



# **Monitor volume efficiency operations**

## **ONTAP 9**

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# Monitor volume efficiency operations

## View efficiency operations and status

You can view whether deduplication or data compression is enabled on a volume. You can also view the status, state, type of compression, and progress of the efficiency operations on a volume by using the `volume efficiency show` command.

### View efficiency status

#### Step

1. View the status of an efficiency operation on a volume: `volume efficiency show`

The following command displays the status of an efficiency operation on volume VolA that is assigned the adaptive compression type:

```
volume efficiency show -instance -vserver vs1 -volume VolA
```

If the efficiency operation is enabled on volume VolA and the operation is idle, then you can see the following in the system output:

```
cluster1::> volume efficiency show -vserver vs1 -volume VolA

Vserver Name: vs1
Volume Name: VolA
Volume Path: /vol/VolA
    State: Enabled
    Status: Idle
    Progress: Idle for 00:03:20
```

### Determine if volumes contain sequentially packed data

You can display a list of volumes that have sequential packing enabled, for instance, when you need to revert to an ONTAP release earlier than 9.13.1. You must be in advanced privilege mode to use this command.

#### Step

1. Set the privilege level: `set -privilege advanced`
2. List volumes that have sequential packing enabled: `'volume efficiency show -extended-auto-adaptive -compression true'`

## View efficiency space savings

You can view the amount of space savings achieved through deduplication and data compression on a volume by using the `volume show` command.

#### About this task

The space savings in Snapshot copies are not included when calculating the space savings achieved on a volume. Using deduplication does not affect volume quotas. Quotas are reported at the logical level, and remain unchanged.

### Step

1. Use the `volume show` command to view space savings achieved on a volume using deduplication and data compression.

### Example

The following command enables you to view the space savings achieved by using deduplication and data compression on volume VolA: `volume show -vserver vs1 -volume VolA`

```
cluster1::> volume show -vserver vs1 -volume VolA

Vserver Name: vs1
Volume Name: VolA

...
    Space Saved by Storage Efficiency: 115812B
Percentage Saved by Storage Efficiency: 97%
    Space Saved by Deduplication: 13728B
Percentage Saved by Deduplication: 81%
    Space Shared by Deduplication: 1028B
    Space Saved by Compression: 102084B
Percentage Space Saved by Compression: 97%

...
```

## View efficiency statistics of a FlexVol volume

You can view the details of the efficiency operations run on a FlexVol volume by using the `volume efficiency stat` command.

### Step

1. Use the `volume efficiency stat` command to view the statistics of efficiency operations on a FlexVol volume.

### Example

The following command enables you to view the statistics of the efficiency operations on the volume VolA: `volume efficiency stat -vserver vs1 -volume VolA`

```
cluster1::> volume efficiency stat -vserver vs1 -volume VolA
```

```
    Vserver Name: vs1
```

```
    Volume Name: VolA
```

```
    Volume Path: /vol/VolA
```

```
Inline Compression Attempts: 0
```

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