Dovetail Test Areas and Test Cases

WARNING: This page is not currently maintained. Test areas will be defined in the test strategy document (being developed in this Gerrit proposal and tracked in this JIRA ticket - see current draft document), and specific test cases will be discussed and included in the Dovetail JIRA and Gerrit repository

This is the list of candidate test areas which have been proposed by community members for addition to the Dovetail test suite. These test areas will be evaluated under the Dovetail test case requirements, proposed for inclusion as patches in Gerrit against Dovetail, and reviewed by the Dovetail maintainers. Once approved, they will become part of the Dovetail test suite.

Brainstorming

This section is intended to help us get to quick consensus on the test priorities for Danube. The rest of the content of this page will be updated to be aligned with this section.

This is intended to help us discuss and collaboratively edit a set of priorities for the dovetail program in OPNFV.

- If we need a more long-winded/threaded discussion on the topic, please add an item to https://techdiscuss.opnfv.org/.

- This is itself a strawman proposal for how we can discuss this important topic. Alternatives are welcome, although the basic goal is that we can come to collaborative consensus as quickly as possible, with minimal barriers to participation in the discussion.

Also see:

- https://jira.opnfv.org/browse/DOVETAIL-345

High

- Component verification: leverage all available tests to validate functional/API/etc capabilities of component distros

  - NFVI+VIM: start with well-established aspects of NFVI+VIM

    - OpenStack: Refstack (https://refstack.openstack.org)

    - ODL: https://github.com/opendaylight/integration-test

    - OpenContrail: https://github.com/Juniper/contrail-test-ci/wiki

    - ONOS: https://wiki.onosproject.org/display/ONOS14/How+to+Contribute+to+System+Test

- Reference VNF portability: demonstrate portability and consistent operation for an ever-expanding suite of reference VNFs, which have been verified for most/all OPNFV distros

  - vIMS

- Cross-controller dependent OPNFV features: verify operation of features that depend upon coordinated use of multiple components

  - SFC

- Broadly supported OPNFV features: focus on features that are support in many/most distros and hardware platforms

Medium

- Reliability: operation/performance under stress e.g. load and chaos

- Performance: benchmarking

- Security: static scans (vulnerabilities, licenses) and response to threats in operation

- Infra lifecycle: deployment and day-2 operations

- MANO: MANO-stack interop

Low

- Narrowly-supported features: any features that are distro or hardware platform specific

- Application (e.g. VNF) compliance with standards: while we may leverage reference VNFs as typical use cases their use should focus entirely upon verifying that the NFVI etc implementations result in a consistent user experience. The "user" in this case is the service provider, and consistency does not extend to whether the VNF itself or how it is operated adheres to any standards-based expectation on functionality.

Details on Test Areas

VIM Operations on Compute

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27493

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VIM operations on Compute	Create and show root certificates	Create and show root certificates	VIM: Openstack Components: Keystone, Nova		
2	VIM operations on Compute	Flavors CRD ops	Create, delete, list and show flavors	VIM: Openstack Components: Keystone, Nova		
3	VIM operations on Compute	Floating IPs CRUD ops	Allocate, delete, associate, disassociate, show and list floating ips	VIM: Openstack Components: Keystone, Nova, Neutron		
4	VIM operations on Compute	Image metadata CRUD ops	List, set, update, show, delete image metadatas	VIM: Openstack Components: Keystone, Nova		
5	VIM operations on Compute	Images CRUD ops	Delete, list, show and create images	VIM: Openstack Components: Keystone, Nova, Glance		
6	VIM operations on Compute	Keypairs CRUD ops	Create, list, delete and show keypairs	VIM: Openstack Components: Keystone, Nova		
7	VIM operations on Compute	Show absolute limits	Show absolute limits	VIM: Openstack Components: Keystone, Nova		
8	VIM operations on Compute	Security group rules CRUD ops	Create, delete and list security group rules	VIM: Openstack Components: Keystone, Nova		
9	VIM operations on Compute	Security group CRUD ops	Create, delete, show, update and list security groups	VIM: Openstack Components: Keystone, Nova		
10	VIM operations on Compute	Interfaces CRUD ops	Create, delete, show and list interfaces; attach and deattach ports to servers	VIM: Openstack Components: Keystone, Nova, Neutron		
11	VIM operations on Compute	List availability zones	List of availability zones and available services	VIM: Openstack Components: Keystone, Nova		

12	VIM operations on Compute	Servers CRD ops	Create, delete, list and get servers	VIM: Openstack Components: Keystone, Nova, Neutron		
13	VIM operations on Compute	Rebuild, resize and update server	Rebuild, resize and update server	VIM: Openstack Components: Keystone, Nova		
14	VIM operations on Compute	List and show instance actions	List and show instance actions	VIM: Openstack Components: Keystone, Nova		
15	VIM operations on Compute	Multiple create servers	Verify whether reservation id is in the response body of creating servers	VIM: Openstack Components: Keystone, Nova		
16	VIM operations on Compute	Server actions	Change server passwords; reboot, rebuild, resize, pause, unpause, suspend, resume, shelve, unshelve, stop, start, lock, unlock server; create backup; get console oupt; show vnc console;	VIM: Openstack Components: Keystone, Nova, Glance		
17	VIM operations on Compute	List server addresses	List server addresses	VIM: Openstack Components: Keystone, Nova, Neutron		
18	VIM operations on Compute	Server group	Create/delete server-groups with different policies. policies = affinity/anti-affinity It also adds the tests for list and get details of server-groups	VIM: Openstack Components: Keystone, Nova		
19	VIM operations on Compute	Server metadata CRUD ops	List, set, update, show, delete server metadata	VIM: Openstack Components: Keystone, Nova		
20	VIM operations on Compute	Delete and get server password	Delete and get server password	VIM: Openstack Components: Keystone, Nova		
21	VIM operations on Compute	Server personality ops	Create and rebuild servers with personality	VIM: Openstack Components: Keystone, Nova		
22	VIM operations on Compute	Rescue and unrescue servers	Rescue and unrescue servers	VIM: Openstack Components: Keystone, Nova		
23	VIM operations on Compute	Create server with special metadata	Create server with admin password; create server with existing server name; create specify keypair; update server name; create server with IPv6 only	VIM: Openstack Components: Keystone, Nova		
24	VIM operations on Compute	List virtual interfaces	List virtual interfaces	VIM: Openstack Components: Keystone, Nova, Neutron		
25	VIM operations on Compute	Attach and deattach volume	Attach and deattach volume; list and show volume attachments; delete attached volume	VIM: Openstack Components: Keystone, Nova, Cinder		
26	VIM operations on Compute	Volume snapshot CRD operations	Create, show, list and delete volume snapshots	VIM: Openstack Components: Keystone, Nova, Cinder		
27	VIM operations on Compute	Volumes CRUD ops	Create, show, list, update and delete volumes	VIM: Openstack Components: Keystone, Nova, Cinder		
28	VIM operations on Compute	Show and list extensions	Show and list extensions	VIM: Openstack Components: Keystone, Nova		
29	VIM operations on Compute	Live block migration	Migrating to an invalid host should not change the status	VIM: Openstack Components: Keystone, Nova		

