Functest Release Notes

Release arno.2015.1.0 (604d2fc)

OPNFV

August 19, 2016

OPNFV BRAHMAPUTRA3.0 RELEASE NOTE FOR FUNCTEST

1.1 Abstract

This document describes the release note of Functest project.

1.2 License

1.3 Version history

Date	Ver.	Author	Comment
2016-02-25	1.0.0	Morgan Richomme (Orange)	Functest for B release
2016-04-27	3.0.0	Morgan Richomme (Orange)	Add scenarios

1.4 OPNFV Brahmaputra Release

Functest deals with functional testing of the OPNFV solution. It includes test cases developed within the project and test cases developed in other OPNFV projects and other upstream communities.

The internal test cases are:

- vPing ssh

- vPing userdata

- Tempest

- Rally

- vIMS

- ODL

The OPNFV projects integrated into Functest framework for automation are:

- Promise

- Doctor

- ONOSFW

- bgpvpn

1.5 Release Data

Project	functest
Repo/tag	brahmaputra.1.0
Release designation	Brahmaputra base release
Release date	February 26 2016
Purpose of the delivery	Brahmaputra base release

1.6 Deliverables

1.6.1 Software

- The Functest Docker image

1.6.2 Documents

- Installation/configuration guide

- User Guide

- Developer Guide

- Test results per scenario

1.7 Version change

1.7.1 Feature evolution

- support new scenarios

1.7.2 New features

- minor bug fixes (formating)

- Modification of the configuration to support vPing_userdata on ONOS scenario

- Use serial option in Tempest to improve success rate

1.8 Scenario Matrix

For Brahmaputra 3.0, Functest was succesfully tested on the following scenarios:

Scenario	Apex	Compass	Fuel	Joid
odl_l2	X	X	X	X
onos		X	X	
nosdn		X	X	
ovs (dpdk)			X	
kvm			X	
bgpvpn	X		X	
sfc			X	

Functest defines the success criteria when having at least 4 consecutive successful runs of a given scenario from the Continuous Integration.

The success criteria is defined as follows:

- vPing SSH 100% OK

- vPing userdata 100% OK

- Tempest success rate > 90%

- Rally success rate > 90%

- ODL success rate = 100%

- ONOSFW success rate = 100%

- Promise success rate = 100%

- Bgpvpn success rate = 100%

- vIMS: deployement of the orchestrator and the vIMS VNF successful

Other scenarios are currently available but did not meet success criteria for the release but might be added in the incremental scenario update of the release.

1.8.1 Brahmaputra limitations

- Fuel and Apex Tempest success rate was below 90% but above 80% on some

scenarios. Some of the error causes were identified (workers, lack of IP)

- vIMS failed in CI for joid/odl_l2 scenario

- vPing userdata and vIMS excluded from onos scenario

- vPing_ssh and vIMS excluded from bgpvpn and kvm scenario

- None of the odl_l3 scenarios has been successful due to vPing ssh issue (ODL

bug reported https://bugs.opendaylight.org/show_bug.cgi?id=5582)

- apex/nosdn never run (not a target scenario) but probably succesful

- vPing SSH and vPing userdata no more run on CI since modification of bgpvpn

configuration regex.

See known issues section for details

1.9 Test and installer/scenario dependencies

It is not always possible to run all the test cases on all the scenarios. The following table details the dependencies of the test cases per scenario.

Test cases	Apex	Compass	Fuel	Joid
vPing SSH	all	all	all	all
vPing userdata	all	all	all	all
Tempest	all	all	all	all
Rally	all	all	all	all
ODL	all ODL	all ODL	all ODL	all ODL
ONOS	ONOS	ONOS	ONOS	ONOS
Promise	no	no	all	all
vIMS	all except ONOS	all except ONOS	all except ONOS	all except ONOS
Doctor	all	no	no	no
Bgpvpn	all	no	all	no

1.10 Test results

Test results are available in:

- test results document: http://artifacts.opnfv.org/functest/docs/results/index.html

- jenkins logs on CI: https://build.opnfv.org/ci/view/functest/

- Test dashboards: http://testresults.opnfv.org/dashboard

1.10.1 Known issues

- IPv6 issues in tempest suite:

    - tempest.api.network.test_ports.PortsIpV6TestJSON.test_create_port_in_allowed_allocation_pools

    - Tempest code which doesn't reserve big enough allocation

    - https://bugs.launchpad.net/tempest/+bug/1514457

- Lack of IP addresses available lead to several errors in different test cases

- vIMS (http://testresults.opnfv.org/reporting/vims/):

    - the VM needs to have access to OpenStack API.

    - Technical architecture may not allow this access (for security reasons)

    - Orchestrator can be deployed but the vIMS VNF cannot

    - That is the reason why it fails on joid/odl_l2 scenario on Orange POD 2

    - case needs to be consolidated on new scenaios (bgpvpn, sfc, ovs)

1.11 Open JIRA tickets

JIRA	Description
FUNCTEST-231	vPing SSH no more run systematically in CI
FUNCTEST-230	Heat issues in Rally scenarios
FUNCTEST-229	Extend reporting to brahmaputra
FUNCTEST-139	prepare_env failed due to https://pypi.python.org/samples is not accessible
FUNCTEST-135	vPing scenario failed in odl_l3 scenario

1.12 Useful links

- wiki project page: https://wiki.opnfv.org/opnfv_functional_testing

- Functest repo: https://git.opnfv.org/cgit/functest

- Functest CI dashboard: https://build.opnfv.org/ci/view/functest/

- JIRA dashboard: https://jira.opnfv.org/secure/Dashboard.jspa?selectPageId=10611

- Wiki page for B Release: https://wiki.opnfv.org/functest_release_2

- Functest IRC chan: #opnfv-testperf

- Test dashboard: https://www.opnfv.org/opnfvtestgraphs/summary

- Functest dashboard: http://testresults.opnfv.org/dashboard

Revision:

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