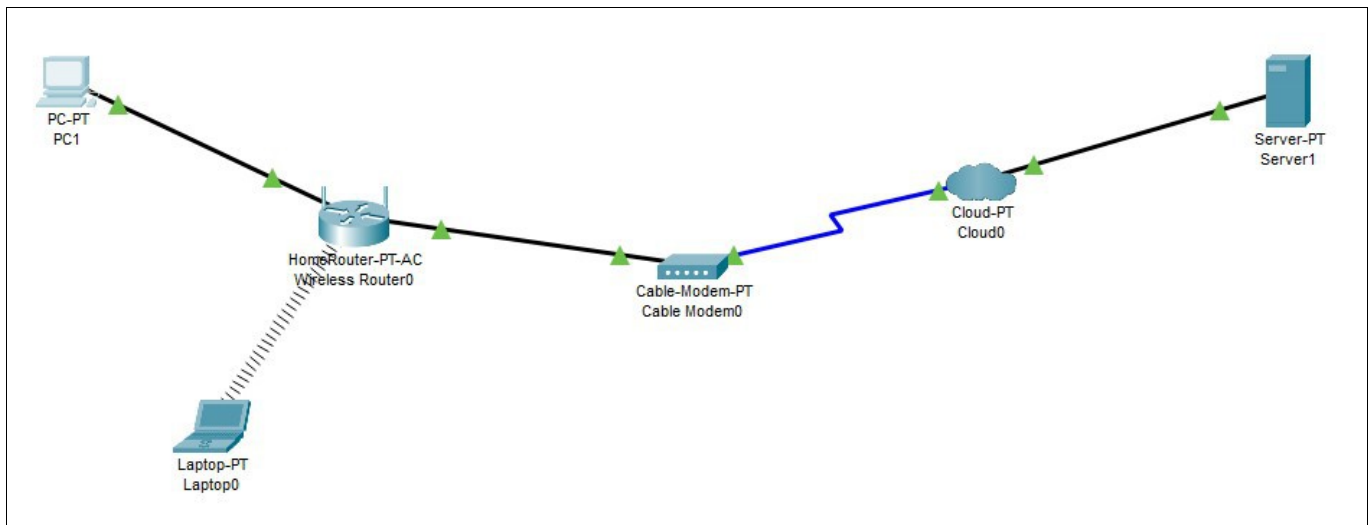


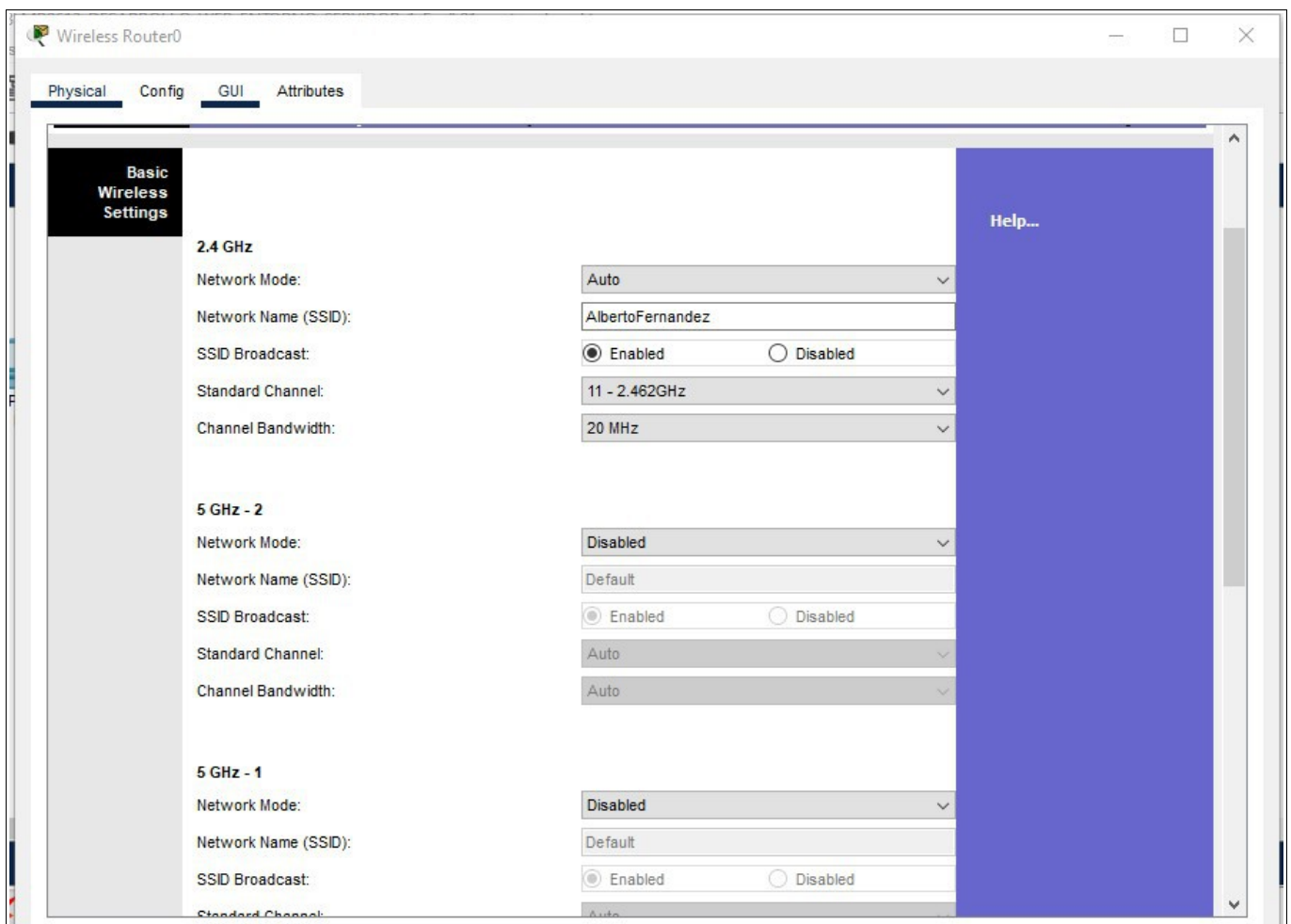
## Red doméstica y servidor web con Cisco Packet Tracer

