

Computer Networking Lab IP

Please capture some related screenshots to support your answer.

The Internet Protocol, the main protocol in the Internet layer of the TCP/IP protocol suite, is used to route datagram from source to destination based on the logical (IP) addresses. In this lab we capture and study packets belonging to the current IP version (IPv4). Like UDP, IP is a connectionless protocol. An IP header can be captured only when an upper-layer protocol uses IP.

Do the following steps:

- Start up your web browser, and make sure your browser's cache is cleared.
- Open Wireshark and start capturing.
- Go back to your web browser and enter the URL:
<http://gaia.cs.umass.edu/wireshark-labs/TCP-wireshark-file1.html>
- Stop Wireshark packet capture.
- Type http in the filter field and press Apply. In the packet list panel, select the first packet. In the packet detailed panel, check the **Internet Protocol**.

Answer the following questions:

1. What is the IP address of your computer?
2. Within the IP packet header, what is the value in the upper layer protocol field?
3. How many bytes are in the IP header? How many bytes are in the payload of the IP datagram? Explain how you determined the number of payload bytes.
4. What is the value in the Identification field and the TTL field?