Objective 4.2-Storage cluster,DRS, advanced settings

16 July 2017   00:01

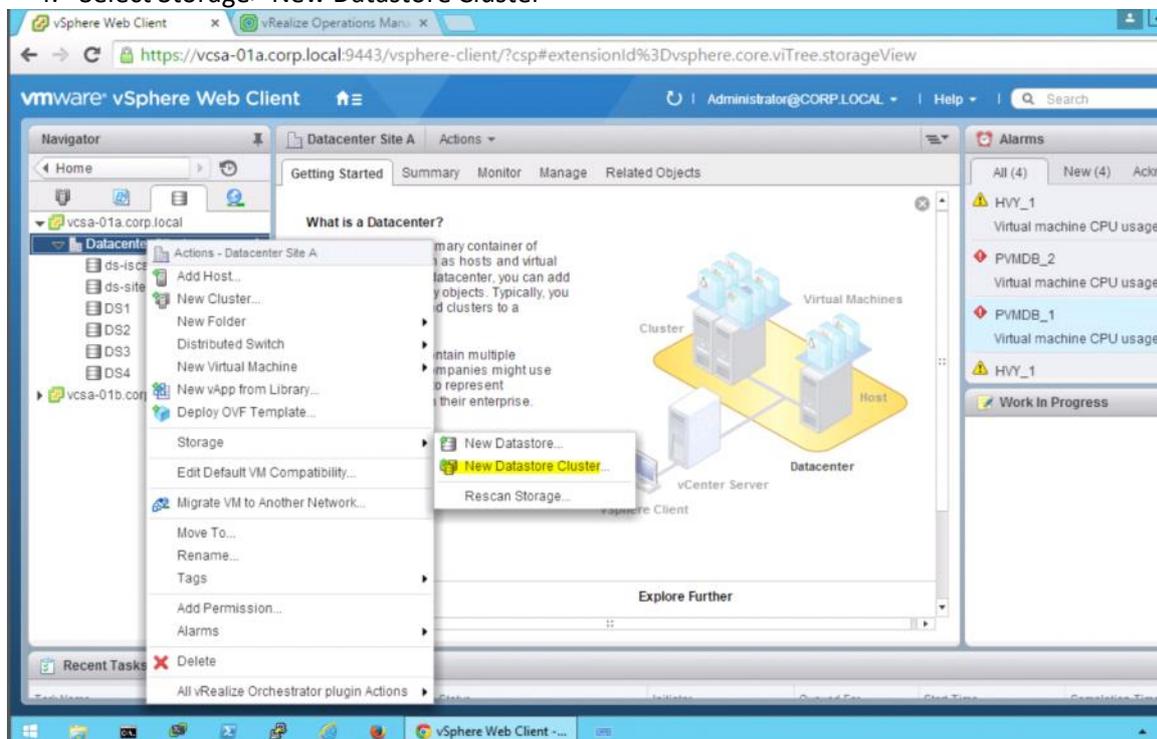What is Datastore cluster(Storage cluster).

Datastore cluster is a multiple datastores combined together same as ESX host cluster.
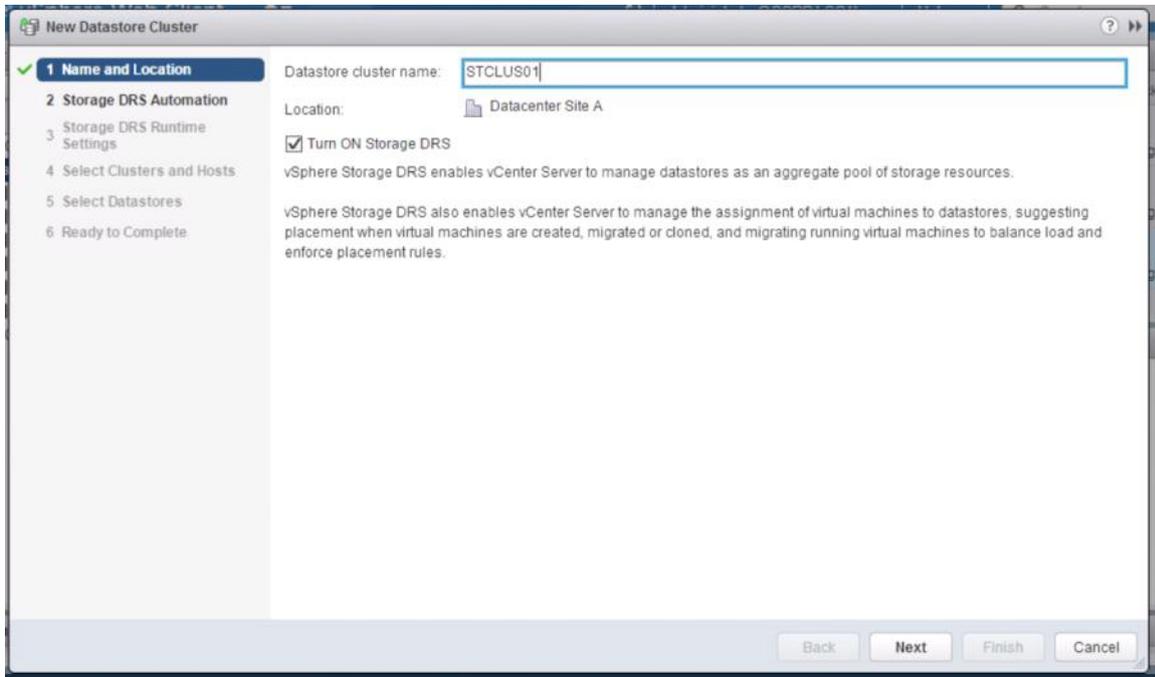
Why we need Datastore cluster

