



Import settings

E-Series Systems

NetApp
August 31, 2022

Table of Contents

- Import settings 1
 - Import settings overview 1
 - Import alert settings 2
 - Import AutoSupport settings 3
 - Import directory services settings 4
 - Import system settings 5
 - Import storage configuration settings 6

Import settings

Import settings overview

The Import Settings feature is a batch operation that allows you to replicate the settings in a single storage array (the source) to multiple arrays (the targets) in the Storage Plugin for vCenter.

Settings available for import

The following configurations can be imported from one array to another:

- **Alerts** — Alerting methods to send important events to administrators using email, a syslog server, or an SNMP server.
- **AutoSupport** — A feature that monitors the health of a storage array and sends automatic dispatches to technical support.
- **Directory services** — A method of user authentication that is managed through an LDAP (Lightweight Directory Access Protocol) server and directory service, such as Microsoft's Active Directory.
- **System settings** — Configurations relating to the following:
 - Media scan settings for a volume
 - SSD settings
 - Automatic load balancing (does not include host connectivity reporting)
- **Storage configuration** — Configurations relating to the following:
 - Volumes (thick and non-repository volumes only)
 - Volume groups and pools
 - Hot spare drive assignments

Configuration workflow

To import settings, follow this workflow:

1. On a storage array to be used as the source, configure the settings using System Manager.
2. On the storage arrays to be used as the targets, back up their configuration using System Manager.
3. From the plugin interface, go to the **Manage** page and import the settings.
4. From the Operations page, review the results of the Import Settings operation.

Requirements for replicating storage configurations

Before importing a storage configuration from one storage array to another, review the requirements and guidelines.

Shelves

- The shelves where the controllers reside must be identical on the source and target arrays.
- Shelf IDs must be identical on the source and target arrays.

- Expansion shelves must be populated in the same slots with the same drive types (if the drive is used in the configuration, the location of unused drives does not matter).

Controllers

- The controller type can be different between the source and target arrays, but the RBOD enclosure type must be identical.
- The HICs, including the DA capabilities of the host, must be identical between the source and target arrays.
- Importing from a duplex to simplex configuration is not supported; however, importing from simplex to duplex is allowed.
- FDE settings are not included in the import process.

Status

- The target arrays must be in Optimal status.
- The source array does not need to be in Optimal status.

Storage

- Drive capacity may vary between the source and target arrays, as long as the volume capacity on the target is larger than the source. (A target array might have newer, larger capacity drives that would not be fully configured into volumes by the replication operation.)
- Disk pool volumes 64 TB or larger on the source array will prevent the import process on the targets.

Import alert settings

You can import alert configurations from one storage array to other storage arrays. This batch operation saves time when you need to configure multiple arrays in the network.

Before you begin

Make sure that:

- Alerts are configured in System Manager (**Settings > Alerts**) for the storage array you want to use as the source.
- The existing configuration for the target storage arrays are backed up in System Manager (**Settings > System > Save Storage Array Configuration**).
- You have reviewed the requirements for replicating storage configurations in [Import settings overview](#).

About this task

You can select email, SNMP, or syslog alerts for the import operation:

- **Email alerts** — A mail server address and the email addresses of the alert recipients.
- **Syslog alerts** — A syslog server address and a UDP port.
- **SNMP alerts** — A community name and IP address for the SNMP server.

Steps

1. From the Manage page, click **Actions > Import Settings**.

The Import Settings wizard opens.

2. In the Select Settings dialog, select either **Email alerts**, **SNMP alerts**, or **Syslog alerts**, and then click **Next**.

A dialog box opens for selecting the source array.

3. In the Select Source dialog, select the array with the settings you want to import, and then click **Next**.
4. In the Select Targets dialog, select one or more arrays to receive the new settings.



Storage arrays with firmware below 8.50 are not available for selection. In addition, an array does not appear in this dialog if the plugin cannot communicate with that array (for example, if it is offline or if it has certificate, password, or networking problems).

5. Click **Finish**.

The Operations page displays the results of the import operation. If the operation fails, you can click on its row to see more information.

Result

The target storage arrays are now configured to send alerts to administrators through email, SNMP, or syslog.

Import AutoSupport settings

You can import an AutoSupport configuration from one storage array to other storage arrays. This batch operation saves time when you need to configure multiple arrays in the network.

Before you begin

Make sure that:

- AutoSupport is configured in System Manager (**Support** > **Support Center**) for the storage array you want to use as the source.
- The existing configuration for the target storage arrays are backed up in System Manager (**Settings** > **System** > **Save Storage Array Configuration**).
- You have reviewed the requirements for replicating storage configurations in [Import settings overview](#).

About this task

Imported settings include the separate features (Basic AutoSupport, AutoSupport OnDemand, and Remote Diagnostics), the maintenance window, delivery method, and dispatch schedule.

Steps

1. From the Manage page, click **Actions** > **Import Settings**.

The Import Settings wizard opens.

2. In the Select Settings dialog, select **AutoSupport** and then click **Next**.

A dialog box opens for selecting the source array.

3. In the Select Source dialog, select the array with the settings you want to import, and then click **Next**.
4. In the Select Targets dialog, select one or more arrays to receive the new settings.



