

ViNePerf Moselle Release Planning

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Overview

Project Name	Enter the name of the project
Target Release Name	Moselle
Project Lifecycle State	TBD

Scope

ViNePerf provides an automated test-framework and comprehensive test suite based on industry standards for measuring the data-plane performance **in different cloud environments**. Dataplane in a cloud includes different switching technologies with **physical** and **virtual** network interfaces, and carries traffic to and from workloads running as **virtual-machines and containers**. The architecture of ViNePerf is agnostic of cloud-type, switching-technology, and traffic-generator. ViNePerf allows user to **customize the test-cases**, network-topology, workload-deployment, hardware-configuration, and the versions of the software components such vswitch, vnf, cnf, cni, etc. ViNePerf can be used both **pre-deployment and post-deployment** of the cloud. Though ViNePerf architecture is designed for evaluation of dataplane of clouds in **Lab environments**, it can also be in **production clouds**. ViNePerf methods follows standards developed by the **IETF** and **ETSI NFV**, and contribute to the development of new standards.

Requirements

Provide a list of features or use cases, documented as Epics or Stories in Jira. Use the Jira issue insertion feature for Confluence.

1. Enhance X-Testing and ViNePerf Integration
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-652>
 - i. Tasks: <https://jira.anuket.io/browse/VINEPERF-654>, <https://jira.anuket.io/browse/VINEPERF-658>
2. Kubernetes - East-West Scenarios.
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-638>
 - i. Task: <https://jira.anuket.io/browse/VINEPERF-643>
3. Clean Workflows
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-670>
 - b. Tasks:
 - i. Baremetal
 - ii. Openstack
 - iii. Kubernetes
4. Improve Stability
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-669>
 - b. Tasks:
 - i. Qemu build
 - ii. Trex results.
5. Newer Software Versions
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-671>
 - b. Tasks:
 - i. DPDK
 - ii. Qemu
 - iii. Operating Systems
 - iv. Containers
6. Tools
 - a. Epic: <https://jira.anuket.io/browse/VINEPERF-672>
 - i. Tasks:
 1. Collecting and organizing packet losses.
 2. Chaos tool integration

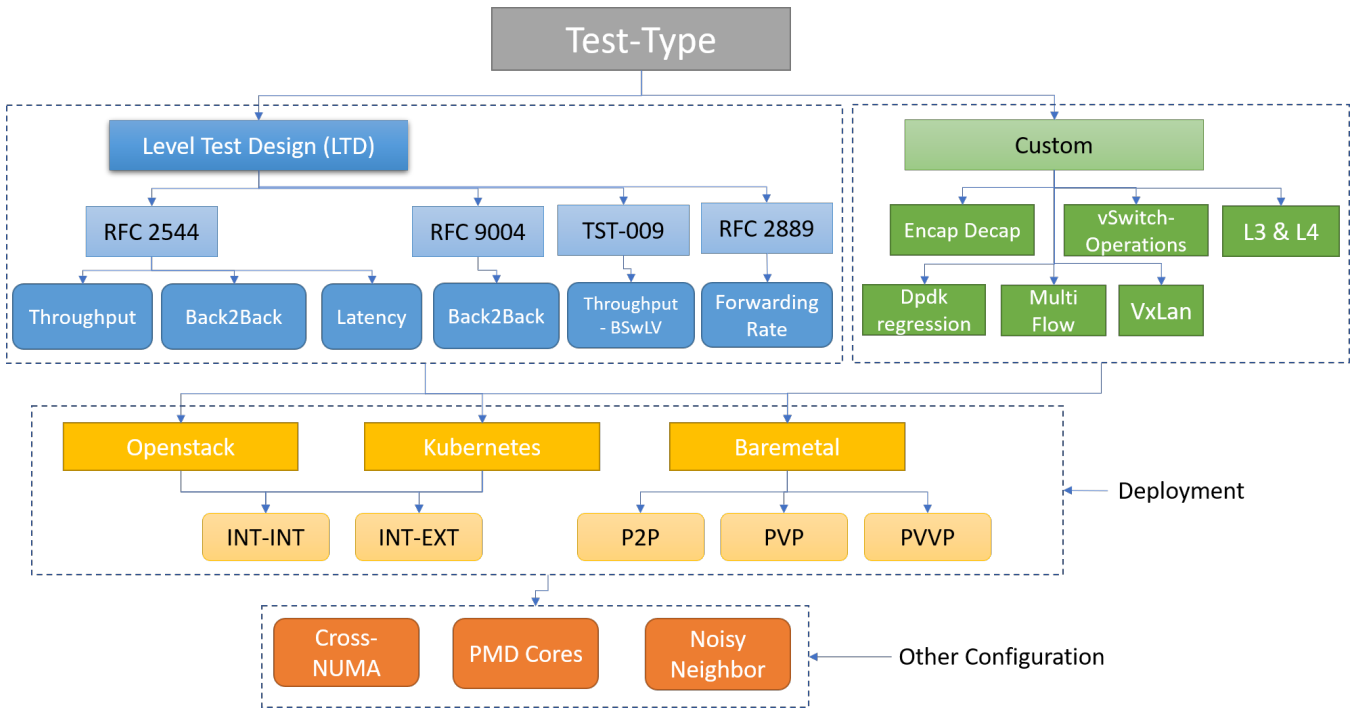
Release Artifacts

Indicate the work product (Executable, Source Code, Library, API description, Tool, Documentation, Release Note, etc) for this release.

Name	Description	Format (Container, Compressed File, etc.)
Feature Enhancements,		Source Code.
Additional Tool Support,		Newer version of containers.
Newer Software Versions		Documentation (.md/.rst)
Stability Improvement		

Architecture

High level architecture diagram



Internal Dependencies

SampleVNF/Prox - incorporated as a traffic gen during this release

XTesting

External Dependencies

DPDK, Qemu, K8s and CNI plugins like MULTUS, Userspace, SRIOV etc. ETSI NFV TST009, IETF BMWG.

Test and Verification

As a test project, evaluation of the project is relatively continuous. RC-related evaluations will be conducted using RI-compliant systems and pre-compliant systems

Risks

List any risks and a plan to mitigate each risk.

Risk Description	Mitigation Plan
Lack of Developers	(a) Interns
	(b) Student Volunteers