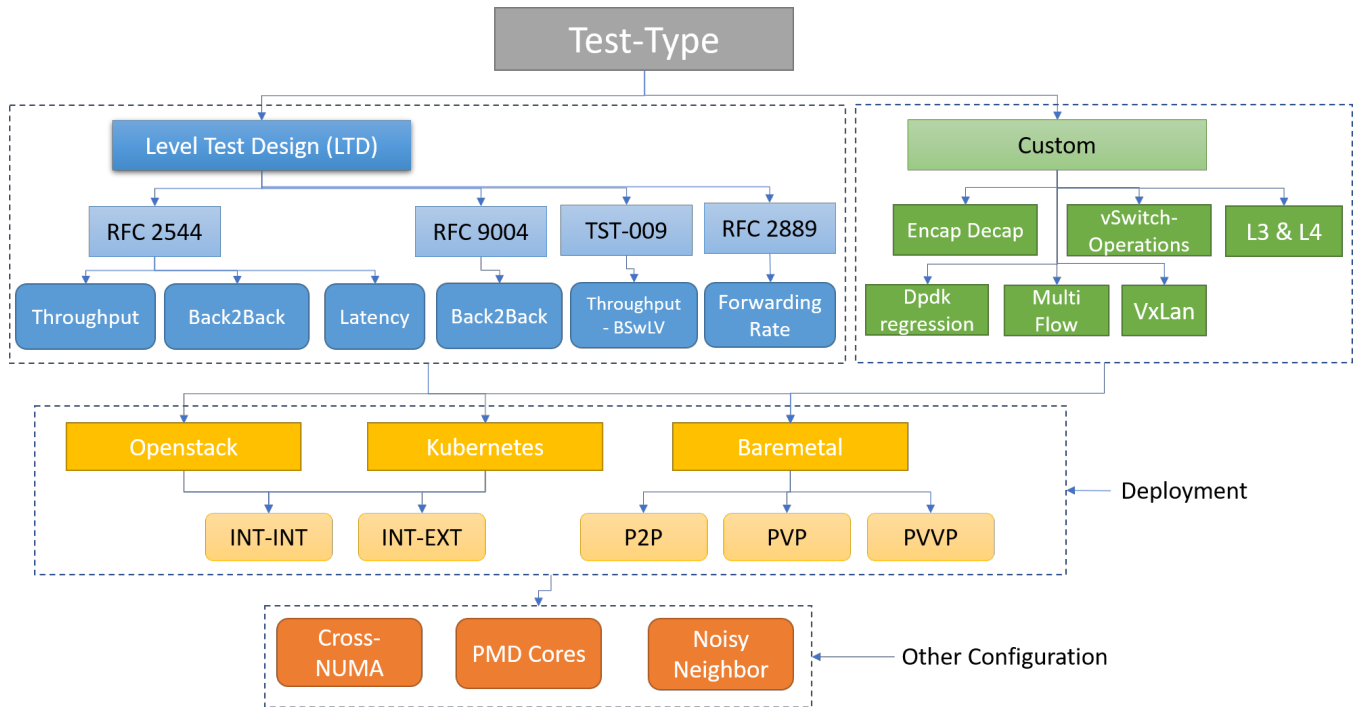# Test List

Source File: TestCases.pptx

VSWITCHPERF Tests to be defined

The test scratchpad (for tests that are WIP/being defined/looked at by the community) can be found here: https://etherpad.opnfv.org/p/vSwitchTestsDrafts

Performance tests to be defined list (Old)

Test	Priority	JIRA
Scalability Tests adding More VMs in succession and building a performance profile as we add more VMs.	1	238
OverlayNetworking Tests: VXLAN performance testing, encap, decap, encap and decap	1	241
Matchaction performance testing? The cost of the different actions supported by a vSwitch	1	242
VM2VM Tests (PHY-VNF-vSwitch-VNF-PHY), with scaling number of VMs in path (combines two tests in the list)	1	243
Classifying L2, L3 and L4 traffic Profile Tests, Flows, new flows/sec, L2/L3/L4 etc. entries in"fast" path tables, ...	2	
Stream/bulk Data transfer "unidirectional stream" performance request& response/transaction rate tests	3	
Performance testing with Mirroring enabled on the switch	2	
TCP Max connections per second, Max # of active sessions, Max transactions per second	3	
IPv6 Support and Testing	2	
Measuring how many instances of a vSwitch would be required to support 1 million simulataneous flows	2	
Resilience tests (re-define or delete)		??
Performance characterization runs vs.number of "x". Tests with Restricted Resources (Host with X Cores, vSwitch with Y Cores?		some x done
Flows, new flows/sec, L2/L3/L4 etc. entries in"fast" path tables, ...	2	
SOAK tests (using RFC 2889 Max Forwarding Rate, not RFC 2544, to collect intermediate results)	2	

Box-full tests, where all CPU cores are doing useful work: vNet4 vSwitch with Nx VNFs, vNet6 vSwitch with Nx VNF chained topologies	2	
Latency And Latency Variation with dedicated latency measurement streams with percentiles, 99th for TST009 benchmark		prox does it
Tests with Restricted Resources (Host with X Cores, vSwitch with Y Cores, ? overlap with 14, … vs number of "X")	2	

Testing Topologies

Topology	Priority	JIRA
vNet vComp2 for VM2VM virt interface testing		

Integration Tests

https://etherpad.opnfv.org/p/vSwitchIntegrationTests

Other

We should consider recommending a minimum number of iterations to repeat the test and either average out the result or calculate the variance across trials