IBM Spectrum Virtualize Family Storage Replication Adapter 3.7.1

Release Notes



# First Edition (February 2022) This edition applies to IBM Spectrum Virtualize Family Storage Replication Adapter 3.7.1 and to all subsequent releases and modifications until otherwise indicated in a newer publication. Newer document editions may be issued for the same product version in order to add missing information or amend typographical errors. The edition is reset to 'First Edition' for every new product version. © Copyright International Business Machines Corporation 2010, 2022. US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

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# **Overview**

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

The IBM Spectrum Virtualize Family SRA extends SRM capabilities and uses replication and mirroring as part of the SRM comprehensive Disaster Recovery Planning (DRP) solution. VMware administrators can automate the failover of a storage system at the protected (primary) SRM site to a storage system at a recovery (secondary) SRM site.

# What's new in 3.7.1

IBM Spectrum® Virtualize Family Storage Replication Adapter 3.7.1 is a minor software release. This release fixes some known issues and introduces additional storage system and VMware server support.

#### Additional storage system support

IBM Spectrum Virtualize Family Storage Replication Adapter 3.7.1 adds additional storage system support for the new FlashSystem 7300 and 9500 models.

#### **Additional SRM support**

This versions adds SRM 8.5 VMware server software support.

#### **Resolved issues**

This release resolves new found issues, including a common security issue. For more information about the resolved issues, see 3.7.1 (February 2022).

# **Compatibility and requirements**

The compatibility and requirements for IBM Spectrum Virtualize Family SRA 3.7.1 are documented in the following topics.

## **Supported storage systems**

The IBM Spectrum Virtualize Family SRA supports the following IBM® Storage products.

Storage system	Microcode version	Compatibility note
IBM FlashSystem® 5000	8.2.1, 8.3.x, 8.4.x	
IBM FlashSystem 5100	8.2.1, 8.3.x, 8.4.x	
IBM FlashSystem 5200	8.4.0.1 or later, 8.5.0.0	
IBM FlashSystem 7200	8.3.1, 8.4.x	
IBM FlashSystem 7300	8.5.0.0	
IBM FlashSystem 9100	8.2.x, 8.3.x, 8.4.x	
IBM FlashSystem 9200	8.3.1, 8.4.x	
IBM FlashSystem 9500	8.5.0.0	
IBM Storwize® V3700	7.8.1	
IBM Storwize V5000 Gen1	7.8.1	
IBM Storwize V5000 Gen2	7.8.1, 8.2.x, 8.3.x	
IBM Storwize V5000E	8.2.1, 8.3.x, 8.4.x	
IBM Storwize V5100	8.2.x, 8.3.x, 8.4.x	
IBM Storwize V7000	7.8.x, 8.2.x, 8.3.x, 8.4.x	
IBM Storwize V7000 Unified	1.5.2, 1.6.0, 1.6.1, 1.6.2	Only block storage is supported. File systems and file shares are not supported.
IBM SAN Volume Controller	7.8.x, 8.2.x, 8.3.x, 8.4.x, 8.5.0.0	Requires the Remote Mirror and FlashCopy® features to be enabled.
IBM FlashSystem V9000	7.8.x, 8.2.x, 8.3.x	

#### Note:

- Newer microcode versions may also be compatible. When a newer microcode version becomes available, refer to the <u>Lifecycle and support matrix page</u> in IBM Documentation to check whether the new microcode version is also supported.
- All storage systems listed above run the IBM Spectrum Virtualize software.

### **Required VMware server software**

The following server software must be installed at both the protected (primary) and recovery (secondary) sites.

• VMware Site Recovery Manager 8.2, 8.3, 8.4, 8.5 (Virtual Appliance)

**Note:** For more information about supported combinations of IBM storage system software versions and various VMware cloud platforms, see the VMware compatibility matrix.

## **Required VMware client software**

The following software must be installed on the administrator client station.

• VMware vSphere Web Client 6.0 U3 or later

**Note:** For more information about supported combinations of IBM storage system software versions and various VMware cloud platforms, see the VMware compatibility matrix.

# **Change log**

This section summarizes the changes made in different version releases of the IBM Spectrum Virtualize Family Storage Replication Adapter (SRA).