Alumno: José Alberto Fernández Conde - Curso 2º DAW

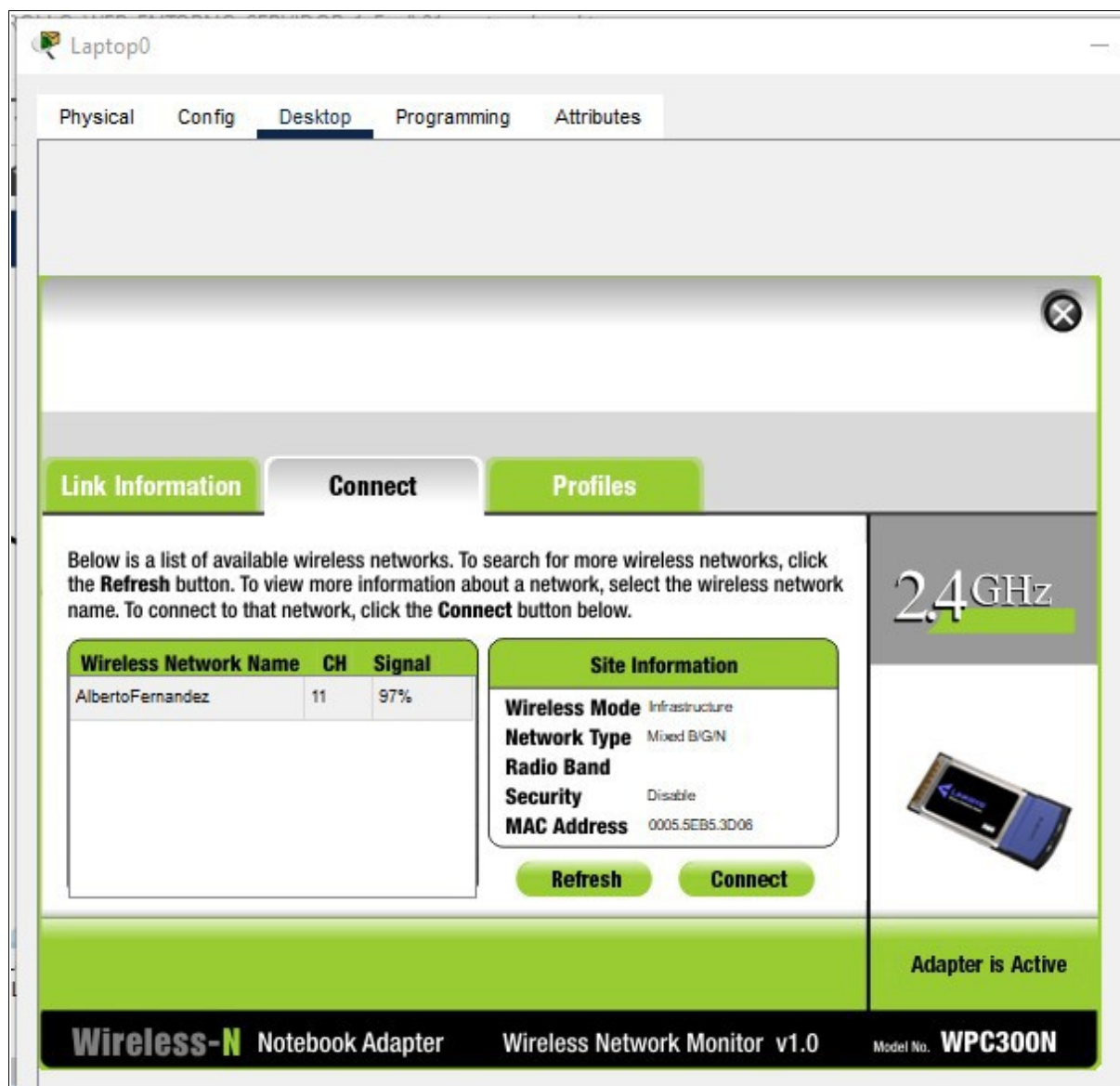
### 1. Captura de la topología de red:



### 2. Captura de la pestaña de configuración wireless del router, con SSID=AlbertoFernandez:



3. Captura de PC Wireless > Connect del portátil, tras conectarse a la red Wi-Fi.



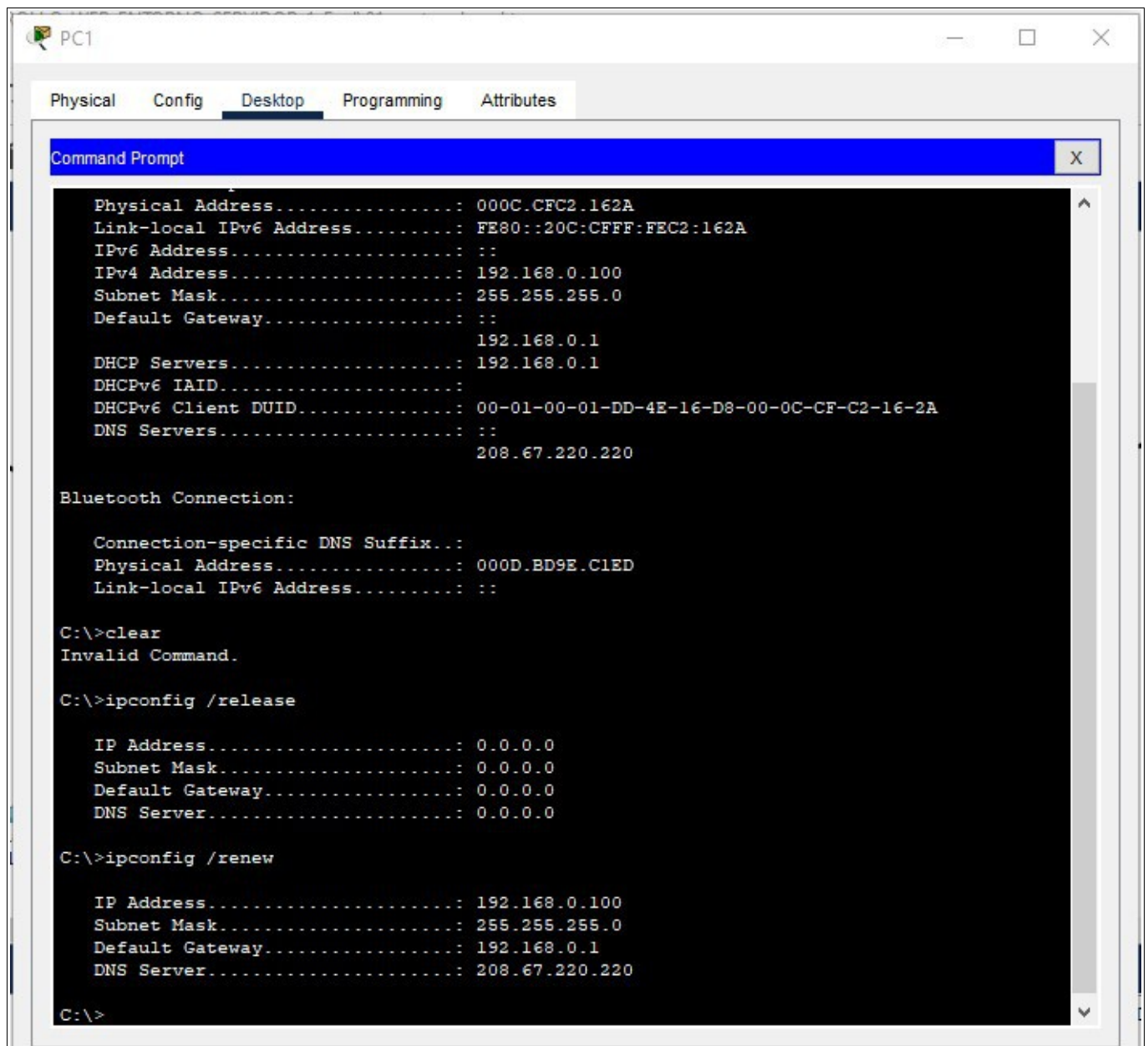
4. Captura de la salida del comando ipconfig /all en el PC, tras conectarse y pasos previos.

a) Configuración IP:

The screenshot shows the 'IP Configuration' window for PC1 in Cisco Packet Tracer. The window has tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes', with 'Desktop' currently selected. The 'Interface' dropdown is set to 'FastEthernet0'. Under 'IP Configuration', the 'DHCP' radio button is selected, and the 'Static' radio button is unselected. The 'IPv4 Address' field contains '192.168.0.100', the 'Subnet Mask' field contains '255.255.255.0', the 'Default Gateway' field contains '192.168.0.1', and the 'DNS Server' field contains '208.67.220.220'. Under 'IPv6 Configuration', the 'Automatic' radio button is unselected and the 'Static' radio button is selected.

