

Test nova compute Rack 1 KVM 4 (with RHT patch 1093416) with VMEM cinder driver (RC5)

nova_detach_packages.tar.gz

/etc/nova/nova.conf

```
#
# Options defined in nova.virt.libvirt.volume
#

# number of times to rescan iSCSI target to find volume
# (integer value)
#num_iscsi_scan_tries=3
num_iscsi_scan_tries=5

[root@lsdna004xgkvm00 RHOS-patch]# rpm -qa | grep nova
openstack-nova-common-2013.2.2-2_1093416.el6ost.noarch
python-novaclient-2.15.0-3.el6ost.noarch
python-nova-2013.2.2-2_1093416.el6ost.noarch
openstack-nova-compute-2013.2.2-2_1093416.el6ost.noarch
[root@lsdna004xgkvm00 RHOS-patch]#
```

```
[root@lsdna004xgkvm00 ~]# /usr/lib/python2.6/site-packages/nova/virt/libvirt/volume.py
```

```
946     # The /dev/disk/by-path/... node is not always present immediately
947     # We only need to find the first device. Once we see the first device
948     # multipath will have any others.
949     def _wait_for_device_discovery(host_devices, mount_device):
950         linuxscsi.rescan_hosts(hbas)
951         tries = self.tries
952         for device in host_devices:
953             LOG.debug_("Looking for Fibre Channel dev %(device)s",
954                       {'device': device})
955             if os.path.exists(device):
956                 self.host_device = device
957                 # get the /dev/sdX device. This is used
958                 # to find the multipath device.
959                 self.device_name = os.path.realpath(device)
960                 raise loopingcall.LoopingCallDone()
961
962         if self.tries >= CONF.num_iscsi_scan_tries:
963             msg = _("Fibre Channel device not found.")
964             raise exception.NovaException(msg)
```

```
[root@lsdna004xgkvm00 ~]# multipath -ll
mpatho (SVIOLIN_SAN_ARRAY_DE88A3358A4E9765) dm-6 VIOLIN,SAN ARRAY
size=42G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:0:3 sdg 8:96 active ready running
   |- 7:0:1:3 sdi 8:128 active ready running
   |- 8:0:1:3 sdk 8:160 active ready running
   `-- 8:0:0:3 sdj 8:144 active ready running
mpathn (SVIOLIN_SAN_ARRAY_DE88A335DC600DE7) dm-5 VIOLIN,SAN ARRAY
size=45G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:1:2 sdd 8:48 active ready running
   |- 7:0:0:2 sdc 8:32 active ready running
   |- 8:0:1:2 sdf 8:80 active ready running
   `-- 8:0:0:2 sde 8:64 active ready running
mpathh (SVIOLIN_SAN_ARRAY_DE88A3356ED1B5DE) dm-16 VIOLIN,SAN ARRAY
size=1.0T features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:0:1 sdb 8:16 active ready running
   |- 7:0:1:1 sdh 8:112 active ready running
   |- 8:0:0:1 sdn 8:208 active ready running
   `-- 8:0:1:1 sdt 65:48 active ready running
[root@lsdna004xgkvm00 ~]#
```

```
[root@lsdna007xgoss1 cinder]# /etc/cinder/cinder.conf
```

```
# The maximum number of times to rescan targets to find volume
# (integer value)
#num_volume_device_scan_tries=3
num_volume_device_scan_tries=5
```

```
cinder/brick/initiator/connector.py
```

```
599         # The /dev/disk/by-path/... node is not always present immediately
600         # We only need to find the first device. Once we see the first device
601         # multipath will have any others.
602         def _wait_for_device_discovery(host_devices):
603             self._linuxfc.rescan_hosts(hbas)
604             tries = self.tries
605             for device in host_devices:
606                 LOG.debug(_("Looking for Fibre Channel dev %(device)s"),
607                           {'device': device})
608                 if os.path.exists(device):
609                     self.host_device = device
610                     # get the /dev/sdX device. This is used
611                     # to find the multipath device.
612                     self.device_name = os.path.realpath(device)
613                     raise loopingcall.LoopingCallDone()
614
```

```
[root@lsdna007xgoss1 ~]# multipath -ll
[root@lsdna007xgoss1 ~]#
```

```
[root@lsdna002xgosc1 CINDER_TEST]# ./step1.sh
```

```
+ cinder create --image-id 88bf5791-6a0f-46f2-ad51-b01aeb215930 --volume-type violin --display-name VW-Jetta 63
```