30	VIM operations on Compute	List networks	List networks	VIM: Openstack Components: Keystone, Nova, Neutron		
31	VIM operations on Compute	Quotas CRUD ops	Show, create, update and delete quotas	VIM: Openstack Components: Keystone, Nova		
32	VIM operations on Compute	List and show tenant networks	List and show tenant networks	VIM: Openstack Components: Keystone, Nova, Neutron		
33	VIM operations on Compute	List and show API versions	List and show API versions	VIM: Openstack Components: Keystone, Nova		
34	VIM operations on Compute	Agents CRUD	Create, update, delete and list agents	VIM: Openstack Components: Keystone, Nova		
35	VIM operations on Compute	Aggregate CRUD	Create, update, delete, show and list agents	VIM: Openstack Components: Keystone, Nova		
36	VIM operations on Compute	Auto-allocating networks	Tests auto-allocating networks with the v2.37 microversion. The tenant must not have any network resources available to it so we can make sure that Nova calls to Neutron to automatically allocate the network topology.	VIM: Openstack Components: Keystone, Nova, Neutron		
37	VIM operations on Compute	Fixed ips	List, reserve and unreserve fixed ips	VIM: Openstack Components: Keystone, Nova		
38	VIM operations on Compute	Flavors access	Add and remove Flavor Access require admin privileges	VIM: Openstack Components: Keystone, Nova		
39	VIM operations on Compute	Flavor Extra Spec API extension	SET, UNSET, UPDATE Flavor Extra specs require admin privileges. GET Flavor Extra specs can be performed even by without admin privileges.	VIM: Openstack Components: Keystone, Nova		
40	VIM operations on Compute	Floating IPs Bulk CRUD	Create, update, delete, and list Floating IPs Bulk that require admin privileges	VIM: Openstack Components: Keystone, Nova, Neutron		
41	VIM operations on Compute	Host CRUD ops	Create, update, delete, show and list hosts using admin privileges	VIM: Openstack Components: Keystone, Nova		
42	VIM operations on Compute	List and show hypervisors	List and show hypervisors using admin privileges	VIM: Openstack Components: Keystone, Nova		
43	VIM operations on Compute	Instance usage audit log	Show and list instance usage audit log	VIM: Openstack Components: Keystone, Nova		
44	VIM operations on Compute	Live block migration	Live migration between two hosts	VIM: Openstack Components: Keystone, Nova		
45	VIM operations on Compute	Migrations admin	Live migrations and cold migrations	VIM: Openstack Components: Keystone, Nova		
46	VIM operations on Compute	Nova network API	List and show network	VIM: Openstack Components: Keystone, Nova		
47	VIM operations on Compute	Servers create ops on multinodes	Create servers on same host; create servers on different hosts	VIM: Openstack Components: Keystone, Nova		

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
48	VIM operations on Compute	List and show services	List and show services	VIM: Openstack Components: Keystone, Nova		
49	VIM operations on Compute	List and show tenant usage	List and show usage for tenants	VIM: Openstack Components: Keystone, Nova		

VIM Operations on Network

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27497

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VIM operations on Network	Ports CRU ops with allowed address pair	Create, list, update and show ports with allowed address pair	VIM: Openstack Components: Keystone, Neutron		
2	VIM operations on Network	DHCP + IPv6 service	Test DHCPv6 specific features using SLAAC, stateless and stateful settings for subnets. Also it shall check dual-stack functionality (IPv4 + IPv6 together). The tests include: generating of SLAAC EUI-64 address in subnets with various settings receiving SLAAC addresses in combinations of various subnets receiving stateful IPv6 addresses addressing in subnets with router	VIM: Openstack Components: Keystone, Neutron		
3	VIM operations on Network	List all available extensions	List available extensions for the project	VIM: Openstack Components: Keystone, Neutron		
4	VIM operations on Network	Ports CRU ops with extra DHCP options	Create, list, show and update ports with the Extra DHCP options	VIM: Openstack Components: Keystone, Neutron		
5	VIM operations on Network	Floating IPs CRUD ops	Create, update, delete, list, show and associate Floating IPs	VIM: Openstack Components: Keystone, Neutron		
6	VIM operations on Network	Metering extensions CRD ops	List, Show, Create, Delete Metering labels List, Show, Create, Delete Metering labels rules	VIM: Openstack Components: Keystone, Neutron		
7	VIM operations on Network	Networks and subnets CRUD ops	create a network for a project list project's networks show a project network details create a subnet for a project list project's subnets show a project subnet details network update subnet update delete a network also deletes its subnets list external networks All subnet tests are run once with ipv4 and once with ipv6.;	VIM: Openstack Components: Keystone, Neutron		
8	VIM operations on Network	Ports CRUD ops	Create, delete, list, show and update ports	VIM: Openstack Components: Keystone, Neutron		
9	VIM operations on Network	Routers CRUD ops	Create, delete, list, show and update routers; add and remove router interface	VIM: Openstack Components: Keystone, Neutron		
10	VIM operations on Network	Security groups CRUD ops	Create, delete, list, show and update security groups;Create, delete, show security group rules;	VIM: Openstack Components: Keystone, Neutron		
11	VIM operations on Network	List service providers	List service providers	VIM: Openstack Components: Keystone, Neutron		