Field	Value
Interface	FastEthernet0
IP Configuration	
<input checked="" type="radio"/> DHCP	<input type="radio"/> Static
IPv4 Address	192.168.0.100
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
DNS Server	208.67.220.220
IPv6 Configuration	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static

b) Comandos `ipconfig /release` e `ipconfig /renew`



The screenshot shows a window titled 'PC1' with tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The Command Prompt shows the output of the `ipconfig` command, followed by an attempt to clear the screen (which fails), and then the execution of `ipconfig /release` and `ipconfig /renew`.

```
Physical Address.....: 000C.CFC2.162A
Link-local IPv6 Address.....: FE80::20C:CFFF:FEC2:162A
IPv6 Address.....: ::
IPv4 Address.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
                   192.168.0.1
DHCP Servers.....: 192.168.0.1
DHCPv6 IAID.....:
DHCPv6 Client DUID.....: 00-01-00-01-DD-4E-16-D8-00-0C-CF-C2-16-2A
DNS Servers.....: ::
                   208.67.220.220

Bluetooth Connection:

Connection-specific DNS Suffix...:
Physical Address.....: 000D.BD9E.C1ED
Link-local IPv6 Address.....: ::

C:\>clear
Invalid Command.

C:\>ipconfig /release

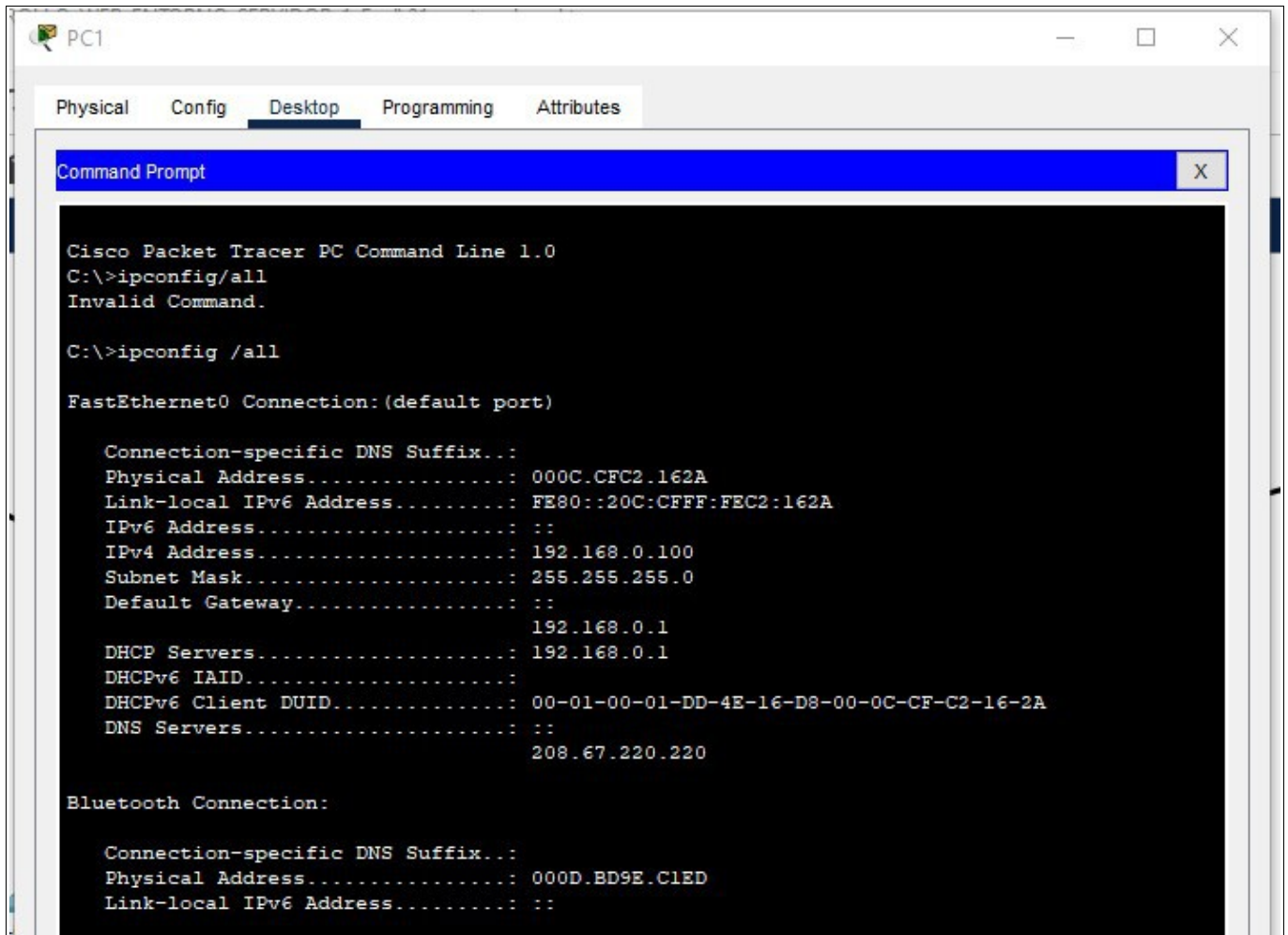
IP Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: 0.0.0.0
DNS Server.....: 0.0.0.0

C:\>ipconfig /renew

IP Address.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>
```

c) Salida del comando **ipconfig /all** en el PC:



The screenshot shows a Cisco Packet Tracer PC Command Line window for PC1. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, and a Command Prompt window is open. The Command Prompt shows the output of the `ipconfig /all` command. The output displays network configuration details for the FastEthernet0 and Bluetooth connections.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig/all
Invalid Command.

C:\>ipconfig /all

FastEthernet0 Connection: (default port)

    Connection-specific DNS Suffix...:
    Physical Address.....: 000C.CFC2.162A
    Link-local IPv6 Address.....: FE80::20C:CFFF:FEC2:162A
    IPv6 Address.....: ::
    IPv4 Address.....: 192.168.0.100
    Subnet Mask.....: 255.255.255.0
    Default Gateway.....: ::
                                192.168.0.1
    DHCP Servers.....: 192.168.0.1
    DHCPv6 IAID.....:
    DHCPv6 Client DUID.....: 00-01-00-01-DD-4E-16-D8-00-0C-CF-C2-16-2A
    DNS Servers.....: ::
                                208.67.220.220

