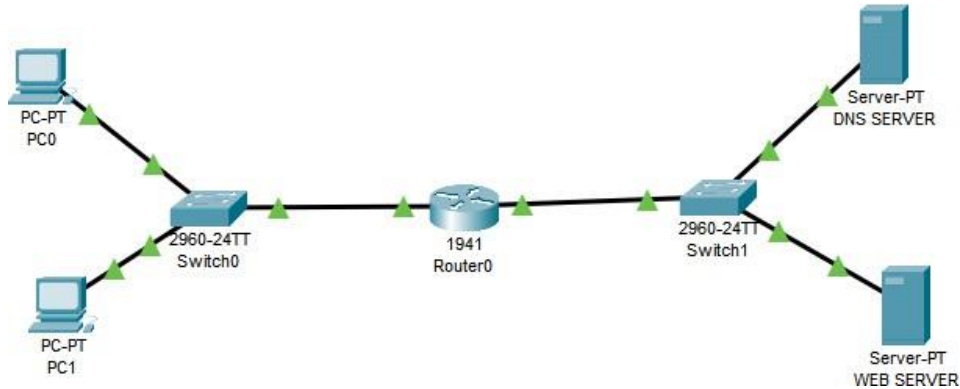
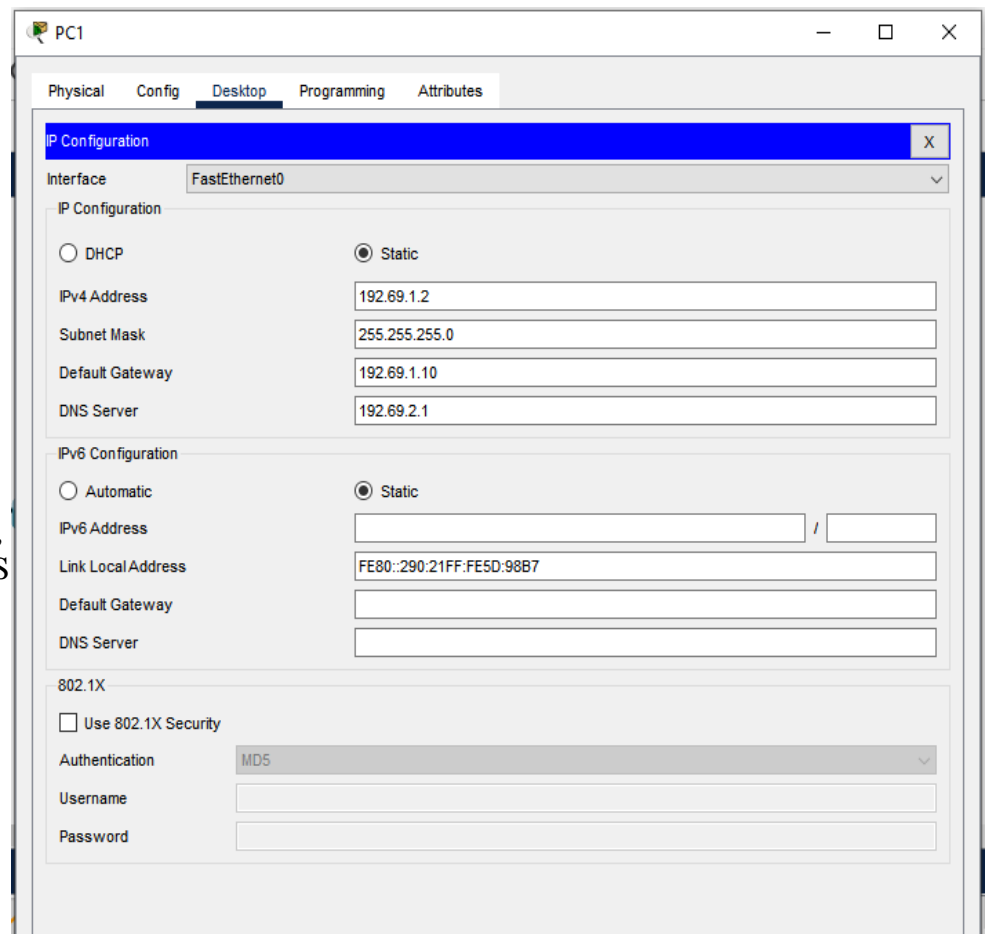


TOPOLOGY:

This network topology connects two PCs, a router, switches, and servers (DNS and Web) to enable communication and service access.