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
12	VIM operations on Network	Subnet pools CRUD ops	Create, delete, list, show and update subnet pools	VIM: Openstack Components: Keystone, Neutron		
13	VIM operations on Network	List API versions	List API versions	VIM: Openstack Components: Keystone, Neutron		
14	VIM operations on Network	Agents management	List, show and update agents	VIM: Openstack Components: Keystone, Neutron		
15	VIM operations on Network	DHCP agent scheduler	List DHCP agents on hosting network; List networks hosted by one DHCP; Add and remove networks from DHCP agents	VIM: Openstack Components: Keystone, Neutron		
16	VIM operations on Network	External network CRUD ops	Create, delete, list, show and update external networks	VIM: Openstack Components: Keystone, Neutron		
17	VIM operations on Network	L3 agent scheduler	List routers that the given L3 agent is hosting. List L3 agents hosting the given router. Add and Remove Router to L3 agent	VIM: Openstack Components: Keystone, Neutron		
18	VIM operations on Network	Quotas CRU ops	List, show, update, set, reset quotas	VIM: Openstack Components: Keystone, Neutron		
19	VIM operations on Network	Router DVR	Create Distributed Virtual Routing (DVR) router; create a centralized router; update a centralized router to DVR router	VIM: Openstack Components: Keystone, Neutron		

VIM Operations on Volume

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27499

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VIM operations on Volume	List availability zones	List availability zones	VIM: Openstack Components: Keystone, Nova, Cinder		
2	VIM operations on Volume	List extensions	List of all extensions	VIM: Openstack Components: Keystone, Nova, Cinder		
3	VIM operations on Volume	Snapshot metadata CRUD ops	Create, show, update, delete metadata; Create, show, update, delete metadata items;	VIM: Openstack Components: Keystone, Nova, Cinder		
4	VIM operations on Volume	Volume metadata CRUD ops	Create, show, update, delete volume metadata	VIM: Openstack Components: Keystone, Cinder		
5	VIM operations on Volume	Volume transfer CRUD ops	Create, show, update, delete and list volume transfers	VIM: Openstack Components: Keystone, Cinder		
6	VIM operations on Volume	Volume actions	Attach and deattach volume to an instance; Verify that a volume bootable flag is retrieved; Verify that a volume's attachment information is retrieved; upload volume; reserve and unreserve volumes; update volume; Reset volume status; force delete volumes	VIM: Openstack Components: Keystone, Cinder, Glance		
7	VIM operations on Volume	Volume backup CRUD ops	Create, show, list, restore, delete volume backups;export and import volume backups; reset backup status	VIM: Openstack Components: Keystone, Cinder		

8	VIM operations on Volume	Volumes clone	Creates a volume from another volume passing a size different from the source volume; Create a volume from the bootable volume	VIM: Openstack Components: Keystone, Cinder		
9	VIM operations on Volume	Extend volume	Extend volume	VIM: Openstack Components: Keystone, Cinder		
10	VIM operations on Volume	Volumes CRUD ops	Create, show, update, list and delete volumes	VIM: Openstack Components: Keystone, Cinder, Glance		
11	VIM operations on Volume	Volumes snapshot CRUD ops	Create a snapshot when volume status is in-use; Create, show, list, update and delete snapshots;	VIM: Openstack Components: Keystone, Cinder		
12	VIM operations on Volume	Image metadata RUD ops	Update and show, delete image metadata	VIM: Openstack Components: Keystone, Nova, Cinder, Glance		
13	VIM operations on Volume	Create and show volume with Mutil backend	Show volume id which created by type without prefix;Show volume id which created by type wit prefix	VIM: Openstack Components: Keystone, Cinder		
14	VIM operations on Volume	Qos specs CRUD ops	Create, list, delete, show, associate, disassociate, set/unset qos-specs	VIM: Openstack Components: Keystone, Cinder		
15	VIM operations on Volume	Snapshot actions	Reset and update snapshot status; force delete snapshot;	VIM: Openstack Components: Keystone, Cinder		
16	VIM operations on Volume	List hosts	List hosts	VIM: Openstack Components: Keystone, Nova, Cinder		
17	VIM operations on Volume	Show volume pools	Show volume pools	VIM: Openstack Components: Keystone, Nova, Cinder		
18	VIM operations on Volume	Volume quotas RUD ops	List, show,update and delete volume quotas	VIM: Openstack Components: Keystone, Cinder		
19	VIM operations on Volume	List volume services	Volume service list requires admin privileges	VIM: Openstack Components: Keystone, Cinder		
20	VIM operations on Volume	Create and update volume snapshot quotas	Create and update volume snapshot quotas	VIM: Openstack Components: Keystone, Cinder		
21	VIM operations on Volume	Volume types extra specs CRUD ops	Create, show, delete, list and update volume types extra specs	VIM: Openstack Components: Keystone, Cinder		
22	VIM operations on Volume	Volume types CRUD ops	Create, update, show, delete and list volume types	VIM: Openstack Components: Keystone, Cinder		
23	VIM operations on Volume	User messages RD ops	List, show and delete user messsages	VIM: Openstack Components: Keystone, Cinder		
24	VIM operations on Volume	List and show backends capabilities	List and show backends capabilities	VIM: Openstack Components: Keystone, Cinder		
25	VIM operations on Volume	Add and list volume type access	Add and list volume type access	VIM: Openstack Components: Keystone, Cinder		

VIM Operations on Image

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27219

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VIM operations on Image	Images member CRUD ops	Create, show, delete, update, list images member	VIM: Openstack Components: Keystone, Glance		https://gerrit.opnfv.org/gerrit/#/c/27221
2	VIM operations on Image	Metadata definition Namespaces basic functionality	Create, show, update, delete and list metadata definition namespace	VIM: Openstack Components: Keystone, Glance		https://gerrit.opnfv.org/gerrit/#/c/27223
3	VIM operations on Image	Metadata definition resource types basic functionality	Create, show, update, delete and list metadata definition resource types	VIM: Openstack Components: Keystone, Glance		https://gerrit.opnfv.org/gerrit/#/c/27225
4	VIM operations on Image	Images CRUD ops	Register, show , delete, update and list images; upload and show the image file	VIM: Openstack Components: Keystone, Glance		https://gerrit.opnfv.org/gerrit/#/c/27227
5	VIM operations on Image	Create and delete image tags	Create and delete image tags	VIM: Openstack Components: Keystone, Glance		https://gerrit.opnfv.org/gerrit/#/c/27231

