Manage remote storage

SANtricity 11.8

NetApp
August 29, 2024

This PDF was generated from https://docs.netapp.com/us-en/e-series-santricity/sm-storage/rtv-import-remote-storage.html on August 29, 2024. Always check docs.netapp.com for the latest.

Table of Contents

Manage remote storage . . . 1
Import remote storage . . . 1
Manage progress of remote storage imports . . . 3
Modify connection settings for remote storage . . . 3
Remove remote storage object . . . 4

Manage remote storage

Import remote storage

To initiate a storage import from a remote system to a local E-Series storage system, use the Import Remote Storage wizard.

Before you begin

- The E-Series storage system must be configured to communicate with the remote storage system.

> Hardware configuration is described in the user guide for the Remote Storage feature, which is available from the E-Series and SANtricity documentation center at Configure hardware, and in the Remote Storage Technical Report.

- For the remote storage system, gather the following information:
  - iSCSI IQN
  - iSCSI IP addresses
  - LUN number of the remote storage device (source volume)
- For the local E-Series storage system, create or select a volume to be used for the data import. See Create volumes. The target volume must meet the following requirements:
  - Matches the block size of the remote storage device (the source volume).
  - Has a capacity that is equal to or larger than the remote storage device.
  - Has a state of Optimal and is available.

For a full list of requirements, see Remote storage volume requirements.

- **Recommended:** Back up volumes on the remote storage system before starting the import process.

About this task

In this task, you create a mapping between the remote storage device and a volume on the local E-Series storage system. When you finish the configuration, the import begins.

> Because many variables can impact the import operation and its completion time, we recommend that you first perform smaller “test” imports. Use these tests to ensure that all connections work as expected and that the import operation completes in an appropriate amount of time.

Steps

1. Select **Storage › Remote storage**.
2. Click **Import Remote Storage**.

   A wizard for importing remote storage is displayed.

3. In **Step 1a** of the Configure Source panel, enter connection information. If you want to add another iSCSI connection, click **Add another IP address** to include an additional IP address for the remote storage. When you are done, click **Next**.

Field details

Setting	Description
Name	Enter a name for the remote storage device to identify it in the System Manager interface. A name may include up to 30 characters, and can contain only letters, numbers, and the following special characters: underscore (_), dash (-), and the hash sign (#). A name may not contain spaces.
iSCSI connection properties	Enter the connection properties of the remote storage device: • **iSCSI Qualified Name (IQN)**: Enter the iSCSI IQN. • **IP Address**: Enter the IPv4 address. • **Port**: Enter the port number to be used for communications between the source and target devices. By default, the port number is 3260.

After you click **Next**, the **Step 1b** of the Configure Source panel is displayed.

4. In the **LUN** field, select the LUN number of the remote storage device to be used as the source, and then click **Next**.

   The Configure Target panel opens and displays volume candidates to serve as the target for the import. Some volumes do not display in the list of candidates due to block size, capacity, or volume availability.

5. From the table, select a target volume on the E-Series storage system. If needed, use the slider to change the import priority. Click **Next**. Confirm the operation in the next dialog box by typing `continue`, and then clicking **Continue**.

   If the target volume has a capacity that is larger than the source volume, that additional capacity is not reported to the host connected to the E-Series system. To use the new capacity, you must perform a file system expansion operation on the host after the import operation completes and is disconnected.

   After you confirm the configuration in the dialog, the Review panel is displayed.

6. From the Review panel, verify that the settings are accurate, and then click **Finish** to initiate the import.

   Another dialog box opens asking if you want to initiate another import.

7. If needed, click **Yes** to create another remote storage import. Clicking **Yes** returns to **Step 1a** of the Configure Source panel, where you can select the existing configuration or add a new one. If you do not want to create another import, click **No** to exit the dialog box.

   Once the import process begins, the entire target volume is overwritten with the copied data. If the host writes any new data to the target volume during this process, that new data is propagated back to the remote device (source volume).

8. View the progress of the operation in the View Operations dialog under the Remote Storage panel.

Results

The time required to complete the import operation depends on the size of the remote storage system, the

priority setting for the import, and the amount of I/O load on both storage systems and their associated volumes.

Once the import is complete, the local volume is a duplicate of the remote storage device.

After you finish

When you are ready to break the relationship between the two volumes, select **Disconnect** on the import object from the Operations In Progress view. Once the relationship is disconnected, performance of the local volume returns to normal and is no longer impacted by the remote connection.

Manage progress of remote storage imports

After the import process begins, you can view and take action on its progress.

About this task

For each import operation, the Operations in Progress dialog displays a percentage of completion and estimated time remaining. Actions include changing the import priority, stopping and resuming operations, and disconnecting from the operation.

You can also view Operations in Progress from the Home page (**Home › Show operations in progress**).

Steps

1. From the Remote Storage page, select **View Operations**.

   The Operations in Progress dialog box is displayed.

2. If desired, use the links in the **Actions** column to stop and resume, change priority, or disconnect from an operation.
   - **Change Priority** — Select **Change Priority** to change the processing priority of an operation that is in progress or pending. Apply a priority to the operation and then click **OK**.
   - **Stop** — Select **Stop** to pause the copying of data from the remote storage device. The relationship between the import pair is still intact, and you can select **Resume** when you are ready to continue the import operation.
   - **Resume** — Select **Resume** to begin a stopped or failed process from where it left off. Next, apply a priority to the Resume operation, and then click **OK**. This operation does *not* restart the import from the beginning. If you want to restart the process from the beginning, you must select **Disconnect**, and then re-create the import through the Import Remote Storage wizard.
   - **Disconnect** — Select **Disconnect** to break the relationship between the source and destination volumes for an import operation that has stopped, completed, or failed.

Modify connection settings for remote storage

You can edit, add, or delete connection settings for any remote storage configuration through the View/Edit Settings option.

About this task

Making changes to connection properties will affect in-progress imports. To avoid disruptions, only make changes to connection properties when imports are not running.

Steps

1. Select **Storage › Remote storage**.
2. From the list, select the remote storage object that you want to modify.
3. Click **View/Edit Settings**.

   The Remote Storage Settings dialog box is displayed.

4. Click the **Connection Properties** tab.

   The configured IP address and port settings for the remote storage import are displayed.

5. Perform one of the following actions:
   - **Edit** — Click **Edit** next to the corresponding line item for the remote storage object. Enter the revised IP address and/or port information in the fields.
   - **Add** — Click **Add**, and then enter the new IP address and port information in the fields provided. Click **Add** to confirm, and then the new connection appears in the list of remote storage objects.
   - **Delete** — Select the desired connection from the list and then click **Delete**. Confirm the operation by typing `delete` in the provided field and then click **Delete**. The connection is removed from the list of remote storage objects.
6. Click **Save**.

   The modified connection settings are applied to the remote storage object.

Remove remote storage object

After an import completes, you can remove a remote storage object if you no longer want data copied between the local and remote devices.

Before you begin

Make sure that no imports are associated with the remote storage object you plan to remove.

About this task

When you remove a remote storage object, connections between the local and remote devices are removed.

Steps

1. Select **Storage › Remote storage**.
2. From the list, select the remote storage object that you want to remove.
3. Click **Remove**.

   The Confirm Remove Remote Storage Connection dialog box is displayed.

4. Confirm the operation by typing `remove` and then clicking **Remove**.

   The selected remote storage object is removed.

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.