IBM Storwize Family Software for Flex System V7000 V7.2 delivers performance improvements and simplified storage management

At a glance

Are your storage requirements growing too fast? Are the costs of managing this growth taking more and more of your IT budget? IBM® Storwize® Family Software V7.2 can help solve these problems and get you on the road towards a more flexible, responsive, and efficient storage environment. The Flex System V7000 is designed to deliver the benefits of storage virtualization and advanced storage capabilities, including FlashCopy® , replication, Real-time Compression™ , and Easy Tier®, in environments from large enterprises to small businesses and midmarket companies.

Overview

IBM Storwize Family Software for Flex System V7000 V7.2 enables software-defined storage capabilities for the Flex System V7000 Storage Node, the integrated storage system for IBM PureFlex™ System and IBM Flex System™ . This offering can help customers reduce the complexities and cost of managing their storage by:

• Centralizing management of storage volumes, enabling administrators to manage storage volumes from a single point
• Improving utilization of storage capacity with virtual volumes, enabling businesses to tap into previously unused disk capacity
• Avoiding downtime for backups, maintenance, and upgrades
• Performing data migration without disruption to applications
• Enabling all storage devices to be organized into storage pools from which virtual volumes, whether standard, compressed, or thin-provisioned, are created with the desired characteristics
• Leveraging storage resource management automation with the Virtual Storage Center, Tivoli® Storage Productivity Center (as applicable by platform), and Tivoli Storage FlashCopy Manager (as applicable by platform)
• Increasing the performance efficiency of storage pools that use solid state devices with Easy Tier
• Restoring data access quickly with near and remote copy capabilities across Fibre Channel, Fibre Channel over Ethernet (FCoE), and IP networks

IBM Storwize Family Software V7.2 introduces replication over IP networks that is easy to configure in existing IP infrastructures. This is a lower-cost alternative to the current Fibre Channel-based and FCoE-based replication, eliminating the need for FCIP routers and dark fibre. By placing the IP replication function in the Storwize Family Software, server CPU and management overhead is freed up and a single point of replication control is available for all server types.
Performance improvements for remote mirroring and VMware environments will benefit from support for VMware 5.5 and act as a provider for the vSphere API for Storage Awareness.

Current ordering information and processes for Storwize Family Software for Flex System V7000 remains unchanged by this announcement.

### Key prerequisites

**Software requirements**

IBM Flex System V7000 V7.2 (5766-NX7, 5766-EV7, 5766-RX7, and 5766-CX7) has the same software prerequisites as IBM Flex System V7000 V7.1. Refer to the Description section and the announcements listed in the Reference information section for more information.

**Hardware requirements**

IBM Storwize Family Software for Flex System V7000 requires at least one IBM Flex System V7000 (4939-X49, 4939-H49) Control Enclosure for installation. IBM Flex System V7000 V7.2 software (5766-NX7, 5766-EV7, 5766-RX7, and 5766-CX7) is preinstalled and shipped on the required IBM 4939-X49 IBM Flex System V7000 Control Enclosure.

### Planned availability date

November 29, 2013

### Description

IBM Storwize Family Software for Flex System V7000 version 7.2 includes:

- **Remote Mirroring over IP (Ethernet) communication links:** The Remote Mirroring function (also referred to as Metro/Global Mirror) is now supported using 1 Gb and 10 Gb Ethernet communication links. Storwize Family Software IP replication uses innovative Bridgeworks SANSlide technology to optimize network bandwidth and utilization, and this new function enables the use of lower speed and lower cost networking infrastructures for data replication. Bridgeworks’ SANSlide technology integrated into IBM Storwize Family Software uses artificial intelligence to help optimize network bandwidth utilization and adapt to changing workload and network conditions. This technology can improve remote mirroring network bandwidth utilization up to three times, which may enable clients to deploy a less costly network infrastructure or speed remote replication cycles to enhance disaster recovery effectiveness.

- **Performance improvements for asynchronous remote mirroring:** Enhancements to the asynchronous remote mirroring function allows for improved throughput of remotely replicated data.

