



Provisioning cache by adding SSDs

System Manager Classic

NetApp
December 09, 2021

This PDF was generated from https://docs.netapp.com/us-en/ontap-sm-classic/online-help-96-97/task_providing_cache_by_adding_ssd_disks.html on December 09, 2021. Always check docs.netapp.com for the latest.

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Provisioning cache by adding SSDs

You can use System Manager to add SSDs as either storage pools or dedicated SSDs to provision cache. By adding SSDs, you can convert a non-root aggregate or a root aggregate that does not contain partitioned disks to a Flash Pool aggregate, or increase the cache size of an existing Flash Pool aggregate.

About this task

- The added SSD cache does not add to the size of the aggregate, and you can add an SSD RAID group to an aggregate even when it is at the maximum size.
- You cannot use partitioned SSDs when you add cache by using System Manager.

Related information

[How storage pool works](#)

Provisioning cache to aggregates by adding SSDs

You can use System Manager to add storage pools or dedicated SSDs to provision cache by converting an existing non-root HDD aggregate or a root aggregate that does not contain partitioned disks to a Flash Pool aggregate.

Before you begin

- The aggregate must be online.
- There must be sufficient spare SSDs or allocation units in the storage pool that can be assigned as cache disks.
- All of the nodes in the cluster must be running ONTAP 8.3 or later.

If the cluster is in a mixed-version state, you can use the command-line interface to create a Flash Pool aggregate and then provision SSD cache.

- You must have identified a valid 64-bit non-root aggregate composed of HDDs that can be converted to a Flash Pool aggregate.
- The aggregate must not contain any array LUNs.

About this task

You must be aware of platform-specific and workload-specific best practices for Flash Pool aggregate SSD tier size and configuration.

Steps

1. Choose one of the following methods:
 - Click **Applications & Tiers > Storage Tiers**.
 - Click **Storage > Aggregates & Disks > Aggregates**.
2. In the **Storage Tiers** window, select the aggregate, and then click **More Actions > Add Cache**.



Adding cache is not supported on FabricPool-enabled aggregates.

3. In the **Add Cache** dialog box, perform the appropriate action:

If you selected the cache source as...	Do this...
Storage pools	<ol style="list-style-type: none">Select the storage pool from which cache can be obtained.Specify the cache size.Modify the RAID type, if required.
Dedicated SSDs	<p>Select the SSD size and the number of SSDs to include, and optionally modify the RAID configuration:</p> <ol style="list-style-type: none">Click Change.In the Change RAID Configuration dialog box, specify the RAID type and RAID group size, and then click Save.

4. Click **Add**.

For mirrored aggregates, an Add Cache dialog box is displayed with the information that twice the number of selected disks will be added.

5. In the **Add Cache** dialog box, click **Yes**.

Results

The cache disks are added to the selected aggregate.

Related information

[NetApp Technical Report 4070: Flash Pool Design and Implementation](#)

Increasing the cache for Flash Pool aggregates by adding SSDs

You can add SSDs as either storage pools or dedicated SSDs to increase the size of a Flash Pool aggregate by using System Manager.

Before you begin

- The Flash Pool aggregate must be online.
- There must be sufficient spare SSDs or allocation units in the storage pool that can be assigned as cache disks.

Steps

1. Click **Storage > Aggregates & Disks > Aggregates**.
2. In the **Aggregates** window, select the Flash Pool aggregate, and then click **Add Cache**.
3. In the **Add Cache** dialog box, perform the appropriate action:

If you selected the cache source as...	Do this...
Storage pools	Select the storage pool from which cache can be obtained, and specify the cache size.
Dedicated SSDs	Select the SSD size and the number of SSDs to include.

4. Click **Add**.

For mirrored aggregates, an Add Cache dialog box is displayed with the information that twice the number of selected disks will be added.

5. In the **Add Cache** dialog box, click **Yes**.

Results

The cache disks are added to the selected Flash Pool aggregate.

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