

OpenNebula - Feature #3053

Multi-Queue virtio-scsi

07/16/2014 03:03 AM - ☐ ☐ ☐

Status:	Closed	Start date:	07/16/2014
Priority:	Normal	Due date:	
Assignee:	Javi Fontan	% Done:	0%
Category:	Drivers - VM	Estimated time:	0.00 hour
Target version:	Release 5.4	Pull request:	
Resolution:	fixed		
Description			
<p>Multi-queue virtio-scsi provides improved storage performance and scalability in the virtio-scsi driver. It enables each virtual CPU to have a separate queue and interrupt to use without affecting other vCPUs.</p> <p>Multi-queue virtio-scsi is disabled by default on Red Hat Enterprise Linux 7.</p> <p>To enable multi-queue virtio-scsi support in the guest, add the following to the guest XML configuration, where N is the total number of vCPU queues:</p> <pre><controller type='scsi' index='0' model='virtio-scsi'> <driver queues='N' /> </controller></pre>			
Related issues:			
Related to Feature # 3060: trim/discard for Ceph RBD		Closed	07/17/2014

Associated revisions

Revision 93f078d1 - 05/17/2017 09:48 AM - Javi Fontan

F #3053: Add support for virtio-scsi controller

Revision 8e3706fe - 05/17/2017 10:01 AM - Javi Fontan

F #3053: add virtio_scsi to defaults file

Revision 05511e5c - 05/17/2017 10:56 AM - Javi Fontan

F #3053: add virtio-scsi controller when queues are specified

Revision e164fde8 - 05/17/2017 01:24 PM - Javi Fontan

F #3053: add explicit address to scsi drives

By default scsi drives increase the unit part of the address. This causes problems in linux as the devices are not created in order.

Setting the target forces the order to be maintained.

https://bugzilla.redhat.com/show_bug.cgi?id=1200049

F #3053 Added virtio-scsi Queues input in OS Booting (update VM Template)

History

#1 - 07/16/2014 03:05 AM - [redacted]

XML example:

```
<controller type='scsi' index='0' model='virtio-scsi'>
  <driver queues='N' />
</controller>
```

#2 - 04/21/2017 03:25 AM - Florian Heigl

Could someone look at this? it has major performance impact and virtio-scsi is also needed for trim to work as far as I know. (I can set "unmap" now but not sure that'd be enough)

#3 - 04/21/2017 01:59 PM - Javi Fontan

You can enable virtio-scsi adding this RAW parameter to the template or to defaults kvm driver file:

```
RAW=[
  DATA="<devices><controller type='scsi' index='0' model='virtio-scsi'></controller></devices>",
  TYPE="kvm" ]
```

You can add the disks in SCSI bus and use trim.

#4 - 05/18/2017 08:56 AM - Javi Fontan

- Category set to Drivers - VM
- Assignee set to Javi Fontan
- Target version set to Release 5.4

#5 - 05/23/2017 08:20 AM - Javi Fontan

- Tracker changed from Request to Feature
- Status changed from Pending to Closed
- Resolution set to fixed

libvirt already adds a virtio-scsi controller if there is none and a scsi disk is added. There's a new option to specify the number of queues:

```
FEATURES = [
  VIRTIO_SCSI_QUEUES = 4
]
```

If this parameter is specified and greater than 0 a controller is added with that amount of queues.

#6 - 05/24/2017 04:14 PM - Javi Fontan

- Related to Feature #3060: trim/discard for Ceph RBD added