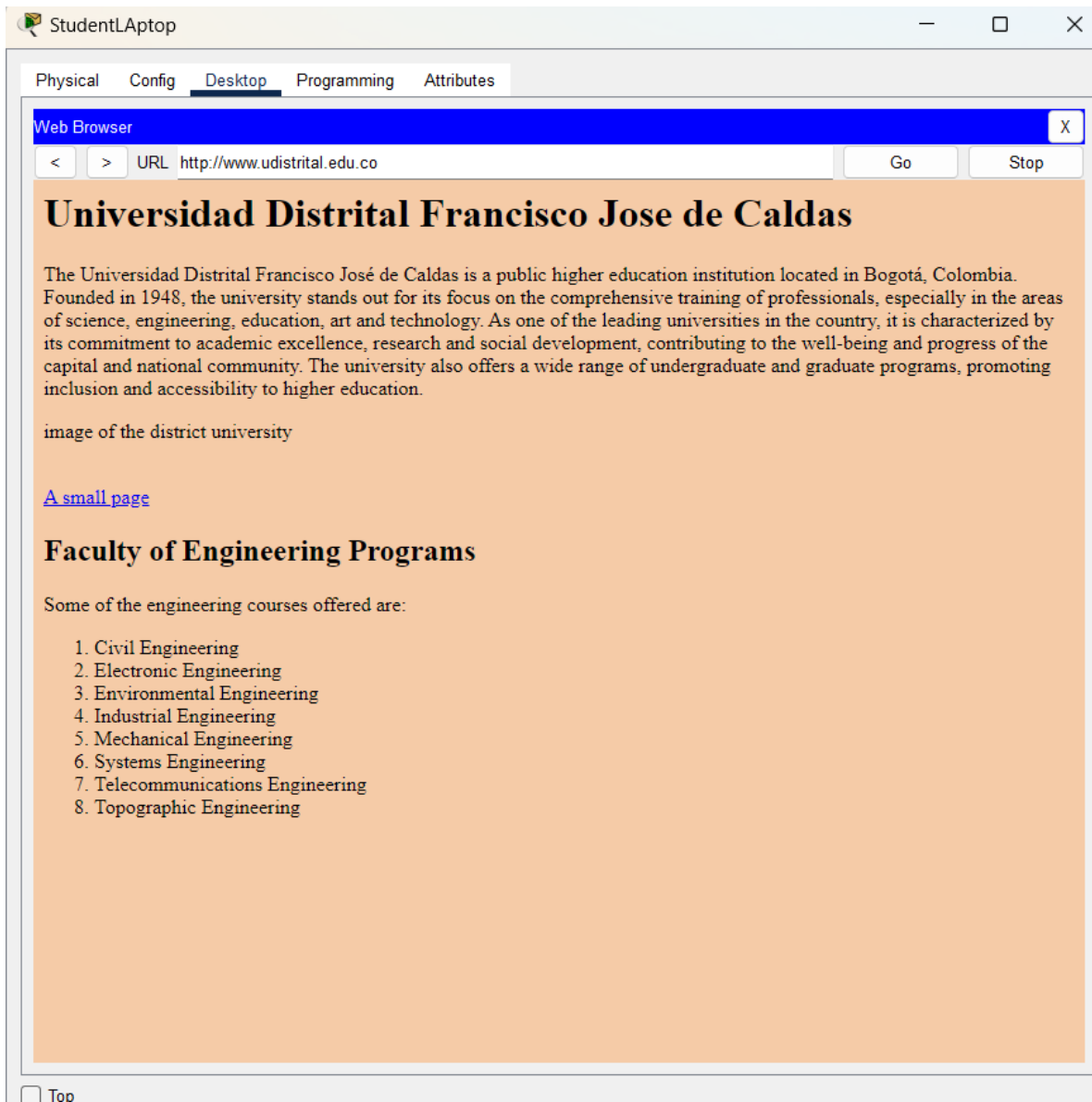


image 12. network connection check

As we can see, the university page appears, therefore we have a connection between the server and the client, fulfilling the objective of the workshop.