CAN201 In-Class Test 2

Building Network Topology with Mininet

Objective

In this in-class test, you are assigned the task of learning how to depict and tailor a network topology utilizing the Mininet Python library.

Task Description

Based on the provided network topology diagram (see Fig. 1), create a network description file that defines the network topology based on the Mininet Python library.

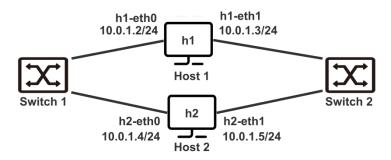


Fig. 1: Network Topology for the in-class test.

Grading Criteria (Total: 5 points)

- 1. Network Creation (3 points)
 - All the IP addresses are correct according to the specification (1 point).
 - The network topology is correct according to the specification (1 point).
 - The network description file executes correctly (1 point).
- 2. Network Connectivity (2 points)
 - o The Mininet 'pingall' command confirms that all nodes in the network topology can communicate with each other.

Penalty Rules for Late Submission

- 1. [No penalty] Submission before the lab session due.
- 2. [5% penalty] Submission within 24 hours after the due.
- 3. [10% penalty] Submission within 2 days
- 4. [15% penalty] Submission within 3 days.
- 5. [20% penalty] Submission within 4 days.
- 6. [25% penalty] Submission within 5 days.

Submission Guidelines

- ZIP file (name): In-class Test2_StudentName_StudentID.zip
 This zip file includes:
 myTopo StudentName StudentID.py
- 2. Submission: upload the python code file through the submission link on LMO.