VIM Operations on Identity

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27501

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VIM operations on Identity	List extensions	List all the extensions	VIM: Openstack Components: Keystone		
2	VIM operations on Identity	API discovery features	Show API version; show API media types; show API status	VIM: Openstack Components: Keystone		
3	VIM operations on Identity	Projects CRUD ops	List, create, delete and update projects; associate a user to a project	VIM: Openstack Components: Keystone		
4	VIM operations on Identity	Token CRUD ops	Create, show, delete, rescope token; Note: An unscoped token can be requested, that token can be used to request a scoped token. The scoped token can be revoked, and the original token used to get a token in a different project.	VIM: Openstack Components: Keystone		
5	VIM operations on Identity	Update password	User update own password	VIM: Openstack Components: Keystone		
6	VIM operations on Identity	User ec2 credentials CRD ops	Create, show, list and delete user ec2 credentials	VIM: Openstack Components: Keystone		
7	VIM operations on Identity	Credentials CRUD ops	Create, show, update, delete and list credentials	VIM: Openstack Components: Keystone		
8	VIM operations on Identity	Default project id	1. create a domain 2. create a project in the domain 3. create a user in the domain, with the previous project as his default project 4. get roles and find the admin role 5. grant the admin role to the user on his project 6. create a new client with user's credentials 7. verify the user's token and see that it is scoped to the project	VIM: Openstack Components: Keystone		

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
9	VIM operations on Identity	Domains CRUD ops	Create, update, delete and list domains	VIM: Openstack Components: Keystone		
10	VIM operations on Identity	Endpoint CRUD ops	Create, update, delete, show and list endpoints	VIM: Openstack Components: Keystone		
11	VIM operations on Identity	Groups CRUD ops	Create, update, delete, show and list groups; add, list and delete users in groups;	VIM: Openstack Components: Keystone		
12	VIM operations on Identity	Inherits CRUD ops	Create, assign, list, check, revoke roles on domains user/domains group/projects user /projects group/domains/ project trees	VIM: Openstack Components: Keystone		
13	VIM operations on Identity	Policy CRUD ops	List, create, update and delete policies	VIM: Openstack Components: Keystone		
14	VIM operations on Identity	Regions CRUD ops	Create, show, update, delete and list regions	VIM: Openstack Components: Keystone		
15	VIM operations on Identity	Roles CRUD ops	Create, show, update, delete and list roles; grant ,list and revoke role to user/group on project/domain/	VIM: Openstack Components: Keystone		
16	VIM operations on Identity	Services CRUD ops	Create, show, update, delete and list services	VIM: Openstack Components: Keystone		
17	VIM operations on Identity	Trusts CRU ops	Create, show, delete and list trusts; updates are not supported for trusts	VIM: Openstack Components: Keystone		
18	VIM operations on Identity	Users CRUD ops	Create, update, show, delete and list users; Request for token authentication with /without a valid token in header	VIM: Openstack Components: Keystone		

NFVI

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27503

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Network	vPing	two vms setup in the same subnet and can ping each other (ssh, userdata, IPv4, IPv6(afraid not support now MatthewLi))	VIM: Openstack Components: Keystone, Nova, Neutron, Glance		
2	Network	vRouter	Two VMs in two different subnets, connected by a Neutron virtual router, can ping each other	VIM: Openstack Components: Keystone, Nova, Neutron, Glance		
3	Network	Security rules	Verify that a security rule prevents a type of traffic, remove rule, verify that traffic passes, add it back, test that traffic is stopped	VIM: Openstack Components: Keystone, Nova, Neutron, Glance		
4	Network	External routing	Verify that a VM can access hosts external to the VIM	VIM: Openstack Components: Keystone, Nova, Neutron, Glance		
5	Network		...fill out CRUD operations for "network/subnet/router/port" operations	VIM: Openstack Components: Keystone, Nova, Neutron, Glance		
6	Network	Network advanced server ops	Check VM connectivity after some advanced instance operations executed: * Stop/Start an instance * Reboot an instance * Rebuild an instance * Pause/Unpause an instance * Suspend/Resume an instance * Resize an instance	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		

7	Network	Network basic operations	This smoke test suite assumes that Nova has been configured to boot VM's with Neutron-managed networking, and attempts to verify network connectivity as follows: There are presumed to be two types of networks: tenant and public. A tenant network may or may not be reachable from the Tempest host. A public network is assumed to be reachable from the Tempest host, and it should be possible to associate a public ('floating') IP address with a tenant ('fixed') IP address to facilitate external connectivity to a potentially unroutable tenant IP address.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
8	Network	Network v6	1. Create network with subnets: 1.1. one IPv4 and 1.2. one or more IPv6 in a given address mode 2. Boot 2 VMs on this network 3. Allocate and assign 2 FIP4 4. Check that vNICs of all VMs gets all addresses actually assigned 5. Each VM will ping the other's v4 private address 6. If ping6 available in VM, each VM will ping all of the other's v6 addresses as well as the router's	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
9	Network	Security groups basic ops	This test case assumes that Nova has been configured to boot VM's with Neutron-managed networking, and attempts to verify cross tenant connectivity as follows ssh: in order to overcome "ip namespace", each tenant has an "access point" VM with floating-ip open to incoming ssh connection allowing network commands (ping/ssh) to be executed from within the tenant-network-namespace Tempest host performs key-based authentication to the ssh server via floating IP address connectivity test is done by pinging destination server via source server ssh connection. success - ping returns failure - ping_timeout reached multi-node: Multi-Node mode is enabled when CONF.compute.min_compute_nodes > 1. Tests connectivity between servers on different compute nodes. When enabled, test will boot each new server to different compute nodes.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
10	NFVI	Basic minimum scenario test	1. Create image 2. Create keypair 3. Boot instance with keypair and get list of instances 4. Create volume and show list of volumes 5. Attach volume to instance and getlist of volumes 6. Add IP to instance 7. Create and add security group to instance 8. Check SSH connection to instance 9. Reboot instance 10. Check SSH connection to instance after reboot	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
11	Compute	OPNFV_YARDSTICK_TC0 10	Measure the memory read latency for varying memory sizes and strides. Whole memory hierarchy is measured including all levels of cache.	Colorado Scenario: due to floating IP, not support odl_l2, bgnvpn VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder, Heat		
12	Compute	OPNFV_YARDSTICK_TC0 12	Measure the rate at which data can be read from and written to the memory (this includes all levels of memory).	Colorado Scenario: due to floating IP, not support odl_l2, bgnvpn VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder, Heat		
13	Compute	OPNFV_YARDSTICK_TC0 14	To evaluate the IaaS processing speed with regards to score of single cpu running and parallel running The purpose is also to be able to spot trends. Test results, graphs and similar shall be stored for comparison reasons and product evolution understanding between different OPNFV versions and/or configurations.	Colorado Scenario: due to floating IP, not support odl_l2, bgnvpn VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder, Heat		
14	Compute	OPNFV_YARDSTICK_TC0 55	To evaluate the IaaS compute capacity with regards to hardware specification, including number of cpus, number of cores, number of threads, available memory size and total cache size. Test results, graphs and similar shall be stored for comparison reasons and product evolution understanding between different OPNFV versions and/or configurations.	Colorado Scenario: due to floating IP, not support odl_l2, bgnvpn VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder, Heat		
15	Compute	Aggregates basic ops	Creates an aggregate within an availability zone 1. Adds a host to the aggregate 2. Checks aggregate details 3. Updates aggregate's name 4. Removes host from aggregate 5. Deletes aggregate	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		

