

IBM DS8000 Storage Replication Adapter  
Version 2.4.1

*Release Notes*



**First Edition (August 2020)**

This edition applies to version 2.4.1 of the IBM® DS8000® Storage Replication Adapter 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.

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# Contents

<b>Overview.....</b>	<b>1</b>
<b>Download site.....</b>	<b>3</b>
<b>Compatibility and requirements.....</b>	<b>5</b>
Supported storage systems.....	5
Required VMware server software.....	5
Required VMware client software.....	5
<b>Change log.....</b>	<b>7</b>
2.4.1 (August 2020).....	7
2.3.3 (December 2019).....	7
2.3.2 (September 2017).....	7
2.3.1 (January 2016).....	7
2.3.0 (November 2014).....	8
2.2.1 (December 2013).....	8
2.2.0 (May 2013).....	8
2.1.0 (March 2013).....	9
<b>Known issues.....</b>	<b>11</b>
<b>Related information and publications.....</b>	<b>13</b>
<b>Getting information, help, and service.....</b>	<b>15</b>
<b>Notices.....</b>	<b>17</b>
Trademarks.....	18



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# Overview

The IBM DS8000 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 with supported storage systems.

The IBM DS8000 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.



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## Download site

You can download the IBM DS8000 SRA from the VMware website.

<http://www.vmware.com/go/download-srm>





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# Compatibility and requirements

This section specifies the compatibility and requirements of version 2.4.1 of the IBM DS8000 SRA.

## Supported storage systems

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The IBM DS8000 SRA supports the following storage products.

Storage system	Microcode version
IBM DS8870	7.5
IBM DS8880	8.0 to 8.5.x
IBM DS8900	9.0

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**Note:** Newer microcode versions may also be compatible. When a newer microcode version becomes available, refer to the [Lifecycle and support matrix page](#) on IBM Knowledge Center to check whether the new microcode version is also supported.

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## Required VMware server software

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

- VMware Site Recovery Manager 8.2 or 8.3 (Virtual Appliance)

## Required VMware client software

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

- VMware vSphere Web Client 6.0 U3 or later



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# Change log

This section summarizes the changes made in different version releases of the IBM DS8000 SRA.

## 2.4.1 (August 2020)

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This version adds support for IBM DS8900 9.0 and VMware Site Recovery Manager 8.2 and 8.3 (Virtual Appliance). It also includes the following fix.

Ticket ID	Description
<b>SRADSK-261276</b>	<b>Fixed:</b> Copy Service Manager could not be used with an SRA preconfigured environment.

## 2.3.3 (December 2019)

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This version added support for versions 8.4 and 8.5 of IBM DS8880 and included the following enhancement.

Ticket ID	Description
<b>SRADSK-261264</b>	<b>Enhancement:</b> Improved performance when querying remote copy relationships from storage systems.

## 2.3.2 (September 2017)

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This version added support for versions 8.1 to 8.3 of IBM DS8880 and included the following fix.

Ticket ID	Description
<b>SRADSK-261222</b>	<b>Fixed:</b> The remote mirroring definition could not be found during preconfig disaster failover in GM/Master subordinate configuration.

## 2.3.1 (January 2016)

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This version added support for IBM DS8880 8.0 and included the following enhancements.

Ticket ID	Description
<b>SRADSK-261217</b>	<b>Enhancement:</b> Extent Space Efficient (ESE) volumes support added, for when creating flash copies in Test, Backup Target, and Reprotect.
<b>SRADSK-261218</b>	<b>Enhancement:</b> If the SRA is running in non-preconfigured mode, the GM Flashcopy is removed on the source site after Reprotect runs successfully.

## 2.3.0 (November 2014)

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This version included the following enhancements and fix.

<b>Ticket ID</b>	<b>Description</b>
<b>SRADSK-261140</b>	<b>Enhancement:</b> The <b>Check Configuration</b> tool determines whether the configuration is correct and troubleshoots problems.
<b>SRADSK-261182</b>	<b>Enhancement:</b> M–N Metro Mirror enables Peer-to-Peer Remote Copy (PPRC) connections to more than one DS8000 SRA.
<b>SRADSK-261177</b>	<b>Fixed:</b> IBM DS8000 SRA will not suspend Metro Mirror for a Metro Global Mirror function during testFailover.  <b>Note:</b> This fix stops Tivoli® Storage Productivity Center for Replication (TPC-R) from operating incorrectly and affecting other unrelated replications.

