# VNF Test Platform (VTP)
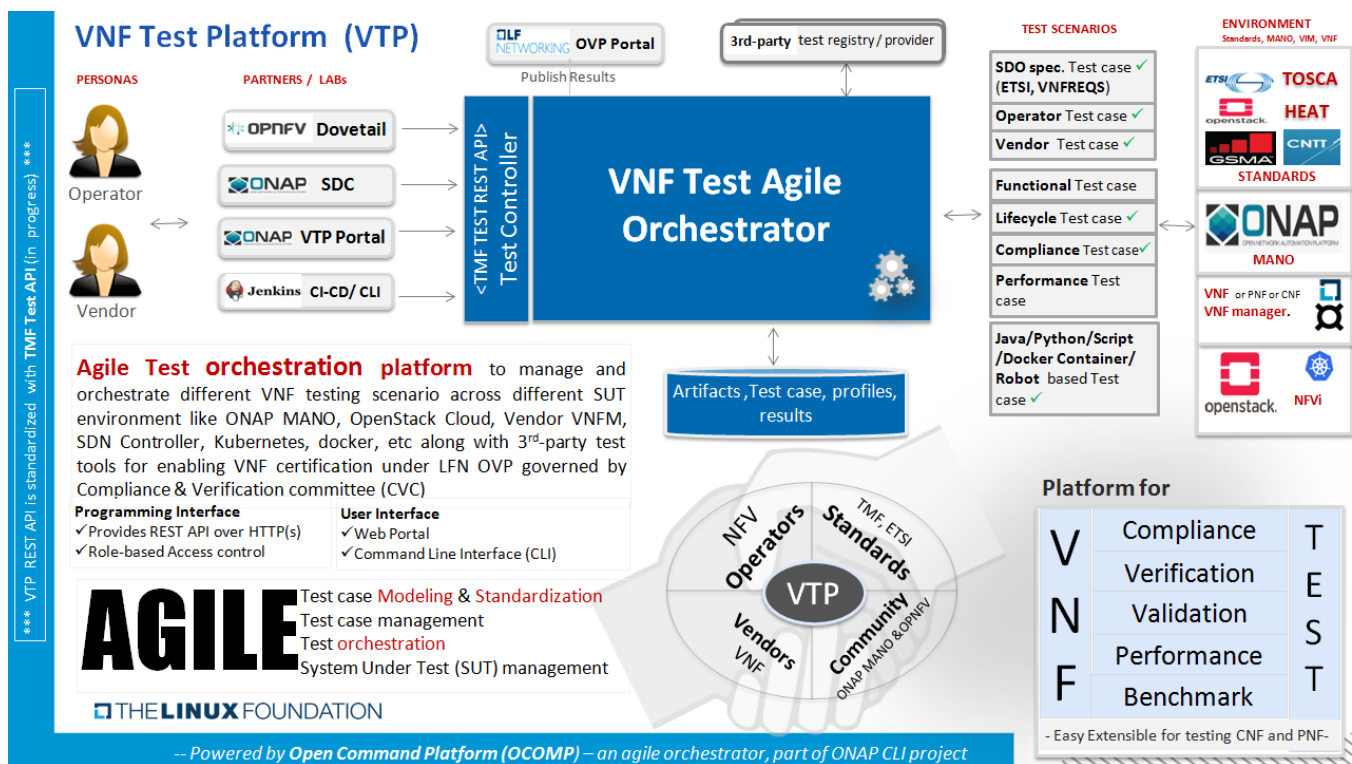
## Objectives

- As part of LFN Anuket Certification Program, ONAP wants test platform where VNF packages could be certified using ONAP requirements to drive industry adoption
- Provide an platform where vendor/operator can develop, deploy, run test cases and query the results
- Test cases, test results and VNF should be manageable .i,e with authorization, so only user with given roles is allowed to perform operation like VNF package upload/download, run compliance verification tests, allow only specific VIM for specific users, etc.
- Test results should be persisted and should be available for human analysis later via LFN infrastructure.
- Provides test flow where author make flow across different test cases for a given program like compliance verification and  VNFREQS/SOL0004.
- Provide integration with OPNFV dovetail to run test cases across dovetail and VNFSDK.
- Deployable as docker container.

## Overview

A vert generic test platform for perfoming various VNF testing and could be used at different stage such as CI/CD, LFN OVP certification, onboarding, design and active&passive testing.



## Usecases

It has been used for following usecases:

1. VSP compliance check (on-boarding phase)
2. VNF validation (certification phase)
3. VNF OVP certifications (certification phase)
4. Test flow design

   a. TSC 2019-12-05

      i. https://wiki.onap.org/download/attachments/71835507/OVP%20Augment%20with%20ONAP-v1.1.pdf?version=1&modificationDate=1575595693000&api=v2

# Demos

Above usecases are demoed in following ONS events

1. ONS NA 2019
2. ONS EU 2019

# Others

Press Releases

https://www.prnewswire.com/news-releases/onap-doubles-down-on-deployments-drives-commercial-activity-across-open-source-networking-stack-with-dublin-release-300881744.html

## - ONAP now plays an integral role in compliance and verification program (OVP)

In ONAP, VTP plays this role.

- **OVP Enhancements:** In April, an expanded OPNFV Verification Program (OVP) was launched that includes VNF verification through publicly-available VNF compliance test tooling based on requirements developed within the ONAP community. While OVP checks against industry-wide requirements, it does not check VNF compliance against operator-specific requirements (e.g. VM flavors, dataplane acceleration technologies, and so on). For this reason, Dublin adds a Vendor Software Product (VSP) compliance check in SDC to fill this gap.

mentioned about the VNF Test Platform (VTP) as "publically available VNF compliance testing tool"

# REST API

## Casablanca

```
"/onapapi/vnfsdk-marketplace/v1/vtp/tests": {
      "get": {
        "tags": [
          "VNF Test Platform"
        ],
        "summary": "VTP Test cases",
        "description": "Returns the list of test cases",
        "operationId": "listTests",
        "produces": [
          "application/json"
        ],
        "parameters": [],
        "responses": {
          "200": {
            "description": "successful operation",
            "schema": {
              "type": "string"
            }
          },
          "500": {
            "description": "Failed to retrieve the tests",
            "schema": {
              "type": "string"
            }
          }
        }
      }
    },
    "/onapapi/vnfsdk-marketplace/v1/vtp/tests/{testName}/run": {
      "post": {
        "tags": [
          "VNF Test Platform"
        ],
        "summary": "Run VTP testcase",
        "description": "Runs the given test case and returns the result",
        "operationId": "runTest",
        "consumes": [
          "application/json"
        ],
        "produces": [
          "application/json"
        ],
        "parameters": [
          {
            "name": "testName",
            "in": "path",
            "description": "test Name",
            "required": true,
            "type": "string"
          }
        ],
        "responses": {
          "404": {
            "description": "Test case not found",
            "schema": {
              "type": "string"
            }
          },
          "500": {
            "description": "VTP internal failure",
            "schema": {
              "type": "string"
            }
          }
        }
      }
    }
```

**Dublin**

Provides required API for qureying and executing the test cases as part of VSP Compliance check use case in dublin.

More details VTP REST API v1