16	Compute	Server advanced operations	This test case stresses some advanced server instance operations: * Resizing a volume-backed instance * Sequence suspend resume	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
17	Compute	Server basic operations	This smoke test case follows this basic set of operations: * Create a keypair for use in launching an instance * Create a security group to control network access in instance * Add simple permissive rules to the security group * Launch an instance * Perform ssh to instance * Verify metadata service * Verify metadata on config_drive * Terminate the instance	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
18	Compute	Server multinode	This is a set of tests specific to multinode testing	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
19	Compute	Shelve instance	The following is the scenario outline: * boot an instance and create a timestamp file in it * shelve the instance * unshelve the instance * check the existence of the timestamp file in the unshelved instance	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
20	Compute	Snapshot pattern	The following is the outline: * boot an instance and create a timestamp file in it * snapshot the instance * boot a second instance from the snapshot * check the existence of the timestamp file in the second instance	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
21	Compute	Stamp pattern	This test is for snapshotting an instance/volume and attaching the volume created from snapshot to the instance booted from snapshot. The following is the scenario outline: 1. Boot an instance "instance1" 2. Create a volume "volume1" 3. Attach volume1 to instance1 4. Create a filesystem on volume1 5. Mount volume1 6. Create a file which timestamp is written in volume1 7. Unmount volume1 8. Detach volume1 from instance1 9. Get a snapshot "snapshot_from_volume" of volume1 10. Get a snapshot "snapshot_from_instance" of instance1 11. Boot an instance "instance2" from snapshot_from_instance 12. Create a volume "volume2" from snapshot_from_volume 13. Attach volume2 to instance2 14. Check the existence of a file which created at 6. in volume2	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
22	Compute	Volume boot pattern	This test case attempts to reproduce the following steps: * Create some bootable volume importing a image * Boot an instance from the bootable volume * Write content to the volume * Delete an instance and Boot a new instance from the volume * Check written content in the instance * Create a volume snapshot while the instance is running * Boot an additional instance from the new snapshot based volume * Check written content in the instance booted from snapshot	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
23	Storage	yardstick_tc005	Fio test is invoked in a host VM on a compute blade, a job file as well as parameters are passed to fio and fio will start doing what the job file tells it to do.	Colorado Scenario: due to floating IP, not support odl_l2, bgpvpn VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder, Heat		
24	Storage	Encrypted volumes	This test is for verifying the functionality of encrypted volumes. For both LUKS and cryptsetup encryption types, this test performs the following: * Creates an image * Boots an instance from the image * Creates an encryption type (as admin) * Creates a volume of that encryption type (as a regular user) * Attaches and detaches the encrypted volume to the instance	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		

High Availability (HA)

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27505

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References

1	HA	OPNFV _YARD STICK_ TC019	This test case will verify the high availability of the service provided by compute on control node.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA		
2	HA	OPNFV _YARD STICK_ TC045	This test case will verify the high availability of the network service provided by network on control node	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA		
3	HA	OPNFV _YARD STICK_ TC046	This test case will verify the high availability of the user service provided by Identity on control node	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
4	HA	OPNFV _YARD STICK_ TC047	This test case will verify the high availability of the image service provided by image on control node	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
5	HA	OPNFV _YARD STICK_ TC048	This test case will verify the high availability of the volume service provided by network on control node	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder		
6	HA	OPNFV _YARD STICK_ TC049	This test case will verify the high availability of the storage service provided by object storage on control node	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Additional Components: Swift		
7	HA	OPNFV _YARD STICK_ TC050	This test case will verify the high availability of control node. When one of the controller failed to connect the network, which breaks down the Openstack services on this node. These Openstack service should able to be accessed by other controller nodes, and the services on failed controller node should be isolated	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA		
8	HA	OPNFV _YARD STICK_ TC051	This test case will verify the high availability of control node. When the CPU usage of a specified controller node is stressed to 100%, which breaks down the Openstack services on this node. These Openstack service should able to be accessed by other controller nodes, and the services on failed controller node should be isolated	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA		
9	HA	OPNFV _YARD STICK_ TC052	This test case will verify the high availability of control node. When the disk I/O of a specified disk is blocked, which breaks down the Openstack services on this node. Read and write services should still be accessed by other controller nodes, and the services on failed controller node should be isolated	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA		

| 10 | HA | OPNFV _YARD STICK_ TC053 | This test case will verify the high availability of the load balance service(current is HAProxy) that supports OpenStack on controller node. When the load balance service of a specified controller node is killed, whether other load balancers on other controller nodes will work, and whether the controller node will restart the load balancer are checked | VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA | | |
| 11 | HA | OPNFV _YARD STICK_ TC054 | This test case will verify the high availability for virtual ip in the environment. When master node of virtual ip is abnormally shutdown, connection to virtual ip and the services binded to the virtual IP it should be OK | VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder SDN: not support SDN Sepcial requirements: 3 control nodes with HA | | |