Storage arrays with firmware below 8.50 are not available for selection. In addition, an array does not appear in this dialog if the plugin cannot communicate with that array (for example, if it is offline or if it has certificate, password, or networking problems).

5. Click **Finish**.

The Operations page displays the results of the import operation. If the operation fails, you can click on its row to see more information.

Result

The target storage arrays are now configured with the same AutoSupport settings as the source array.

Import directory services settings

You can import a directory services configuration from one storage array to other storage arrays. This batch operation saves time when you need to configure multiple arrays in the network.

Before you begin

Make sure that:

- Directory services are configured in System Manager (**Settings > Access Management**) for the storage array you want to use as the source.
- The existing configuration for the target storage arrays are backed up in System Manager (**Settings > System > Save Storage Array Configuration**).
- You have reviewed the requirements for replicating storage configurations in [Import settings overview](#).

About this task

Imported settings include the domain name and URL of an LDAP (Lightweight Directory Access Protocol) server, along with the mappings for the LDAP server's user groups to the storage array's predefined roles.

Steps

1. From the Manage page, click **Actions > Import Settings**.

The Import Settings wizard opens.

2. In the Select Settings dialog, select **Directory services** and then click **Next**.

A dialog box opens for selecting the source array.

3. In the Select Source dialog, select the array with the settings you want to import, and then click **Next**.
4. In the Select Targets dialog, select one or more arrays to receive the new settings.



Storage arrays with firmware below 8.50 are not available for selection. In addition, an array does not appear in this dialog if the plugin cannot communicate with that array (for example, if it is offline or if it has certificate, password, or networking problems).

5. Click **Finish**.

The Operations page displays the results of the import operation. If the operation fails, you can click on its row to see more information.

Result

The target storage arrays are now configured with the same directory services as the source array.

Import system settings

You can import the system settings from one storage array to other storage arrays. This batch operation saves time when you need to configure multiple arrays in the network.

Before you begin

Make sure that:

- System settings are configured in System Manager for the storage array you want to use as the source.
- The existing configuration for the target storage arrays are backed up in System Manager (**Settings** > **System** > **Save Storage Array Configuration**).
- You have reviewed the requirements for replicating storage configurations in [Import settings overview](#).

About this task

Imported settings include media scan settings for a volume, SSD settings for controllers, and automatic load balancing (does not include host connectivity reporting).

Steps

1. From the Manage page, click **Actions** > **Import Settings**.

The Import Settings wizard opens.

2. In the Select Settings dialog, select **System** and then click **Next**.

A dialog box opens for selecting the source array.

3. In the Select Source dialog, select the array with the settings you want to import, and then click **Next**.
4. In the Select Targets dialog, select one or more arrays to receive the new settings.



Storage arrays with firmware below 8.50 are not available for selection. In addition, an array does not appear in this dialog if the plugin cannot communicate with that array (for example, if it is offline or if it has certificate, password, or networking problems).

5. Click **Finish**.

The Operations page displays the results of the import operation. If the operation fails, you can click on its row to see more information.

Result

The target storage arrays are now configured with the same system settings as the source array.

Import storage configuration settings

You can import the storage configuration from one storage array to other storage arrays. This batch operation saves time when you need to configure multiple arrays in the network.

Before you begin

Make sure that:

- Storage is configured in System Manager for the storage array you want to use as the source.
- The existing configuration for the target storage arrays are backed up in System Manager (**Settings** › **System** › **Save Storage Array Configuration**).
- You have reviewed the requirements for replicating storage configurations in [Import settings overview](#).
- The source and target arrays must meet these requirements:
 - The shelves where the controllers reside must be identical.
 - Shelf IDs must be identical.
 - Expansion shelves must be populated in the same slots with the same drive types.
 - The RBOD enclosure type must be identical.
 - The HICs, including the Data Assurance capabilities of the host, must be identical.
 - The target arrays must be in Optimal status.
 - The volume capacity on the target array is larger than the source array's capacity.
- You understand the following restrictions:
 - Importing from a duplex to simplex configuration is not supported; however, importing from simplex to duplex is allowed.
 - Disk pool volumes 64 TB or larger on the source array will prevent the import process on the targets.

About this task

Imported settings include configured volumes (thick and non-repository volumes only), volume groups, pools, and hot spare drive assignments.

Steps

1. From the Manage page, click **Actions** › **Import Settings**.

The Import Settings wizard opens.

2. In the Select Settings dialog, select **Storage configuration** and then click **Next**.

A dialog box opens for selecting the source array.

3. In the Select Source dialog, select the array with the settings you want to import, and then click **Next**.
4. In the Select Targets dialog, select one or more arrays to receive the new settings.



Storage arrays with firmware below 8.50 are not available for selection. In addition, an array does not appear in this dialog if the plugin cannot communicate with that array (for example, if it is offline or if it has certificate, password, or networking problems).

5. Click **Finish**.

The Operations page displays the results of the import operation. If the operation fails, you can click on its row to see more information.

Result

The target storage arrays are now configured with the same storage configuration as the source array.

Copyright Information

Copyright © 2022 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.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

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.