



Quick Reference Step-by-Step Lab 5 Instructions: Just a Scan, Ma'am

Step-by-Step Instructions: `justascan.pdf`
Trace File: `justascan.dmp`
“Watch the Lab” File: `justascan.avi (XviD codec) or justascan.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 `justascan.dmp` trace file.
- Step 4:** This trace file contains what appears to be a scan on a target system, 10.1.0.1. Are these scans really coming from 10.1.0.2? **Look closely at packets 13, 14 and 15.**
- Step 5:** **Click on packet 13.** Ethereal decodes the destination port as “echo.” Click on packet 14 – uh, oh. We can see the scanner has responded with an ACK to complete the handshake. If this was a spoofed address, the scanner doesn’t need to finish up the handshake. This is a great indication that the scanner is really using IP address 10.1.0.2 at this time. Now they may have stolen it temporarily from another user on the network – but at this time, it appears that this scanner is using 10.1.0.2.
- Step 6:** What else is happening in this trace? **Scroll through the trace to the end.** What changed?
- Step 7:** Did you notice the sudden change in the destination port numbers? **Look for the pattern.**
- Step 8:** **Click on packet 29.** Ethereal has decoded the destination port field as “nameserver.” To learn what port number is defined, look inside the detail decode of that packet.
- Step 9:** **Continue scrolling through the trace and write down the port number pattern.**
- Step 10:** Ok... so now we can clearly see a pattern—start at x, increment by 4 and repeat three times in a row, then drop back to x+1. Repeat. Unfortunately our target isn’t responding any more. In fact when this trace was taken our target never did respond again – it died. Why?

Well – did you notice what else changed suddenly at packet 27? Click **View > Time Display Format > Seconds Since Previous Packet** to ensure you are looking at the time from the end of one packet to the end of the next packet.

Now **examine the trace from packet 27 to packet 38.** What is the new rate of the scan? How does that compare to the scan process in packets 1 through 26?

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 for additional self-paced labs.