

EFFICIENT, EASY, DEPENDABLE STORWIZE V3700 STORAGE SYSTEM



EASY-TO-USE, AFFORDABLE
STORAGE WITH ADVANCED
CAPABILITIES FOR SMALL AND
MIDSIZED BUSINESSES

STORWIZE V3700 HIGHLIGHTS

- Easily manage and deploy storage using a breakthrough graphical user interface
- Gain efficiency with internal storage virtualization and high-performance thin provisioning
- Have continuous access to data with integrated non-disruptive migration
- Improve network utilization for remote mirroring with innovative replication technology
- Optimize costs for mixed workloads, with up to three times performance improvement with only five percent flash storage capacity using IBM® Easy Tier®1
- Comply with Network Equipment Building System (NEBS) Level 3 and European Telecommunication Standards Institute (ETSI) specifications

EASY-TO-USE, AFFORDABLE STORAGE WITH ADVANCED CAPABILITIES FOR SMALL AND MIDSIZED BUSINESSES

In the era of cloud, big data and analytics, and mobile and social computing, organizations need to meet ever-changing demands for storage while also improving data economics. IT must deliver more services faster and more efficiently, enable real-time insight and support more customer interaction. The right infrastructure allows clients to share information, secure transactions and drive real-time insights.

The IBM Storwize® family, including IBM Storwize V3700 helps organizations achieve better data economics by supporting these new workloads that are critical to their success. Storwize family systems can handle the massive volumes of data from mobile and social applications, enable rapid and flexible cloud services deployments, and deliver the performance and scalability needed to gain insights from the latest analytics technologies.

IBM Storwize V3700, the entry-level system in the IBM Storwize family, is an efficient, easy-to-use system designed to complement virtual server environments while delivering flexibility and innovative storage functions. To help address block storage requirements, Storwize V3700 is designed to provide small and midsized organizations with the ability to consolidate and share data at an affordable price, while leveraging advanced software capabilities usually found in more expensive systems. Providing up to 240 drives of capacity, Storwize V3700 delivers proven ease of management, functionality and interoperability.

SIMPLIFY MANAGEMENT

Storwize V3700 comes with an easy-to-use management interface based on the breakthrough Storwize family graphical user interface (GUI). With dynamic and customizable views, the interface is designed to give administrators intuitive control of the system, while interactive menus, tabs and charts can also help improve productivity.

An application provides monitoring capabilities to securely check the health and performance of the system remotely from a mobile device. The built-in performance dashboard provides at-a-glance access to key high-level real-time system performance information.

OPTIMIZE EFFICIENCY

Using thin provisioning, applications consume only the space they are actually using, versus the total space that they have been allocated. Designed to keep business overhead low, thin provisioning optimizes efficiency by allocating disk storage space in a flexible manner among multiple users, based on the minimum space required by each user at any given time. This can help organizations save power, lower heat generation and reduce hardware space requirements. Improve performance

Automated storage tiering with IBM Easy Tier, an optional function for Storwize V3700, is designed to help improve performance at lower cost through more efficient use of flash storage or multiple types of disk drives. Easy Tier automatically and dynamically moves the appropriate data across storage tiers to meet performance objectives at the most reasonable cost by identifying and moving less-frequently accessed data to the most economical drive tier without

sacrificing performance. Similarly, frequently accessed data for busy workloads is automatically migrated to faster storage such as flash to ensure lower response times for those applications that need it. Using Easy Tier, you can improve performance up to three times with only five percent flash storage capacity¹

Storwize V3700 also includes storage pool balancing that operates automatically to distribute data across arrays in a pool to deliver balanced array performance and help eliminate the need for manual tuning. The function is sensitive to different drive types and takes their capabilities into account with no intervention required.

PROTECT DATA

Storwize V3700 includes IBM FlashCopy® technology, which is designed to create an almost-instant copy of active data that can be used for backup purposes or for parallel processing activities.

In addition, the optional remote mirroring function enables organizations to create copies of data at remote locations for disaster recovery. Metro Mirror supports synchronous replication at distances up to 300 km, whereas Global Mirror supports asynchronous replication up to 8,000 km. Replication can occur between any Storwize family systems, and can include any supported virtualized storage. Remote mirroring works with Fibre Channel, Fibre Channel over Ethernet (FCoE) and IP (Ethernet) networking between sites. With IP networking, Storwize V3700 uses innovative Bridgeworks SANrockIT technology to optimize use of network bandwidth. As a result, the networking infrastructure may require lower speeds (and thus, lower costs), or users may be able to improve the accuracy of remote data through shorter replication cycles.