Same as host DRS, we can use SDRS to load balanced among the datastores
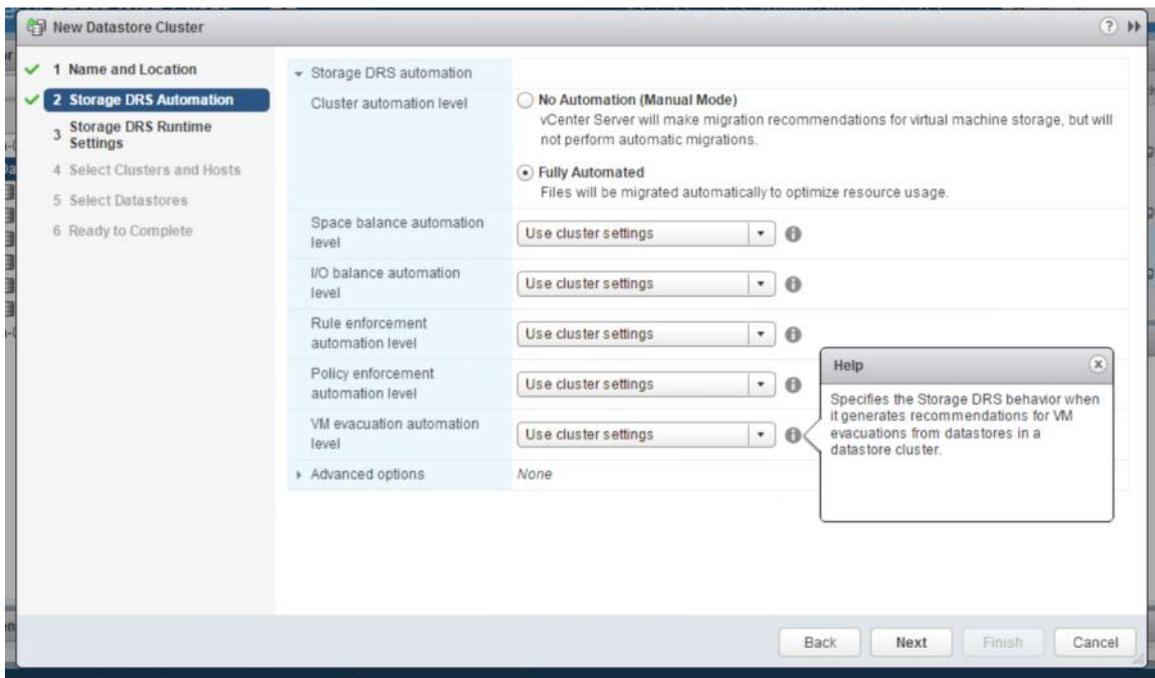
How to create datastore cluster

1. Login to the vcenter
2. Select storage from home
3. Right click on the datacenter
4. Select Storage> New Datastore Cluster