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Physical Address.....: 000D.BD9E.C1ED
    Link-local IPv6 Address.....: ::
```

## 5. Captura de Services > DNS configurado en el servidor Cisco.com.

### a) Services > DHCP:

The screenshot shows the DHCP configuration window for 'Server1'. The 'Services' tab is selected, and the 'DHCP' service is configured. The interface includes a sidebar with service options, a main configuration area with fields for interface, pool name, gateway, DNS server, IP address range, subnet mask, and user limit, and a table of existing DHCP pools.

**SERVICES**

- HTTP
- DHCP**
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

**DHCP**

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

Buttons: Add, Save, Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
DHCPPOOL	208.67.220.220	208.67.220.220	208.67.220.1	255.255.255.0	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

### b) Services > DNS:

The screenshot shows the DNS configuration window for 'Server1'. The 'Services' tab is selected, and the 'DNS' service is configured. The interface includes a sidebar with service options, a main configuration area with fields for DNS service status, resource records, and a table of existing DNS records.

**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

Buttons: Add, Save, Remove

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

6. Captura de Config > Interface > FastEthernet0 configurado en el servidor Cisco.com.

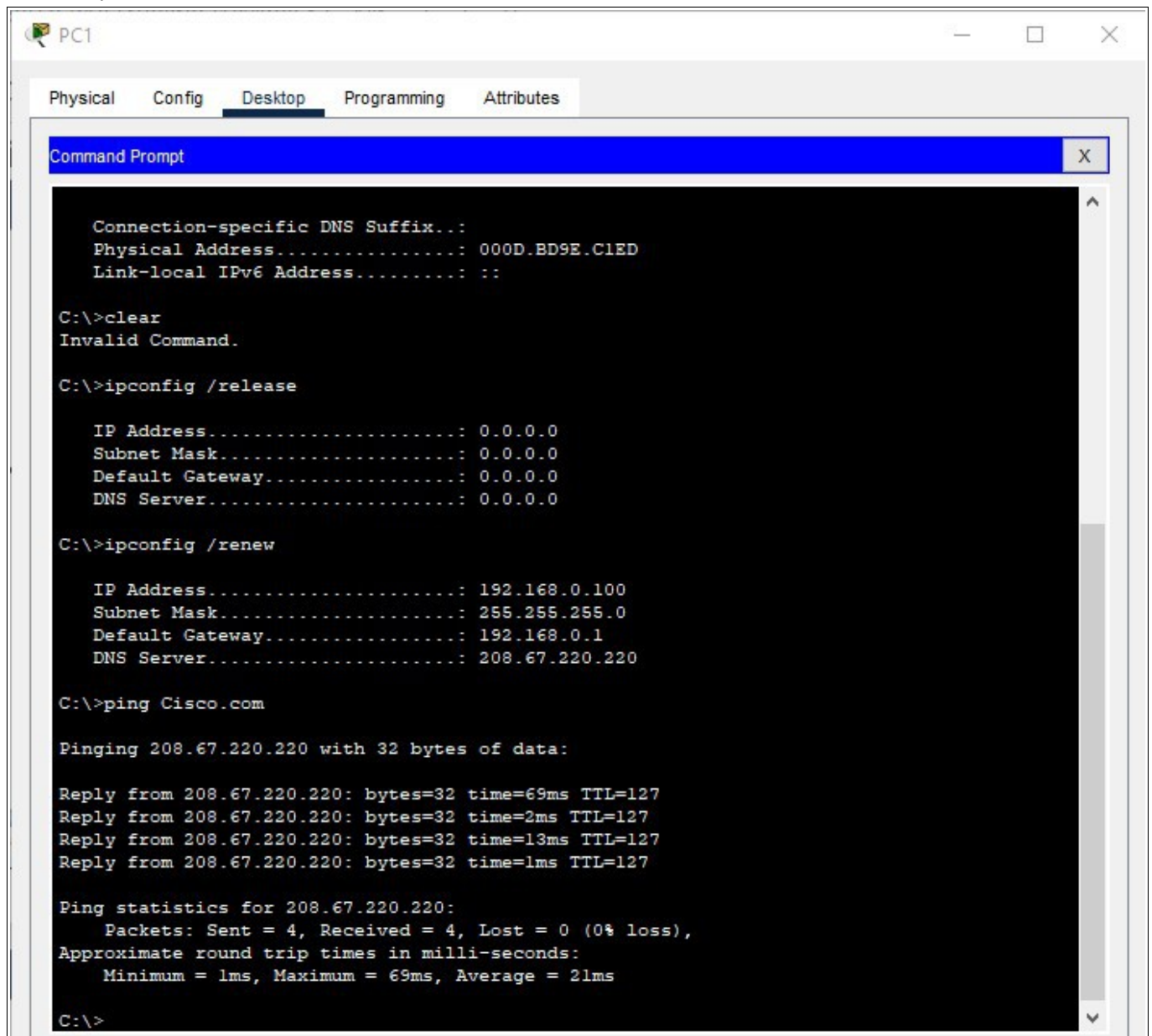
The screenshot shows the Cisco.com configuration interface for the FastEthernet0 interface. The left sidebar contains a tree view with 'GLOBAL' and 'INTERFACE' sections. Under 'INTERFACE', 'FastEthernet0' is selected. The main content area is titled 'FastEthernet0' and contains the following configuration options:

- Port Status:** ☒ On
- Bandwidth:** ☐ 100 Mbps ☒ 10 Mbps ☒ Auto
- Duplex:** ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address:** 000D.BD78.35E5
- 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:** FE80::20D:BDFF:FE78:35E5



7. Captura de la salida del comando ping Cisco.com desde el PC y el portátil.

a) Desde el PC:



The screenshot shows a window titled 'PC1' with tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the following sequence of commands and their outputs:

```
Connection-specific DNS Suffix...:
Physical Address.....: 000D.BD9E.C1ED
Link-local IPv6 Address.....: ::

C:\>clear
Invalid Command.

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.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

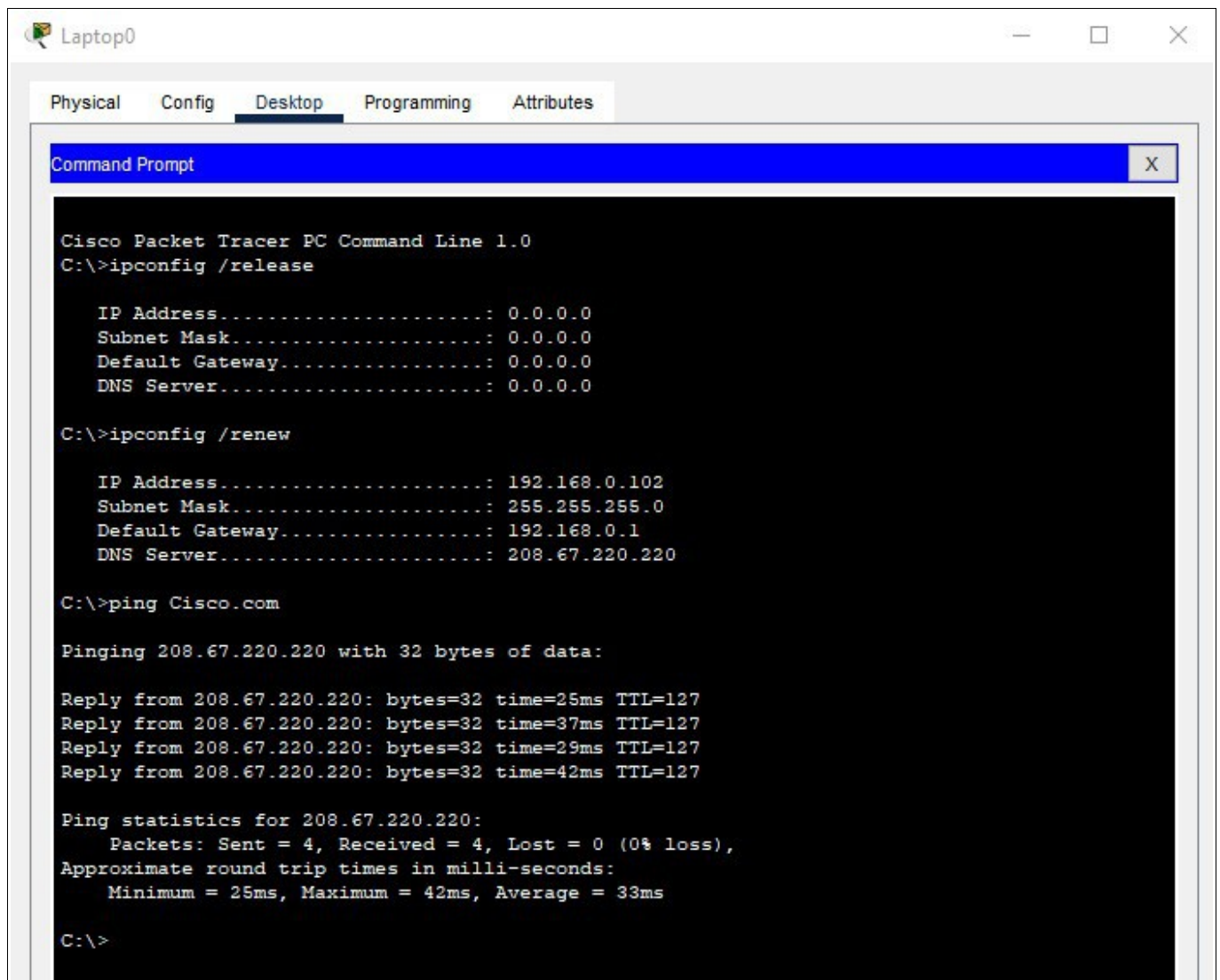
Reply from 208.67.220.220: bytes=32 time=69ms TTL=127
Reply from 208.67.220.220: bytes=32 time=2ms TTL=127
Reply from 208.67.220.220: bytes=32 time=13ms TTL=127
Reply from 208.67.220.220: bytes=32 time=1ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 69ms, Average = 21ms

