



TNOVA

NETWORK FUNCTIONS AS-A-SERVICE  
OVER VIRTUALISED INFRASTRUCTURES

# T-NOVA VNF Workload Characterization Framework

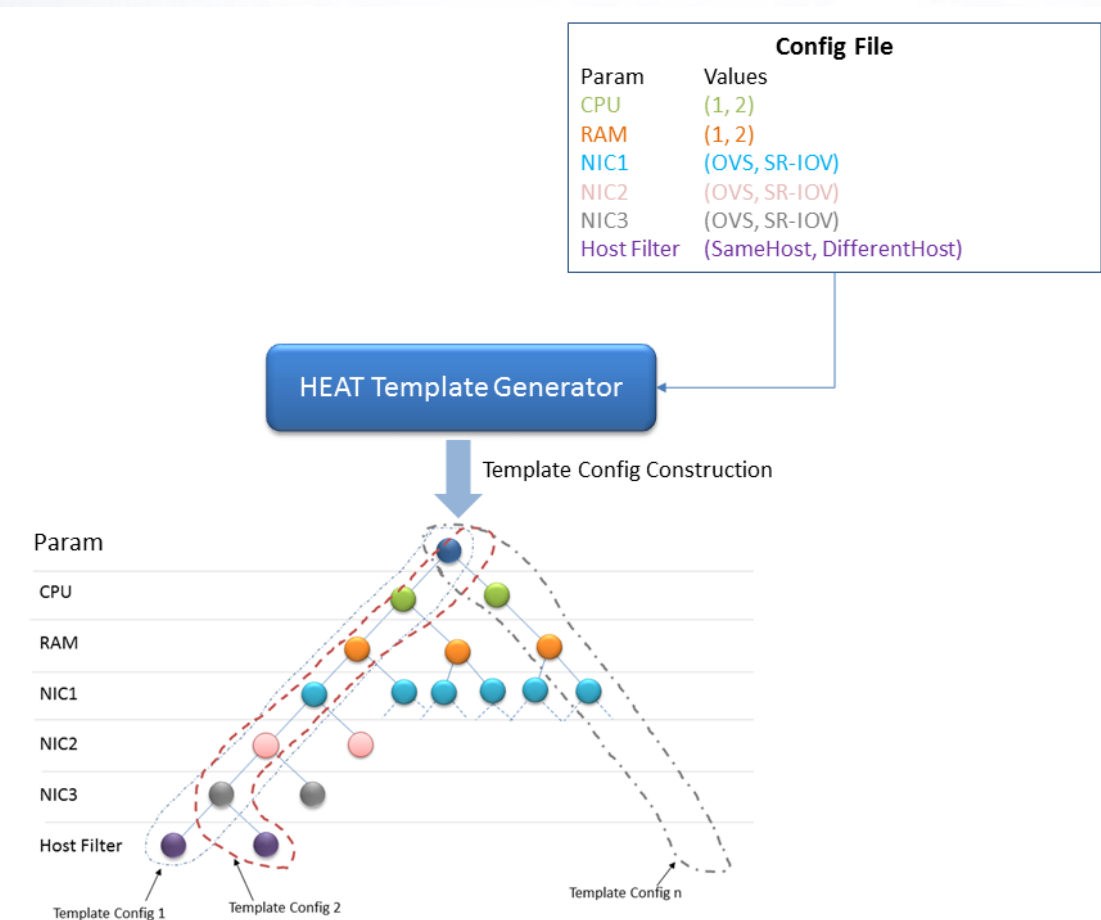
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Intel

# Framework Overview

- The VNF Workload Characterisation Framework supports the automated testing of VNF platform configurations and the capture of associated data in an OpenStack Cloud Environment.
- The framework provides orchestration of the full test lifecycle including deployment of the VNF, starting/stopping packet generation, collection of test data, creation experiment metadata and termination of the test case.

