



## Quick Reference Step-by-Step Lab 6 Instructions: ARP! ARP! ARP!

---

**Step-by-Step Instructions:** nosmtp.pdf  
**Trace File:** nosmtp.dmp  
**“Watch the Lab” File:** nosmtp.avi (XviD codec) or nosmtp.wmv

**Step 1:** Create an *Ethereal Labs* directory on your hard drive and **copy the trace files** from the LLK6 over to that directory.

**Step 2:** Launch Ethereal.

**Step 3:** Select **File > Open** on the Ethereal menu bar. Select **your local drive** off the drive list and double-click on the **Ethereal Labs directory** you created in Step 1. Double-click on the *nosmtp.dmp* trace file.

**Step 4:** **Examine the client’s two experiments** to prove they could communicate on the network – a ping to another host and an FTP session. All looks good. Why can’t our client make a connection to 10.2.23.11?

**Step 5:** **Scroll to the end of the trace.** This tells a story. Click on packet 38. We see the client is sending an ARP to obtain the MAC address of 10.2.23.11.

**Step 6:** Select **View > Time Display Format > Seconds Since Previous Packet** to set the time to the interpacket gap time (time from the end of one packet to the end of the next). We clearly see four unanswered ARP packets at the end of the trace.

**Step 7:** What are the possible reasons that an ARP would go unanswered?

1. The target IP address (10.2.23.11) is invalid.
2. The target IP address is valid, but the target is not currently up.
3. The ARP packet is malformed.
4. The target does not hear the ARP.

Which answer makes the most sense to you?

**Note:** Take the “Getting the Packet on the Wire” class included in the “Laura Chappell Master Library” to test your knowledge of TCP/IP packet flows on routed and switched networks.

---

If you’d like to be walked through this process, check out the *BYOL* section of LLKv6. See the *Laura Chappell Master Library (LCML)* at [www.packet-level.com](http://www.packet-level.com) for additional self-paced labs.