IBM Storage DS8900F all-flash systems support Copy Services functions and Transport Layer Security 1.3

At a glance 🔗

IBM® Storage DS8900F models offer the following features and functions:

– Multi-target Global Mirror

– Cascaded Incremental Resynchronization

– Support for Transport Layer Security (TLS) 1.3

– License machine code 9.4 is available for machine types 5331, 5332, 5333, 5334, and 5341 models 993, 994, 996, 998, and E96 as an upgrade option

Overview 🔗

Multi-target Global Mirror

Multi-target Global Mirror provides the ability to have two Global Mirror relationships on the same primary volume. This extends the previously available multi-target Metro Mirror and multi-target Metro Global Mirror functionality providing additional flexibility when designing and implementing replication solutions.

This can be used to provide a disaster recovery capability between three geographically separated locations. It also provides incremental resynchronization functionality to enable any two surviving sites to quickly resume replication. Other use cases include providing additional site migration or storage system migration options for configurations using Global Mirror.

Multi-target Global Mirror can also be used to provide a physically isolated Cyber Vault solution in the primary site where Global Mirror is being used for disaster recovery and with this capability it is also possible to provide a cyber vault in both locations similar to what is done with Metro Mirror today.

Cascaded Incremental Resynchronization

Cascaded Incremental Resynchronization provides a new incremental resynchronization functionality for cascaded PPRC relationships and is intended to replace the Metro Global Mirror Incremental Resynchronization functionality. Cascaded Incremental Resynchronization enables an incremental copy from primary to tertiary of any cascaded relationship in both planned and unplanned scenarios while retaining the original relationship enabling a simple resynchronization to be performed switching between cascading and multi-target mode.

Cascaded Incremental Resynchronization enables high availability for the DR site systems in a 4-site Metro Global Mirror environment and also provides an improved incremental resynchronization capability for both 3-site and 4-site Metro Global Mirror in case of failure of the Metro Mirror secondary site or storage system.

As part of the cascaded incremental resynchronization functionality we are also increasing the maximum number of PPRC relationships on a volume from 3 to 4. This number includes Metro Mirror, Global Copy/Mirror as well as Multi-target and Cascaded Incremental Resynchronization relationships.

Exploitation of the Cascaded Incremental Resynchronization functionality is delivered in both Copy Services Manager and GDPS®. Initial session types for Copy Services Manager exploiting Cascaded Incremental

Resynchronization is included in the Copy Services Manager Software Announcement 223-0834, dated December 12, 2023.

> ℹ️ **Note:** Cascaded Incremental Resynchronization will have limited availability. If you would like this functionality enabled, contact IBM support.

Support for Transport Layer Security (TLS) 1.3

Transport Layer Security (TLS) provides mechanisms to protect data during electronic dissemination across the Internet. DS8000® R9.4 adds support for TLS 1.3 to the selection and configuration of TLS protocol implementations while making effective use of Federal Information Processing Standards (FIPS) and NIST-recommended cryptographic algorithms. It requires that TLS 1.2 configured with FIPS-based cipher suites be supported by all government TLS servers and clients and requires support for TLS 1.3 by January 1, 2024.

For more information see the Guidelines for the Selection, Configuration, and Use of Transport Layer Security (TLS) implementations page.

Feature exchange 🔗

None

Key requirements 🔗

All announced features and functions that are supported on the IBM DS8000 series require DS8000 LMC 8.9.40.xx.xx (bundle version 89.40.xx.xx), or later.

Planned availability date 🔗

– December 22, 2023: Features 1894 and 1994 available on Fix Central

- January 26, 2024: Features 1894 and 1994 available on initial and MES orders

Availability within a country is subject to local legal requirements.

Section 508 of the US Rehabilitation Act ⊘

IBM DS8900F is capable as of the planned availability, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it. A US Section 508 Accessibility Conformance Statement can be requested on the Product accessibility information website.