Property	Value
attachments	[]
availability_zone	nova
bootable	false
created_at	2014-05-16T18:07:20.897224
display_description	None
display_name	VW-Jetta
id	ebb7f738-4aca-4bb6-a40b-8a1c04a6d2b6
image_id	88bf5791-6a0f-46f2-ad51-b01aeb215930
metadata	{}
size	63
snapshot_id	None
source_volid	None
status	creating
volume_type	violin

```
+ cinder create --image-id 88bf5791-6a0f-46f2-ad51-b01aeb215930 --volume-type violin --display-name VW-Passat 63
```

Property	Value
attachments	[]
availability_zone	nova
bootable	false
created_at	2014-05-16T18:07:21.726881
display_description	None
display_name	VW-Passat
id	32e51cf9-f7fa-4cf2-85b1-569f2f097684
image_id	88bf5791-6a0f-46f2-ad51-b01aeb215930
metadata	{}
size	63
snapshot_id	None
source_volid	None
status	creating
volume_type	violin

```
+ cinder create --image-id 88bf5791-6a0f-46f2-ad51-b01aeb215930 --volume-type violin --display-name VW-GTI 63
```

Property	Value
attachments	[]
availability_zone	nova
bootable	false
created_at	2014-05-16T18:07:22.445805

display_description	None
display_name	VW-GTI
id	52f2c0fd-7034-4141-8a9e-5a1713f203ba
image_id	88bf5791-6a0f-46f2-ad51-b01aeb215930
metadata	{}
size	63
snapshot_id	None
source_volid	None
status	creating
volume_type	violin

```
+ cinder create --image-id 88bf5791-6a0f-46f2-ad51-b01aeb215930 --volume-type violin --display-name VW-Beetle 63
```

Property	Value
attachments	[]
availability_zone	nova
bootable	false
created_at	2014-05-16T18:07:23.255549
display_description	None
display_name	VW-Beetle
id	9f4552a8-ce9b-499f-96fb-bf8aa0901d18
image_id	88bf5791-6a0f-46f2-ad51-b01aeb215930
metadata	{}
size	63
snapshot_id	None
source_volid	None
status	creating
volume_type	violin

```
+ cinder create --image-id 88bf5791-6a0f-46f2-ad51-b01aeb215930 --volume-type violin --display-name VW-Golf 63
```

Property	Value
attachments	[]
availability_zone	nova
bootable	false
created_at	2014-05-16T18:07:23.945783
display_description	None
display_name	VW-Golf
id	f627f9c2-da2d-42f2-af76-86e1bf9179e3
image_id	88bf5791-6a0f-46f2-ad51-b01aeb215930
metadata	{}
size	63
snapshot_id	None
source_volid	None
status	creating
volume_type	violin

```
[root@lsdna002xgosc1 CINDER_TEST]#
```

```
[root@lsdna002xgosc1 CINDER_TEST]# cinder list | grep VW
| 32e51cf9-f7fa-4cf2-85b1-569f2f097684 | downloading | VW-Passat | 63 | violin | false |
|
| 52f2c0fd-7034-4141-8a9e-5a1713f203ba | downloading | VW-GTI | 63 | violin | false |
|
| 9f4552a8-ce9b-499f-96fb-bf8aa0901d18 | downloading | VW-Beetle | 63 | violin | false |
|
| ebbf7f38-4aca-4bb6-a40b-8a1c04a6d2b6 | downloading | VW-Jetta | 63 | violin | false |
|
| f627f9c2-da2d-42f2-af76-86e1bf9179e3 | downloading | VW-Golf | 63 | violin | false |
|
[root@lsdna002xgosc1 CINDER_TEST]#
```

```
[root@lsdna002xgosc1 CINDER_TEST]# cinder list | grep VW
| 32e51cf9-f7fa-4cf2-85b1-569f2f097684 | available | VW-Passat | 63 | violin | true |
|
| 52f2c0fd-7034-4141-8a9e-5a1713f203ba | available | VW-GTI | 63 | violin | true |
|
| 9f4552a8-ce9b-499f-96fb-bf8aa0901d18 | available | VW-Beetle | 63 | violin | true |
|
| ebbf7f38-4aca-4bb6-a40b-8a1c04a6d2b6 | available | VW-Jetta | 63 | violin | true |
|
| f627f9c2-da2d-42f2-af76-86e1bf9179e3 | available | VW-Golf | 63 | violin | true |
|
[root@lsdna002xgosc1 CINDER_TEST]#
```

