VNF Test Platform (VTP)

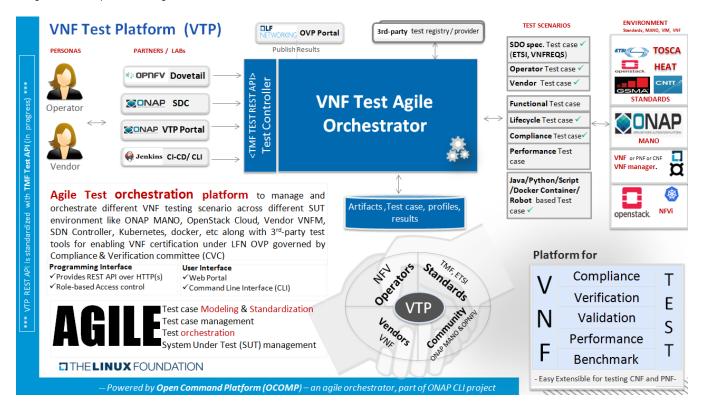
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Objectives

- 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-releases-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 <u>OPNFV Verification Program</u> (OVP) was launched that includes VNF verification through publicly-available VNF compliance test tooling based on requirements developed within the <u>ONAP community</u>. 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