



Monitor volume efficiency operations

ONTAP 9

NetApp
June 27, 2023

Table of Contents

- Monitor volume efficiency operations 1
 - View efficiency operations and status 1
 - View efficiency space savings 1
 - View efficiency statistics of a FlexVol volume 2

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
```

Copyright information

Copyright © 2023 NetApp, Inc. All Rights Reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP “AS IS” AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

LIMITED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (b)(3) of the Rights in Technical Data -Noncommercial Items at DFARS 252.227-7013 (FEB 2014) and FAR 52.227-19 (DEC 2007).

Data contained herein pertains to a commercial product and/or commercial service (as defined in FAR 2.101) and is proprietary to NetApp, Inc. All NetApp technical data and computer software provided under this Agreement is commercial in nature and developed solely at private expense. The U.S. Government has a non-exclusive, non-transferrable, nonsublicensable, worldwide, limited irrevocable license to use the Data only in connection with and in support of the U.S. Government contract under which the Data was delivered. Except as provided herein, the Data may not be used, disclosed, reproduced, modified, performed, or displayed without the prior written approval of NetApp, Inc. United States Government license rights for the Department of Defense are limited to those rights identified in DFARS clause 252.227-7015(b) (FEB 2014).

Trademark information

NETAPP, the NETAPP logo, and the marks listed at <http://www.netapp.com/TM> are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.