**PC Configuration**

PC1 is statically configured with IP 192.69.1.2, using a subnet mask of 255.255.255.0, gateway 192.69.1.10, and DNS server 192.69.2.1 for network connectivity.



DNS Server Configuration

The DNS server is configured with a static IP of 192.69.2.1, subnet mask 255.255.255.0, default gateway 192.69.2.10, and uses its own IP as the DNS server for internal name resolution.

The screenshot shows the 'DNS SERVER' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing the following settings:

Field	Value
IP Configuration	<input type="radio"/> DHCP <input checked="" type="radio"/> Static
IPv4 Address	192.69.2.1
Subnet Mask	255.255.255.0
Default Gateway	192.69.2.10
DNS Server	192.69.2.1

The 'IPv6 Configuration' section is also visible, showing the following settings:

Field	Value
IPv6 Configuration	<input type="radio"/> Automatic <input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::201:42FF:FE00:CD1A
Default Gateway	
DNS Server	

The '802.1X' section is also visible, showing the following settings:

Field	Value
802.1X	<input type="checkbox"/> Use 802.1X Security
Authentication	MDS
Username	
Password	

DNS Records Configuration

The DNS server is active and contains A records mapping the domain names `alaina`, `web1`, `web2`, and `web3` to the IP address `192.69.2.2`, allowing network devices to resolve these names to the specified web server.

The screenshot shows the 'DNS SERVER' configuration window. The 'Services' tab is selected, and the 'DNS' service is turned 'On'. Under 'Resource Records', there is a table listing four A records. The 'Name' field is empty, and the 'Type' is set to 'A Record'. The 'Address' field is also empty. Below the table are 'Add', 'Save', and 'Remove' buttons.

No.	Name	Type	Detail
0	alaina	A Record	192.69.2.2
1	web1	A Record	192.69.2.2
2	web2	A Record	192.69.2.2
3	web3	A Record	192.69.2.2

Web Server Configuration

The web server is statically assigned the IP address 192.69.2.2, with a subnet mask of 255.255.255.0, default gateway 192.69.2.10, and DNS server set to 192.69.2.1, enabling it to host websites and resolve domain names within the network.

The screenshot shows a window titled "WEB SERVER" with a tabbed interface. The "Desktop" tab is selected. The "IP Configuration" section is active, showing the following settings:

Field	Value
IP Configuration	Static
IPv4 Address	192.69.2.2
Subnet Mask	255.255.255.0
Default Gateway	192.69.2.10
DNS Server	192.69.2.1

The "IPv6 Configuration" section is also visible, showing the following settings:

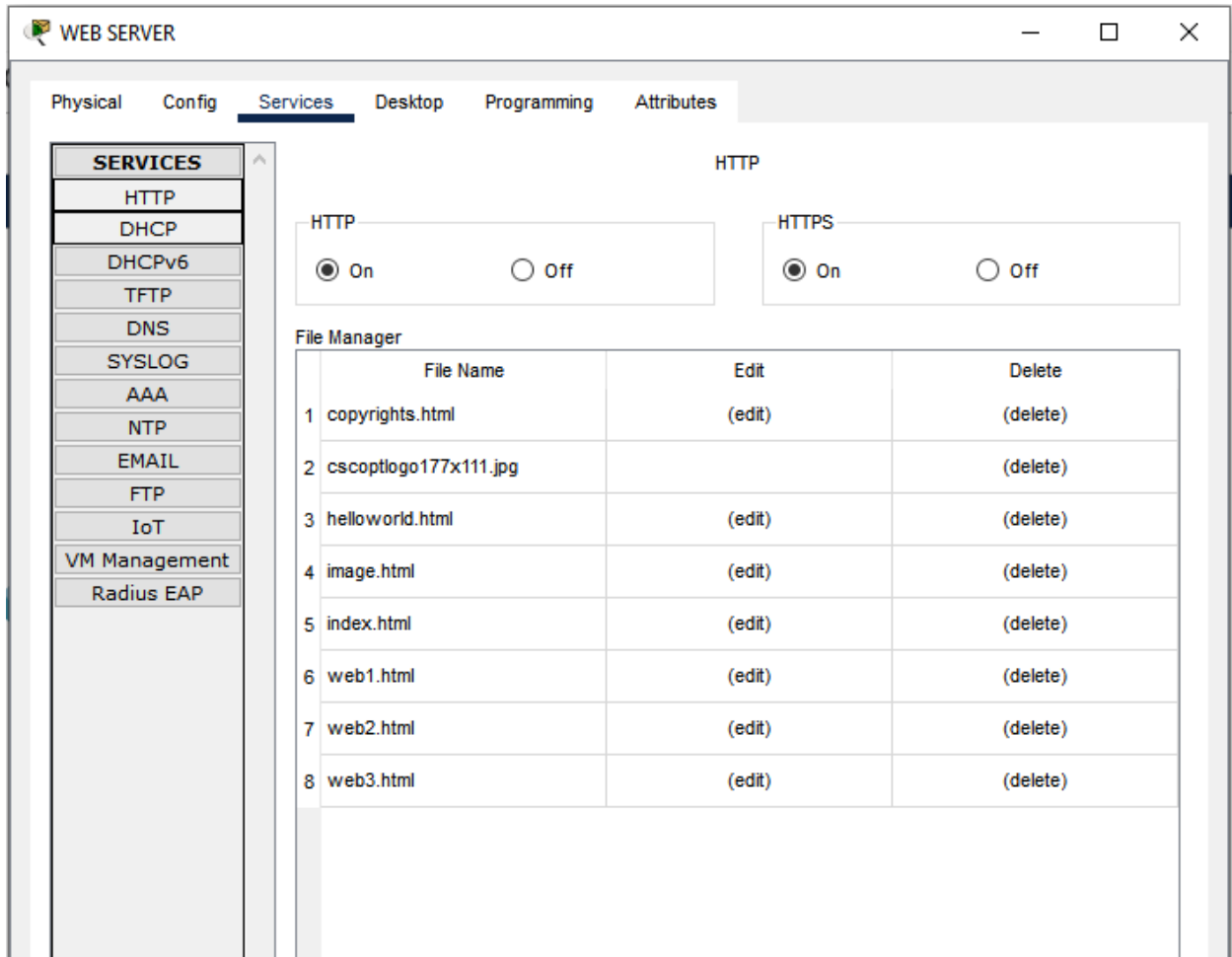
Field	Value
IPv6 Configuration	Static
IPv6 Address	
Link Local Address	FE80::202:16FF:FE9A:8079
Default Gateway	
DNS Server	

The "802.1X" section is also visible, showing the following settings:

Field	Value
802.1X	
Use 802.1X Security	<input type="checkbox"/>
Authentication	MD5
Username	
Password	