C:\>
```



b) Desde el Portátil:



```
Cisco Packet Tracer PC Command Line 1.0
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.....: 192.168.0.102
Subnet Mask.....: 255.255.255.0
Default Gateway...: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=25ms TTL=127
Reply from 208.67.220.220: bytes=32 time=37ms TTL=127
Reply from 208.67.220.220: bytes=32 time=29ms TTL=127
Reply from 208.67.220.220: bytes=32 time=42ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 25ms, Maximum = 42ms, Average = 33ms

C:\>
```

## 8. Simulation.

Comando ping desde un dispositivo (el portátil) y pulsar el botón de play.

Captura de paquetes ICMP en el recuadro Event List.

The screenshot displays the Cisco Packet Tracer interface during a simulation. On the left, the 'Laptop0' configuration window is open, showing the 'Desktop' tab with a 'Command Prompt' window. The command prompt shows the following commands and output:

```
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. . . . .: 192.168.0.102
Subnet Mask. . . . .: 255.255.255.0
Default Gateway. . . . .: 192.168.0.1
DNS Server. . . . .: 208.67.220.220

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=36ms TTL=127
Reply from 208.67.220.220: bytes=32 time=37ms TTL=127
Reply from 208.67.220.220: bytes=32 time=39ms TTL=127
Reply from 208.67.220.220: bytes=32 time=42ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 25ms, Maximum = 42ms, Average = 33ms

