## A Hands-on Workshop on P4 Programmable Switches

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Hands on Session 4: Populating and Managing Match-action Tables at Runtime



## **Control Plane**

- The match-action tables are empty by default
- The control plane populates the tables with entries
- The control plane can insert, remove, and update table entries





## **Runtime Environment**

- The simple\_switch\_CLI tool is used to populate the tables in this lab series
- This tool includes a program-independent CLI and a Thrift client
- It connects to a control server residing on the switch





## Lab Topology and Objectives

- The topology consists of three hosts: h1, h2, and h3; one P4 switch: s1
- The P4 program is already provided; no P4 programming is needed in this lab
- Navigate the simple\_switch\_CLI tool
- Displaying ports, tables, and actions
- Inserting, updating, and deleting table entries



