

SDN Lab2

TA: 王彥錚

Lab: ED817

Email: luke010708@gmail.com

Outline

- Goals
- Instructions

Goals

- Learn how to use Ryu to modify flow entry dynamically
- Learn how to write a simple application based on monitor feature

Lab Content

- Step 1: Retrieve flow information
- Step 2: Delete a flow entry when it has transmitted “10” packets

Instructions

- Step 1: Retrieve flow information
 - Use “OFPFlowStatsRequest()” and “OFPFlowStatsReply()” to get information about flow entries
 - Remove flow entries based on “packet_count”

Instructions

- Step 2: Delete a flow entry when it has transmitted “10” packets
 - Use “OFPFlowMod” to delete flow entries
 - Specify command “OFPFC_DELETE”
 - Parameter “match” decides which flow entry will be remove
 - Note that you have to stop “_packet_in_handler” from adding flow entry which you want to delete

Reference :

http://ryu.readthedocs.io/en/latest/ofproto_v1_3_ref.html#ryu.ofproto.ofproto_v1_3_parser.OFPFlowMod

Instructions

- Step 2: Delete a flow entry when it has transmitted “10” packets
 - Test your code with “ping”
 - Ex: “h1 ping h2” makes host 1 keep sending packets to host 2
 - If flow entry is removed, host 1 won’t be able to ping host 2
 - TA will have other functional tests for correctness