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=12ms TTL=127
```

On the right, the 'Simulation Panel' is open, showing the 'Event List' tab. The event list displays the following events:

Vis.	Time(sec)	Last Device	At Device
	4.002	Cisco.com	Cloud0
	4.003	Cloud0	Cable Modem0
	4.004	Cable Modem0	Wireless Router0
	4.005	Wireless Router0	Laptop0
	4.005	--	Laptop0
	4.009	--	Laptop0
	4.010	Laptop0	Wireless Router0
	4.011	Wireless Router0	Cable Modem0
	4.012	Cable Modem0	Cloud0
	4.012	--	Wireless Router0
	4.013	Wireless Router0	Laptop0
	4.013	Cloud0	Cisco.com
	4.014	Cisco.com	Cloud0
	4.015	Cloud0	Cable Modem0
	4.016	Cable Modem0	Wireless Router0
	4.017	Wireless Router0	Laptop0

The 'Simulation Panel' also includes a 'Play Controls' section with buttons for 'Reset Simulation', 'Constant Delay', and 'Play Controls'. The 'Event List Filters' section shows a list of visible events: ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PaGP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP.

Captura de paquetes ICMP en el recuadro Event List.

Simulation Panel

Event List

Vis.	Time(sec)	Last Device	At Device
	4.012	--	Wireless Router0
	4.013	Wireless Router0	Laptop0
	4.013	Cloud0	Cisco.com
	4.014	Cisco.com	Cloud0
	4.015	Cloud0	Cable Modem0
	4.016	Cable Modem0	Wireless Router0
	4.017	Wireless Router0	Laptop0
	5.020	--	Laptop0
	5.021	Laptop0	Wireless Router0
	5.022	Wireless Router0	Cable Modem0
	5.023	Cable Modem0	Cloud0
	5.024	Cloud0	Cisco.com
	5.024	--	Wireless Router0
	5.025	Wireless Router0	Laptop0
	5.025	Cisco.com	Cloud0
	5.026	Cloud0	Cable Modem0

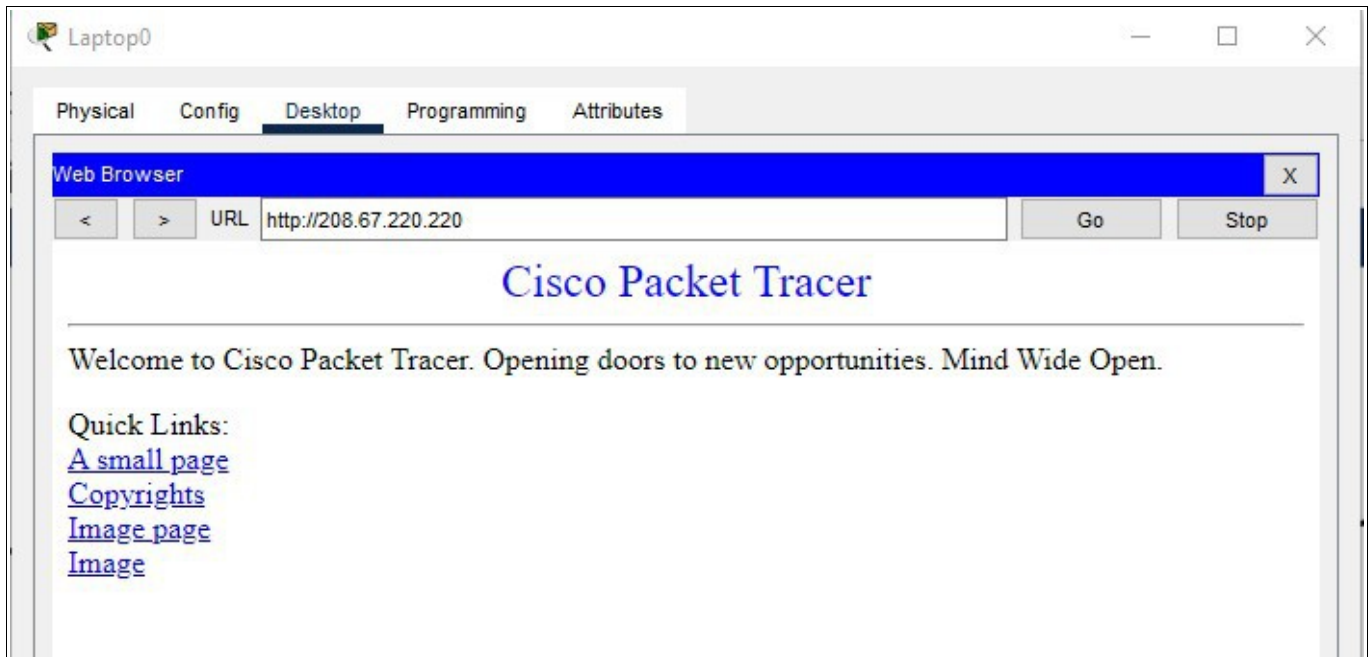
☒ Constant Delay Captured to: 5.026 s

Play Controls

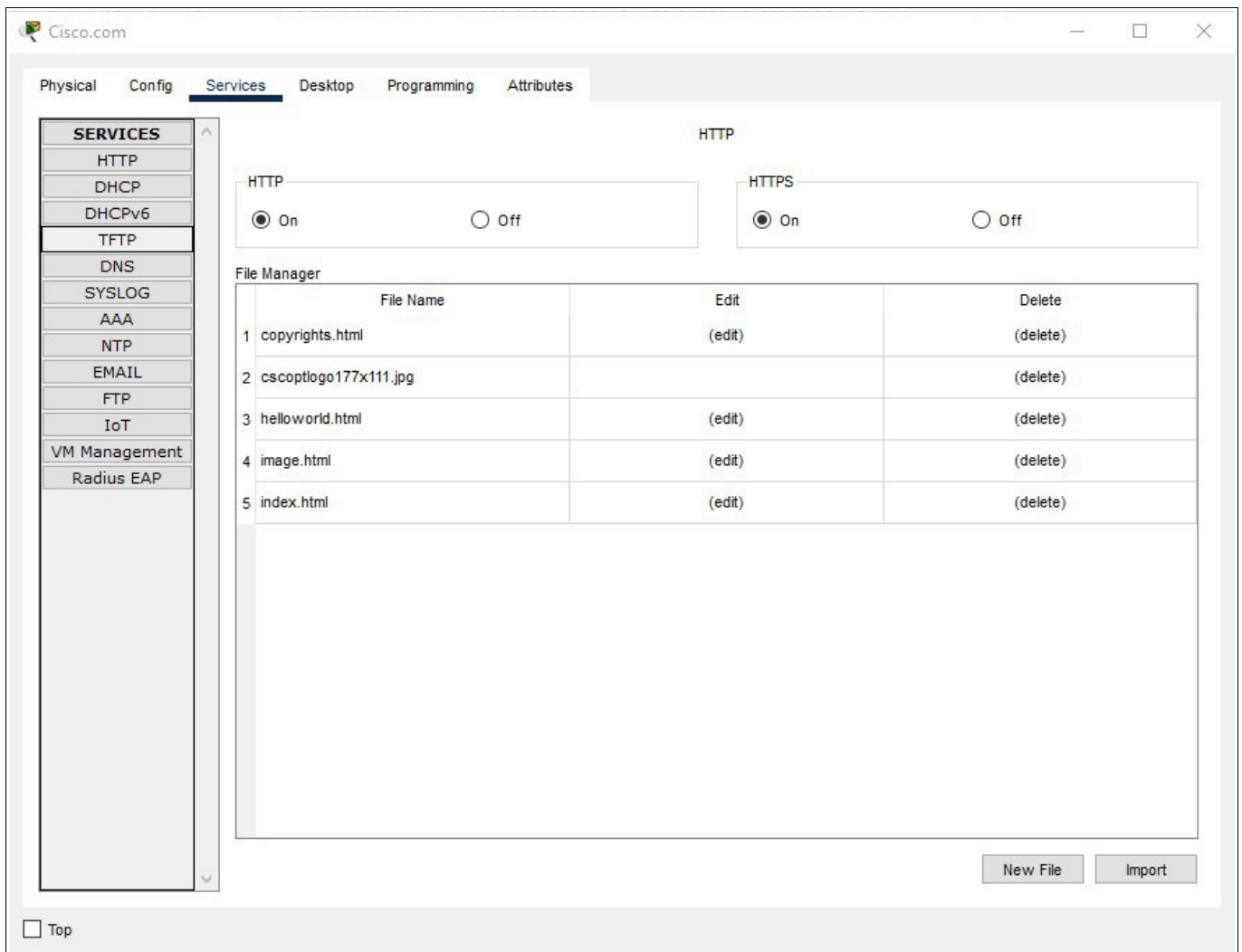
Event List Filters - Visible Events

ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoE, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP

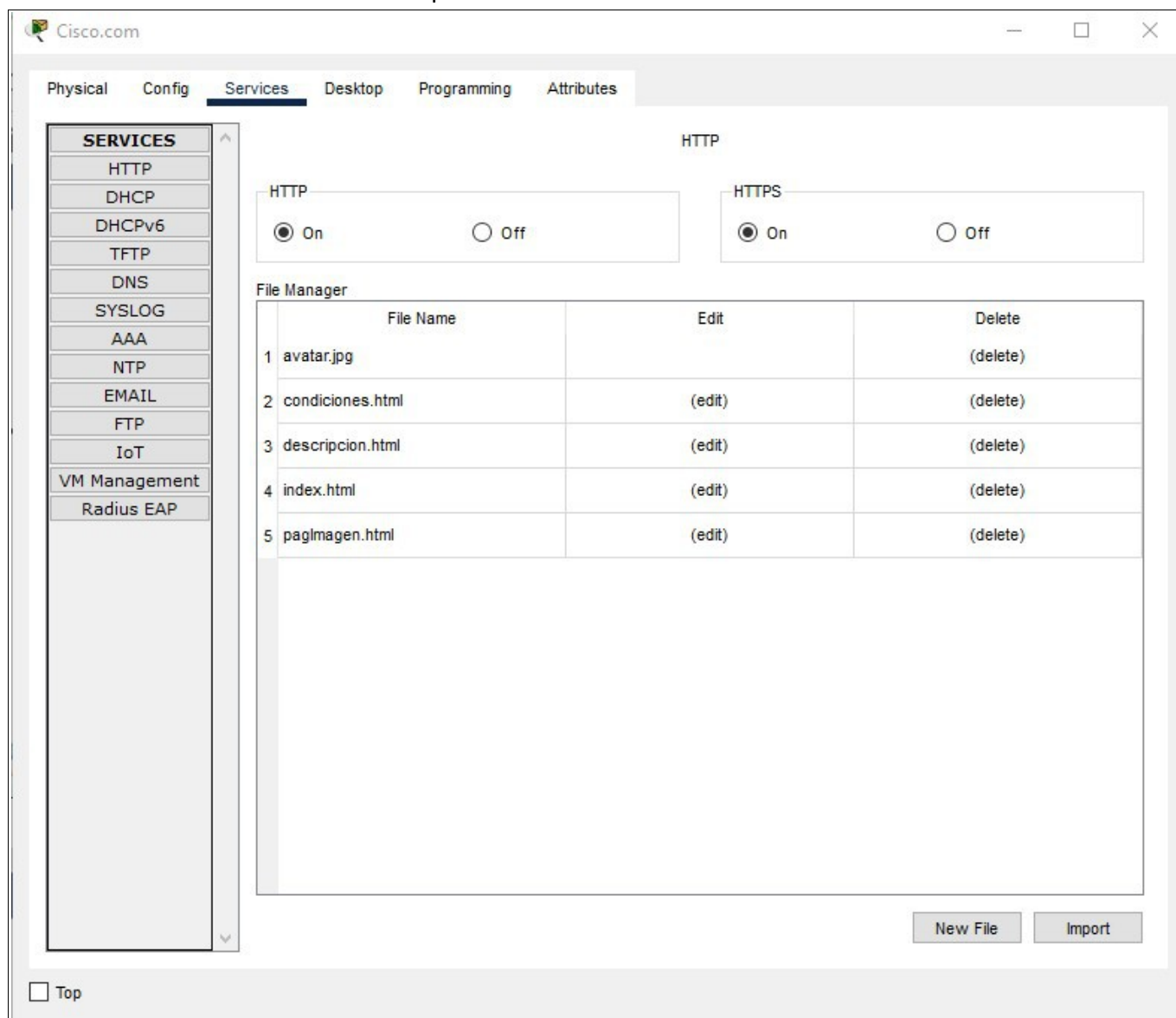
## 9. Browser desde el portátil



## 10. Ficheros servidos por defecto:



## 11. Sustitución de los ficheros por defecto en el servidor:



## 12. Código fuente de las páginas:

index.html

