Manage virtual machines

ONTAP tools for VMware vSphere 10

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Manage virtual machines

Considerations to migrate or clone virtual machines

You should be aware of some of the considerations while migrating existing virtual machines in your data center.

Migrate protected virtual machines

You can migrate the protected virtual machines to:

- Same vVols datastore in a different ESXi host
- Different compatible vVols datastore in same ESXi host
- Different compatible vVols datastore in a different ESXi host

If the virtual machine is migrated to a different FlexVol volume, then the respective metadata file also gets updated with the virtual machine information. If a virtual machine is migrated to a different ESXi host but same storage, then underlying FlexVol volume metadata file will not be modified.

Clone protected virtual machines

You can clone protected virtual machines to the following:

- Same container of same FlexVol volume using replication group

  Same FlexVol volume's metadata file is updated with the cloned virtual machine details.

- Same container of a different FlexVol volume using replication group

  The FlexVol volume where the cloned virtual machine is placed, the metadata file gets updated with the cloned virtual machine details.

- Different container or vVols datastore

  The FlexVol volume where the cloned virtual machine is placed, the metadata file gets updated virtual machine details.

VMware presently does not support virtual machines cloned to a VM template.

Clone-of-Clone of a protected virtual machine is supported.

Refer to Creating a Virtual Machine for Cloning for more details.

Virtual Machine Snapshots

Presently only virtual machine Snapshots without memory are supported. If virtual machine has Snapshot with memory, then the virtual machine is not considered for protection.

You also cannot protect unprotected virtual machines that have memory Snapshot. For this release, you are expected to delete memory snapshot before enabling protection for the virtual machine.

For windows VM with ASA r2 storage type, when you take a snapshot of the virtual machine, it will be a read-only snapshot. When there is power on call for the VM, the VASA Provider creates a LUN using the read-only snapshot and then it enables it for IOPS. During the power-off request, VASA Provider deletes the LUN that was created and then disables the IOPS.

Migrate virtual machines with NFS and VMFS datastores to vVols datastores

You can migrate virtual machines from NFS and VMFS datastores to Virtual Volumes (vVols) datastores to take advantage of policy-based VM management and other vVols capabilities. vVols datastores enable you to meet increased workload requirements.

Before you begin

Ensure that VASA Provider is not running on any of the virtual machines that you plan to migrate. If you migrate a virtual machine that is running VASA Provider to a vVols datastore, you cannot perform any management operations, including powering on the virtual machines that are on vVols datastores.

About this task

When you migrate from a NFS and VMFS datastore to a vVols datastore, the vCenter Server uses vStorage APIs for Array Integration (VAAI) offloads when moving data from VMFS datastores, but not from an NFS VMDK file. VAAI offloads normally reduce the load on the host.

Steps

1. Right-click the virtual machine that you want to migrate and select **Migrate**.
2. Select **Change storage only** and then select **Next**.
3. Select a virtual disk format, a VM Storage Policy, and a vVol datastore that matches the features of the datastore that you are migrating.
4. Review the settings and select **Finish**.

VASA cleanup

Use the steps in this section to perform VASA cleanup.

It is recommended that you remove any vVols datastores before performing the VASA Cleanup.

Steps

1. Unregister the plug-in by going into https://OTV_IP:8143/Register.html
2. Verify that the plug-in is no longer available on the vCenter Server.
3. Shut down ONTAP tools for VMware vSphere VM.
4. Delete ONTAP tools for VMware vSphere VM.

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