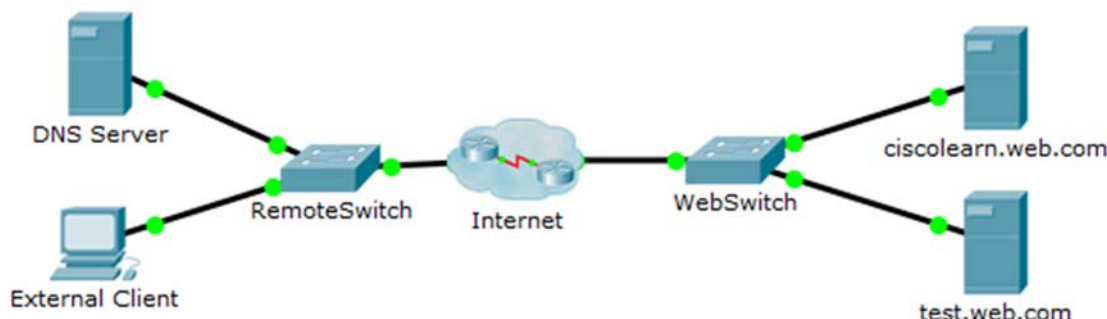


Packet Tracer – Observing Web Requests

Topology



Objectives

View the client/server traffic sent from a PC to a web server when requesting web services.

Step 1: Verify connectivity to the web server.

- Click External Client and access the **Command Prompt** from the **Desktop** tab.
- Use the **ping** command to reach the URL **ciscolearn.web.com**.

```
PC> ping ciscolearn.web.com
```

Notice the IP address included in the ping output. This address is obtained from the DNS server and resolves to the domain name ciscolearn.web.com. All traffic forwarded across a network uses source and destination IP address information.

- Close the Command Prompt window, but leave the External Client desktop window open.

Step 2: Connect to the web server.

- From the Desktop window, access the **Web Browser**.
- In the URL block, type **ciscolearn.web.com**.
*Be sure to read the web page that is displayed. Leave this page open.
- Minimize the External Client window but do not close it.

Step 3: View the HTML code.

- From the Logical topology, click **ciscolearn.web.com** server.
- Click the **Services** tab > **HTTP** tab. Then next to the **index.html** file click **(edit)**.
- Compare the HTML markup code on the server that creates the Web Browser display page on the External Client. This may require that you re-maximize the External Client window if it shrunk when you opened the server window.
- Close both the External Client and web server windows.

Step 4: Observe traffic between the client and the web server.

- Enter Simulation mode by clicking the **Simulation** tab in the lower right-hand corner.

- b. Double click the Simulation Panel to unlock it from the PT window. This allows you to move the Simulation Panel to view the entire network topology.
- c. View traffic by creating a Complex PDU in Simulation mode.
 - 1) From the **Simulation Panel**, select **Edit Filters**.
 - 2) Click the Misc tab to verify that only the boxes for TCP and HTTP are selected.
 - 3) Add a Complex PDU by clicking the open envelope located above the Simulation mode icon.
 - 4) Click the **External Client** to specify it as the source. The **Create Complex PDU** window will appear.
- d. Specify the Create **Complex PDU** settings by changing the following within the Complex PDU window:
 - 1) Under PDU Settings, Select Application should be set to **HTTP**.
 - 2) Click the **ciscolearn.web.com** server to specify it as the destination device. Notice the IP address of the web server will appear in the destination box within the complex PDU window
 - 3) For the Starting Source Port, enter **1000**.
 - 4) Under Simulation Settings, select Periodic Interval and type **120** seconds.
- e. Create the PDU by clicking the box **Create PDU** in the **Create Complex PDU** window.
 - 1) Observe the traffic flow by clicking **Auto Capture / Play** in the Simulation Panel. Speed up the animation by using the play control slider.
When the Buffer Full window appears, close the window using the **x**.
 - 2) Scroll through the Event List. Notice the number of packets that traveled from source to destination. HTTP is a TCP protocol, which requires connection establishment and acknowledgement of receipt of packets, considerably increasing the amount of traffic overhead.