



# **lun import commands**

## **ONTAP 9.12.1 commands**

NetApp  
February 11, 2024

# Table of Contents

- lun import commands . . . . . 1
  - lun import create . . . . . 1
  - lun import delete . . . . . 1
  - lun import pause . . . . . 2
  - lun import prepare-to-downgrade . . . . . 3
  - lun import resume . . . . . 4
  - lun import show . . . . . 4
  - lun import start . . . . . 8
  - lun import stop . . . . . 9
  - lun import throttle . . . . . 9
  - lun import verify start . . . . . 10
  - lun import verify stop . . . . . 11

# lun import commands

## lun import create

Create an import relationship

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

This command creates an import relationship between a specified LUN and a specified foreign disk so you can import the foreign disk data into a LUN.

The foreign disk must be marked as foreign using [storage disk set-foreign-lun](#) command before you can begin the import progress.

The LUN must be of the same size as the foreign disk.

### Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN where you import data to from the foreign disk data.

**-foreign-disk <text> - Foreign Disk Serial Number (privilege: advanced)**

Specifies the serial number of the Foreign Disk.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN where you want to import the data of the foreign disk to. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtree1/lun1`.

### Examples

```
cluster1::> lun import create -vserver vs1 -path /vol/dvol1/lun1 -foreign  
-disk 6000B5D0006A0000006A020E00040000
```

Creates an import relationship between lun1 at the path `/vol/dvol1/lun1` and foreign disk with serial number `6000B5D0006A0000006A020E00040000`.

### Related Links

- [storage disk set-foreign-lun](#)

## lun import delete

Deletes the import relationship of the specified LUN or the specified foreign disk

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command deletes the import relationship of a specified LUN or a specified foreign disk.

You cannot use this command if an import is in-progress between the foreign disk and the LUN unless you use the force option. The import has to either successfully completed or be stopped before deleting the import relationship.

You can use the [lun import stop](#) command to stop the data import, and then you delete the import relationship.

## Parameters

**{ -vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN that you want to delete the import relationship.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN where you want to delete the import relationship. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtree1/lun1`.

**| -foreign-disk <text> - Foreign Disk Serial Number (privilege: advanced) }**

Specifies the serial number of the foreign disk.

**[-force {true|false}] - Force Delete (privilege: advanced)**

When set to true, stops the in progress data import.

## Examples

```
cluster1::> lun import delete -vserver vs1 -path /vol/vol2/lun2
```

Deletes the import relationship of lun2 at the path `/vol/vol2/lun2`.

```
cluster1::> lun import delete -vserver vs0 -foreign-disk  
6000B5D0006A0000006A020E00040000
```

Deletes the import relationship of the foreign disk with serial number `6000B5D0006A0000006A020E00040000`.

## Related Links

- [lun import stop](#)

## lun import pause

Pause the import for the specified LUN

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command pauses the data import to a specified LUN.

This command does not reset all import checkpoints. To resume a paused import, use the `lun import resume` command to restart from the last checkpoint taken before you paused the data import.

If you want to resume the data import from the beginning, use the `lun import stop` command. Then use the `lun import start` command.

## Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to pause the data import to.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN you want to pause the data import to. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/mtree1/lun1`.

## Examples

```
cluster1::> lun import pause -vserver vs1 -path /vol/vol2/lun2
```

Pauses the data import for lun2 at the path `/vol/vol2/lun2`

## lun import prepare-to-downgrade

Prepares LUN import to be downgraded

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command prepares the cluster for a downgrade to a version of Data ONTAP earlier than 8.3.1 by disabling the online LUN import feature. Before using this command verify that all LUNs in an import relationships are offline by running [lun show](#).

## Examples

```
cluster1::> lun import prepare-to-downgrade
```

The above example will disable the online LUN import feature if all LUNs in import relationships are offline

## Related Links

- [lun show](#)

# lun import resume

Resume the import for the specified LUN

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

Resumes the data import to a specified LUN.

The import starts from the last checkpoint taken before you paused the data import.

If you want to resume the data import from the beginning, use the `lun import stop` command. Then use the `lun import start` command.

## Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to resume the data import to.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN that you want to resume the data import to. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtrees1/lun1`.

## Examples

```
cluster1::> lun import resume -vserver vs1 -path /vol/vol2/lun2
```

Resumes the data import to lun2 at the path `/vol/vol2/lun2`

# lun import show

Display a list of import relationships

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command displays information about the import relationships.

## Parameters

**{ [-fields <fieldname>,...]**

If you specify the `-fields <fieldname>, ...` parameter, the command output also includes the specified field or fields. You can use `'-fields ?'` to display the fields to specify.

**| [-instance ] }**

If you specify the `-instance` parameter, the command displays detailed information about all fields.

**[-vserver <Vserver Name>] - Vserver Name (privilege: advanced)**

Displays import relationships for a specified Vserver.

**[-foreign-disk <text>] - Foreign Disk Serial Number (privilege: advanced)**

Enables you to see the import relationship for a particular foreign disk with the specified serial number.

