

Phase 1 Answers

a. Summarizing Experiences

- i. Setting up the mininet environment was pretty straight forward. I followed the guide, and messed up once in installation so I had to restart but the process was pretty smooth from there. I chose to use VirtualBox, and set up the shared folder system, but did not complete the full screen section. I am also on a windows machine so I completed the requisite sections such as enabling DHCP server. I did not face any issues/challenges in the setup.
- ii. The walkthrough was also informative, and the main points I learned are as summarized below :
 1. How to set up different topologies and monitor traffic via wireshark
 2. How to see info about config via nodes, net and dump
 3. Details about visibility between root and mininet client
 4. How to test connection between hosts
 5. Running more complex commands between hosts, namely server client interaction
 6. Running regression tests without doing the setup through cli
 7. Using -topo for parameterised topologies
 8. Setting up link variations from the cli
 9. Printing out useful debug info through -v parameter options in startup
 10. Using python to create custom topologies
 11. Many other ideas like simplifying mac addresses, spawning multiple Xterm consoles for individual debugging of hosts and switches, timing, namespacing hosts and switches etc.
 12. Different types of switches
 13. Using the python interpreter and API
 14. Using a remote controller from my localhost onto the vm(and using the right port for it).
 15. As per the piazza post I did not look into the OpenFlow frameworks like Ryu