**LAB # 5**

1. List up to **4 different protocols** that appear in the protocol column in the unfiltered packet-listing window.

Answer:

* SNMP
* DNS
* TCP
* HTTP

1. How long did it take from when the HTTP GET message was sent until the HTTP OK reply was received?

Answer: HTTP GET was sent on Sep 23, 2003 10:29:47.838388000 Pakistan Standard Time and HTTP OK reply was received on Sep 23, 2003 10:29:47.862531000 Pakistan Standard Time which means it took 0.024143000 seconds.

1. Was the second Get Request successful? How can you tell it from the corresponding response packet?

Answer: The GET Request is successful as the connection is build but the website which was searches was not found.

1. Is your **browser** running HTTP version 1.0 or 1.1? What **version** of HTTP is the server running?

Answer: Both, our browser and server are running HTTP version 1.1.

1. What **languages** (if any) does your **browser** indicate that it can accept to the server?

Answer: Our browser accepts **en-us, en;q=0.50** language.

1. What is the **IP address** of the gaia.cs.umass.edu server and your computer?

Answer: IP address of the gaia.cs.umass.edu server is 128.119.245.12 and IP address of my computer is 192.168.1.102.

1. What is the **MAC address** of the server and your computer?

Answer: MAC address of the server is LinksysG\_da:af:73 (00:06:25:da:af:73) and MAC address of my computer is DellComp\_4f:36:23 (00:08:74:4f:36:23).

1. What is sending and receiving **Port Number**? What does Port No. 80 represents?

Answer: My Port: 4127 (4127) and Destination Port: 80 (80). Port No. 80 is assigned to mostly use internet communication protocol HTTP. So, it represents a HTTP protocol.

1. What is the **status code** returned from the server to your browser?

Answer: The status codes return from the server to my browser are 200 and 404.

1. When was the HTML file, that you are retrieving, **last modified** at the **server?**

Answer: The HTML file, that I am retrieving, is last modified at the server at Tue, 23 Sep 2003 05:29:00 GMT\r\n

**Trace 2**

1. Inspect the contents of the first HTTP GET request from your browser to the server. Do you see an “IF-MODIFIED-SINCE” line in the HTTP GET?

Answer: “IF-MODIFIED-SINCE” line cannot be seen in the first HTTP GET.

1. Inspect the contents of the server response. Did the server explicitly return the contents of the file? How can you tell from the Packet Bytes Window?

Answer:

1. Now inspect the contents of the second HTTP GET request from your browser to the server. Do you see an “IF-MODIFIED-SINCE:” line in the HTTP GET? If so, what information follows the “IF-MODIFIED-SINCE:” header? **What is meant by this information?**

Answer: “IF-MODIFIED-SINCE” line can be seen in the second HTTP GET. “IF-MODIFIED- SINCE:” indicates the time for which a browser first downloaded a resource from the server. This helps determine whether or not the resource has changed since the last time it was accessed.

1. What is the **HTTP status code** and phrase returned from the server in response to this **second HTTP GET**? Did the server explicitly return the contents of the file? Explain your answer

Answer: HTTP status code and phrase returned from the server in response to this second HTTP GET is Status Code: 304 and Response Phrase: Not Modified.

**Trace 3**

1. How many HTTP GET request messages did your browser send?

Answer: One HTTP GET request message was send by my browser.