### 3.7.1 (February 2022)

IBM Spectrum Virtualize Family Storage Replication Adapter 3.7.1 introduces new storage support for FlashSystem 7300 and 9500, adds SRM 8.5 VMware server support, and resolves the following issues:

Ticket ID	Description
VMSS-260976	<b>Fixed:</b> Active-Active storage scenario fails in disaster recovery scenario with <b>SaveExportInformation</b> as <i>True</i> and Failback operation is performed.
VMSS-260979	<b>Fixed:</b> Common security issue. For more information about this security issue, see CVE-2021-44832 on the Common Vulnerabilities and Exposures (CVE) information website (cve.mitre.org).

## 3.7.0 (December 2021)

IBM Spectrum Virtualize Family Storage Replication Adapter 3.7.0 introduced the following fix:

Ticket ID	Description		
VMSS-260970	<b>Fixed:</b> In some cases, during a testfailover or failover scenario, storage LUNs are exported to undesired hosts during the failback process.		
VMSS-260972	<b>Fixed:</b> Common security issue. For more information about this security issue, see <a href="CVE-2021-45046">CVE-2021-45046</a> on the Common Vulnerabilities and Exposures (CVE) information website (cve.mitre.org).		

## **3.6.0 (February 2021)**

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.6.0 added support for the microcode versions 8.4.0 and 8.4.0.1 as well as included the following fixes and enhancements.

Ticket ID	Description	
VMSS-260956	<b>Enhancement:</b> Support was added for Data Reduction Volume during test failover.	
VMSS-260958	<b>Enhancement:</b> Support was added for SRA Check Tool in a container environment.	
VMSS-260966	<b>Fixed:</b> Multiport support for SRA on 1:1 Spectrum Virtualize topology, and Data Sync issue with CG resolved.	

## 3.5.0 (August 2019)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.5.0 added support for the following storage system microcode versions:

- IBM FlashSystem V9000 8.3.0
- IBM FlashSystem 9100 8.3.0
- IBM SAN Volume Controller 8.3.0

- IBM Storwize V5000 8.3.0
- IBM Storwize V7000 8.3.0
- IBM Spectrum Virtualize (deployable software) 8.3.0

Spectrum Virtualize Family SRA 3.5.0 also included the following enhancement.

Ticket ID	Description
VMSS-260946	<b>Enhancement:</b> Support was added for VMware SRM 8.2 (Virtual Appliance).

#### 3.4.0 (August 2018)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.4.0 added support for the following storage system microcode versions:

- IBM FlashSystem V9000 8.1.3
- IBM FlashSystem 9100 8.2.0
- IBM SAN Volume Controller 8.1.3
- IBM Storwize V5000 8.1.3
- IBM Storwize V7000 8.1.3 and 8.2.0
- IBM Spectrum Virtualize (deployable software) 8.1.3

Spectrum Virtualize Family SRA 3.4.0 also included the following fixes and enhancements.

Ticket ID	Description		
VMSS-260812	<b>Fixed:</b> The error code returned for invalid device ID (4) was incorrect and actually means "Invalid Array ID." The correct error code (77777 "CMMVC6270E Invalid device.\n") is now returned.		
VMSS-260837	<b>Fixed:</b> The Spectrum Virtualize attachvolume function only returned the return code value from the last time the target host mapping operation was performed. As a result, when subsequent failover operations were run, the mapping operation was not run again for hosts that were previously mapped successfully, which led to failover operation failure.		
VMSS-260864	<b>Enhancement:</b> Return code check for host mapping during testfailoverstart operation added.		
VMSS-260878	<b>Enhancement:</b> Added support for a new IBM storage product, IBM FlashSystem 9100.		

#### 3.3.3 (March 2018)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.3.3 added support for the following storage system microcode versions:

- IBM FlashSystem V9000 8.1.2
- IBM SAN Volume Controller 8.1.2
- IBM Storwize V5000 8.1.2
- IBM Storwize V7000 8.1.2
- IBM Spectrum Virtualize (deployable software) 8.1.2

Spectrum Virtualize Family SRA 3.3.3 also included the following fix.

