



Import Settings

SANtricity 11.6

NetApp

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Import Settings

Concepts

How Import Settings works

You can use SANtricity Unified Manager to import settings from one storage array to multiple storage arrays. The Import Settings feature is a batch operation that saves time when you need to configure multiple arrays in the network.

Settings available for import

The following configurations can be imported to multiple arrays:

- **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.
- **Storage configuration** — Configurations relating to the following:
 - Volumes (thick and non-repository volumes only)
 - Volume groups and pools
 - Hot spare drive assignments
- **System settings** — Configurations relating to the following:
 - Media scan settings for a volume
 - SSD settings
 - Automatic load balancing (does not include host connectivity reporting)

Configuration workflow

To import settings, follow this workflow:

1. On a storage array to be used as the source, configure the settings using SANtricity System Manager.
2. On the storage arrays to be used as the targets, back up their configuration using SANtricity System Manager.
3. From SANtricity Unified Manager, 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 (for example, importing from an E2800 to an E5700), 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.
- Thin volumes are not included in the import process.

How to

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

- Alerts are configured in SANtricity System Manager for the storage array you want to use as the source (**Settings > Alerts**).
- The existing configuration for the target storage arrays are backed up in SANtricity System Manager (**Settings > System > Save Storage Array Configuration**).

About this task

You can select email, SNMP, or syslog alerts for the import operation. The imported settings include:

- **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 **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 Unified Manager 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.

Results

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

- AutoSupport is configured in SANtricity System Manager for the storage array you want to use as the source (**Support** > **Support Center**).
- The existing configuration for the target storage arrays are backed up in SANtricity System Manager (**Settings** > **System** > **Save Storage Array Configuration**).

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 **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 Unified Manager 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.

Results

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

- Directory services are configured in SANtricity System Manager for the storage array you want to use as the source (**Settings > Access Management**).
- The existing configuration for the target storage arrays are backed up in SANtricity System Manager (**Settings > System > Save Storage Array Configuration**).

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 **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 Unified Manager 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.

Results

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

Import system settings

You can import the system 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

- System settings are configured in SANtricity 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 SANtricity System Manager (**Settings > System > Save Storage Array Configuration**).

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 **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 Unified Manager 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.

Results

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

- Storage is configured in SANtricity 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 SANtricity System Manager (**Settings** > **System** > **Save Storage Array Configuration**).
- 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.
 - Thin volumes are not included in the import process.

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 **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 Unified Manager 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.

Results

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

FAQs

What settings will be imported?

The Import Settings feature is a batch operation that loads configurations from one storage array to multiple storage arrays. The settings that are imported during this operation depend on how the source storage array is configured in SANtricity System Manager.

The following settings can be imported to multiple storage arrays:

- **Email alerts** — Settings include a mail server address and the email addresses of the alert recipients.
- **Syslog alerts** — Settings include a syslog server address and a UDP port.
- **SNMP alerts** — Settings include a community name and IP address for the SNMP server.
- **AutoSupport** — Settings include the separate features (Basic AutoSupport, AutoSupport OnDemand, and Remote Diagnostics), the maintenance window, delivery method, and dispatch schedule.
- **Directory services** — Configuration includes 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.
- **Storage configuration** — Configurations include volumes (only thick and only non-repository volumes), volume groups, pools, and hot spare drive assignments.
- **System settings** — Configurations include media scan settings for a volume, SSD cache for controllers, and automatic load balancing (does not include host connectivity reporting).

Why don't I see all of my storage arrays?

During the Import Settings operation, some of your storage arrays might not be available in the target selection dialog box.

Storage arrays might not appear for the following reasons:

- The firmware version is below 8.50.
- The storage array is offline.
- Unified Manager cannot communicate with that array (for example, it has certificate, password, or networking problems).

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