IPv6

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27509

Link to the introduction of IPv6 test cases status: Ipv6 Test Cases Status

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	IPv6	Test Case 1: Create and Delete an IPv6 Network, Port and Subnet	To test if Create and Delete an IPv6 Network, Port and Subnet is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
2	IPv6	Test Case 2: Create, Update and Delete an IPv6 Network and Subnet	To test if Create, Update and Delete an IPv6 Network and Subnet is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
3	IPv6	Test Case 3: Check External Network Visibility	To test if Check External Network Visibility is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
4	IPv6	Test Case 4: List IPv6 Networks and Subnets of a Tenant	To test if List IPv6 Networks and Subnets of a Tenant is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
5	IPv6	Test Case 5: Show Information of an IPv6 Network and Subnet	To test if Show Information of an IPv6 Network and Subnet is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
6	IPv6	Test Case 6: Create an IPv6 Port in Allowed Allocation Pools	To test if Create an IPv6 Port in Allowed Allocation Pools is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
7	IPv6	Test Case 7: Create an IPv6 Port without Security Groups	To test if Create an IPv6 Port without Security Groups is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
8	IPv6	Test Case 8: Create, Update and Delete an IPv6 Port	To test if Create, Update and Delete an IPv6 Port is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
9	IPv6	Test Case 9: List IPv6 Ports of a Tenant	To test if List IPv6 Ports of a Tenant is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
10	IPv6	Test Case 10: Show Information of an IPv6 Port	To test if Show Information of an IPv6 Port is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		

11	IPv6	Test Case 11: Add Multiple Interfaces for an IPv6 Router	To test if Add Multiple Interfaces for an IPv6 Router is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
12	IPv6	Test Case 12: Add and Remove an IPv6 Router Interface with port_id	To test if Add and Remove an IPv6 Router Interface with port_id is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
13	IPv6	Test Case 13: Add and Remove an IPv6 Router Interface with subnet_id	To test if Add and Remove an IPv6 Router Interface with subnet_id is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
14	IPv6	Test Case 14: Create, Update, Delete, List and Show an IPv6 Router	To test if Create, Update, Delete, List and Show an IPv6 Router is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
15	IPv6	Test Case 15: Create, Update, Delete, List and Show an IPv6 Security Group	To test if Create, Update, Delete, List and Show an IPv6 Security Group is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
16	IPv6	Test Case 16: Create, Delete and Show Security Group Rules	To test if Create, Delete and Show Security Group Rules is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
17	IPv6	Test Case 17: List All Security Groups	To test if List All Security Groups is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
18	IPv6	Test Case 18: IPv6 Address Assignment - DHCPv6 Stateless	To test if IPv6 Address Assignment - DHCPv6 Stateless is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
19	IPv6	Test Case 19: IPv6 Address Assignment - Dual Stack, DHCPv6 Stateless	To test if IPv6 Address Assignment - Dual Stack, DHCPv6 Stateless is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
20	IPv6	Test Case 20: IPv6 Address Assignment - Multiple Prefixes, DHCPv6 Stateless	To test if IPv6 Address Assignment - Multiple Prefixes, DHCPv6 Stateless is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
21	IPv6	Test Case 21: IPv6 Address Assignment - Dual Stack, Multiple Prefixes, DHCPv6 Stateless	To test if IPv6 Address Assignment - Dual Stack, Multiple Prefixes, DHCPv6 Stateless is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
22	IPv6	Test Case 22: IPv6 Address Assignment - SLAAC	To test if IPv6 Address Assignment - SLAAC is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
23	IPv6	Test Case 23: IPv6 Address Assignment - Dual Stack, SLAAC	To test if IPv6 Address Assignment - Dual Stack, SLAAC is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
24	IPv6	Test Case 24: IPv6 Address Assignment - Multiple Prefixes, SLAAC	To test if IPv6 Address Assignment - Multiple Prefixes, SLAAC is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
25	IPv6	Test Case 25: IPv6 Address Assignment - Dual Stack, Multiple Prefixes, SLAAC	To test if IPv6 Address Assignment - Dual Stack, Multiple Prefixes, SLAAC is OK.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirements: ipv6 network configuration		
26	IPv6	Test Case 26: Service VM as an IPv6 vRouter	OPNFV_YARDSTICK_TC027 To do a basic verification that IPv6 connectivity is within acceptable boundaries when ipv6 packets travel between hosts located on same or different compute blades.	Colorado Scenario: nosdn, nofeature VIM: Openstack Components: Keystone, Nova, Neutron, Glance SDN: not support SDN		

VPN

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27511

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	VPN	VPN CRUD	1. Create VPN instance and check command return code 2. Check if VPN instance is present 3. Create IETF VM interface and check return code 4. Verify IETF VM interface 5. Create VPN interface for IETF interface 6. Verify VPN interface 7. Verify FIB entry after create 8. Delete VM VPN interface 9. Verify after deleting VM VPN interface 10. Delete VPN instance 11. Verify after deleting VPN instance 12. Delete VM IETF interface 13. Verify after deleting VM IETF interface 14. Verify FIB entry after delete			
2	VPN	BGP VPN CRUD	1. Create BGPVPN 2. Create BGPVPN with malformatted route target (e.g. ASN:NN) should fail. 3. Create BGPVPN with invalid route target (e.g. 65536:0) should fail. 4. Getting the VPN list works without producing an error. 5. Updating an existing BGPVPN works. 6. Displaying parameters of an existing BGPVPN works. 7. Deleting a BGPVPN works. 8. Associating an existing BGPVPN with a Neutron network works 9. Getting the associated Neutron network works. 10. Deleting the network association works. 11. Associating an existing BGPVPN with a Neutron Router works 12. Getting the associated Neutron router works. 13. Deleting the router association works			
3	VPN	Data Center Gateway integration	Data Center Gateway integration, check if routes are correctly exchanged between SDN controller and datacenter gateway			
4	VPN	Inter-DC communication	Inter-DC communication, Check if communication between two data centers connected through an MPLS backbone works.			
5	VPN	Subnet connectivity	VPN provides connectivity between subnets. different subnets cannot reach each other unless they are connected to the same Router.	Colorado Scenario: odl_l2, bgpvpn VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone SDN: ODL Feature: no feature needed		
6	VPN	Tenant separation	VPNs enable using the same IP address ranges in different VPNs, which is an important feature for tenant separation in the DC. This test verifies if the correct VM is reached under a given IP address when IP addresses are used multiple times in the same DC.	Colorado Scenario: odl_l2, bgpvpn VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone SDN: ODL Feature: no feature needed		
7	VPN	VPN provides connectivity between subnets using router association	VPN provides connectivity between subnets using router association	Colorado Scenario: odl_l2, bgpvpn VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone SDN: ODL Feature: no feature needed		
8	VPN	A subnet with a router attached can be associated to a VPN with network association and given a floating IP	A subnet with a router attached can be associated to a VPN with network association and given a floating IP	Colorado Scenario: odl_l2, bgpvpn VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone SDN: ODL Feature: no feature needed		