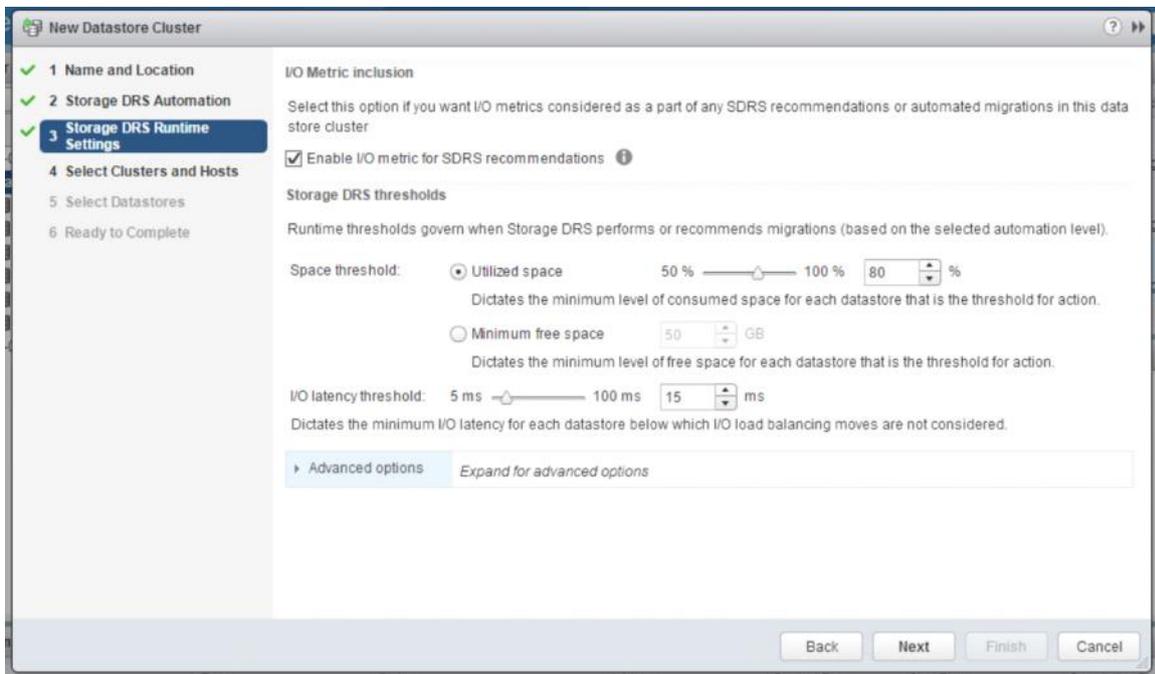5.Give a name for datastore cluster and Turn On Storage DRS

6.Select Automation level(There are two option, Manual mode only provide the recommendation, and we need to migrate virtual machine/disks manually.
There are several categories such as space balance, I/O balance.

7.To enable the I/O metric recommendation for SDRS we need to enable this option
From here we can set the threshold for space utilization and I/o latency.

Eg-with below example, if we have two datastores each capacity is 1000GB.When the one datastore filled 800GB data it will move some virtual machine to other datastore.
Same way if there is i/o latency of 15 ms for one datastore. It will move some virtual machines to different datastore

