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.

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
**Description**

**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


**Reference information**

For details, refer to the following announcements:

Hardware Announcement ZG06-0660, dated August 22, 2006 (IBM System Storage DS8000 series provides new price/performance options)

Hardware Announcement ZG04-0612, dated October 12, 2004 (IBM TotalStorage® DS8000 series — 2244 Function Authorizations)

Hardware Announcement ZG04-0611, dated October 12, 2004 (IBM TotalStorage DS8000 series — Setting new standards for on demand enterprise disk storage)

**Trademarks**