Fault Management(Doctor)

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27513

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Fault management	Relaunch instance ?	When an instance fails, can the platform restart the instance automatically?			
2	Fault management	Scale-up ?	Can a new instance of a given type be launched when a certain load is hit?			
3	Fault management	Subscribe to a fault event	Listen for an instance fault , and verify that when the instance is killed we hear about it			
4	Fault management	failure notification	To test VM failure notification time. Boot a VM and create an alarm event in Ceilometer using the consumer ip. Once Doctor components are started, a failure is injected to the system, then the consumer receives a failure notification.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Additional component: Cinder, Ceilometer, Aodh, Congress, Vitrage Feature: Doctor		

KVM

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27515

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Kvm	Timer Test without workload	Measure system high resolution by using Cyclictest, getting latencies as results.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance Special Requirments: 1. BIOS setup 2. kernel configuration 3. run time environment setup refer to https://wiki.opnfv.org/display/kvm /KVM4NFV+Test++Environment		

Parser

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27517

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Parser	verify the function of Yang-to-Tosca in Parser	Offers the capability to translate yang based scriptors to tosca formate templates	VIM: Openstack not necessary, run in jumpserver Feature: no feature needed		
2	Parser	verify the function of Policy-to-Tosca in Parser	Enables policy related fields in tosca could be translated into heat orchestration template correctly	VIM: Openstack not necessary, run in jumpserver Feature: no feature needed		
3	Parser	verify the function of Tosca-to-Heat in Parser	Heat-translator call class of ToscaTemplate in tosca-parser firstly to validate and parse input yaml file, then tranlate the file into hot file	VIM: Openstack not necessary, run in jumpserver Feature: no feature needed		

virtual Traffic Classifier

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27519

ID	Type	Test Case	Description	Pre-condition & requirements	Status	References
1	VTC	opnfv_yardstick_tc020	To verify that a newly instantiated vTC is 'alive' and functional and its instantiation is correctly supported by the infrastructure	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Additional Components: Heat Special: Hardware: 1. physical node hosting the packet generator must have 2 NICs which are DPDK compatible 2. The switch used must support multicast traffic and IGMP snooping 3. The corresponding ports to which the cables are connected need to be configured as VLAN trunks using two of the VLAN IDs available for Neutron. Software: vtc, DPDK_pktgen, python-dev, python-pip, python-mock, tcpreplay, libpcap-dev, smcroute		
2	VTC	opnfv_yardstick_tc021	To verify that a newly instantiated vTC is 'alive' and functional and its instantiation is correctly supported by the infrastructure in the presence of noisy neighbours.	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Additional Components: Heat Special: Hardware: 1. physical node hosting the packet generator must have 2 NICs which are DPDK compatible 2. The switch used must support multicast traffic and IGMP snooping 3. The corresponding ports to which the cables are connected need to be configured as VLAN trunks using two of the VLAN IDs available for Neutron. Software: vtc, DPDK_pktgen, python-dev, python-pip, python-mock, tcpreplay, libpcap-dev, smcroute		

Copper

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27521

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Copper	DMZ Placement	Pause VMs running in a DMZ zone, if the image running is not allowed to run in that zone	VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone Additional Components: Ceilometer Feature: no feature needed		
2	Copper	SMTP Ingress	Identify VMs that have TCP port 25 open for ingress	VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone Additional Components: Ceilometer Feature: no feature needed		
3	Copper	Reserved Subnet	Delete any subnets created in restricted network ranges	VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone Additional Components: Ceilometer Feature: no feature needed		

Promise

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27523

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Promise	Capacity Management	Including add providers, update the capacity, and query the current capacity and utilization of a provider	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Feature: no feature needed		
2	Promise	Reservation Management	Allows a Consumer to request reservations for resource capacity (create, update, cancel, query reservations)	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Feature: no feature needed		

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
3	Promise	Allocation Management	Create an instance of specified resource(s) for immediate use utilizing capacity from the pool and destroy an existing server instance and release it back to the pool	VIM: Openstack Components: Keystone, Nova, Neutron, Glance, Cinder Feature: no feature needed		

Multisite

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27525

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Multisite	Quota Management API	This testcase includes 9 functions: 1. Update global limit for a tenant 2. Get global limit for a tenant 3. A tenant can also get the global limit by himself 4. Get defaults limits 5. Get total usage for a tenant 6. A tenant can also get the total usage by himself 7. On demand quota sync 8. Delete specific global limit for a tenant 9. Delete all kingbird global limit for a tenant	Colorado Scenario: os-nosdn-multisite-ha VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone, Glance, ceilometer SDN: not support SDN Feature: no feature needed		
2	Multisite	Quota Class API	This testcase includes 3 functions: 1. Update default quota class 2. Get default quota class 3. Delete default quota class	Colorado Scenario:os-nosdn-multisite-ha VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone, Glance, ceilometer SDN: not support SDN Feature: no feature needed		

SDN controller(ODL)

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27533

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	ODL	restconf modules	verify Restconf is OK	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		
2	ODL	neutron reachability	Get the complete list of networks Get the complete list of subnets Get the complete list of ports	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		
3	ODL	neutron networks	Checking Network created in OpenStack are pushed to OpenDaylight	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		
4	ODL	neutron subnets	Checking Subnets created in OpenStack are pushed to OpenDaylight	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		
5	ODL	neutron ports	Checking Port created in OpenStack are pushed to OpenDaylight	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		
6	ODL	neutron delete ports	Checking Port deleted in OpenStack are deleted also in OpenDaylight	Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed		

| 7 | ODL | neutron delete subnets | Checking Subnets deleted in OpenStack are deleted also in OpenDaylight | Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed | | |
| 8 | ODL | neutron delete networks | Checking Network deleted in OpenStack are deleted also in OpenDaylight | Colorado Scenario: odl_l2 or odl_l3 VIM: Openstack Components: Neutron, ODL Feature: no feature needed | | |

SDN controller(ONOS)