8.There are some advanced options also available

Keep VMDKs togther by default

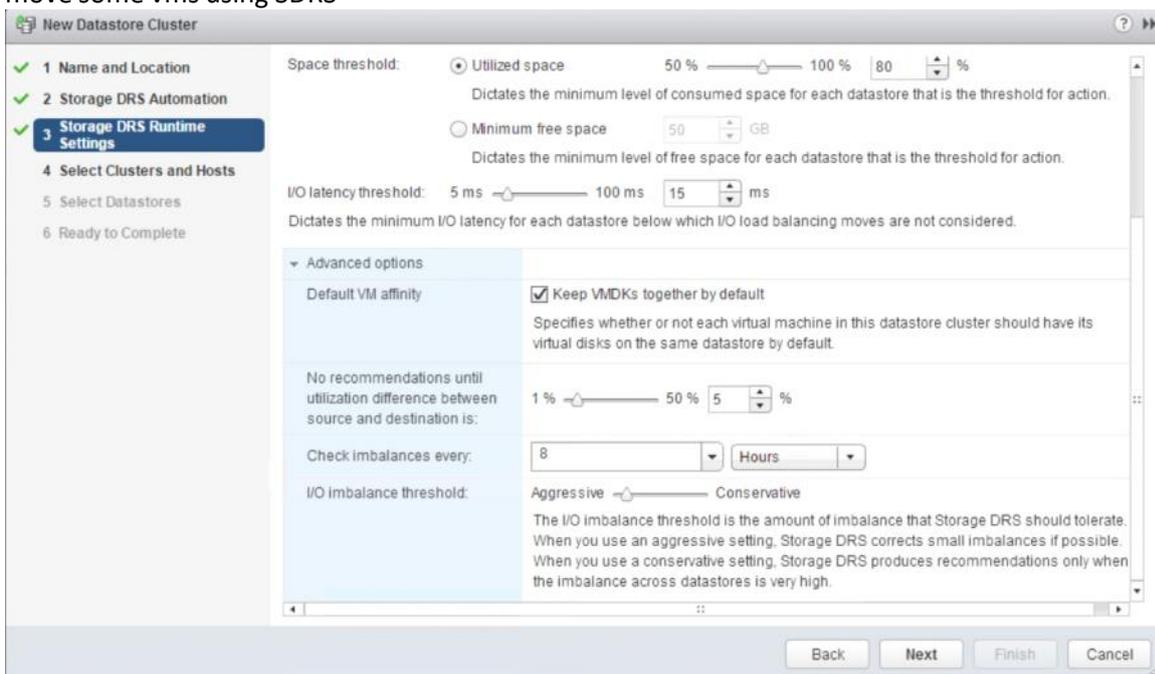Eg-VM01 one has two vmdk files and stored in Datastore01.Administrato have moved one vmdk to Datastore02.but since we enable this option SDRS will try to move that vmdk back.

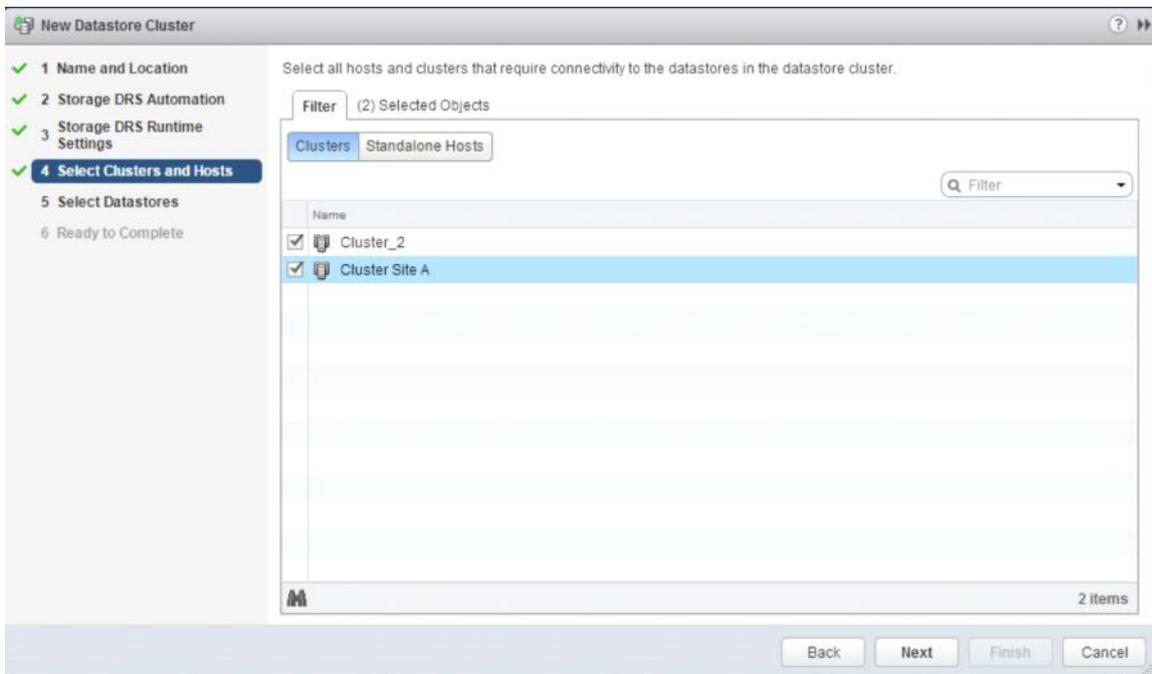No recommendations until utilization difference between source and destination is

Eg-we have two datastore in one datastore cluster(datastore01,datastore02).