AVOID DISRUPTIONS

Storwize V3700 includes a dynamic data migration function that is designed to move data from existing block storage into the new system while maintaining user access to data. The data migration function might be used, for example, when replacing older storage with newer storage, as part of load-balancing work.

WHY SYSTEM X

System x is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. System x also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle.

PRODUCT SPECIFICATIONS

Part number	6099L2C - Storwize V3700 3.5" Storage Controller Unit 6099LEU - Storwize V3700 3.5" Storage Expansion Unit 6099S2C - Storwize V3700 2.5" Storage Controller Unit 6099SEU - Storwize V3700 2.5" Storage Expansion Unit 6099T2C - Storwize V3700 2.5" DC Storage Controller Unit 6099TEU - Storwize V3700 2.5" DC Storage Expansion Unit
Host interface	1 Gbps iSCSI and 6 Gbps SAS (optional 8 Gbps Fibre Channel, 1 Gbps iSCSI, 6 Gbps SAS or 10 Gbps iSCSI/Fibre Channel over Ethernet)
Single/dual controller	Dual controller
RAID levels	RAID-0, 1, 5, 6 and 10
Fans and power supplies	Fully redundant, hot-swappable
Rack support	Standard 19-inch rack-mount enclosure*
Advanced functions included with system	Internal virtualization, thin provisioning, one-way data migration and FlashCopy (up to 64 targets), IP Replication acceleration, Bridgeworks SANSlide technology
Warranty	3-year limited warranty with optional upgrades available
Optional licensed functions	FlashCopy upgrade (up to 2,040 targets), Easy Tier, Remote Mirror and turbo performance

FEATURE

- Graphical user interface (GUI)
- IBM Systems Director
- IBM Storage Mobile Dashboard
- IBM FlashCopy
- Thin provisioning
- Data migration
- IBM Easy Tier
- Metro Mirror and Global Mirror
- Turbo performance
- DC-powered models
- NEBS Level 3 and ETSI compliance

BENEFITS

- Enhance IT productivity with an easy-to-use GUI and point-and-click system management capabilities
- Provide integrated management for physical and virtual server infrastructures, including monitoring and repairing for higher availability and operational efficiency
- Provide basic monitoring capabilities to securely check the health and performance status of your system
 - Create a near-instant copy of active data that can be used for backup or for parallel processing activities; support backup for recovering corrupted data
 - Make better use of space with incremental or space-efficient (thin-provisioned) snapshots
 - Support business applications that need to grow dynamically, while consuming only the space actually used
 - Use available storage across supported host platforms to improve storage utilization
- Provide efficiency and business value in a non-disruptive migration function
 - Provide automatic migration of frequently accessed data elements among tiers of storage, including flash
- Allow synchronous or asynchronous data replication between any Storwize family system for maximum flexibility and backup efficiency
 - Help optimize the use of network bandwidth with IP replication and Bridgeworks SANSlide technology
- Increase system maximum input/output operations per second (IOPS) by 50 percent and maximum throughput by 100 percent‡
- Meet the telecommunication standard -48 V dc power source requirement
- Improve resiliency in the most intense and harsh environments

Cache per controller	4 GB upgradable to 8 GB
Drive type	Dual-port, hot-swappable 6 Gb SAS disk drives
User interface	Storwize V3700 graphical user interface
Supported drives	Small form-factor 2.5-inch disk drives: <ul style="list-style-type: none"> • 146 GB, 300 GB at 15k rpm • 600 GB, 900 GB and 1.2 TB at 10k rpm • 1 TB at 7.2k rpm SAS nearline Large form-factor 3.5-inch disk drives: <ul style="list-style-type: none"> • 2 TB, 3 TB, 4 TB, and 6 TB at 7.2k rpm • 900 GB and 1.2 TB at 10k rpm • 300 GB at 15k rpm Solid-state drives (SSD) drives: <ul style="list-style-type: none"> • 200 GB, 400 GB, 800 GB, and 1.8 TB
Maximum drives supported per enclosure	<ul style="list-style-type: none"> • Small form-factor enclosure: 24 x 2.5-inch drives • Large form-factor enclosure: 12 x 3.5-inch drives
Total number of drives supported	<ul style="list-style-type: none"> • 240 drives per system