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27535

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	ONOS	Virtual Network NBI Test -Network Post	Belonged to tier FUNCvirNetNB, this is create Network northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Data via HTTP, 3) Get Data via HTTP, 4) Compare Send Id and Get Id	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
2	ONOS	Network Update	Belonged to tier FUNCvirNetNB, this is update Network northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Data via HTTP, 3) Update Data via HTTP, 4) Get Data via HTTP, 5) Compare Update data	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
3	ONOS	Network Delete	Belonged to tier FUNCvirNetNB, this is delete Network northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Data via HTTP, 3) Delete Data via HTTP, 4) Get Data is NULL	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
4	ONOS	Subnet Post	Belonged to tier FUNCvirNetNB, this is create Subnet northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP, 4) Get Subnet Data via HTTP, 5) Compare Post Subnet Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
5	ONOS	Subnet Update	Belonged to tier FUNCvirNetNB, this is update Subnet northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP, 4) Update Subnet Data via HTTP, 5) Get Subnet Data via HTTP, 6) Compare Subnet Data, 7) Delete Subnet via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
6	ONOS	Subnet Delete	Belonged to tier FUNCvirNetNB, this is delete Subnet northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP, 4) Delete Subnet Data via HTTP, 5) Get Subnet Data is NULL	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
7	ONOS	Port Post	Belonged to tier FUNCvirNetNB, this is create Virtualport northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP(Post port need post subnet), 4) Post Port Data via HTTP, 5) Get Port Data via HTTP, 6) Compare Post Port Data, 7) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		

8	ONOS	Port Update	Belonged to tier FUNCvirNetNB, this is update Virtualport northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP(Post port need post subnet), 4) Post Port Data via HTTP, 5) Update Port Data via HTTP, 6) Get Port Data via HTTP, 7) Compare Post Port Data, 8) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
9	ONOS	Port Delete	Belonged to tier FUNCvirNetNB, this is delete Virtualport northbound test, in order to determine if North bound can handle the request, including steps: 1) Generate Post Data, 2) Post Network Data via HTTP(Post Subnet need post network), 3) Post Subnet Data via HTTP(Post port need post subnet), 4) Post Port Data via HTTP, 5) Delete Port Data via HTTP, 6) Get Port Data via HTTP, 7) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
10	ONOS	Router Post	Belonged to tier FUNCvirNetNBL3, this is create Router northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post Router need post network), 2) Post Router Data via HTTP, 3) Get Router Data via HTTP, 4) Compare Post Router Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
11	ONOS	Router Update	Belonged to tier FUNCvirNetNBL3, this is update Router northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post Router need post network), 2) Post Router Data via HTTP, 3) Update Router Data via HTTP, 4) Get Router Data via HTTP, 5) Compare Router Data, 6) Delete Router via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
12	ONOS	Router Delete	Belonged to tier FUNCvirNetNBL3, this is delete Router northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post Router need post network), 2) Post Router Data via HTTP, 3) Delete Router Data via HTTP, 4) Get Router Data is NULL	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
13	ONOS	RouterInterface Post	Belonged to tier FUNCvirNetNBL3, this is create RouterInterface northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network), 2) Post Subnet Data via HTTP(Post port need post subnet), 3) Post Port Data via HTTP, 4) Post Router Data via HTTP, 5) Put RouterInterface Data via HTTP, 6) Get RouterInterface Data via HTTP, 7) Compare Post Port Data, 8) Del RouterInterface Data via HTTP, 9) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
14	ONOS	RouterInterface Delete	Belonged to tier FUNCvirNetNBL3, this is delete RouterInterface northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network), 2) Post Subnet Data via HTTP(Post port need post subnet), 3) Post Port Data via HTTP, 4) Post Router Data via HTTP, 5) Post RouterInterface Data via HTTP, 6) Del RouterInterface Data via HTTP, 7) Delete Port Data via HTTP, 8) Get Port Data is NULL, 9) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
15	ONOS	FloatingIp Post	Belonged to tier FUNCvirNetNBL3, this is create Floatingip northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Get Port Data via HTTP 6) Post FloatingIp Data via HTTP 7) Get Port Data via HTTP 8) Get FloatingIp Data via HTTP 9) Get FloatingIp Data via HTTP 10) Compare Post FloatingIp Data 11) Post FloatingIp Clean Data via HTTP 12) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		

16	ONOS	FloatingIp Update	Belonged to tier FUNCvirNetNBL3, this is updateFloatingip northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Post FloatingIp Data via HTTP 6) Post Delete Data via HTTP 7) Post NewPort Data via HTTP 8) Post NewFloatingIp Data via HTTP 9) Get NewFloatingIp Data via HTTP 10) Compare Post FloatingIp Data 11) Post FloatingIp Clean Data via HTTP 12) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
17	ONOS	FloatingIp Delete	Belonged to tier FUNCvirNetNBL3, this is delete Floatingip northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Post FloatingIp Data via HTTP 6) Post FloatingIp Clean Data via HTTP 7) Get FloatingIp Data is NULL 8) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
18	ONOS	Gateway Post	Belonged to tier FUNCvirNetNBL3, this is create Gateway northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Get Gateway Data via HTTP 6) Compare Post Gateway Data 7) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
19	ONOS	Gateway Update	Belonged to tier FUNCvirNetNBL3, this is update Gateway northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Post New Router Data via HTTP 6) Get Gateway Data via HTTP 7) Compare Post Gateway Data 8) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		
20	ONOS	Gateway Delete	Belonged to tier FUNCvirNetNBL3, this is delete Gateway northbound test, in order to determine if North bound can handle the request, including steps: 1) Post Network Data via HTTP(Post port need post network) 2) Post Subnet Data via HTTP(Post port need post subnet) 3) Post Port Data via HTTP 4) Post Router Data via HTTP 5) Post Del Gateway Data via HTTP 6) Get Gateway Data via HTTP 7) If Gateway Data is NULL 8) Clean Data via HTTP	Colorado Scenario: ONOS VIM: Openstack Components: Neutron, ONOSrest Feature: no feature needed		

Open source VNF running on NFVI

The Gerrit reference for this test area: https://gerrit.opnfv.org/gerrit/#/c/27539

ID	Type	Test Case	Description	Pre-condition & requirements	Status	Gerrit References
1	Open Source VNF	cloudify _ims	This test case deploys an OpenSource vIMS solution from Clearwater using the Cloudify orchestrator. It also runs some signaling traffic.	VIM: Openstack Components: Nova, Cinder, Neutron, KeyStone, Glance Special Requirements: Cloudify		