Product number ⊘

Description	Machine type	Model	Feature
DS8000 LMC R9.4	5331	993	1894
DS8000 LMC R9.4	5331	994	1894
DS8000 LMC R9.4	5331	996	1894
DS8000 LMC R9.4	5331	998	1894
DS8000 LMC R9.4 indicator	5331	E96	1994
DS8000 LMC R9.4	5332	993	1894
DS8000 LMC R9.4	5332	994	1894
DS8000 LMC R9.4	5332	996	1894

DS8000 LMC R9.4	5332	998	1894
DS8000 LMC R9.4 indicator	5332	E96	1994
DS8000 LMC R9.4	5333	993	1894
DS8000 LMC R9.4	5333	994	1894
DS8000 LMC R9.4	5333	996	1894
DS8000 LMC R9.4	5333	998	1894
DS8000 LMC R9.4 indicator	5333	E96	1994
DS8000 LMC R9.4	5334	993	1894
DS8000 LMC R9.4	5334	994	1894
DS8000 LMC R9.4	5334	996	1894
DS8000 LMC R9.4	5334	998	1894
DS8000 LMC R9.4 indicator	5334	E96	1994
DS8000 LMC R9.4	5341	993	1894
DS8000 LMC R9.4	5341	994	1894
DS8000 LMC R9.4	5341	996	1894
DS8000 LMC R9.4	5341	998	1894
DS8000 LMC R9.4 indicator	5341	E96	1994

Publications 🔗

DS8000 publications are available at the IBM Publications Center.

You can search, view, and collaborate with documentation using IBM Documentation. IBM Documentation is an IBM-wide view of technical information with multiple sources of offerings in a single location.

IBM Documentation provides a centralized and consolidated way to access the information you need to use IBM products and also provides innovative ways to find information and to create your own set of information to cater to your needs. You will be able to personalize views, build client documents, and interact with other information.

To access the IBM Publications Center Portal, go to the IBM Publications Center website.

The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. A large number of publications are available online in various file formats, which can currently be downloaded.

Services 🔗

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IBM Technology Lifecycle Services (TLS)

IBM TLS helps organizations protect their IT investment with support and services for their hybrid cloud and enterprise IT data centers across the product lifecycle. Deep expertise in IBM Systems, enterprise networking and third-party vendors, streamlined processes and advanced technologies such as AI, enable organizations to consistently maintain high availability for mission-critical workloads across the product lifecycle. Consultants have deep technical expertise, valuable tools, and successful methodologies which help organizations to solve business challenges, gain new skills, and apply best practices. For more information about the IBM infrastructure support and services, see the IBM Technology Lifecycle Services website.

IBM Technology Expert Labs

Technology Expert Labs is a professional services organization powered by an experienced team of product experts. This knowledgeable team offers specialized expertise in IBM data and AI, automation, sustainability, security, cloud software solutions, and more. Through proven methodologies, practices, and patterns, Technology Expert Labs helps their partners develop complex solutions, achieve better business outcomes and drive client adoption of IBM software.

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With extensive consultative expertise on IBM Security software solutions, Technology Expert Labs for Security helps clients and partners modernize the security of their applications, data, and workforce.

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For more information, contact IBM Security Expert Labs at sel@us.ibm.com.

For additional information, see the IBM Technology Expert Labs website.

IBM support ⊘

For installation and technical support information, see the IBM Support.

Additional support ⊘

IBM Client Engineering for Systems

Client Engineering for Systems is a framework for accelerating digital transformation. It helps you generate innovative ideas and equips you with the practices, technologies, and expertise to turn those ideas into business value in weeks. When you work with Client Engineering for Systems, you bring pain points into focus. You empower your team to take manageable risks, adopt leading technologies, speed up solution development, and measure the value of everything you do. Client Engineering for Systems has experts and services to address a broad array of use cases, including capabilities for business transformation, hybrid cloud, analytics and AI, infrastructure systems, security, and more. Contact Client Engineering at sysgarage@ibm.com.

