

## OpenNebula - Bug #3832

### Scheduler: Resuming a stopped VM tries to check IMAGE datastore capacity

06/09/2015 07:11 PM - Roy Keene

<b>Status:</b>	Closed	<b>Start date:</b>	06/09/2015
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>	Carlos Martín	<b>% Done:</b>	90%
<b>Category:</b>	Scheduler	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Release 4.14	<b>Pull request:</b>	
<b>Resolution:</b>	fixed		
<b>Affected Versions:</b>	OpenNebula 4.12		

#### Description

I stopped a VM that is using RBD disks in a shared datastore.

When I tried to resume the VM it stayed in a pending state and would not be scheduled because the scheduler is attempting to check for free space in the image datastore of the VM.

```
Tue Jun 9 18:25:30 2015 [Z0][SCHED][I]: Getting scheduled actions information. Total time: 0.00479594s
```

```
Tue Jun 9 18:25:30 2015 [Z0][VM][D]: Found 1 pending/rescheduling VMs.
```

```
Tue Jun 9 18:25:31 2015 [Z0][HOST][D]: Discovered 1 enabled hosts.
```

```
Tue Jun 9 18:25:31 2015 [Z0][SCHED][I]: Getting VM and Host information. Total time: 0.00683541s
```

```
Tue Jun 9 18:25:31 2015 [Z0][SCHED][D]: Match-making results for VM 74:
```

```
Cannot schedule VM, image datastore does not have enough capacity.
```

```
Tue Jun 9 18:25:31 2015 [Z0][SCHED][D]: Match Making statistics:
```

```
Number of VMs: 1
```

```
Total time: 0s
```

```
Total Match time: 0s
```

```
Total Ranking Time: 0s
```

```
Tue Jun 9 18:25:31 2015 [Z0][SCHED][D]: Dispatching VMs to hosts:
```

```
VMID  Host  System DS
```

```
-----
```

```
Tue Jun 9 18:25:31 2015 [Z0][SCHED][I]: Dispatching VMs to hosts. Total time: 1.3103e-05s
```

#### VIRTUAL MACHINE 74 INFORMATION

```
ID      : 74
```

```
NAME    : sqltest
```

```
USER    : user
```

```
GROUP   : group
```

```
STATE   : PENDING
```

```
LCM_STATE : LCM_INIT
```

```
RESCHED : No
```

```
START TIME : 06/04 20:34:47
```

```
END TIME  : -
```

```
DEPLOY ID : one-74
```

#### VIRTUAL MACHINE MONITORING

```
USED MEMORY : 0K
```

```
USED CPU    : 0
```

```
NET_TX     : 3.5G
```

NET\_RX : 1.8G

#### PERMISSIONS

OWNER : um-  
GROUP : ---  
OTHER : ---

#### VM DISKS

ID	TARGET	IMAGE	TYPE	SAVE	SAVE_AS
0	hda	disk1	rbd	NO	-
1	vda	disk2	rbd	NO	-

#### VM NICs

ID	NETWORK	VLAN	BRIDGE	IP	MAC
0	Network2	yes	br2	10.xx.x.x0	02:00:0a:60:01:14

#### VIRTUAL MACHINE HISTORY

SEQ	HOST	ACTION	DS	START	TIME	PROLOG
0	node4	none	0	06/04 20:35:58	3d 15h44m	0h00m04s
1	node4	none	0	06/08 12:25:02	0d 00h50m	0h00m00s
2	node4	stop	0	06/08 13:22:46	1d 02h41m	0h00m00s

#### USER TEMPLATE

ERROR="Mon Jun 8 12:26:19 2015 : Error attaching new VM Disk: Could not attach rbd (hdb) to one-74"  
HYPERVISOR="kvm"  
LOGO="images/logos/windowsxp.png"  
SUNSTONE\_CAPACITY\_SELECT="YES"  
SUNSTONE\_NETWORK\_SELECT="YES"

