Automating Test-tools deployment in Openstack and Kubernetes

Internship Projects/Mentors

Title	Automating Test-tools deployment in Openstack and Kubernetes
Status	APPROVED
Difficulty	MEDIUM

Description

This project focuses on developing a tool to deploy Trafficgen, Loadgen and any other supporting tools, in different topologies, on Openstack and Kubernetes environments.

Example toplogies:

1. Single L2 Network, Single-Host.
2. Single L3 Network, Multiple-Host.
3. Single-Pod
4. Multiple-Pod
5. With SRIOV
6. With VPP/OVS_DPDK
7. Single Interface or Two-Interfaces
8. Max-VMs/Host.

Additional Information

All details will be added in this page: https://wiki.anuket.io/display/HOME/Potential+Projects+for+Internships

Hosting Repo: "https://gerrit.opnfv.org/gerrit/vineperf"

Learning Objectives

Students will get to know

1. VNF Deployment and Configuration

2. CNF Deployment and Configuration.

3. Importance of Test-Automation and building-blocks of end-to-end testing.

Expected Outcome

An interactive tool for automated deployment of testtools.

Relation to LF Networking

It will be part of Anuket VinePerf project, and many Anuket projects can reuse this effort.

Education Level

Undergraduate.

Skills

Yaml, Python, Jinja (templating), basics of Openstack and Kubernetes.

Future plans

This has the potential to be a standalone project.

Preferred Hours and Length of Internship

Part-Time

Mentor(s) Names and Contact Info

Sridhar K. N. Rao

Spirent Communications

sridhar.rao@spirent.com