14.8.1 labwork

What is this called?

**conversation multiplexing.**

A variety of PDUs appears in the event list in the Simulation Panel. What is the meaning of the different colors?

**They represent different protocols.**

Why did it take so long for the HTTP PDU to appear?

**Because TCP must first establish the connection so that the HTTP traffic can begin.**

What is the section labeled?

**TCP**

Are these communications considered to be reliable?

**Yes, TCP is in use.**

Record the **SRC PORT**, **DEST PORT**, **SEQUENCE NUM**, and **ACK NUM** values.

**1029 (value could vary), 80, 1, 1**

Which TCP flags are set in this PDU?

**ACK and PSH**

How are the port and sequence numbers different than before?

**The source and destination ports are reversed, and the acknowledgement number is 1. The flags have changed to SYN+ACK.**

What information is now listed in the TCP section? How are the port and sequence numbers different from the previous two PDUs?

**The source and destination ports are reversed, both sequence number is 1, the acknowledgement number is 103 (value my vary), and the flags are PSH and ACK.**

Are these communications considered to be reliable?

**Yes.**

What is the value in the flag field?

**1025, 21, 0, 0. SYN**

How are the port and sequence numbers different than before?

**21, 1025, 0, 1. SYN+ACK. The source and destination ports are reversed, and the acknowledgement number is 1.**

How are the port and sequence numbers different from the previous results?

**1025, 21, 1, 1. The source and destination ports are reversed, and both sequence and acknowledgement numbers are 1.**

What is the message from the server?

**“Welcome to PT Ftp server”**

What is the Layer 4 protocol?

**UDP**

Are these communications considered to be reliable?

**No**

Why are there no sequence and acknowledgement numbers?

**1025 (value may vary) and 53. Because UDP does not need to establish a reliable connection.**

How are the port and sequence numbers different than before?

**53, 1025. The source and destination ports are reversed.**

What is the last section of the **PDU** called? What is the IP address for the name **multiserver.pt.ptu**?

**DNS ANSWER, 192.1681.254.**

What transport layer protocol does email traffic use?

**TCP**

Are these communications considered to be reliable?

**Yes.**

1. Record the **SRC PORT**, **DEST PORT**, **SEQUENCE NUM**, and **ACK NUM** values. What is the flag field value?

**1025 (value may vary), 25, 0, 0. SYN**

How are the port and sequence numbers different than before?

**25, 1025, 0, 1. SYN+ACK. The source and destination ports are reversed, and the acknowledgement number is 1.**

How are the port and sequence numbers different from the previous two results?

**1025, 25, 1, 1. ACK. The source and destination ports are reversed, and both sequence and acknowledgement numbers are 1. ACK**

How are the port and sequence numbers different from the previous two **PDU**s?

**1025, 25, 1, 1. PSH+ACK. The source and destination ports are reversed, and both sequence and acknowledgement numbers are 1.**

What email protocol is associated with TCP port 25? What protocol is associated with TCP port 110?

**SMTP. POP3.**