**[-path <path>] - LUN Path (privilege: advanced)**

Enables you to see the import relationship for a particular LUN path. Examples of correct LUN paths are */vol/vol1/lun1* and */vol/vol1/qtrees1/lun1*.

**[-import-home-node {<nodename>|local}] - Import Home Node (privilege: advanced)**

Enables you to see the node that initially started the data import and where the I/O for the foreign disk is directed. If failover occurs, any in-progress data import restarts on the partner node.

**[-import-current-node {<nodename>|local}] - Import Current Node (privilege: advanced)**

Displays the node that is currently importing data and where the I/O for the foreign disk is directed. During giveback and if the import home node is different from the current home node, import restarts on the initial node (import-home-node).

**[-operation-in-progress {import|verify}] - Operation in Progress (privilege: advanced)**

Enables you to see the imports in progress or import verification in progress.

**[-admin-state {stopped|started|paused}] - Admin State (privilege: advanced)**

Enables you to see the import relationships for a specified administrative state. For example, you can list all the imports that have started in a cluster.

**[-operational-state {in\_progress|failed|completed|stopped|paused}] - Operational State (privilege: advanced)**

Enables you to see the import relationships for a specified operational state. For example, you can list all the imports that have completed in a cluster.

**[-percent-complete <integer>] - Percent Complete (privilege: advanced)**

Enables you to see the percentage of completion for both import and verification. If you want to see all the complete imports and verifications, you would specify 100.

**[-imported-blocks <integer>] - Blocks Imported (privilege: advanced)**

Enables you to see the number of blocks that have been imported to the LUN.

**[-compared-blocks <integer>] - Blocks Compared (privilege: advanced)**

Enables you to see the number of LUN and foreign disk blocks that have been compared.

**[-total-blocks <integer>] - Total Blocks (privilege: advanced)**

Enables you to see the total number of blocks that must be imported to complete the data import to a LUN or the number of blocks that must be compared to complete the import verification.

**[-estimated-remaining-duration {<seconds>| [<d> days] <hh>:<mm>[:<ss>]}] - Estimated Remaining Duration (privilege: advanced)**

If this parameter is specified, the command displays import or verify operations that match the specified time.

**[-failure-reason <text>] - Failure Reason (privilege: advanced)**

Selects LUN import operations that match this parameter value.

**[-max-throughput-limit {<integer>[KB|MB|GB|TB|PB]}] - Maximum Throughput Limit (per sec) (privilege: advanced)**

Selects the LUN import operations that match this parameter value. This value is the throughput limit at which an import or verify will be throttled. By default, there is no throttling.

**[-current-throughput {<integer>[KB|MB|GB|TB|PB]}] - Current Throughput (per sec) (privilege: advanced)**

Selects the LUN import operations that match this parameter value. This value is the current throughput for an in-progress import or verify operation.

**[-qos-policy-group <text>] - QoS Policy Group (privilege: advanced)**

Selects the LUN import operations that match this parameter value. This value is the QoS policy group associated with an import relationship.

## Examples

```
cluster1::> lun import show
vserver          foreign-disk          path
operation-in-progress  admin-state  operational-state  percent-complete
-----
vs1               6000B5D0006A0000006A020E00040000  /vol/dvol1/lun1
import            stopped      stopped           0
vs1               60060480343631336433336538366537  /vol/vol1/lun1
import            started      failed            11
vs2               6000B5D0006A0000006A020E00040001  /vol/dvol1/lun2
verify            started      in_progress       5
```

Display information about all import relationships in the cluster

```
cluster1::> lun import show -instance
Vserver Name: vs1
LUN Path: /vol/dvol1/lun1
Foreign Disk Serial Number: 6000B5D0006A0000006A020E00040000
Import Home Node: cluster1-01
Current Import Node: cluster1-01
Operation in Progress: import
Admin State: started
Operational State: in-progress
Percent Complete: 0%
Blocks Imported: 0
Blocks Compared: 0
Total Blocks to Import: 10000000
```



```

    Estimated Remaining Duration: 00:01:23
        Failure Reason: -
Maximum Throughput Limit (per sec): -
    Current Throughput (per sec): -
        QoS Policy Group: -
Vserver Name: vs2
        LUN Path: /vol/dvol1/lun2
    Foreign Disk Serial Number: 6000B5D0006A0000006A020E00040001
        Import Home Node: cluster1-01
    Current Import Node: cluster1-01
    Operation in Progress: verify
        Admin State: started
    Operational State: in-progress
        Percent Complete: 5%
        Blocks Imported: 10000000
        Blocks Compared: 500000
    Total Blocks to Import: 10000000
    Estimated Remaining Duration: 00:00:59
        Failure Reason: -
Maximum Throughput Limit (per sec): 2MB
    Current Throughput (per sec): 1.29MB
        QoS Policy Group: fli_pg_cf2b638b-606b-11e4-ae4c-
000c290d40ff
Vserver Name: vs1
    Foreign Disk Serial Number: 60060480343631336433336538366537
        LUN Path: /vol/vol1/lun1
    Import Home Node: cluster1-01
    Current Import Node: cluster1-01
    Operation in Progress: import
        Admin State: started
    Operational State: failed
        Percent Complete: 11
        Blocks Imported: 932352
        Blocks Compared: -
    Total Blocks: 8388608
    Estimated Remaining Duration: -
        Failure Reason: Source read error - reservation
conflict.
Maximum Throughput Limit (per sec): 12MB
    Current Throughput (per sec): -
        QoS Policy Group: fli_pg_f6632344-60e7-11e4-9bad-
000c290d40ff