#### VIRTUAL MACHINE TEMPLATE

AUTOMATIC\_REQUIREMENTS="!(PUBLIC\_CLOUD = YES)"  
CPU="0.2"  
DISK=[  
 CEPH\_HOST="mon-1 mon-2 mon-3",  
 CLONE="YES",  
 CLONE\_TARGET="SELF",  
 DATASTORE="new",  
 DATASTORE\_ID="100",  
 DEV\_PREFIX="hd",  
 DISK\_ID="0",  
 IMAGE="disk1",  
 IMAGE\_ID="31",  
 IMAGE\_UNAME="user",  
 LN\_TARGET="NONE",  
 READONLY="NO",  
 SAVE="NO",  
 SIZE="102400",  
 SOURCE="rbd/one-31",  
 TARGET="hda",  
 TM\_MAD="ceph",  
 TYPE="RBD" ]  
DISK=[  
 CEPH\_HOST="mon-1 mon-2 mon-3",

```

CLONE="YES",
CLONE_TARGET="SELF",
DATASTORE="new",
DATASTORE_ID="100",
DEV_PREFIX="vd",
DISK_ID="1",
IMAGE="disk2",
IMAGE_ID="32",
IMAGE_UNAME="user",
LN_TARGET="NONE",
READONLY="NO",
SAVE="NO",
SELECTED_RESOURCE_ID_ATTACH_DISK="32",
SIZE="307200",
SOURCE="rbd/one-32",
TARGET="vda",
TM_MAD="ceph",
TYPE="RBD" ]
GRAPHICS=[
LISTEN="0.0.0.0",
PORT="5974",
TYPE="VNC" ]
MEMORY="4096"
NIC=[
AR_ID="0",
BRIDGE="br2",
IP="10.xx.x.x0",
MAC="02:00:0a:60:01:14",
MODEL="e1000",
NETWORK="Network2",
NETWORK_ID="1",
NETWORK_UNAME="oneadmin",
NIC_ID="0",
VLAN="YES",
VLAN_ID="xxx" ]
NIC_DEFAULT=[
MODEL="e1000" ]
TEMPLATE_ID="32"
VCPU="2"
VMID="74"

```

Looking through the scheduler it seems to be getting stuck here:

```

src/scheduler/src/sched/Scheduler.cc: 734 //-----
src/scheduler/src/sched/Scheduler.cc: 735 // Test Image Datastore capacity, but not for migrations
src/scheduler/src/sched/Scheduler.cc: 736 //-----
src/scheduler/src/sched/Scheduler.cc: 737 if (!vm->is_resched())
src/scheduler/src/sched/Scheduler.cc: 738 {
src/scheduler/src/sched/Scheduler.cc: 739     if (vm->test_image_datastore_capacity(img_dspool) == false)
src/scheduler/src/sched/Scheduler.cc: 740     {
src/scheduler/src/sched/Scheduler.cc: 741         if (vm->is_public_cloud()) //No capacity needed for public cloud

```

```

src/scheduler/src/sched/Scheduler.cc: 742      {
src/scheduler/src/sched/Scheduler.cc: 743          vm->set_only_public_cloud();
src/scheduler/src/sched/Scheduler.cc: 744      }
src/scheduler/src/sched/Scheduler.cc: 745      else
src/scheduler/src/sched/Scheduler.cc: 746      {
src/scheduler/src/sched/Scheduler.cc: 747          log_match(vm->get_oid(), "Cannot schedule VM, image datastore "
src/scheduler/src/sched/Scheduler.cc: 748              "does not have enough capacity.");
src/scheduler/src/sched/Scheduler.cc: 749          continue;
src/scheduler/src/sched/Scheduler.cc: 750      }
src/scheduler/src/sched/Scheduler.cc: 751  }
src/scheduler/src/sched/Scheduler.cc: 752  }

```

Simply commenting this section out however did not fix the problem. After recompiling and restarting the scheduler it still did not schedule the VM.

It did quit displaying the error message, but did not actually do anything about the VM.

The output became:

```

Tue Jun 9 18:47:56 2015 [Z0][SCHED][I]: Getting scheduled actions information. Total time: 0.00433847s
Tue Jun 9 18:47:56 2015 [Z0][VM][D]: Found 1 pending/rescheduling VMs.
Tue Jun 9 18:47:57 2015 [Z0][HOST][D]: Discovered 1 enabled hosts.
Tue Jun 9 18:47:57 2015 [Z0][SCHED][I]: Getting VM and Host information. Total time: 0.00669545s
Tue Jun 9 18:47:57 2015 [Z0][SCHED][D]: Match Making statistics:
    Number of VMs: 1
    Total time: 0s
    Total Match time: 5.8248e-05s
    Total Ranking Time: 2.9626e-05s
Tue Jun 9 18:47:57 2015 [Z0][SCHED][D]: Dispatching VMs to hosts:
    VMID  Host  System DS
    -----
Tue Jun 9 18:47:57 2015 [Z0][SCHED][I]: Dispatching VMs to hosts. Total time: 1.4495e-05s

```

## Associated revisions

**Revision c9ccd944 - 07/29/2015 04:23 PM - Carlos Martín**

Bug #3832: Scheduler detects VMs to be resumed instead of first deployments

**Revision 29045fd1 - 07/30/2015 08:17 AM - Carlos Martín**

Bug #3832: Cleanup xpath calls in scheduler

## History

**#1 - 06/10/2015 08:29 AM - Ruben S. Montero**

- *Target version set to Release 4.14*

**#2 - 07/13/2015 11:20 AM - Ruben S. Montero**

- *Assignee set to Carlos Martín*

**#3 - 07/29/2015 04:58 PM - Carlos Martín**

- *Status changed from Pending to New*

- *% Done changed from 0 to 90*

**#4 - 07/30/2015 09:06 AM - Ruben S. Montero**

- *Status changed from New to Closed*

- *Resolution set to fixed*