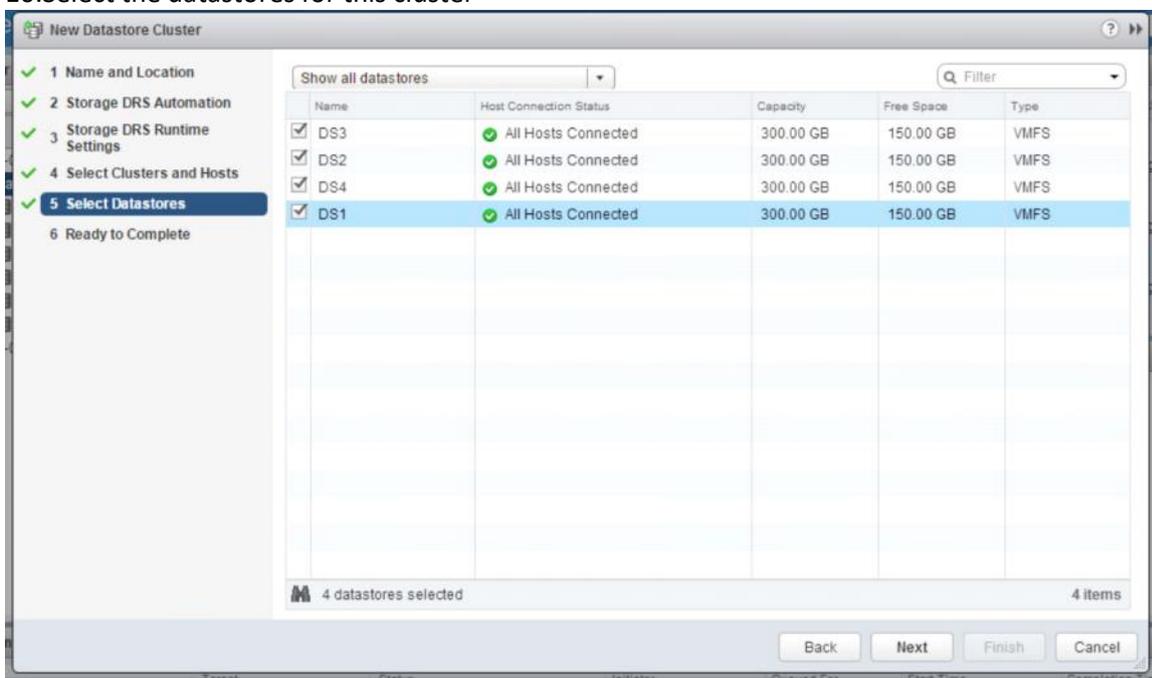Datastore01 is 1000GB and 800GB is filled. Now SDRS wants to move some virutal machines to datastore02.
But Datastore02 also 780GB used.with below threshold datastore02 should have 50GB free space to move some vms using SDRS
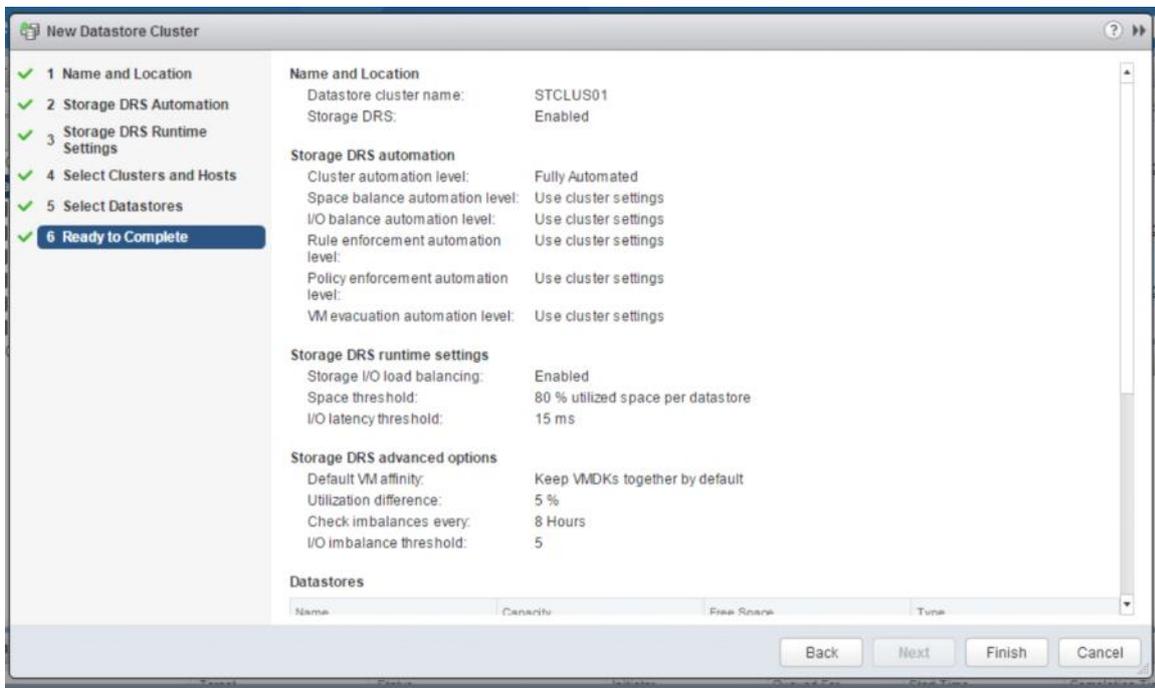