```

Display detailed information about all import relationships in the cluster.

```
cluster1::> lun import show -vserver vs1
vserver  path                      foreign-disk                      admin-
state  operational-state  percent-complete
-----
vs1      /vol/dvol1/lun1              vgv3040f46a:vgbr300s70:9.126L1    stop
-                                     0%
```

Display information about the LUNs in an import relationships in a specific vserver.

```
cluster1::> lun import show -admin-state start
vserver  path                      foreign-disk                      admin-
state  operational-state  percent-complete
-----
vs2      /vol/dvol1/lun2              vgv3040f46a:vgbr300s70:9.126L2    start
in-progress      5%
```

Display active LUN import sessions in a cluster.

## lun import start

Start the import for the specified LUN

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

This command initiates the data import to a specified LUN.

You must use the `lun import create` command to create an import relationship between a LUN and a foreign disk before you can initiate the data import.

### Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to import data to.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN that you want to import data to. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtrees1/lun1`.

### Examples

```
cluster1::> lun import start -vserver vs1 -path /vol/vol2/lun2
```

Starts the data import to lun2 at the path /vol/vol2/lun2.

## lun import stop

Stop the import for the specified LUN

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

This command stops the data import into a specified LUN.

After you stop the data import and if you start the import again using [lun import start](#) command, then the import restarts from the beginning.

### Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to stop importing data to.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN that you want to stop the data import to.

### Examples

```
cluster1::> lun import stop -vserver vs1 -path /vol/vol2/lun2
```

Stops data import to lun2 at the path /vol/vol2/lun2

### Related Links

- [lun import start](#)

## lun import throttle

Modify the max throughput limit for the specified import relationship

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

### Description

This command throttles the speed of the import for a given LUN by specifying a maximum throughput limit on the import.

## Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN to which data from the foreign disk is imported.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN to which data from the foreign disk is imported. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtree1/lun1`.

**-max-throughput-limit {<integer>[KB|MB|GB|TB|PB]} - Maximum Throughput Limit (per sec) (privilege: advanced)**

Specifies the maximum amount of throughput to be allocated for processing import requests on the bound LUN. At the time of creation, the default is zero. A value of zero implies that import traffic is processed by the system at best effort rate along with on-going user I/O. A non-zero value indicates that import will be throttled at a rate which is at most the maximum throughput limit set.

## Examples

```
cluster1::*> lun import throttle -vserver vs1 -path /vol/vol1/lun1 -max  
-throughput-limit 3M
```

The above example limits the import speed for the bound LUN with path `/vol/vol1/lun1` to a maximum of 3MB/s.

## lun import verify start

Start the verification of the foreign disk and LUN data

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command compares the LUN and the foreign disk block by block. You are not required to run this command; it is optional. Before you can do this verification process, the operation state must be stopped or completed. Use the `lun import show` command to determine the operation state.

If a block mismatch occurs, the verification process stops.

Verification must be done offline. Ensure the foreign disk and LUN cannot be accessed by a host. To prevent access of the LUN, the LUN should be taken offline administratively using the `lun offline` command.

Note: The specified LUN must be in an import relationship with a foreign disk before you can verify the data import.

## Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to compare block by block with the foreign disk.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN that you want to compare the foreign disk to. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtree1/lun1`.

## Examples

```
cluster1::> lun import verify start -vserver vs1 -path /vol/vol2/lun2
```

Starts the import verification on lun2 at path `/vol/vol2/lun2`.

## lun import verify stop

Stop the verify for the specified LUN

**Availability:** This command is available to *cluster* administrators at the *advanced* privilege level.

## Description

This command stops the block by block verification of the foreign disk and LUN data.

## Parameters

**-vserver <Vserver Name> - Vserver Name (privilege: advanced)**

Specifies the Vserver that contains the LUN you want to stop block by block comparison with the foreign disk.

**-path <path> - LUN Path (privilege: advanced)**

Specifies the path of the LUN that you want to stop the block by block comparison. Examples of correct LUN paths are `/vol/vol1/lun1` and `/vol/vol1/qtree1/lun1`.

## Examples

```
cluster1::> lun import verify stop -vserver vs1 -path /vol/vol2/lun2
```

Stops the import verify on lun at path `/vol/vol2/lun2`.

## Copyright information

Copyright © 2024 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.