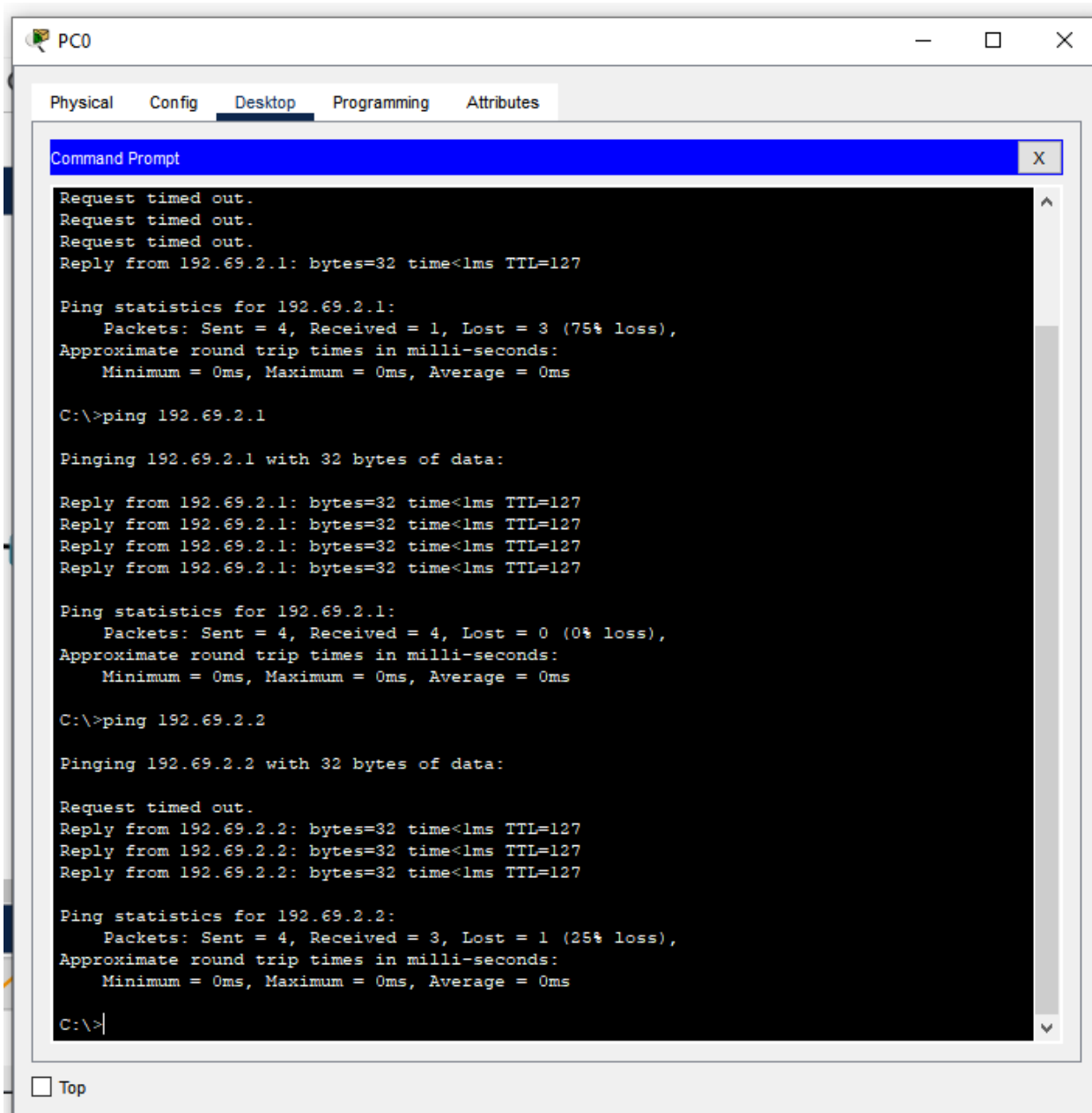
Web Server Services Configuration

The web server has both **HTTP and HTTPS services enabled**, and hosts multiple web pages such as `index.html`, `web1.html`, `web2.html`, and `web3.html`, allowing users to access web content securely over the network.



Ping Test Results

This ping test from PC0 shows varying connectivity to different devices: initial packet loss to 192.69.2.1, a stable retry, and a 25% packet loss to 192.69.2.2, indicating occasional network communication issues.



The screenshot shows a PC0 desktop environment with a window titled "PC0" containing tabs for Physical, Config, Desktop, Programming, and Attributes. The "Desktop" tab is active, displaying a Command Prompt window. The Command Prompt shows the results of ping tests to 192.69.2.1 and 192.69.2.2.

```
Request timed out.
Request timed out.
Request timed out.
Reply from 192.69.2.1: bytes=32 time<1ms TTL=127

Ping statistics for 192.69.2.1:
    Packets: Sent = 4, Received = 1, Lost = 3 (75% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.69.2.1

Pinging 192.69.2.1 with 32 bytes of data:

Reply from 192.69.2.1: bytes=32 time<1ms TTL=127
Reply from 192.69.2.1: bytes=32 time<1ms TTL=127
Reply from 192.69.2.1: bytes=32 time<1ms TTL=127
Reply from 192.69.2.1: bytes=32 time<1ms TTL=127

Ping statistics for 192.69.2.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.69.2.2

Pinging 192.69.2.2 with 32 bytes of data:

Request timed out.
Reply from 192.69.2.2: bytes=32 time<1ms TTL=127
Reply from 192.69.2.2: bytes=32 time<1ms TTL=127
Reply from 192.69.2.2: bytes=32 time<1ms TTL=127

Ping statistics for 192.69.2.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

At the bottom left of the PC0 window, there is a checkbox labeled "Top".

Web Page Access via DNS Name

The PC is accessing a web page using the DNS name `http://alaina`, successfully loading the default Cisco Packet Tracer welcome page, confirming that DNS resolution and HTTP services are working correctly.