- **vSphere API for Storage Awareness:** Storwize Family Software V7.2 enables users to get more capability out of their VMware environments by being a provider for the vSphere API for Storage Awareness.

### Revised licensing rules for Flex System V7000 Real-time Compression Software (5766-CX7)

Rather than purchasing a license for Storwize Family Software for Flex System V7000 Real-time Compression (5766-CX7) for every licensed enclosure (internal and external) managed by the IBM Storwize V7000 Disk system as required when first released, some customers will benefit from the following modifications to the 5766-CX7 licensing rules:
• For any Flex System V7000 system made up of one Flex System V7000 Control enclosure plus more than two other enclosures (whether Flex System V7000 Expansion enclosures, Storwize V7000 Expansion enclosures, or third party external storage enclosures), the maximum number of 5766-CX7 licenses required is three (see scenario 1 below)

• For any Flex System V7000 system made up of multiple Flex System V7000 Control enclosures (in a clustered configuration, for example), the maximum number of 5766-CX7 licenses required is three per control enclosure (see scenarios 2 and 3 below)

Under this Storwize Family Software V7.2 revision, to authorize use of Real-time Compression capabilities of the IBM Flex System V7000, you must purchase a license for Storwize Family Software for Flex System V7000 Real-time Compression (5766-CX7) for each licensed enclosure managed by the IBM Flex System V7000 Disk System. This includes each internal enclosure licensed with Storwize Family Software for Flex System V7000 base software (5766-NX7) and each external enclosure licensed with Storwize Family Software for Flex System V7000 External Virtualization (5766-EV7), up to a maximum number of three enclosure licenses for each Flex System V7000 Control enclosure.

This change applies to new software transactions and new software maintenance renewals and reinstatements only. If customers have already purchased a greater quantity of software licenses for Flex System V7000 Real-time Compression (5766-CX7) than required under this change, they should contact their sales representative to adjust the licensing to ensure they renew with the appropriate software maintenance license quantity as part of their next transaction. Some customers will have an automatic renewal of software maintenance applied to their account. It is the customer’s responsibility to take advantage of this change in licensing requirements and to remove the automatic renewal (if desired) and to review the renewal statement to ensure any needed change in license quantity is made. This change does not entitle customers to any refunds for software licensing.

The following are examples of how to license Real-time Compression (5766-CX7) under the modified licensing rules:

**Scenario 1:** You have a four-enclosure Flex System V7000 system made up one control enclosure and three expansion enclosures with nothing externally virtualized, therefore it has four 5766-NX7 licenses. The Storwize Family Software for Flex System V7000 Real-time Compression licensing would be a total of three 5766-CX7 licenses required.

**Scenario 2:** You have a five-enclosure Flex System V7000 system made up two control enclosures and three expansion enclosures with nothing externally virtualized, therefore it has five 5766-NX7 licenses. The existence of two control enclosures moves the maximum license quantity up to six, therefore the Storwize Family Software for Flex System V7000 Real-time Compression licensing would be a total of five 5766-CX7 licenses required.

**Scenario 3:** You have a five-enclosure Flex System V7000 system made up two control enclosures and three expansion enclosures, managing a DS5020 consisting of three enclosures, therefore it has five 5766-NX7 licenses and three 5766-EV7 licenses. The existence of two control enclosures moves the maximum license quantity up to six, therefore the Storwize Family Software for Flex System V7000 Real-time Compression licensing would be a total of six 5766-CX7 licenses required, even though the total number of enclosures in the configuration is eight.

**Added interoperability**

Storwize Family Software now supports many more heterogeneous data center environments with the addition of interoperability support for VMware vSphere 5.5.

For all the specific models and host environments supported, visit the support site at [http://www.ibm.com/support/entry/portal/downloads/hardware/puresystems/pureflex_system/storage_node/flex_system_v7000](http://www.ibm.com/support/entry/portal/downloads/hardware/puresystems/pureflex_system/storage_node/flex_system_v7000)
Accessibility by people with disabilities

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


Reference information


Announcement countries

All European, Middle Eastern, and African Countries.

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