

BLM 3022 – Computer Networking Technologies

Project

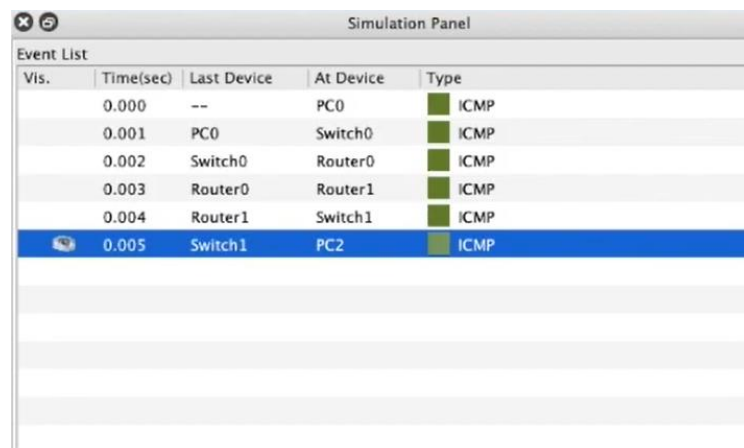
As part of your project, you will be required to prepare a video project to demonstrate your understanding of the network concepts covered in the course. You may select either one of the two previous homework assignments, Lab 2 - VLAN or Lab 3 – STP.

Start with an introduction that briefly explains the lab objective and requirements. This could include a brief overview of the network topology and the purpose of the lab.

Afterwards, you will need to use the simulation module of Cisco Packet Tracer to demonstrate your understanding of the lab objectives by explaining each step of transfer in detail. This could include explaining how each OSI layer works during an ICMP packet transfer (ping), what each layer does, and how it interacts with other layers to ensure successful packet transfer.

The video project/homework should be comprehensive and cover all the steps of the simulation. An example has been shown in the event list of simulation panel (see Figure 1) and inbound/outbound PDU details (see Figure 2). You should overview each element in the tables.

For those who never used simulation panel, here is a video showing the simulation module: [Simulation Video](#)



| Event List | | | | |
|------------|-----------|-------------|-----------|------|
| Vis. | Time(sec) | Last Device | At Device | Type |
| | 0.000 | -- | PC0 | ICMP |
| | 0.001 | PC0 | Switch0 | ICMP |
| | 0.002 | Switch0 | Router0 | ICMP |
| | 0.003 | Router0 | Router1 | ICMP |
| | 0.004 | Router1 | Switch1 | ICMP |
| | 0.005 | Switch1 | PC2 | ICMP |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Figure 1 Simulation panel event list

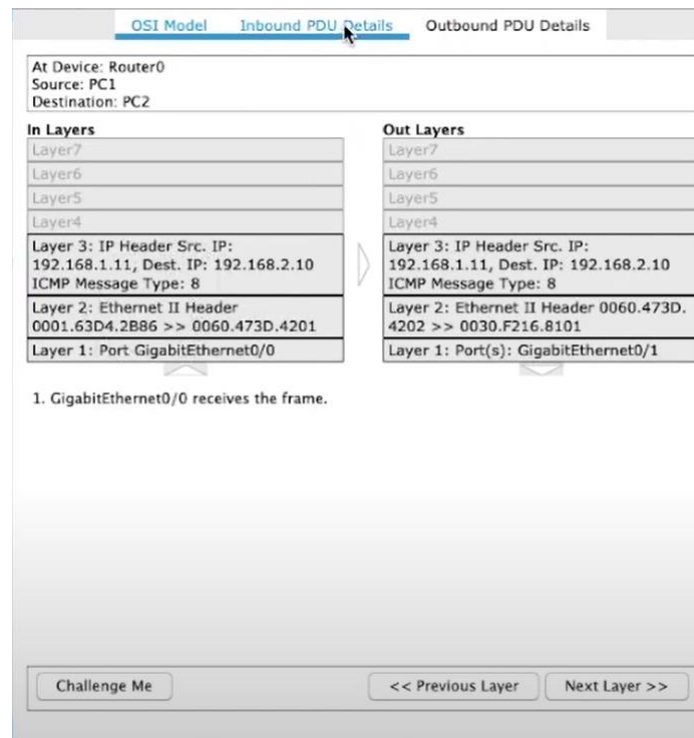


Figure 2 PDU Details, Inbound and Outbound

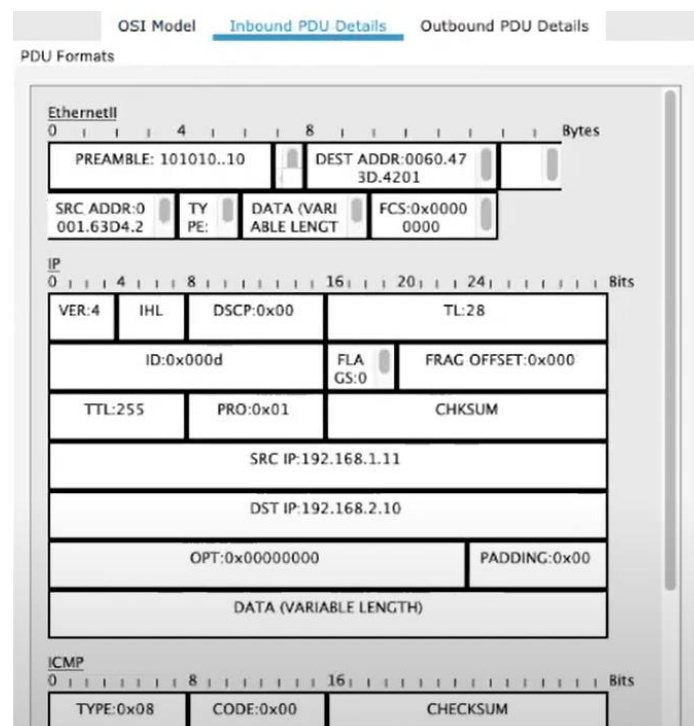


Figure 3 Inbound PDU Details

Submission:

The video length should be around 6-8 minutes and should not exceed 8 minutes. Upload it to YouTube as an unlisted video or provide a drive link to the video file. Share the video link in the cover of the project report.

You should also prepare a project report with 4 pages long, 12pt, with 1.5 line space.

You should submit two files:

1. Your Packet Tracer file (.pkt) named project-studentid1-studentid2.pkt
2. The report in PDF named project-studentid1-studentid2.pdf.1