```
1 <html>
2 <center><font size='+2' color='blue'>Cisco Packet Tracer</font></center>
3 <h1>José Alberto Fernández Conde</h1>
4 <p>Enlaces:
5 <br><a href='descripcion.html'>Descripción personal</a>
6 <br><a href='condiciones.html'>Condiciones de contratación</a>
7 <br><a href='pagImagen.html'>Página de Imagen</a>
8 <br><a href='avatar.jpg'>Imagen avatar</a>
9 </html>
```



descripcion.html

```
1 <html>
2   Descripción de mis características como desarrollador.
3   <br><a href='index.html'>Volver a Inicio</a>
4 </html>
```

condiciones.html

```
1 <html>
2   Mis condiciones de contratación.
3   <ul>
4     <li>Salario aceptable.</li>
5     <li>Posibilidad de teletrabajo.</li>
6     <li>Fin de semana libre.</li>
7   </ul>
8   <br><a href='index.html'>Volver a Inicio</a>
9 </html>
```

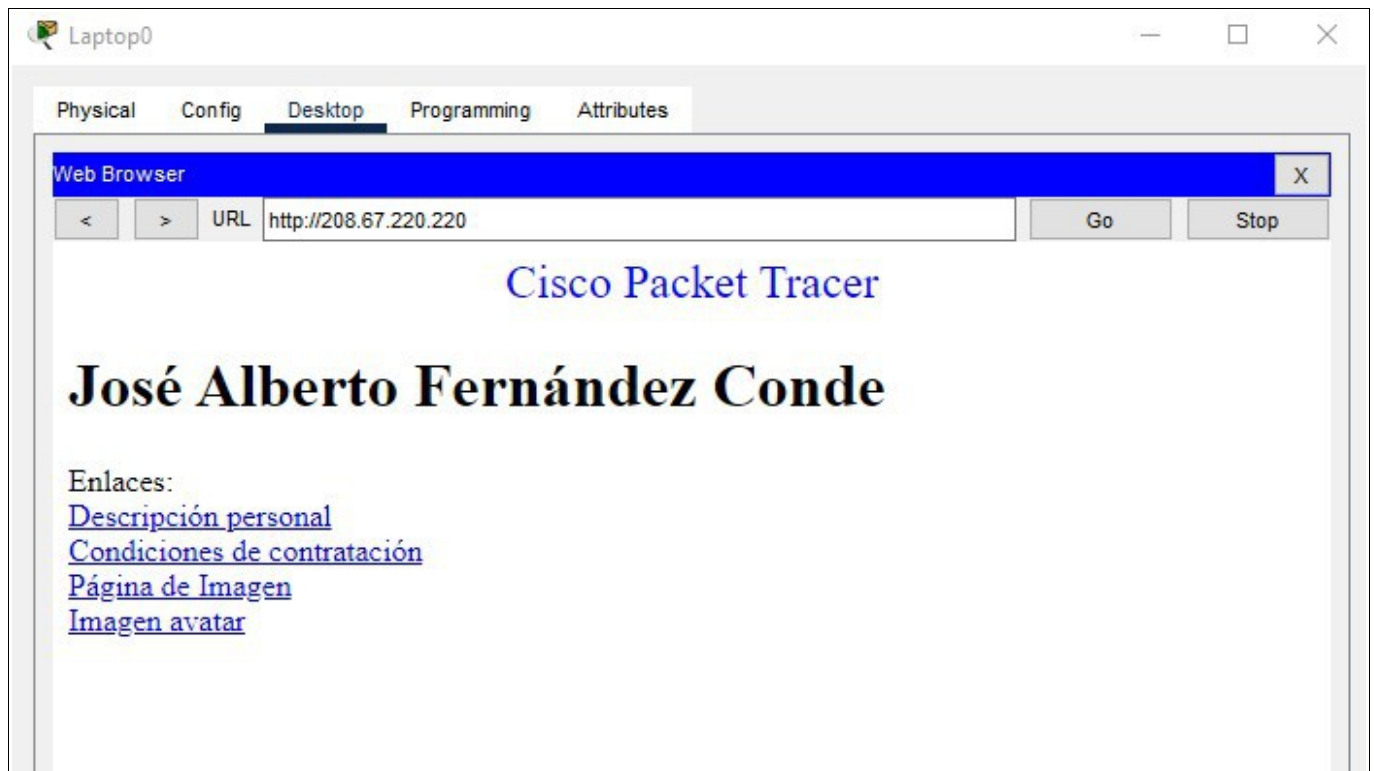
pagImagen.html