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## 2.2.1 (December 2013)

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This version added support for IBM DS8000 7.2 and included the following enhancement.

<b>Ticket ID</b>	<b>Description</b>
<b>SRADSK-261183</b>	<b>Enhancement:</b> Support for Transport Layer Security (TLS) 1.2.

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## 2.2.0 (May 2013)

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This version included the following enhancements and fixes.

<b>Ticket ID</b>	<b>Description</b>
<b>SRADSK-259754</b>	<b>Enhancement:</b> Improved lock mechanism to avoid conflicting with new volume IDs.
<b>SRADSK-261184</b>	<b>Enhancement:</b> The <b>Name Filter</b> parameter limits device discovery to a subset of devices that are managed by SRM. This parameter can be used to limit the discovery, for example, to replicated volumes or session IDs whose names begin with a specified string.
<b>SRADSK-258327</b>	<b>Fixed:</b> <b>DiscoverDevices</b> returns incorrect Peer-to-Peer Remote Copy (PPRC) direction. An error occurs during Global Mirror failover or test failover, when one recovery plan is in the process of reprotect and another recovery plan invokes <b>DiscoverDevices</b> .
<b>SRADSK-260190</b>	<b>Fixed:</b> <b>DiscoverDevices</b> returns incorrect PPRC direction. An error occurs during Global Mirror reprotect, where some PPRCs within the same Global Mirror might experience reprotect while others might not.

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## 2.1.0 (March 2013)

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This version added the following features:

**Metro Mirror**

Metro Mirror between the storage systems.

**Global Mirror**

Multiple Global Mirrors between the storage systems.

**Metro Global Mirror**

Metro Global Mirror between the storage systems.

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**Note:** The DS8000 SRA does not support failover to the intermediate site.

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**Master Subordinate Global Mirror**

Global Mirror with master and subordinate between the storage systems.

**Tivoli Storage Productivity Center for Replication**

Global Mirror and Metro Mirror practice mode that is managed by TPC-R.

**Preconfigured failover**

Pre-configured environment settings for data migration.

**Non-preconfigured failover**

Non-preconfigured environment settings for data migration.

**Space Efficient Volume**

Space Efficient FlashCopy® target volume.



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## Known issues

This section details the known issues in version 2.4.1, along with possible workarounds (if workarounds are available).

Ticket ID	Description
<b>SRADSK-261207</b>	<p>If the IBM DS8000 on the protected site is enabled for VMware vStorage APIs for Array Integration (VAAI) Atomic Test &amp; Set (ATS) and the DS8000 on the recovery site is ATS-disabled or does not support VAAI, VMWare SRM fails to run Test Failover and Failover. This result is because the copied datastore on the recovery site cannot be mounted successfully. For example, if you have one DS8000 R7.3 on which VAAI is enabled by default on the protected site and one DS8000 R6.3 on which VAAI is not supported on the recovery site, this problem occurs. You can find the DS8000 VAAI support matrix in the the <a href="http://www.vmware.com/resources/compatibility/detail.php?deviceCategory=san&amp;productid=1223">compatibility guide (http://www.vmware.com/resources/compatibility/detail.php?deviceCategory=san&amp;productid=1223)</a>.</p> <p><b>Workaround:</b> Disable the VAAI ATSONly on the VMware Virtual Machine File System (VMFS) datastore on the DS8000 on the protected site and run the SRM operation again. The steps can also be found on the VMware Knowledge Base (<a href="http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&amp;cmd=displayKC&amp;externalId=2030416">http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&amp;cmd=displayKC&amp;externalId=2030416</a>)</p>

The following workaround command can be used:

```
vmkfstools --configATSONly 0  
/vmfs/devices/disks/device-ID :Partition
```

Where device-ID is the NAA ID of the LUN on which the VMFS datastore was created and Partition is the partition number on which the VMFS datastore was created. For example:

```
vmkfstools --configATSONly 0  
/vmfs/devices/disks/  
naa.6006016055711d00ce5e65664ee011:1
```





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## Related information and publications

Additional information and publications that are related to the IBM DS8000 SRA can be found at the following websites:

- [IBM Knowledge Center](#)
- [IBM DS8000 Copy Services for Open Systems](#)
- [VMware vCenter Site Recovery Manager Documentation](#)
- [VMware Technical Resource Center](#)
- [VMware Knowledge Center](#)



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## 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 \(ibm.com®\)](http://ibm.com)
- [IBM Publications Center \(www.ibm.com/shop/publications/order/\)](http://www.ibm.com/shop/publications/order/)
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