IBM Spectrum Accelerate Family Storage Replication Adapter
Version 3.0.1

Release Notes

IBM

Contents

Overview

The IBM® Spectrum Accelerate Family Storage Replication Adapter (SRA) is a software add-on that integrates with the VMware vCenter Site Recovery Manager (SRM) platform and enables site-to-site failovers together with supported IBM storage systems.

The IBM Spectrum Accelerate Family SRA extends the VMware vCenter Site Recovery Manager capabilities by allowing it to employ the storage system's replication and mirroring features for continuous storage availability at both the protected site and recovery site.

What's new in version 3.0.1

Version 3.0.1 adds compatibility with Multi-site HA/DR solution, as introduced by the FlashSystem A9000 and A9000R storage systems (version 12.3). While not actively supporting this function, the SRA is agnostic to the underlying HA/DR configuration and does not interfere with its operation.

General availability date: 23 November 2018

Download site

VMware certification for IBM Spectrum Accelerate Family Storage Replication Adapter software will be available soon. When certified, the package will be available for download from:

http://www.vmware.com/go/download-srm. Until then, the software can be obtained from IBM Fix Central.

Compatibility and requirements

This section specifies the compatibility and requirements of version 3.0.0 of the IBM Spectrum Accelerate Family Storage Replication Adapter.

Note: For information about the compatibility and requirements of a previous version, refer to its relevant release notes. In addition, refer to the VMware compatibility matrix on IBM Knowledge Center for information about supported combinations of IBM storage system software versions and various VMware cloud platforms.

Supported storage systems

The IBM Spectrum Accelerate Family Storage Replication Adapter supports the following storage systems.

Storage system	Microcode version
IBM XIV® Storage System	10.2.x
	11.0.x, 11.1.x, 11.2.x, 11.3.x, 11.4.x, 11.5.x, 11.6.x
IBM Spectrum Accelerate	11.5.x
IBM FlashSystem A9000	12.x

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Storage system	Microcode version
IBM FlashSystem A9000R	12.x

Note:

- Newer microcode versions may also be compatible. When a newer microcode version becomes available, refer to the latest storage system release notes to check whether the new microcode version is also supported.
- Version 3.0.0 adds integration with FlashSystem A9000 and A9000R HyperSwap solution, when using software version 12.1 of the storage systems. If HyperSwap support is not required, you can use earlier releases of IBM Spectrum Accelerate Family SRA.

Required VMware server software

Any of the following VMware vCenter Site Recovery Manager releases must be installed at both the protected (primary) site and recovery (secondary) site: 6.1, 6.5. The minimum SRM version for IBM HyperSwap support is 6.1.

Note: For earlier VMware SRM releases (5.1, 5.5, 5.8, 6.0), use IBM Spectrum Accelerate Family SRA version 2.3.0.

Change log

This section summarizes the changes made in different version releases of the IBM Spectrum Accelerate Family Storage Replication Adapter.

Note: New functional features of these versions are only briefly summarized. For a detailed summary of the new functional features of a specific version, refer to the 'What's new' section of its release notes.

Version 3.0.1 (November 2018)

Version 3.0.1 adds compatibility with Multi-site HA/DR solution, as introduced by the FlashSystem A9000 and A9000R storage systems (version 12.3).

Version 3.0.0 (June 2017)

Version 3.0.0 added integration with IBM HyperSwap solution, as introduced by the FlashSystem A9000 and A9000R storage systems (version 12.1).

Version 2.3.0 (August 2016)

Version 2.3.0 added support for IBM FlashSystem A9000 and IBM FlashSystem A9000R version 12.0.x.

Version 2.2.2 (January 2016)

Version 2.2.2 added support for IBM Spectrum Accelerate™ 11.5.3 and for VMware vCenter Site Recovery Manager 6.1.

Additional changes in version 2.2.2:

Ticket ID	Description
SRA-258735	**Fixed**: The IBM XIV SRA does not work with XIV storage systems that are configured to use LDAP authentication.

Version 2.2.1 (June 2015)

Version 2.2.1 included the following fix.

Ticket ID	Description
SRA-258748	**Fixed**: The IBM XIV SRA does not support compressed volumes created on XIV storage systems (version 11.6 or later).

Version 2.2.0 (March 2013)

Version 2.2.0 added support for newer versions of the XIV microcode, Spectrum Accelerate, and VMware vCenter Site Recovery Manager.

It also includes the following enhancement and fix:

Ticket ID	Description
SRA-258677	**Enhancement**: At both the protected and recovery sites, the IBM XIV SRA aims to best achieve the following configuration goals on the XIV storage system, if possible: • Keep the volume LUN numbers upon failover, and reuse the same ones upon failback. • Map volumes with the same LUN IDs across all the specific ESXi hosts that are requested for the failover. • In more scenarios, map volumes to a cluster that contains all the specific ESXi hosts that are requested for the failover, rather than mapping to individual hosts. For more detailed information, refer to the user guide.
SRA-239280	**Fixed**: The IBM XIV SRA does not work when version 3.0.0 of the IBM Storage Management Console for VMware vCenter is used in parallel.

