



Special kinds of quotas

ONTAP 9

NetApp
February 12, 2026

Table of Contents

Special kinds of quotas	1
How default quotas work	1
Default user quota example	1
How you use explicit quotas	2
How derived quotas work	4
Use tracking quotas	5

Special kinds of quotas

How default quotas work

You can use default quotas to apply a quota to all instances of a given quota type. For example, a default user quota affects all users on the system for the specified FlexVol volume or qtree. In addition, default quotas enable you to modify your quotas easily.

You can use default quotas to automatically apply a limit to a large set of quota targets without having to create separate quotas for each target. For example, if you want to limit most users to 10 GB of disk space, you can specify a default user quota of 10 GB of disk space instead of creating a quota for each user. If you have specific users for whom you want to apply a different limit, you can create explicit quotas for those users. (Explicit quotas—quotas with a specific target or list of targets—override default quotas.)

In addition, default quotas enable you to use resizing rather than reinitialization when you want quota changes to take effect. For example, if you add an explicit user quota to a volume that already has a default user quota, you can activate the new quota by resizing.

Default quotas can be applied to all three types of quota target (users, groups, and qtrees).

Default quotas do not necessarily have specified limits; a default quota can be a tracking quota.

A quota is indicated by a target that is either an empty string ("") or an asterisk (*), depending on the context:

- When you create a quota using the `volume quota policy rule create` command, setting the `-target` parameter to an empty string ("") creates a default quota.

Learn more about `volume quota policy rule create` in the [ONTAP command reference](#).

- In the `volume quota policy rule create` command, the `-qtree` parameter specifies the name of the qtree to which the quota rule applies. This parameter is not applicable for tree type rules. For user or group type rules at the volume level, this parameter should contain "".
- In the output of the `volume quota policy rule show` command, a default quota appears with an empty string ("") as the target.

Learn more about `volume quota policy rule show` in the [ONTAP command reference](#).

- In the output of the `volume quota report` command, a default quota appears with an asterisk (*) as the ID and Quota Specifier.

Learn more about `volume quota report` in the [ONTAP command reference](#).

Default user quota example

The following quota rule uses a default user quota to apply a 50-MB limit on each user for vol1:

```

cluster1::> volume quota policy rule create -vserver vs0 -volume vol1
-policy-name default -type user -target "" -qtree "" -disk-limit 50m

cluster1::> volume quota policy rule show -vserver vs0 -volume vol1

Vserver: vs0          Policy: default          Volume: vol1
                                         Soft          Soft
                                         User       Disk       Disk   Files   Files
                                         Type      Target     Qtree   Mapping   Limit   Limit
                                         Threshold
-----
-----
user   ""        ""        off           50MB      -        -        -
-
```

If any user on the system enters a command that would cause that user's data to take up more than 50 MB in vol1 (for example, writing to a file from an editor), the command fails.

How you use explicit quotas

You can use explicit quotas to specify a quota for a specific quota target, or to override a default quota for a specific target.

An explicit quota specifies a limit for a particular user, group, or qtree. An explicit quota replaces any default quota that is in place for the same target.

When you add an explicit user quota for a user that has a derived user quota, you must use the same user mapping setting as the default user quota. Otherwise, when you resize quotas, the explicit user quota is rejected because it is considered a new quota.

Explicit quotas only affect default quotas at the same level (volume or qtree). For example, an explicit user quota for a qtree does not affect the default user quota for the volume that contains that qtree. However, the explicit user quota for the qtree overrides (replaces the limits defined by) the default user quota for that qtree.

Examples of explicit quotas

The following quota rules define a default user quota that limits all users in vol1 to 50MB of space. However, one user, **jsmith**, is allowed 80MB of space, because of the explicit quota (shown in bold):

```

cluster1::> volume quota policy rule create -vserver vs0 -volume vol1
-policy-name default -type user -target "" -qtree "" -disk-limit 50m

cluster1::> volume quota policy rule create -vserver vs0 -volume vol1
-policy-name default -type user -target "jsmith" -qtree "" -disk-limit 80m

cluster1::> volume quota policy rule show -vserver vs0 -volume vol1

Vserver: vs0          Policy: default          Volume: vol1
                                         Soft          Soft
                                         User       Disk       Disk   Files   Files
                                         Mapping   Limit   Limit   Limit   Limit
Type   Target   Qtree   Mapping   Limit   Limit   Limit   Limit
Threshold
-----
-----  -----  -----  -----  -----  -----  -----  -----
user   ""      ""      off      50MB   -      -      -
-
user   jsmith   ""      off      80MB   -      -      -
-
```

