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.

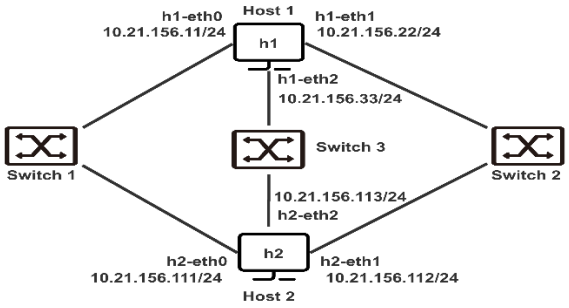

Fig. 1: Network Topology for the in-class test.

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)**
    - 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

1. 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.