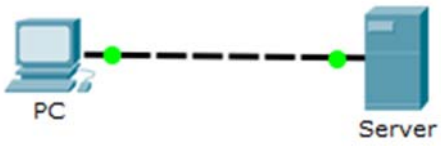
Packet Tracer – The Client Interaction

Topology



Objectives

Observe the client interaction between the server and PC.

Background / Scenario

Clients, such as desktop PCs, request services from servers. The lab environment, using physical PCs and servers, supports a full range of services. In a simulated environment, the number of services is limited. Packet Tracer allows the addition of simulated network servers that support DHCP, DNS, HTTP, and TFTP. Packet Tracer also supports the addition of simulated PCs that can request these services. This activity uses a simple network consisting of a PC connected directly to a server configured to supply DNS services as well as hosting a web page through an HTTP server. This activity will track the flow of traffic that happens when a web page is requested, how the IP address of the web page is resolved and the web page is delivered.

Step 1: Enter simulation mode.

When Packet Tracer starts, it presents a logical view of the network in realtime mode.

Click the **Simulation Mode** to enter simulation mode. The simulation mode icon is located at the end of the yellow bar below the logical workplace.

Step 2: Set Event List Filters.

In simulation mode, the default is to capture all events. You will use filters to only capture DNS and HTTP events.

a. In the **Event List Filters** section, click **Show All/None** to clear all the checks.

b. Click **Edit Filters**. Under the IPv4 tab, select **DNS**. Under the Misc tab, select **HTTP**. The **Event List Filters** shows DNS and HTTP as the only visible events.

Step 3: Request a web page from the PC.

You will open a simulated web browser on the PC and request a web page from the server.

a. Click **PC**. Click **Desktop** tab and click **Web Browser**.

b. A simulated web browser opens. Type **www.example.com** into the URL box and click **Go** button to the right. Minimize the PC window.

Step 4: Run the simulation.

a. In the **Play Controls** section of the **Simulation Panel**, click **Auto Capture / Play**. The exchange between the PC and the server is animated and the events are added to the **Event List**. These events represent the PC's request to resolve the URL to an IP address, the server's providing of the IP address, the PC's request for the web page, the server's sending the web page in two segments, and the PC's acknowledging the web page.

b. Click **View Previous Event** to continue when the buffer is full.

Step 5: Access a specific PDU.

a. Restore the simulated PC window. Notice there is a web page displayed in the Web Browser. Minimize the simulated browser window.

b. In the **Simulation Panel Event List** section, the last column contains a colored box that provides access to detailed information about an event. Click the colored box in the first row and last column for the first event. The **PDU Information** window opens.

Step 6: Examine the contents of the PDU Information Window.

The first tab in the PDU Information window contains information about the inbound and/or outbound PDU as it relates to the OSI model. Click **Next Layer >>** repeatedly to cycle through the inbound and outbound layers and read the description in the box below the layers to get an overview of how the exchange works.

Examine the PDU information for the other events to get an overview of the entire exchange process.