Part-3

CS562_Applied Software Engineering

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Testing file: co.py

Functions Tested:

build():

addSwitch():

get():

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.

Mininet supports research, development, learning, prototyping, testing, debugging, and any other tasks that could benefit from having a complete experimental network on a laptop or other PC.

Mininet provides an easy way to get correct system behavior (and, to the extent supported by your hardware, performance) and to experiment with topologies.

Mininet networks run real code including standard Unix/Linux network applications as well as the real Linux kernel and network stack (including any kernel extensions which you may have available, as long as they are compatible with network namespaces.)

Because of this, the code you develop and test on Mininet, for an OpenFlow controller, modified switch, or host, can move to a real system with minimal changes, for real-world testing, performance evaluation, and deployment. Importantly this means that a design that works in Mininet can usually move directly to hardware switches for line-rate packet forwarding.

I tested this systems a lot but there wasn't any bugs. The system performance it works excellently. The proof of this, I have a special project to networks and I daily use the system and I didn't find any bugs. The system is built a network and I can add pc's and switches and others. I think, Mininet is stable and solid system, and there is no any bugs.

System work really good and researchers need it a lot. Researchers found this system helpful and they need it all the time to help them find result. These researchers worked on it really hard to find that there is no any problems or errors with the system but, there wasn't any bugs in it. I was working on the controller.py file from Mininet system and it was really good. I didn't find bugs in the software under test, so it doesn't have any error or problems and nobody faced any problem with it so far.

I used to have difficulties using tstl, it was hard at first and now it easy for me because I started learning tstl grammar and understand it more. It still very hard to understand because there is nothing helpful like a book or video which can help to learn it faster and easier. I worked really hard to get along with it and it worked. Now the system is really easy for me and I don't have any problems with it.

Regarding the coverage, now I work on coverage and in the coming days will get result I covered a large part of system through this work has gained considerable experience in the field testing of the system is a wonderful work

I test many function in Mininet system.I found Mininet is a great system and helpful to design and implementation network. I test co.py and test build (), add Switch (), get () function. But I think there are some error grammar in my tstl, but I will solve this error in the next part.

References:

[1]. www.Mininet.org