9.We can assign ESX host cluster for this Datastore cluster

10. Select the datastores for this cluster

11. Click on Finish
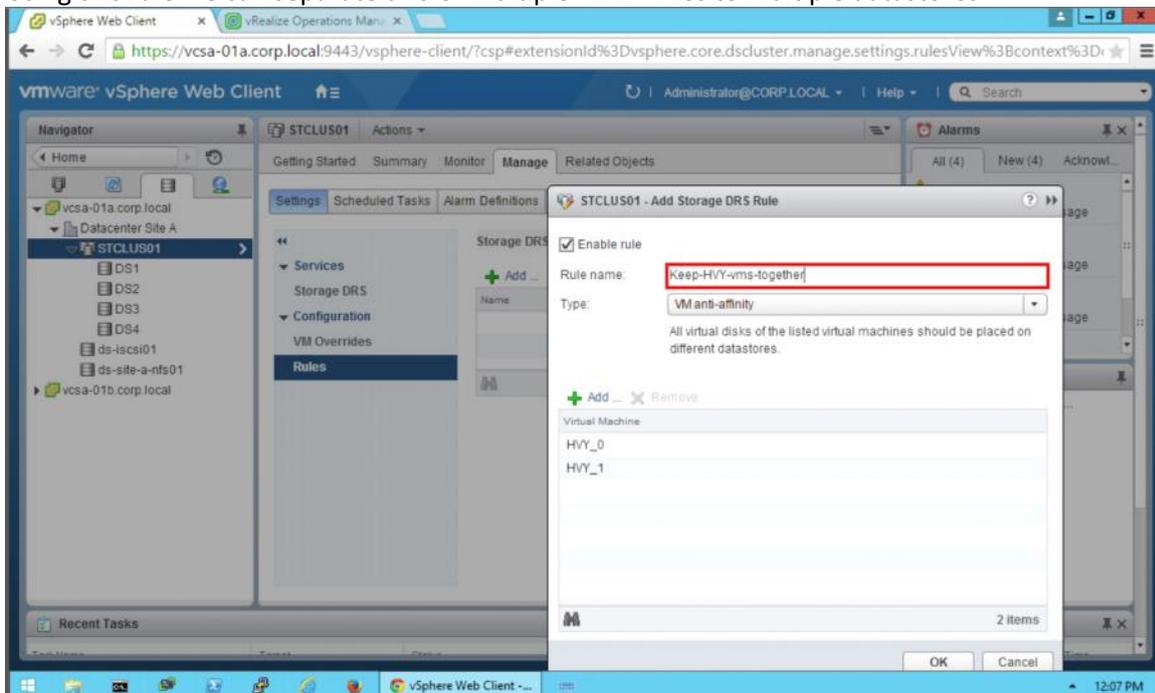
Datastore cluster anti-affinity rules

There are two type of anti-affinity rules are available.

Vm anti-affinity

Using this rule we can separate two vms to two datastores.

VMDK anti-affinity

Using this rule we can separate two or multiple VMDK files to multiple datastores

When we want to put datastore to the maintenance and if this process will violate the rule, what will happened?

Then we cannot put datasore to the maintenance mode. If required we need to add below advanced configuration with the value of 1

IgnoreAffinityRulesForMaintenance 1

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<https://pubs.vmware.com/vsphere-51/topic/com.vmware.vsphere.resmgmt.doc/GUID-8FF722CB-0CD3-4718-8653-2606E1E25957.html>