```
1 <html>
2 <body>
3   <!--<center><font size='+2' color='blue'>Imagen</font></center>-->
4   <p>Imagen personal</p>
5   <p><a href='avatar.jpg'></a></p>
6   <br><a href='index.html'>Volver a Inicio</a>
7 </body>
8 </html>
```

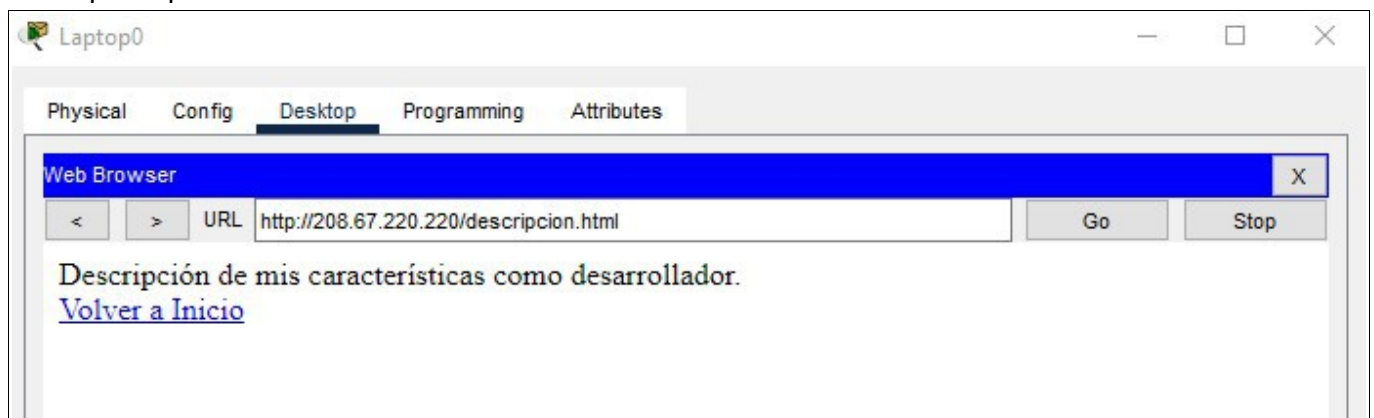
avatar.jpg



### 13. En el navegador:

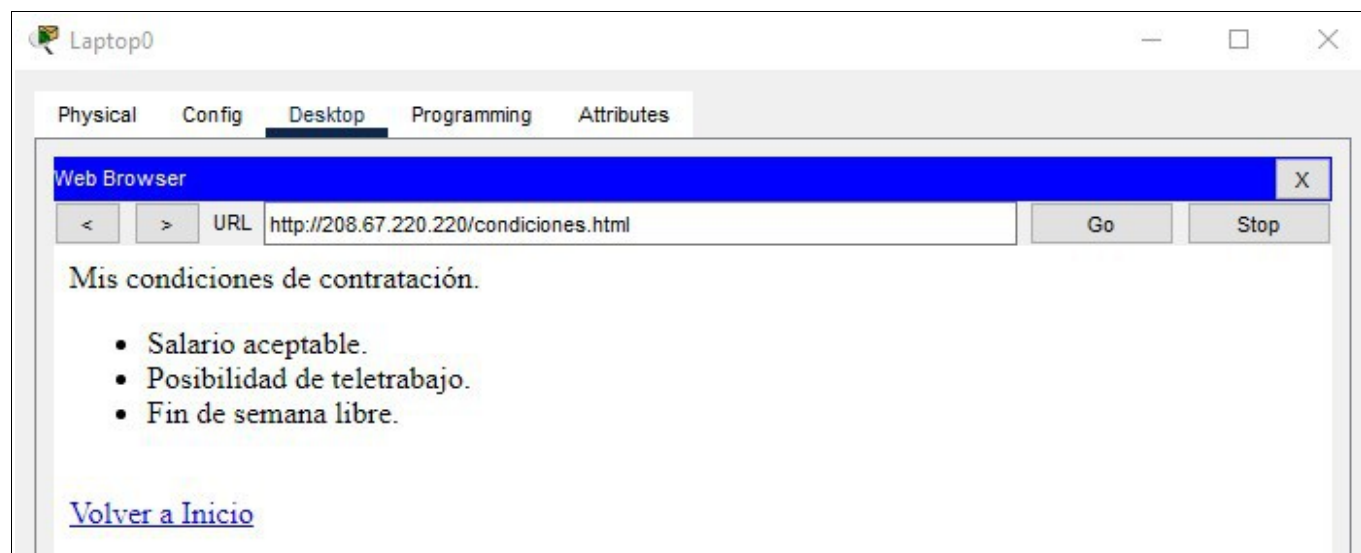


### Descripción personal.

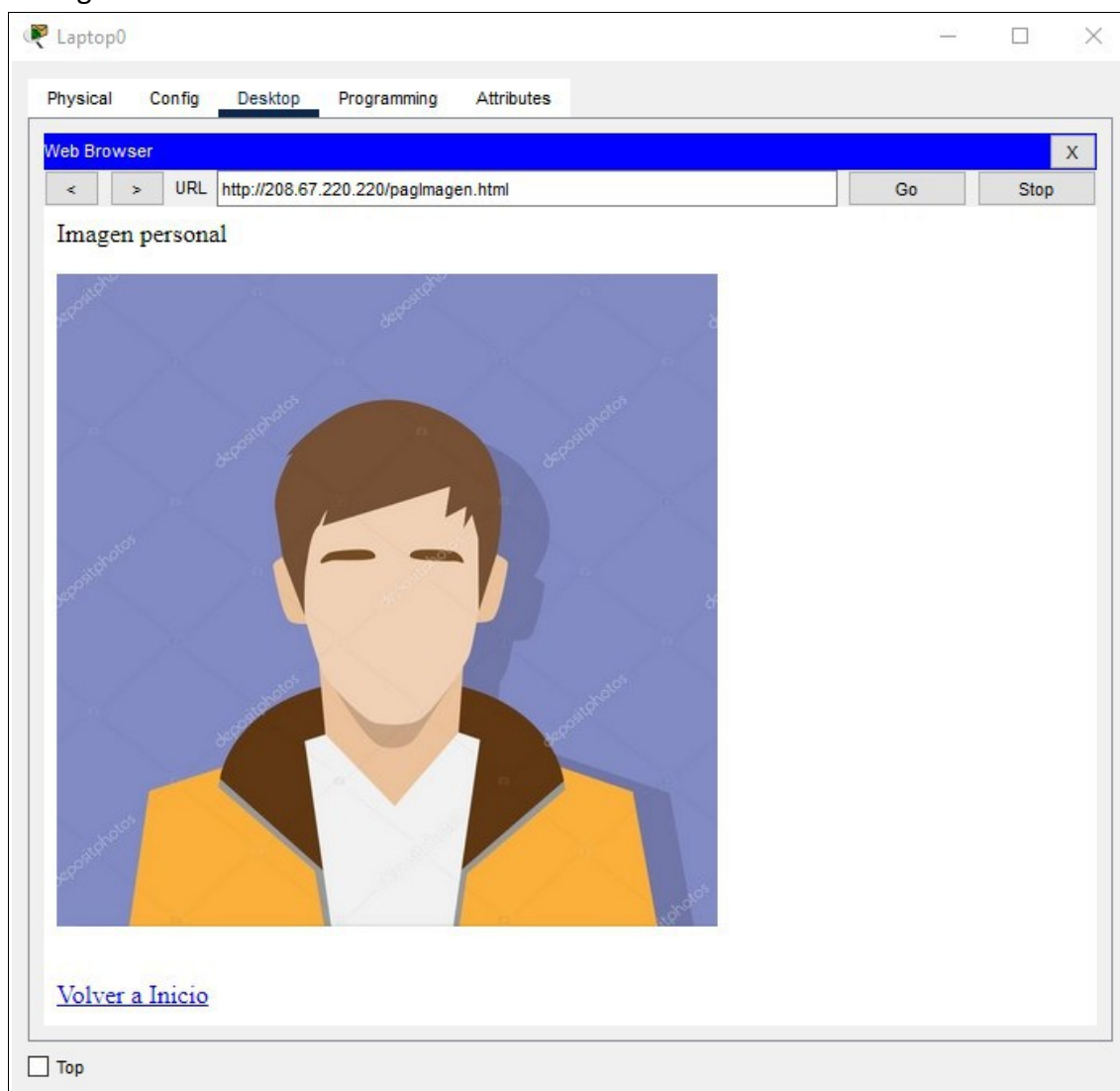




## Condiciones de contratación.



## Página de Imagen.



## Imagen Avatar