Stale devices left behind on cinder volume server

```
[root@lsdna007xgoss1 ~]# multipath -ll
mpathe (SVIOLIN_SAN_ARRAY_DE88A33509E8F71B) dm-11 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=enabled
  |- 7:0:0:3 sdj 8:144 failed faulty running
  |- 8:0:0:3 sdp 8:240 failed faulty running
  `-- 8:0:1:3 sds 65:32 failed faulty running
mpathd (SVIOLIN_SAN_ARRAY_DE88A33594BAE0AA) dm-10 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=enabled
  |- 7:0:0:5 sdl 8:176 failed faulty running
  |- 8:0:0:5 sdr 65:16 failed faulty running
  `-- 8:0:1:5 sdu 65:64 failed faulty running
mpathc (SVIOLIN_SAN_ARRAY_DE88A335AF779C2D) dm-4 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=enabled
  |- 7:0:0:4 sdk 8:160 failed faulty running
  |- 8:0:0:4 sdq 65:0 failed faulty running
  `-- 8:0:1:4 sdt 65:48 failed faulty running
mpathb (SVIOLIN_SAN_ARRAY_DE88A33513B142AA) dm-3 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=enabled
```

```

|- 7:0:0:1 sdb 8:16 failed faulty running
|- 8:0:1:1 sdh 8:112 failed faulty running
`- 8:0:0:1 sdf 8:80 failed faulty running
mpatha (SVIOLIN_SAN_ARRAY_DE88A3351BC75061) dm-2 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=enabled
|- 7:0:0:2 sdc 8:32 failed faulty running
|- 8:0:0:2 sdg 8:96 failed faulty running
`- 8:0:1:2 sdi 8:128 failed faulty running
[root@lsdna007xgoss1 ~]#

```

```

[root@lsdna004xgkvm00 ~]# multipath -ll
mpatho (SVIOLIN_SAN_ARRAY_DE88A3358A4E9765) dm-6 VIOLIN,SAN ARRAY
size=42G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
|- 7:0:0:3 sdg 8:96 active ready running
|- 7:0:1:3 sdi 8:128 active ready running
|- 8:0:1:3 sdk 8:160 active ready running
`- 8:0:0:3 sdj 8:144 active ready running
mpathn (SVIOLIN_SAN_ARRAY_DE88A335DC600DE7) dm-5 VIOLIN,SAN ARRAY
size=45G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
|- 7:0:1:2 sdd 8:48 active ready running
|- 7:0:0:2 sdc 8:32 active ready running
|- 8:0:1:2 sdf 8:80 active ready running
`- 8:0:0:2 sde 8:64 active ready running
mpathh (SVIOLIN_SAN_ARRAY_DE88A3356ED1B5DE) dm-16 VIOLIN,SAN ARRAY
size=1.0T features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
|- 7:0:0:1 sdb 8:16 active ready running
|- 7:0:1:1 sdh 8:112 active ready running
|- 8:0:0:1 sdn 8:208 active ready running
`- 8:0:1:1 sdt 65:48 active ready running
[root@lsdna004xgkvm00 ~]#

```

```

[root@lsdna002xgosc1 CINDER_TEST]# nova boot --flavor m1.small --availability-zone sub-zone --boot-volume 32e51cf9-f7fa-4cf2-85b1-569f2f097684 --nic net-id=690990d7-20a5-4689-8a13-7aaf84bbc2e6 A2

