

Department of Computer Engineering
University of Peradeniya
CO515 Computer Networks: Special Topics

Lab Number: 03

Topic : Performance evaluation of different SDN Controllers

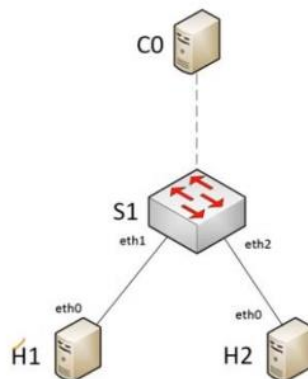
Objective : The objective of this assignment is to familiarize with different controller platforms and compare their performances.

Submission : Submit the given task in a zipped file named E14XXXLab1.zip/ E15XXXLab1.zip. Here XXX is your Registration number.

The zip file should include the Wireshark traces renamed according to the controller name, and a pdf file containing a table comparing the controller performances.

Lab Task:

1. Set up the following network with mininet.
 1. The controller will be implemented in a different PC (not the same PC where mininet is installed)
 2. Configure the remote controller.



3. Start Wireshark at the controller
4. Start a ping from H1 to H2
5. List the protocols you may notice in the traces.
6. Explain in brief what these protocols do.
7. Identify the delay at the controller to push a flow.
8. Compare them in a table for different controllers given below.

- POX
- OpenFlow
- Floodlight
- Beacon

NOTE: Use the same hardware setup for throughout the whole experiment.