

# VSPERF & Yardstick integration overview

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# Agenda:

- Introduction
- Documentation
- Integration overview
- Code walkthrough
- Next steps
- Questions?

# Introduction

- Yardstick - a generic umbrella for OPNFV testing
- Motivation for integration
  - synthetic tests (pvp)
  - real scenarios (vnf deployed by OpenStack)
- Two ways of integration
  - Plugin mode (native tests)
  - Traffic gen mode (currently used)

# Documentation

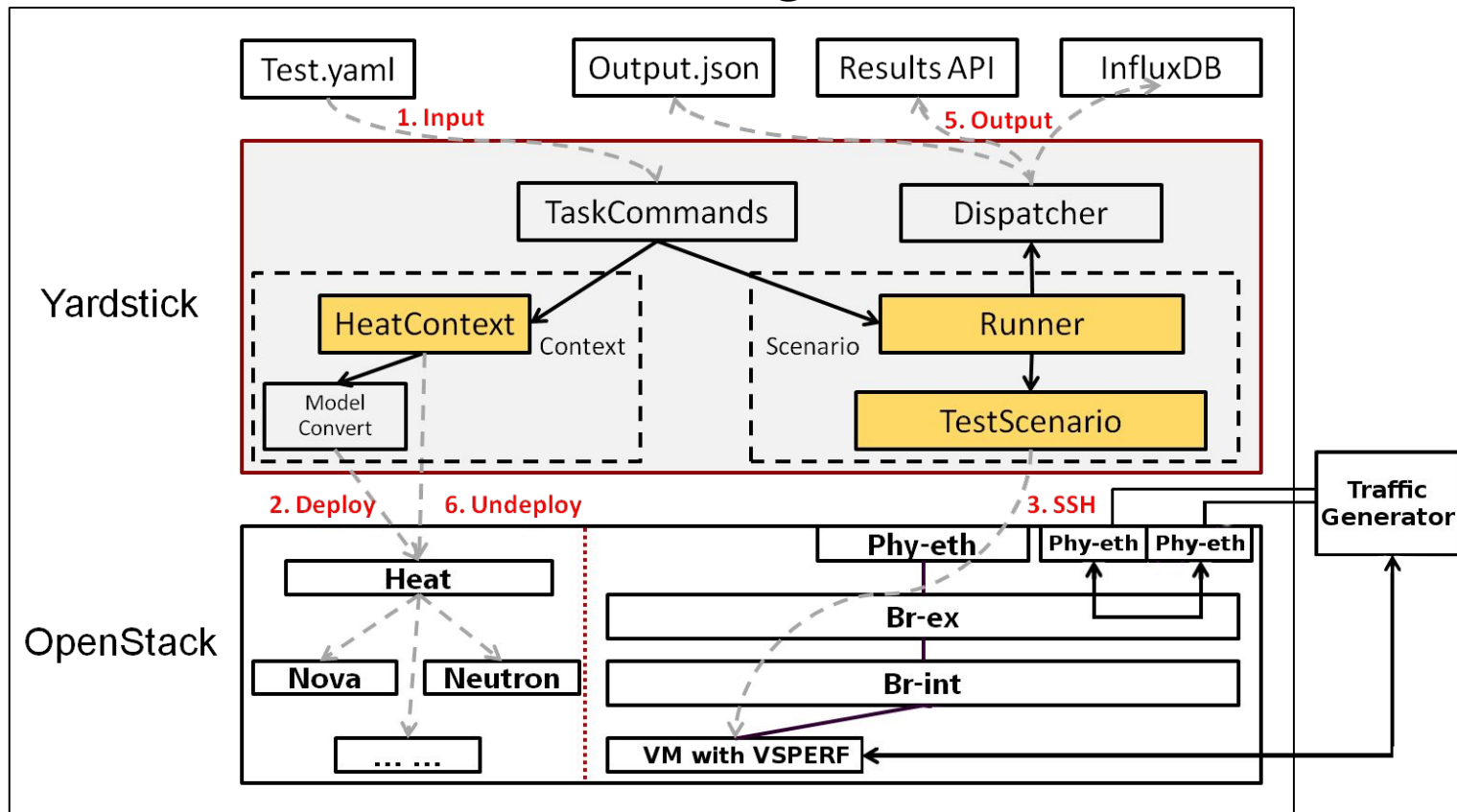
- yardstick architecture:

<http://artifacts.opnfv.org/yardstick/brahmaputra/docs/userguide/architecture.html>

- Vsperf:

<http://artifacts.opnfv.org/vswitchperf/colorado/docs/userguide/yardstick.html>

# Yardstick & VSPERF integration



# Current limitations

- single node installation of OpenStack
  - only one OVS to configure
- yardstick executed from Networking node
  - no SSH to modify OVS
  - but user can do it manually
- “master” vsperf VM image not available
  - guidelines in the docs
- IxNetwork results stored in shared folder

# Source code

Code (yardstick repo):

- new scenario class:  
`./yardstick/benchmark/scenarios/networking/vsperf.py`
- new unit test:  
`./tests/unit/benchmark/scenarios/networking/test_vsperf.py`

Sample testcases (vsperf repo)

- `yardstick/tests/p2p_back2back.yaml`
- `yardstick/tests/p2p_cont.yaml`
- `yardstick/tests/p2p_tput.yaml`

# Next Steps (analyze & test)

- OVS configuration change
  - manual through setup-script
  - automatic setup detection and modification
- separate Compute & Network nodes
  - two OVSes to configure
  - flows / tunnels to route traffic from TGEN to VM(s)
- execution of yardstick from jumphost
  - ssh connection to reach open stack nodes
  - vsperf at jumphost vs. vsperf inside VM
- test execution with non IXIA traffic gen
  - focus on MoonGen installed inside VM



# Next Steps (implementation)

- based on analysis, update/enhance yardstick code
- add support for new CLI options (generic test-params)
- prepare master VM images
  - VSPERF pre-installed
  - build-in guest loopback app
- prepare more complex tests (e.g. PVP, PVVP, etc.)
- install at POD3 and prepare a daily job for yardstick tests

## Note:

- yardstick TCs must be customized for every OpenStack installation