Practical 9

Title:

Installing Mininet (Full installation), Floodlight and Testbed

Learning:

Mininet is a network emulator which creates a network of virtual hosts, switches, controllers, and links. Mininet hosts run standard Linux network software, and its switches support OpenFlow for highly flexible custom routing and Software-Defined Networking.

\$ sudo apt-get install Mininet

This command ensures complete installation of Mininet (Mininet, Open vSwitch, Wireshark, etc.)

Floodlight is the leading open-source OpenFlow controller. It specifies a protocol by which a remote controller can modify the behaviour of networking devices through a well-defined "forwarding instruction set". Floodlight is designed to work with the growing number of switches, routers, virtual switches, and access points that support the OpenFlow standard.

```
$ sudo apt-get install git
build-essential ant maven python-dev
```

Then go to the directory where you want to install Floodlight.

```
$ sudo git clone
git://github.com/floodlight/floodlight.gi
t
$ cd floodlight
$ sudo git submodule init
$ sudo git submodule update
$ sudo ant
```

For Web GUI:

```
$ sudo git clone
git://github.com/floodlight/floodlight-we
bui
```

Conclusion:

We have installed the required software for Software Development Networks. Mininet and Floodlight are 2 of the most common and easy-to-use software. Mininet is command line whereas Floodlight provides GUI to see the action behind the scenes.