Ticket ID	Description
VMSS-260853	<b>Fixed:</b> Defensive programming check in preparefailover was not working.

## 3.3.2 (December 2017)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.3.2 added support for the following storage system microcode versions:

- IBM FlashSystem V9000 8.1.1
- IBM SAN Volume Controller 8.1.1
- IBM Storwize V5000 8.1.1
- IBM Storwize V7000 8.1.1
- IBM Spectrum Virtualize (deployable software) 8.1.1

Spectrum Virtualize Family SRA 3.3.2 also included the following enhancement and fixes.

Ticket ID	Description		
VMSS-260785	<b>Enhancement:</b> Improved performance when querying stretched cluster volumes from storage systems.		
VMSS-260727	<b>Fixed:</b> Protection site volumes could not be attached to the host when running reprotect after running disaster failover using iSCSI.		
VMSS-260789	<b>Fixed:</b> Since version 3.3.0, the log in the SRA check configuration tool did not display configuration changes.		

## 3.3.1 (September 2017)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.3.1 added support for Spectrum Virtualize host cluster starting with IBM SAN Volume Controller 7.7.1. It also added support for the following storage system microcode versions:

- IBM FlashSystem V9000 8.1
- IBM SAN Volume Controller 8.1
- IBM Storwize V5000 8.1
- IBM Storwize V7000 8.1
- IBM Spectrum Virtualize (deployable software) 8.1

## 3.3.0 (November 2016)

Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.3.0 added support for the following storage system microcode versions:

- IBM FlashSystem V9000 7.8
- IBM SAN Volume Controller 7.8
- IBM Storwize V3700 7.8
- IBM Storwize V5000 7.8
- IBM Storwize V7000 7.8
- IBM Storwize V7000 Unified 1.6.2

Additional enhancement in Spectrum Virtualize Family SRA 3.3.0:

Ticket ID	Description
VMSS-260704	<b>Enhancement:</b> IBM Storwize Family Storage Replication Adapter renamed to IBM Spectrum Virtualize Family Storage Replication Adapter.

# **Known issues**

This section details the known issues in IBM Spectrum Virtualize Family Storage Replication Adapter (SRA) 3.7.1, along with possible workarounds (if workarounds are available).

Ticket ID	Description  The direction of the GMCV replications shown in SRM will sometimes display incorrectly if devices are manually discovered after a Recovery operation. This issue only reproduces against GMCV.		
VMSS-260691			
	After a failover, the GMCV becomes idle, and SRM cannot detect the direction of the replication relationship. No other operations, such as Reprotect, however, are impacted.		
SVCSRA-5161	If the vCenter/SRM/ESX server is down while the IBM storage is still working, the secondary recovery action might fail when the primary site is recovered.		
	<b>Workaround:</b> Stop the remote copies with the <b>access</b> option enabled on the storage system before running the secondary recovery.		

# **Related information and publications**

You can find additional information and publications related to the IBM Spectrum Virtualize Family Storage Replication Adapter at the following websites:

- IBM FlashSystem 5200, 5000, 5100, Storwize V5100 and V5000E in IBM Documentation (ibm.com<sup>®</sup>/docs/en/flashsystem-5x00)
- IBM FlashSystem 7200, 7300 and Storwize V7000 in IBM Documentation (ibm.com/docs/en/flashsystem-7x00)
- IBM Storwize V7000 Unified in IBM Documentation (ibm.com/docs/en/flashsystem-v7000u)
- IBM SAN Volume Controller in IBM Documentation (ibm.com/docs/en/sanvolumecontroller)
- IBM FlashSystem V9000 in IBM Documentation (ibm.com/docs/en/flashsystem-v9000)
- IBM FlashSystem 9x00 in IBM Documentation (ibm.com/docs/en/flashsystem-9x00)
- SAN Volume Controller V4.3.0 Advanced Copy Services (redbooks.ibm.com/redbooks/pdfs/sg247574.pdf)
- SAN Volume Controller Best Practices and Performance Guidelines (redbooks.ibm.com/redbooks/pdfs/sg247521.pdf)
- VMware Documentation (vmware.com/support/pubs)
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