



SwitchON P4 Service

SwitchON P4 Service is designed to help customers on their first steps with their P4 capable network switch. The aim of this training session is to guide you through the initial set-up and operation of your switch.

The Goal

The goal of this course is to take the engineer from un-boxing the switch to running a first test application, while demonstrating the major features of their first exposure to a P4 development platform.

The Audience

Ideally suited to the Systems or Applications Engineer who has received their switch and wants to be guided, assisted, or simply have the reassurance of someone watching over their shoulder whilst they get their new system up and running with their first 'Hello World' scenario.

This course would also be very useful if your engineer wanted to 'kick the tyres' before buying and wants an introduction to the system. In this case, we would use one of our test systems to run through the same processes.



Session Content

This is designed as a **3-hour** course which from experience, gives a comfortable pace in which to achieve the goals of the course. The session content is designed to cover all the steps from un-boxing to running a first viable test application. However, depending on how experienced the Engineer is (un-boxing and racking is a reflex action for most Engineers) we can skip the early stages and move straight to the connection and set-up phase.

SwitchON Content

- Un-boxing and checking parts
- Racking and connecting
- Console connection and first start up
- Building the Barefoot SDE
- bf_switchd startup
- Compiling and running a P4 test application

Prerequisites

Ideally the Engineer taking this course will be the eventual System Developer and the prerequisites will be those necessary to be an P4/Intel Tofino competent developer. However, not all development teams are structured equally: the minimum prerequisites for the SwitchON course are:

For the Engineer

- Familiarity with rack network devices or servers
- Familiarity with Linux
- Some basic network knowledge (familiarity with Scapy/tcpreplay/tcpdump is a plus)
- Good internet access for session video and audio

For the actual switch set-up

- The switch
- A console cable for initial connection and network configuration
- A 1GbE network cable for subsequent networking
- A PC or laptop, ideally Linux based or Windows with picocom/minicom (for initial console access) and Putty (for access after management network interface config) or equivalent installed
- Ability to open an SSH, screen sharing or other access to the switch or to PC with access to the switch