



Managing Storage Efficiency Policies

Active IQ Unified Manager 9.7

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Managing Storage Efficiency Policies

A Storage Efficiency Policy (SEP) enables you to define the storage efficiency characteristics of a workload. You can assign a Storage Efficiency Policy to a workload when initially creating the workload, or afterwards by editing the workload.

Storage efficiency includes using technologies, such as thin provisioning, deduplication, and data compression that increase storage utilization and decrease storage costs. While creating Storage Efficiency Policies, you can use these space-saving technologies either individually or together to achieve maximum storage efficiency. When you associate the policies with your storage workloads, the specified policy settings are assigned to them. Unified Manager enables you to assign system-defined and user-defined Storage Efficiency Policies to optimize storage resources in your data center.

Unified Manager provides two system-defined Storage Efficiency Policies: High and Low. These SEPs are applicable to most of the storage workloads in a data center, however, you can create your own policies if the system-defined SEPs do not meet your requirements.

You cannot modify a Storage Efficiency Policy that is system-defined or that is currently assigned to a workload. You cannot delete a Storage Efficiency Policy that is assigned to a workload, or if it is the only available Storage Efficiency Policy.

The Storage Efficiency Policies page lists the available Storage Efficiency Policies and enables you to add, edit, and delete customize SEPs. This page displays the following information:

Field	Description
Name	Name of the Storage Efficiency Policy.
Type	Whether the policy is system-defined or user-defined.
Space Reserve	Whether the volume is thin-provisioned or thick-provisioned.
Deduplication	Whether deduplication is enabled on the volume: <ul style="list-style-type: none">• Inline: Deduplication occurs while being written on the volume• Background: Deduplication occurs in the background• Disable: Deduplication is disabled on the volume

Field	Description
Compression	Whether data compression is enabled on the volume: <ul style="list-style-type: none"> • Inline: Data compression occurs while being written on the volume • Background: Data compression occurs in the background • Disable: Data compression is disabled on the volume
Workloads	Number of storage workloads that have been assigned the Storage Efficiency Policy

Guidelines for creating a custom Storage Efficiency Policy

If the existing Storage Efficiency Policies do not meet policy requirements for your storage workloads, you can create a custom Storage Efficiency Policy. However, it is recommended that you attempt to use the system-defined Storage Efficiency Policies for your storage workloads, and only create custom Storage Efficiency Policies if necessary.

Creating and editing Storage Efficiency Policies

When the system-defined Storage Efficiency Policies do not match your workload requirements, you can create your own Storage Efficiency Policies that are optimized for your workloads.

Before you begin

- You must have the Application Administrator role.
- The Storage Efficiency Policy name must be unique, and you cannot use the following reserved keywords:

High, Low, Unassigned, Learning, Idle, Default, and None.

About this task

You create and edit custom Storage Efficiency Policies from the Storage Efficiency Policies page by defining the storage efficiency characteristics you require for the applications that will access storage.



You cannot modify a Storage Efficiency Policy if it is currently assigned to a workload.

Steps

1. In the left navigation pane under **Settings**, select **Policies > Storage Efficiency Policies**.
2. In the **Storage Efficiency Policies** page, click the appropriate button depending on whether you want to create a new Storage Efficiency Policy or if you want to edit an existing Storage Efficiency Policy.

To...	Follow these steps...
Create a new Storage Efficiency Policy	Click Add
Edit an existing Storage Efficiency Policy	Select an existing Storage Efficiency Policy and click Edit

The page to add or edit a Storage Efficiency Policy is displayed.

3. Customize the Storage Efficiency Policy by specifying the storage efficiency characteristics, and then click **Submit** to save the Storage Efficiency Policy.

After you finish

You can apply the new or changed Storage Efficiency Policy to workloads (LUNs, NFS File Shares, CIFS Shares) from the Workloads page or when provisioning a new workload.

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