LFN Developer Forum

ONAP/OPNFV Cross-Community Collaboration PoC
VNF SDK / Dovetail Integration

Bruce Thompson – Amdocs
Moshe Hoadley – Amdocs
Eddie Arrage - Huawei
LFN ‘Verified’ Web Portal

- Provide Key Resources
- Support Learning
- Incentivize Participation

Centralized Community Repository
Collaboration & Result Sharing
Self-Testing / Community Review

Common Verification Framework
Test Execution, Logging, Centralized Results, Pass/Fail Reporting

Acceptance & Marketing

Category label

Infrastructure

Date versioning

2018.01
OVP Highlights

• Based on operator requirements & capabilities – goal of inclusion in RFPs
• Supports both self-testing and third-party lab testing
• Compliance verification with automated test suite developed by the OPNFV community
  • Dovetail – test tool with test suites – mandatory/optional
  • OVP Portal – collaborate and submit results for community review
• Offerings/products that pass the OVP may be labeled as ‘OPNFV Verified’ – considering evolution to unified LFN program
• Initial version validates VIM & NFVI component offerings (+HW = SUT)
• VNF SDK validation content will make a unified ‘Verified’ program more compelling allowing VNF vendors to participate
Integration of VNFTTest in Dovetail

**YAML**

```yaml
testsuite_supported:
- compliance_test
- proposed_tests
- debug
- ovp.1.0.0
- onap.1.0.0

...-
```

**Run / CLI**

```python
class TestRunnerFactory(object):
    def __init__(self):
        self.type = "vnftest"
        super(VnftestCrawler, self)._init(testcase)

class VnftestRunnerFactory(DockerRunner):
    def __init__(self, testcase):
        self.type = "vnftest"
```

**Logging / Reporting**

VnftestCrawler, VnftestChecker

```
from report import Report, VnftestCrawler, VnftestChecker
from report import FunctestCrawler, YarnstickCrawler, BottleneckCrawler
```

---

Dovetail

```
cli
compliance
conf
container.py
parser.py
patch
report.py
run.py
test_runner.py
testcase.py
```

---

Test Case

```
vnf_tag:
  flags:
    - "--vnftest"
    - "-v"
path:
  - 'vnftest/docker_tag'
help: 'Overwrite tag for
```

---

Container

```
```

---

Test Suite

```
```

---

VNFTest

```
```

---

ons

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Integrate, Automate, Accelerate
VNF SDK / VNFTest Code Structure

git clone https://gerrit.onap.org/r/vnfsdk/dovetail-integration

Test Case YAML

Onboard

Lifecycle

Dockerfile

VNFTest

license.txt
dist
docker
e tc
ez_setup.py
install.sh
pom.xml
pre_config
requirements.txt
setup.py
test-requirements.txt
tests
tools
tox.ini
vnftest
vnftest.egg-info

common
lifecycle
onap_api_call.py
onboard
package_upload.py
ONAP VNF Validation Framework

- ONAP VNF SDK / OPNFV Dovetail Integration

ONAP VNF Marketplace
App which shows VNFs available for instantiation in ONAP Network Service

OPNFV Dovetail
Integrated in ONAP VNF Marketplace
Available as a service and reports pass/fail results
Test suites divided into onboarding/lifecycle

VNF Vendor Cloud
VNF onboarding validations automatically triggered upon uploads to the ONAP VNF Marketplace

ONAP Orchestration / Lifecycle Management
VNF Lifecycle validations executed on demand from VNF Marketplace UI

ONAP Marketplace

- VNF X
  - Upload Test passed
  - Lifecycle Test passed

- VNF Y
  - Upload Test passed

- VNF Z
  - Upload Test passed
  - Lifecycle Test passed

<upload package>
VNF Test Environment

ONAP VNF Test Service
System Under Test
Firewall, VPN Concentrator, etc.

ONAP VNF Test Service

Operability Test

Initiate Test
Test Repository

Test Result Repository

Instantiate Virtual Test Bed
Configure Virtual SUT
Configure Virtual Test Bed
Execute Test
Collect Results

Traffic Sources

VNF

Traffic Syncs

Dovetail

OPNFV

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ONAP VNF Validation Framework

• ONAP VNF SDK / OPNFV Dovetail Workflow

1. VNF vendor initiates upload request to marketplace – API call references VNF package
2. VNF ingest trigger - download Dovetail client with parameter specifying test suite to execute
3. Dovetail creates Docker container for tests in the suite
4. Check progress – check status of ONAP services
5. Examine VNF – may access components of VNF package for validation
6. Report results – progressively report back results through Dovetail framework in local database to VNF Marketplace
Demo

https://wiki.onap.org/display/DW/VNFTEST+integration+with+DOVETAIL
Appendix
Upload Results to OVP Portal – Share Results

- [https://verified.opnfv.org/#/user_results](https://verified.opnfv.org/#/user_results)

  Click here to begin

  Share results
  Must know user login ID
  (Linux Foundation or OpenStack)

  Testers see options of ‘share with’ and ‘submit for review’ in Operation dropdown
Upload Results to OVP Portal – Review Results

- Click Test ID to view summary results
- Click logs to drill into failed results
- SUT Endpoint and Hardware Info

Index of /logs/987c90b8-adf4-11e7-94d9-0