Version 2.1.1.1 (September 2012)

Version 2.1.1.1 included the following critical fix.

Ticket ID	Description
SRA-243783	**Fixed**: Test or Recovery operations may fail when consistency groups are used over asynchronous mirroring.

Version 2.1.1 (August 2012)

Version 2.1.1 added support for VMware vCenter SRM 5.1, and includes the following fix.

Ticket ID	Description
SRA-204003	**Fixed**: The IBM XIV SRA fails if a mirrored consistency group and a mirrored volume have the same name.

Version 2.1.0 (February 2012)

Version 2.1.0 introduced support for VMware vCenter SRM 5.0 and version 11.0 of the IBM XIV microcode (XIV Gen3).

Known issues

This section details the known issues in version 3.0.0 of the IBM Spectrum Accelerate Family Storage Replication Adapter, along with possible solutions or workarounds (if available).

Ticket ID	Description
SRA-167578	In some cases, the VMware vCenter SRM messages might be very general and not specific to the IBM Spectrum Accelerate Family SRA.
	When a volume mapping operation fails (for example, when the specified FC ports do not belong to any host), the 'Test' and 'Failover' operations fail as well, but SRM does not provide an appropriate message regarding the failure.
	An indication regarding the mapping failure and any subsequent operation failure can be found in the IBM Spectrum Accelerate Family SRA log file.
SRA-258768	IBM Spectrum Accelerate Family Storage Replication Adapter does not support IPv6.
	Currently there is no solution or workaround for this limitation.
SRA-258773	If a consistency group used for replication has a mix of locked and unlocked volumes, device rescanning may fail.
	To avoid this situation, before rescanning the storage system, verify that all consistency group volumes are in the same state (locked or unlocked).

Ticket ID	Description
SRA-258914	When the storage system fails at the protected site, while the VMware environment is still operational, a volume in the IBM HyperSwap solution becomes a preferred volume at the recovery site. As a result, the SRM-protected VMs appear as not-protected and cannot be migrated to the recovery site. This issue is caused by the VMware SRM (6.5) fault, described in the release notes for this version. Currently there is no solution or workaround for this limitation.
SRA-258923	Planned failover without VMotion may fail during storage synchronization stage. This issue is caused by the fault in VMware SRM versions 6.1 and 6.5, as detailed in the version 6.1 release notes and version 6.5 release notes. To resolve this issue after the planned migration fails in the first attempt, discover the storage systems manually and run the planned failover operation again.
SRA-258969	When a mirrored volume in an SRM protection group is converted to a stretched one on FlashSystem A9000 or A9000R storage system in a HyperSwap relation, the volume appears as stretched on the discovered devices. However, the VMs on the volume are displayed as no longer protected. To resolve this issue, recreate the protection group and recovery plan, according to the instructions for the specific protection type (high-availability or mirror).
SRA-258972	The SRM Discover Devices and Failover operations on the specific array manager pair fail, if: • Test Failover operation was initiated on a recovery plan, which includes FlashSystem A9000 or A9000R with HyperSwap (stretched) consistency group. • Cleanup operation was not initiated yet. **Note:** Other operations, such as Test and Unplanned Failover for recovery plans, are not affected and can be initiated. To avoid this issue, run the Cleanup operation on the relevant recovery plans before executing further Discover Devices or Planned Failover operations on the same array manager pair.

Ticket ID	Description
SRA-259083	When a Multi-site HA/DR solution is being configured or dismantled, the SRM Discover Devices action might return an error, informing about failure to find matching protected entity.
	To avoid this issue, make sure that only one protection method (SRM or Multi-site HA/DR) is used for relevant volumes or consistency groups. Thus, complete the Multi-site HA/DR solution configuration for the volume; or dismantle the Multi-site HA/DR and use the SRM protection only.

Related information and publications

You can find additional information and publications related to the IBM Spectrum Accelerate Family Storage Replication Adapter on the following information sources.

- IBM XIV Storage System on IBM Knowledge Center
- IBM Spectrum Accelerate on IBM Knowledge Center
- IBM FlashSystem® A9000 on IBM Knowledge Center
- IBM FlashSystem A9000R on IBM Knowledge Center
- VMware vCenter Site Recovery Manager Documentation (www.vmware.com/support/pubs)
- VMware Technical Resources (www.vmware.com/technical-resources)
- VMware knowledgebase (kb.vmware.com)
- For SRA deployment with IBM HyperSwap® solution, also refer to the following VMware documents:
  - Stretched Clusters & VMware Site Recovery Manager
  - Site Recovery Manager and Stretched Storage: Tech Preview of a New Approach® to Active-Active Data Centers

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- IBM Support Portal website (www.ibm.com/storage/support)
- IBM Directory of Worldwide Contacts website (www.ibm.com/planetwide)

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