

## OpenNebula - Feature #4584

### Add support for SDRS clustered vCenter datastores

06/20/2016 04:09 PM - OpenNebula Systems Support Team

<b>Status:</b>	Closed	<b>Start date:</b>	06/20/2016
<b>Priority:</b>	Normal	<b>Due date:</b>	10/06/2016
<b>Assignee:</b>	Miguel Ángel Álvarez Cabrerizo	<b>% Done:</b>	100%
<b>Category:</b>	vCenter	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Release 5.2.1	<b>Pull request:</b>	
<b>Resolution:</b>	fixed		
<b>Description</b>			
Also, research the relationship of OpenNebula vCenter DS support and SDRS features.			

#### Associated revisions

Revision e646fe11 - 10/06/2016 10:52 AM - Miguel Ángel Álvarez Cabrerizo

F #4584: Add support for SDRS clustered vCenter datastores

Revision 42ce8f2e - 10/06/2016 02:01 PM - Tino Vázquez

Merge pull request #120 from n40lab/F4584

F #4584: Add support for SDRS clustered vCenter datastores

#### History

#1 - 10/06/2016 11:16 AM - Miguel Ángel Álvarez Cabrerizo

- Due date set to 10/06/2016
- Status changed from New to Assigned
- Assignee set to Miguel Ángel Álvarez Cabrerizo
- % Done changed from 0 to 100

Storage DRS allows you to cluster your datastores into what is known as a datastore cluster (storage pod) and automatically balances both your storage I/O and capacity just like DRS does with your compute.

Datastore entities under a SDRS cluster are found inside StoragePod entities (<http://pubs.vmware.com/vsphere-60/index.jsp#com.vmware.wssdk.apiref.doc/vim.StoragePod.html>).

Tested:

- CLI - Importing a datastore found under SDRS cluster works.
- Sunstone - Registering an image on an imported datastore works.
- Sunstone - Editing VM template to force usage of imported datastore while setting VCENTER\_DATASTORE attribute. Instantiating VM on imported datastore works.
- Sunstone - Attaching (hotplug) to previous running VM a datablock registered in imported datastore works.
- Sunstone - Attaching (hotplug) to previous running VM an image registered in a different datastore works if host where VM is deployed has visibility to both datastores.

Pull request: F #4584: Add support for SDRS clustered vCenter datastores

## #2 - 10/06/2016 02:03 PM - OpenNebula Systems Support Team

- Status changed from Assigned to Closed
- Resolution set to fixed

## #3 - 11/15/2016 01:20 PM - Miguel Ángel Álvarez Cabrerizo

The support has been enhanced in master.

Current behavior and limitations.

- A StoragePod (StorageDRS cluster) can be imported as a datastore using Sunstone or CLI's onevcenter datastore command. It will be imported as a SYSTEM datastore so it won't be possible to use it to store images but it will be possible to deploy VM on it. The datastores which are member of that cluster will be imported as individual IMAGE datastores so they can be used to store images.
- When cloning the VM, the moveAllDisksBackingsAndDisallowSharing move type is used. According to VMWare's documentation all of the virtual disk's backings should be moved to the new datastore. It is not acceptable to attach to a disk backing with the same content ID on the destination datastore. During a clone operation any delta disk backings will be consolidated. The moveChildMostDiskBacking is used for datastores which are not StoragePods.
- Images in StoragePods can't be imported through Sunstone or CLI's onevcenter command
- New images like VMDK files cannot be created or uploaded to the StoragePod as it's set as a SYSTEM datastore. However, it's possible to create an image and upload it to a datastore which is a member of a Cluster.

In /etc/one/oned.conf, vcenter must be added to the -s argument list in the DATASTORE\_MAD section so the StorageDRS cluster can be monitored:

```
DATASTORE_MAD = [  
  EXECUTABLE = "one_datastore",  
  ARGUMENTS = "-t 15 -d dummy,fs,lvm,ceph,dev,iscsi_libvirt,vcenter -s shared,ssh,ceph,fs_lvm,qcow2,vcenter"  
]
```

## #4 - 01/13/2017 04:42 PM - Tino Vázquez

- Target version changed from Release 5.2 to Release 5.2.1