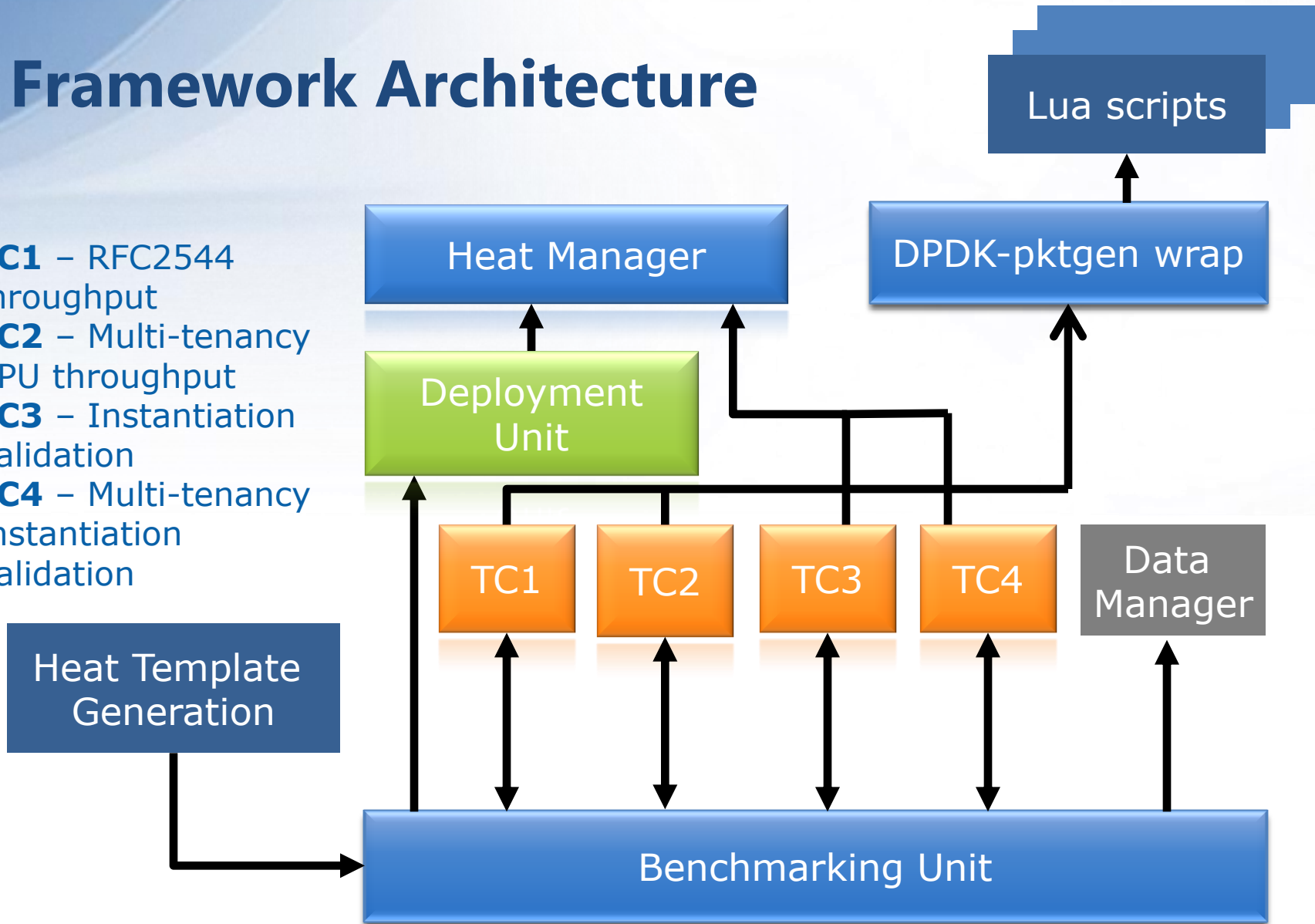
# HEAT Template Generation

- The framework takes as an input a configuration file which defines the parameters to be investigated and their range of values.
- The framework creates all possible configurations as a set of HEAT templates which are deployed sequentially until all configurations have been tested.



# Framework Architecture

- **TC1** – RFC2544 throughput
- **TC2** – Multi-tenancy CPU throughput
- **TC3** – Instantiation Validation
- **TC4** – Multi-tenancy Instantiation Validation



Heat Template Generation

Heat Manager

Deployment Unit

TC1

TC2

TC3

TC4

Data Manager

Benchmarking Unit

DPDK-pktgen wrap

Lua scripts