IBM System Storage DS8000 series (Machine type 2107) delivers Extended Distance FICON for IBM System z environments

At a glance

New functional capabilities for the DS8000 series (Machine type 2107) include Extended Distance FICON for System z environments. For ordering, contact:

Your IBM representative or the Americas Call Centers at

800-IBM-CALL Reference: YE001

Overview

IBM System Storage™ DS8000™ series (Machine type 2107) delivers Extended Distance FICON™ for IBM System z™ environments. The capability can help reduce the need for channel extenders in z/OS® Global Mirror (2-site) and z/OS Metro/Global Mirror (3-site) configurations by increasing the number of read commands in flight.

Key prerequisites

All features and functions in this announcement are supported on the System Storage DS8000 series, and require DS8000 Licensed Machine Code (LMC) level 5.3.1xx.xx (bundle version 63.1.xx.xx), or later.

Planned availability date

March 7, 2008
System z Extended Distance FICON reduces configuration complexity

Extended Distance FICON is an enhancement to the industry-standard FICON architecture (FC-SB-3) that can help avoid degradation of performance at extended distances by implementing a new protocol for "persistent" Information Unit (IU) pacing. Control units that exploit the enhancement to the architecture can increase the pacing count (the number of IUs allowed to be in flight from channel to control unit). Extended Distance FICON can allow the channel to remember the last pacing update for use on subsequent operations to help avoid degradation of performance at the start of each new operation. Improved IU pacing can help to improve the utilization of the link (for example, it can help keep a 4 Gbps link fully utilized at 50 km) and provide increased distance between servers and control units. Extended Distance FICON can reduce the need for channel extenders in DS8000 series 2-site and 3-site z/OS Global Mirror configurations by allowing an increased number of read commands to be in flight simultaneously. It can drastically reduce the total-cost-of-ownership of 2-site and 3-site z/OS Global Mirror configurations and give clients the choice of selecting lower-cost channel extenders built on frame-forwarding technology. The Extended Distance FICON capability is provided with the DS8000 series at no additional charge.

Preview

Along with z/OS V1.10, System Storage intends to provide support for Extended Address Volume (EAV), a volume with more than 65,520 cylinders, initially available on the System Storage DS8000 series. With the initial release, EAV will support 262,668 cylinders per volume (223 GB of addressable storage) for SMS and non-SMS managed VSAM data sets (except for catalogs, page data sets, and data sets defined with KEYRANGE or IMBED attributes). IBM intends to provide this capability in 2008. In the future, IBM intends to expand support for EAV with larger volume sizes to allow additional data set types to reside in the cylinders after the first 65,520 cylinders.

Additionally, the IBM DS8000 series intends to support z/OS Metro/Global Mirror Incremental Resync, which can eliminate the need for a full copy after a HyperSwap™ situation in 3-site z/OS Metro/Global Mirror configurations. Today, the DS8000 series supports z/OS Metro/Global Mirror which is a 3-site mirroring solution that utilizes IBM System Storage Metro Mirror and z/OS Global Mirror (XRC). The z/OS Metro/Global Mirror Incremental Resync capability is intended to enhance this solution by enabling resynchronization of data between sites using only the changed data from the Metro Mirror target to the z/OS Global Mirror target after a GDPS™ HyperSwap. IBM intends to provide this capability in 2008.

All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice. Availability, prices, ordering information, and terms and conditions will be provided when the product is announced for general availability.

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at


Section 508 of the U.S. Rehabilitation Act

The System Storage DS8100, IBM System Storage DS8300, and System Storage DS8000 Expansion Unit are capable, as of December 3, 2004, when used in accordance with IBM's associated 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 U.S. Section 508 VPAT can be requested via IBM's Web site at


Reference information

For details, refer to the following announcements:
Hardware Announcement 106-642, dated August 22, 2006 (IBM System Storage DS8000 series provides new price/performance options)

Hardware Announcement 104-383, dated October 12, 2004 (IBM TotalStorage® DS8000 series — 2244 Function Authorizations)

Hardware Announcement 104-382, dated October 12, 2004 (IBM TotalStorage DS8000 series — Setting new standards for on demand enterprise disk storage)

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld ID and password are required (use IBM ID).

BP Attachment for Announcement Letter 108-156


Trademarks

DS8000, System Storage, FICON, System z, HyperSwap, and GDPS are trademarks of International Business Machines Corporation in the United States or other countries or both.

z/OS and TotalStorage are registered trademarks of International Business Machines Corporation in the United States or other countries or both.

Other company, product, and service names may be trademarks or service marks of others.

Publications

DS8000™ publications are available at:


Publications can be ordered from your IBM representative, by direct order, or through the Publications Center Web site at


The IBM Systems Information Center provides you with a single information center where you can access product documentation for IBM systems hardware, operating systems, and server software. Through a consistent framework, you can efficiently find information and personalize your access. The IBM Systems Information Center is at


IBM Publications Center Portal

http://www.ibm.com/shop/publications/order

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, as well as payment options via credit card. A large number of publications are available online in various file formats, which can currently be downloaded free of charge.