```

Property	Value
OS-EXT-STS:task_state	scheduling
image	Attempt to boot from volume - no image supplied
OS-EXT-STS:vm_state	building
OS-EXT-SRV-ATTR:instance_name	instance-000009d7
OS-SRV-USG:launched_at	None
flavor	m1.small
id	8a303b6d-8032-4b6f-94ef-0ed51b553c5c
security_groups	[[{'u'name': u'default'}]]
user_id	88c8ec5a4fb34de1bc5fac8aa42befa7
OS-DCF:diskConfig	MANUAL
accessIPv4	

```
| accessIPv6 | |
| progress | 0 |
| OS-EXT-STS:power_state | 0 |
| OS-EXT-AZ:availability_zone | nova |
| config_drive | |
| status | BUILD |
| updated | 2014-05-16T21:45:03Z |
| hostId | |
| OS-EXT-SRV-ATTR:host | None |
| OS-SRV-USG:terminated_at | None |
| key_name | None |
| OS-EXT-SRV-ATTR:hypervisor_hostname | None |
| name | A2 |
| adminPass | 54i6Gk9chDio |
| tenant_id | 525c7ad0b5184ce4b64dc8e02e9c74d0 |
| created | 2014-05-16T21:45:03Z |
| os-extended-volumes:volumes_attached | [{u'id': u'32e51cf9-f7fa-4cf2-85b1-569f2f097684'}] |
| metadata | {} |
```

```
+-----+
[root@lsdna002xgosc1 CINDER_TEST]#
```

```
[root@lsdna002xgosc1 CINDER_TEST]# nova list
```

```
+-----+-----+-----+-----+-----+-----+
| ID | Name | Status | Task State | Power State | Networks |
+-----+-----+-----+-----+-----+-----+
| 8a303b6d-8032-4b6f-94ef-0ed51b553c5c | A2 | ACTIVE | None | Running | testproject-net=192.168.10.4 |
+-----+-----+-----+-----+-----+-----+
```

```
[root@lsdna002xgosc1 CINDER_TEST]#
```

```
[root@lsdna004xgkvm00 ~]# multipath -ll
```

```
mpatho (SVIOLIN_SAN_ARRAY_DE88A3358A4E9765) dm-6 VIOLIN,SAN ARRAY
size=42G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:0:3 sdg 8:96 active ready running
   |- 7:0:1:3 sdi 8:128 active ready running
   |- 8:0:1:3 sdk 8:160 active ready running
   `-- 8:0:0:3 sdj 8:144 active ready running
mpathn (SVIOLIN_SAN_ARRAY_DE88A335DC600DE7) dm-5 VIOLIN,SAN ARRAY
size=45G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:1:2 sdd 8:48 active ready running
   |- 7:0:0:2 sdc 8:32 active ready running
   |- 8:0:1:2 sdf 8:80 active ready running
   `-- 8:0:0:2 sde 8:64 active ready running
mpathv (SVIOLIN_SAN_ARRAY_DE88A33513B142AA) dm-7 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
   |- 7:0:1:4 sdm 8:192 active ready running
   |- 7:0:0:4 sdl 8:176 active ready running
   |- 8:0:1:4 sdp 8:240 active ready running
   `-- 8:0:0:4 sdo 8:224 active ready running
```

```

mpathhh (SVIOLIN_SAN_ARRAY_DE88A3356ED1B5DE) dm-16 VIOLIN,SAN ARRAY
size=1.0T features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
  |- 7:0:0:1 sdb 8:16 active ready running
  |- 7:0:1:1 sdh 8:112 active ready running
  |- 8:0:0:1 sdn 8:208 active ready running
  `-- 8:0:1:1 sdt 65:48 active ready running
[root@lsdna004xgkvm00 ~]#

```

```

[root@lsdna002xgosc1 CINDER_TEST]# nova list
+-----+-----+-----+-----+-----+-----+
| ID                                     | Name           | Status | Task State | Power State | Networks          |
+-----+-----+-----+-----+-----+-----+
| 8a303b6d-8032-4b6f-94ef-0ed51b553c5c | A2             | ACTIVE | deleting   | Running     | testproject-net=192.168.10.4 |
+-----+-----+-----+-----+-----+-----+

```

```

[root@lsdna002xgosc1 CINDER_TEST]# nova list | grep A2
[root@lsdna002xgosc1 CINDER_TEST]#

```

```

[root@lsdna004xgkvm00 ~]# multipath -ll
mpatho (SVIOLIN_SAN_ARRAY_DE88A3358A4E9765) dm-6 VIOLIN,SAN ARRAY
size=42G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
  |- 7:0:0:3 sdg 8:96 active ready running
  |- 7:0:1:3 sdi 8:128 active ready running
  |- 8:0:1:3 sdk 8:160 active ready running
  `-- 8:0:0:3 sdj 8:144 active ready running
mpathn (SVIOLIN_SAN_ARRAY_DE88A335DC600DE7) dm-5 VIOLIN,SAN ARRAY
size=45G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
  |- 7:0:1:2 added 8:48 active ready running
  |- 7:0:0:2 sdc 8:32 active ready running
  |- 8:0:1:2 sdf 8:80 active ready running
  `-- 8:0:0:2 sde 8:64 active ready running
mpathv (SVIOLIN_SAN_ARRAY_DE88A33513B142AA) dm-7 VIOLIN,SAN ARRAY
size=63G features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=0 status=active
  |- 7:0:1:4 sdm 8:192 active faulty running
  |- 7:0:0:4 sdl 8:176 active faulty running
  |- 8:0:1:4 sdp 8:240 active faulty running
  `-- 8:0:0:4 sdo 8:224 active faulty running
mpathhh (SVIOLIN_SAN_ARRAY_DE88A3356ED1B5DE) dm-16 VIOLIN,SAN ARRAY
size=1.0T features='0' hwhandler='0' wp=rw
`-+- policy='round-robin 0' prio=1 status=active
  |- 7:0:0:1 sdb 8:16 active ready running
  |- 7:0:1:1 sdh 8:112 active ready running
  |- 8:0:0:1 sdn 8:208 active ready running
  `-- 8:0:1:1 sdt 65:48 active ready running
[root@lsdna004xgkvm00 ~]#

```