

NetApp® FAS/V-Series Storage Replication Adapter 2.0

For use with VMware® vCenter Site Recovery Manager

Release Notes

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Contents

- What is new in this release 5**
- System requirements for using Storage Replication Adapter 7**
- Features not supported in Storage Replication Adapter 9**
- Upgrading to Storage Replication Adapter 2.0 11**
- Copyright information 13**
- Trademark information 15**
- How to send your comments 17**

What is new in this release

Storage Replication Adapter 2.0 supports all the workflows in Site Recovery Manager 5.0, such as discovery of arrays and replicated devices, test recovery, recovery (planned migration and disaster recovery), and reprotect. It also supports automatic creation of igroup and volume filtering.

NetApp Disaster Recovery Adapter is now known as NetApp FAS/V-Series Storage Replication Adapter.

For more information about Storage Replication Adapter 2.0, see the *NetApp FAS/V-Series Storage Replication Adapter 2.0 Installation and Administration Guide*.

System requirements for using Storage Replication Adapter

Before you run Storage Replication Adapter, you must meet certain Data ONTAP and Site Recovery Manager requirements.

The system requirements include the following:

- Data ONTAP 7.2.4 or later is installed on the storage system.
When configuring MultiStore vFiler units as storage arrays, you must ensure that your storage system is running Data ONTAP 7.3.2 or later.
For information about NetApp platforms supported in VMware environment, see the NetApp-VMware platform compatibility matrix on the VMware site.
- FlexClone license is enabled to test recovery.
- SnapMirror license is enabled on the storage system.
- In a NAS environment, NFS services are running.
- In a SAN environment, iSCSI, FC, or both services are running.
- Site Recovery Manager 5.0 is installed on Windows.
Site Recovery Manager supports VMFS (iSCSI and FC), RDM (iSCSI and FC), and NFS storage environments.
- Storage Replication Adapter 2.0 is installed on Site Recovery Manager server at the protected and recovery sites.
- Perl 5.8.8 is installed on the system on which Site Recovery Manager is installed.
Note: If the Site Recovery Manager installation does not include Perl 5.8.8, you can install Perl separately with the default configuration. For more information about downloading Perl, see the Perl download page.
- If you want to use secureHTTP, you must set up SecureAdmin and ensure that SSL or SSH is running.
For more information about installing SSL on Perl, see the NetApp KB article 54012 on the NetApp Support Site.
By default, Storage Replication Adapter calls the Data ONTAP API over HTTP.
Note: SecureAdmin does not require a license.
- To keep the corresponding port open, the firewall (if any) between Data ONTAP and Site Recovery Manager must be configured because SOAP (port 80), HTTP (port 80), or SSL (port 443) is used.

Related information

[Perl script download page](#)
support.netapp.com

[KB 54012](#)

Features not supported in Storage Replication Adapter

Certain features and functions are not supported in Storage Replication Adapter.

- Failover of exports or LUNs that have multiple replication destinations
- Failover of exports or LUNs that have cascading SnapMirror relationships
- Test recovery operation on traditional volumes
Because FlexClone technology is not available for traditional volumes, Storage Replication Adapter does not support test recovery operation on traditional volumes.
- Discovery of exports that are exported as read-only by using `ro` or as read/write to all hosts from the `rw` field
In NAS environment, exports from the storage array must have values in the `rw=` field of export permissions.
- Recovery from a specific quiesced or non-quiesced SMVI Snapshot copy
Storage Replication Adapter 2.0 recovers storage only from the last replicated SnapMirror Snapshot copy.
- SyncMirror replication between Site Recovery Manager sites (as in MetroCluster)

Note: A MetroCluster system might be either the source or destination of a SnapMirror relationship; however, Site Recovery Manager does not support management of SyncMirror failover between MetroCluster nodes.

For specific information about recommended configurations and best practices when using different replication modes, see the *Data ONTAP Data Protection Online Backup and Recovery Guide*.

- Mixed ALUA (Asymmetric Logical Unit Access) configurations for FC igroups
Mixed ALUA configuration is one where one or more ESX hosts in a cluster have some initiators configured in ALUA-enabled igroups and the same ESX host or hosts have other initiators configured in ALUA-disabled igroups.

Example 1: Two or more ESX hosts, each hosting a node of a virtualized MSCS (Microsoft Cluster Server)

For each ESX host, some initiators are in an ALUA-enabled igroup for VMFS LUNs and some initiators are in an ALUA-disabled igroup for RDM LUNs to support MSCS in a virtual machine.

Example 2: Mixed ESX environments

An ESX cluster that contains both ESX 3.5 hosts and ESX 4.x or 5.x hosts where the ESX 3.5 initiators are in an ALUA-disabled igroup and the ESX 4.x or 5.x initiators are in an ALUA-enabled igroup, and where the Site Recovery Manager resource mappings are done at the cluster level.

- Mixed ALUA configurations for FC and iSCSI igroups
Data ONTAP does not support ALUA for iSCSI connections. Mixed ALUA configuration for FC and iSCSI is one where the ESX hosts at the recovery site have LUNs configured in ALUA-enabled FC igroups and the same LUNs configured in ALUA-disabled iSCSI igroups. This

configuration is caused if the recovery environment is FC ALUA-enabled and the recovery ESX hosts have the iSCSI initiators enabled. If the recovery ESX hosts have iSCSI initiators enabled, then Site Recovery Manager might include those initiators in the LUN access request along with the FC initiators. This configuration is not supported by Data ONTAP. Therefore, if the recovery environment is FC ALUA-enabled, then the ESX iSCSI initiators must be disabled.

- Automatic cleanup of SnapMirror Snapshot copies when storage replication is reversed
During a reprotect operation, Storage Replication Adapter does not remove Snapshot copies that were used for replication in the original direction. After the reprotect operation is complete, you must delete the Snapshot copies manually.

Upgrading to Storage Replication Adapter 2.0

Storage Replication Adapter 2.0 is only supported with Site Recovery Manager 5.0.

Steps

1. If you have made any configuration settings in the `ontap_config.txt` file of the earlier version of the adapter, you should make a copy of that file so that you can use those configuration settings in Storage Replication Adapter 2.0.
2. Uninstall the existing Storage Replication Adapter.
Note: If you are upgrading Storage Replication Adapter as part of the upgrade from SRM 4.X to SRM 5, you must uninstall the adapter before uninstalling SRM 4.X.
3. Upgrade Site Recovery Manager using SRM installer.
4. Install Storage Replication Adapter 2.0.
5. Make the required configuration settings in the `ontap_config.txt` file.
6. Connect the sites.
7. Reload Storage Replication Adapter 2.0 from the SRM user interface.
8. Configure Storage Replication Adapter 2.0 in the **Array Manager** wizard of Site Recovery Manager.
9. Verify that all expected replicated datastores are discovered by SRM.
10. Run SRM Migration Utility to import inventory mappings, protection groups, and recovery plans.

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