Services

Global Technology Services

IBM services include business consulting, outsourcing, hosting services, applications, and other technology management.
These services help you learn about, plan, install, manage, or optimize your IT infrastructure to be an On Demand Business. They can help you integrate your high-speed networks, storage systems, application servers, wireless protocols, and an array of platforms, middleware, and communications software for IBM and many non-IBM offerings. IBM is your one-stop shop for IT support needs.

For details on available services, contact your IBM representative or visit

http://www.ibm.com/services/

For details on available IBM Business Continuity and Recovery Services, contact your IBM representative or visit

http://www.ibm.com/services/continuity

For details on education offerings related to specific products, visit


Select your country, and then select the product as the category.

---

Technical information

Specified operating environment

Hardware requirements

Licensed Machine Code: All features and functions in this announcement are supported on the System Storage™ DS8000 series and require DS8000 LMC level 5.3.1xx.xx (bundle version 63.1.xxx.xx), or later.

Some DS8000 series features and functions may not be available or supported in all environments. Current information on supported environments, prerequisites, and minimum operating system levels is available at


Planning information

Customer responsibilities

Physical configuration planning: Physical configuration planning is a customer responsibility. Your disk marketing specialist can help you plan and select the DS8000 series physical configuration and features. Introductory information, including required and optional features, can be found in the IBM System Storage DS8000 Introduction and Planning Guide (GC35-0515).

Capacity and performance planning assistance is also available. Through the use of Disk Magic, your disk marketing specialist can help you plan and anticipate performance characteristics for specific workloads by modelling proposed configurations.

Installation planning: Installation planning is a customer responsibility. Information about planning the installation of your DS8000 series, including equipment, site, and power requirements, can be found in the IBM System Storage DS8000 Introduction and Planning Guide (GC35-0515).

Logical configuration planning and application: Logical configuration planning is a customer responsibility. Logical configuration refers to the creation of RAID ranks, volumes, and/or LUNs, and the assignment of the configured capacity to servers.

Application of the initial logical configuration and all subsequent modifications to the logical configuration is a customer responsibility. The logical configuration can be created, applied, and modified using the DS Storage Manager, DS CLI, or DS Open API.

IBM Global Services will also apply and/or modify your logical configuration (fee-based services).
Licensed Machine Code planning and application: IBM may release changes to the DS8000 series LMC. IBM plans to make most DS8000 series LMC changes available for download by the DS8000 series system from the System Storage technical support Web site. Note that not all LMC changes may be available via the support Web site. If the machine does not function as warranted and your problem can be resolved through your application of downloadable LMC, you are responsible for downloading and installing these designated LMC changes as IBM specifies. IBM has responsibility for installing changes that IBM does not make available for you to download. The DS8000 series includes many enhancements to make the LMC change process simpler, quicker, and more automated. If you would prefer, you may request IBM to install downloadable LMC changes; however, you may be charged for that service.

Calculating physical and effective capacity: Refer to the IBM System Storage DS8000 Introduction and Planning Guide (GC35-0515) for capacity calculation guidelines.

You are responsible for downloading or obtaining from IBM, and installing designated Machine Code (microcode, basic input/output system code (called "BIOS"), utility programs, device drivers, and diagnostics delivered with an IBM machine) and other software updates in a timely manner from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides. You may request IBM to install Machine Code changes; however, you may be charged for that service.

Cable orders: No cables are required.

Direct customer support: Direct customer support for the DS8000 series is provided by IBM Operational Support Services — Support Line. This fee service can enhance your productivity by providing voice and electronic access into the IBM support organization. IBM Operational Support Services — Support Line will help answer questions pertaining to product and feature usage ("how to"), configuration, and product compatibility for eligible products. For a list of the products supported via Support Line, visit

http://www.ibm.com/services/sl/products/

For more information on services, call 800-IBM-4YOU (426-4968).

Security, auditability, and control

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

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

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

http://www.ibm.com/support/electronic
Terms and conditions

**MES discount applicable:** No

**Field-installable feature:** Yes

**Warranty period:** Four years

**Customer setup:** No

**Licensed internal code:** Same license terms and conditions as designated machine

Prices

Contact your IBM representative for charges information for this announcement.

Order now

To order, contact the Americas Call Centers or your local IBM representative.

To identify your local IBM representative, call 800-IBM-4YOU (426-4968).

- **Phone:** 800-IBM-CALL (426-2255)
- **Fax:** 800-2IBM-FAX (242-6329)
- **Internet:** callserv@ca.ibm.com
- **Mail:** IBM Teleweb Customer Support
  IBM Sales Execution Center, Americas North
  3500 Steeles Ave. East, Tower 3/4
  Markham, Ontario
  Canada
  L3R 2Z1

Reference: YE001

The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

Trademarks

DS8000, IBMLink, System Storage, and Electronic Service Agent are trademarks of International Business Machines Corporation in the United States or other countries or both.

Other company, product, and service names may be trademarks or service marks of others.

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com