

Lab 2: Mininet

Tutorial

Install Mininet:

Mininet emulates a complete network of hosts, links, and switches on a single machine.

<https://github.com/mininet/mininet/wiki/Introduction-to-Mininet> may be helpful to you to learn mininet.

Install Mininet and Open vSwitch

1. `git clone https://github.com/mininet/mininet.git`
2. `mininet/util/install.sh -fnv`

Test a few Examples:

Mininet provides many examples in its source code. From these examples, you can learn how to create your own topologies and run your own tests. In this lab, I would recommend you read and test the following examples:

1. `mininet/examples/linuxrouter.py`
2. `mininet/examples/linearbandwidth.py`
3. `mininet/examples/simpleperf.py`

use the following commands to test the examples above.

1. `cd mininet/examples/`
2. `sudo python linuxrouter.py`
3. `help`
4. `pingall`
5. `nodes`

Useful Commands:

1. `ifconfig`
2. `sudo ovs-vsctl show`
3. `sudo ovs-ofctl dump-flows s1`
4. Use Wireshark to monitor network interfaces

You may also use OVS commands to set up your own flow rules

1. `sudo ovs-ofctl add-flow s3 "in_port=1 actions=output:2"`