The following quota rule restricts the specified user, represented by four IDs, to 550MB of disk space and 10,000 files in the vol1 volume:

```

cluster1::> volume quota policy rule create -vserver vs0 -volume vol1
-policy-name default -type user -target "
jsmith,corp\jsmith,engineering\john smith,S-1-5-32-544" -qtree "" -disk
-limit 550m -file-limit 10000

cluster1::> volume quota policy rule show -vserver vs0 -volume vol1

Vserver: vs0          Policy: default          Volume: vol1
                                         Soft          Soft
                                         User       Disk       Disk   Files   Files
                                         Mapping   Limit   Limit   Limit   Limit
Type   Target   Qtree   Mapping   Limit   Limit   Limit   Limit
Threshold
-----
-----  -----  -----  -----  -----  -----  -----  -----
user   "jsmith,corp\jsmith,engineering\john smith,S-1-5-32-544"
      ""      off      550MB   -      10000   -
-
```

The following quota rule restricts the eng1 group to 150MB of disk space and an unlimited number of files in the proj1 qtree:

```
cluster1::> volume quota policy rule create -vserver vs0 -volume vol2  
-policy-name default -type group -target "eng1" -qtree "proj1" -disk-limit  
150m
```

```
cluster1::> volume quota policy rule show -vserver vs0 -volume vol2
```

Vserver: vs0		Policy: default		Volume: vol2							
Type	Target	Qtree	Mapping	User	Disk	Disk	Files	Files	Soft	Soft	
Threshold				Limit		Limit		Limit		Limit	
-----				-----		-----		-----		-----	
group	eng1	proj1	off		150MB		-	-	-	-	

The following quota rule restricts the proj1 qtree in the vol2 volume to 750MB of disk space and 75,000 files:

```
cluster1::> volume quota policy rule create -vserver vs0 -volume vol2  
-policy-name default -type tree -target "proj1" -disk-limit 750m -file  
-limit 75000
```

```
cluster1::> volume quota policy rule show -vserver vs0 -volume vol2
```

Vserver: vs0		Policy: default		Volume: vol2							
Type	Target	Qtree	Mapping	User	Disk	Disk	Files	Files	Soft	Soft	
Threshold				Limit		Limit		Limit		Limit	
-----				-----		-----		-----		-----	
tree	proj1	""	-		750MB		-	75000	-	-	

How derived quotas work

A quota enforced as a result of a default quota, rather than an explicit quota (a quota with a specific target), is referred to as a *derived quota*.

The number and location of the derived quotas depends on the quota type:

- A default tree quota on a volume creates derived default tree quotas for every qtree on the volume.
- A default user or group quota creates a derived user or group quota for every user or group that owns a file at the same level (volume or qtree).

- A default user or group quota on a volume creates a derived default user or group quota on every qtree that also has a tree quota.

The settings—including limits and user mapping—of derived quotas are the same as the settings of the corresponding default quotas. For example, a default tree quota with a 20-GB disk limit on a volume creates derived tree quotas with 20-GB disk limits on the qtrees in the volume. If a default quota is a tracking quota (with no limits), the derived quotas are also tracking quotas.

To see derived quotas, you can generate a quota report. In the report, a derived user or group quota is indicated by a Quota Specifier that is either blank or an asterisk (*). A derived tree quota, however, has a Quota Specifier. To identify a derived tree quota, you must look for a default tree quota on the volume with the same limits.

Explicit quotas interact with derived quotas in the following ways:

- Derived quotas are not created if an explicit quota already exists for the same target.
- If a derived quota exists when you create an explicit quota for a target, you can activate the explicit quota by resizing rather than having to perform a full quota initialization.

Use tracking quotas

A tracking quota generates a report of disk and file usage and does not limit resource usage. When tracking quotas are used, modifying the quota values is less disruptive because you can resize quotas rather than turning them off and back on.

To create a tracking quota, you omit the Disk Limit and Files Limit parameters. This tells ONTAP to monitor disk and files usage for that target at that level (volume or qtree), without imposing any limits. Tracking quotas are indicated in the output of `show` commands and the quota report with a dash ("—") for all limits. ONTAP automatically creates tracking quotas when you use the System Manager UI to create explicit quotas (quotas with specific targets). When using the CLI, the storage administrator creates tracking quotas on top of explicit quotas.

You can also specify a *default tracking quota*, which applies to all instances of the target. Default tracking quotas enable you to track usage for all instances of a quota type (for example, all qtrees or all users). In addition, they enable you use resizing rather than reinitialization when you want quota changes to take effect.

Examples

The output for a tracking rule shows tracking quotas in place for a qtree, user, and group, as shown in the following example for a volume-level tracking rule:

Vserver: vs0			Policy: default				Volume: fv1		
Type	Target	Qtree	User		Disk		Files		Soft
			Mapping	Limit	Disk	Limit	Files	Limit	Threshold
tree	""	""	—	—	—	—	—	—	—
user	""	""	off	—	—	—	—	—	—
group	""	""	—	—	—	—	—	—	—

Copyright information

Copyright © 2026 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—with 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.