

IBM Spectrum Accelerate Family Storage
Replication Adapter
Version 3.1.0

Release Notes



First Edition (December 2020)

This edition applies to version 3.1.0 of the IBM® Spectrum Accelerate Family Storage Replication Adapter software package. Newer document editions may be issued for the same product version in order to add missing information, update information, or amend typographical errors. The edition is reset to 'First Edition' for every new product version.

© **Copyright International Business Machines Corporation 2009, 2020.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

- Overview.....1**
- What's new in 3.1.0..... 3**
- Download site..... 5**
- Compatibility and requirements..... 7**
 - Supported storage systems..... 7
 - Required VMware server software..... 7
- Change log..... 9**
 - 3.1.0 (December 2020)..... 9
 - 3.0.1 (November 2018)..... 9
 - 3.0.0 (June 2017)..... 9
 - 2.3.0 (August 2016)..... 9
 - 2.2.2 (January 2016)..... 9
 - 2.2.1 (June 2015)..... 9
 - 2.2.0 (March 2013)..... 9
 - 2.1.1.1 (September 2012).....10
 - 2.1.1 (August 2012).....10
 - 2.10 (February 2012)..... 10
- Known issues..... 11**
- Related information and publications.....13**
- Getting information, help, and service.....15**
- Notices.....17**
 - Trademarks..... 18

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 3.1.0

IBM Spectrum Accelerate Family SRA 3.1.0 adds compatibility with VMware Site Recovery Manager (SRM) Virtual Appliance (Photon OS). SRM 8.2 Appliance (Photon OS) is the minimum version supported by SRA version 3.1.0.

General availability date: 24 December 2020

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 3.1.0 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
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 3.1.0 supports FlashSystem A9000 and A9000R HyperSwap solution, when using software version 12.1 or later of the storage systems.
-

Required VMware server software

The following VMware vCenter Site Recovery Manager release must be installed at both the protected (primary) site and recovery (secondary) site: **SRM 8.2: VMware Site Recovery Manager Appliance Management (Photon OS)**

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.

3.1.0 (December 2020)

IBM Spectrum Accelerate Family SRA 3.1.0 adds compatibility with VMware Site Recovery Manager (SRM) Virtual Appliance (Photon OS).

3.0.1 (November 2018)

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

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).

2.3.0 (August 2016)

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

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.

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).

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	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>For more detailed information, refer to the user guide.</p>
SRA-239280	<p>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.</p>

2.1.1.1 (September 2012)

Version 2.1.1.1 included the following critical fix.

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

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	<p>Fixed: The IBM XIV SRA fails if a mirrored consistency group and a mirrored volume have the same name.</p>

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 3.1.0 of the IBM Spectrum Accelerate Family Storage Replication Adapter, along with possible solutions or workarounds (if available).

Ticket ID	Description
SRA-167578	<p>In some cases, the VMware vCenter SRM messages might be very general and not specific to the IBM Spectrum Accelerate Family SRA.</p> <p>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.</p> <p>An indication regarding the mapping failure and any subsequent operation failure can be found in the IBM Spectrum Accelerate Family SRA log file.</p>
SRA-258768	<p>IBM Spectrum Accelerate Family Storage Replication Adapter does not support IPv6.</p> <p>Currently there is no solution or workaround for this limitation.</p>
SRA-258773	<p>If a consistency group used for replication has a mix of locked and unlocked volumes, device rescanning may fail.</p> <p>To avoid this situation, before rescanning the storage system, verify that all consistency group volumes are in the same state (locked or unlocked).</p>
SRA-258914	<p>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.</p> <p>Currently there is no solution or workaround for this limitation.</p>
SRA-258923	<p>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.</p> <p>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.</p>
SRA-258969	<p>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.</p> <p>To resolve this issue, recreate the protection group and recovery plan, according to the instructions for the specific protection type (high-availability or mirror).</p>

Ticket ID	Description
SRA-258972	<p>The SRM Discover Devices and Failover operations on the specific array manager pair fail, if:</p> <ul style="list-style-type: none"> • 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. <p>Note: Other operations, such as Test and Unplanned Failover for recovery plans, are not affected and can be initiated.</p> <p>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.</p>
SRA-259083	<p>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.</p> <p>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.</p>

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 \(www.vmware.com/support/pubs\)](http://www.vmware.com/support/pubs)
- [VMware Technical Resources \(www.vmware.com/technical-resources\)](http://www.vmware.com/technical-resources)
- [VMware knowledgebase \(kb.vmware.com\)](http://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](#)

Getting information, help, and service

If you need help, service, technical assistance, or want more information about IBM products, you can find various sources to assist you. You can view the following websites to get information about IBM products and services and to find the latest technical information and support.

- [IBM website \(ibm.com®\)](http://ibm.com)
- [IBM Support Portal website \(www.ibm.com/storage/support\)](http://www.ibm.com/storage/support)
- [IBM Directory of Worldwide Contacts website \(www.ibm.com/planetwide\)](http://www.ibm.com/planetwide)

Notices

These legal notices pertain to the information in this IBM Storage product documentation.

This information was developed for products and services offered in the US. This material may be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing
IBM Corporation
North Castle Drive, MD-NC119
Armonk, NY 10504-1785
USA*

For license inquiries regarding double-byte character set (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

*Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan*

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

*IBM Director of Licensing
IBM Corporation
North Castle Drive, MD-NC119*

Armonk, NY 10504-1785
USA

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

The performance data discussed herein is presented as derived under specific operating conditions. Actual results may vary.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Trademarks

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of the International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the [Copyright and trademark information website](http://www.ibm.com/legal/us/en/copytrade.shtml) (www.ibm.com/legal/us/en/copytrade.shtml).

VMware, ESX, ESXi, vSphere, vCenter, and Site Recovery Manager are trademarks or registered trademarks of VMware Corporation in the United States, other countries, or both.

Other product and service names might be trademarks of IBM or other companies.



Printed in USA