Technical information ⊘

Specified operating environment 🔗

Hardware requirements

Licensed Machine Code

All announced features and functions that are supported on the IBM DS8000 series require DS8000 LMC 8.9.40.xx.xx (bundle version 89.40.xx.xx), or later.

Limitations

None.

Planning information 🔗

Cable orders

Not applicable for this announcement.

Security, auditability, and control 🔗

This product uses the security and auditability features of the host hardware, host software, and application software to which it is attached.

The client is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

Terms and conditions 🔗

MES discount applicable 🔗

No

Field installable feature ⊘

Yes

Warranty period ⊘

One year

To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or IBM. An IBM part or feature installed during the initial installation of an IBM machine is subject to the full warranty period specified by IBM. An IBM part or feature that replaces a previously installed part or feature assumes the remainder of the warranty period for the replaced part or feature. An IBM part or feature added to a machine without replacing a previously installed part or feature is subject to a full warranty. Unless specified otherwise, the warranty period, type of warranty service, and service level of a part or feature are the same as those for the machine in which it is installed.

IBM Storage Expert Care

For complete information about the IBM Storage Expert Care Service and Support offerings, see Services Announcement 622-007, dated May 24, 2022.

Client setup ⊘

No

Machine code ⊘

Same license terms and conditions as base machine

Prices ⊘

The following are newly announced features of the IBM System Storage 5331 machine type:

Description	Model number	Feature numbers	Initial / MES / Both / Support	CSU	RP MES
DS8000 LMC R9.4	993	1894	Both	No	No
DS8000 LMC R9.4	994	1894	Both	No	No
DS8000 LMC R9.4	996	1894	Both	No	No
DS8000 LMC R9.4	998	1894	Both	No	No
DS8000 LMC R9.4 indicator	E96	1994	Both	No	No

The following are newly announced features of the IBM System Storage 5332 machine type:

Description	Model number	Feature numbers	Initial / MES / Both / Support	CSU	RP MES
DS8000 LMC R9.4	993	1894	Both	No	No
DS8000 LMC R9.4	994	1894	Both	No	No
DS8000 LMC R9.4	996	1894	Both	No	No
DS8000 LMC R9.4	998	1894	Both	No	No
DS8000 LMC R9.4 indicator	E96	1994	Both	No	No

The following are newly announced features of the IBM System Storage 5333 machine type:

Description	Model number	Feature numbers	Initial / MES / Both / Support	CSU	RP MES
DS8000 LMC R9.4	993	1894	Both	No	No
DS8000 LMC R9.4	994	1894	Both	No	No
DS8000 LMC R9.4	996	1894	Both	No	No
DS8000 LMC R9.4	998	1894	Both	No	No
DS8000 LMC R9.4 indicator	E96	1994	Both	No	No

The following are newly announced features of the IBM System Storage 5334 machine type:

Description	Model number	Feature numbers	Initial / MES / Both / Support	CSU	RP MES
DS8000 LMC R9.4	993	1894	Both	No	No
DS8000 LMC R9.4	994	1894	Both	No	No
DS8000 LMC R9.4	996	1894	Both	No	No
DS8000 LMC R9.4	998	1894	Both	No	No
DS8000 LMC R9.4 indicator	E96	1994	Both	No	No

The following are newly announced features of the IBM System Storage 5341 machine type:

Description	Model number	Feature numbers	Initial / MES / Both / Support	CSU	RP MES
DS8000 LMC R9.4	993	1894	Both	No	No
DS8000 LMC R9.4	994	1894	Both	No	No
DS8000 LMC R9.4	996	1894	Both	No	No
DS8000 LMC R9.4	998	1894	Both	No	No
DS8000 LMC R9.4 indicator	E96	1994	Both	No	No

Regional availability

American Samoa, Guam, Marshall Islands, Federated States of Micronesia, Northern Mariana Islands, Palau, Puerto Rico, United States, and US Virgin Islands

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