

IBM Storwize V5030F

Advanced performance, functionality and affordability in a single all-flash platform

Highlights

- Deploy storage virtualization & flash performance in one affordable system
 - Help lower storage costs with new data reduction pools
 - Data reduction pools include both deduplication and compression
 - Build hybrid cloud storage solutions to increase business agility
 - Spectrum Virtualize simplifies storage management
 - Leverage the power of IBM Spectrum Virtualize to extend the life of assets
 - Innovative user interface provides an end-to-end view of storage health
 - Performance analytics & capacity statistics across 440+ virtualized systems
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Twenty-first century organizations with midsized application workloads and limited budgets are seeking to gain competitive advantage from the data assets available to them. The IBM Storwize family provides especially powerful solutions for these organizations. With comprehensive storage services and capabilities based on market-leading IBM Spectrum Virtualize technologies, Storwize offers feature-rich, affordable storage solutions for the cognitive business looking to grow and thrive.

IBM Storwize V5030F provides an all-flash, highly flexible, easy-to-use storage solution that enables organizations of all types and sizes with midrange application workloads to efficiently and affordably meet the challenges of rapid data growth and constrained IT budgets. For organizations that need affordable all-flash storage that provides Fortune 500-level functionality plus storage virtualization capabilities, Storwize V5030F offers an ideal choice.

IBM Spectrum Virtualize serves as the block data plane backbone for the IBM Spectrum Storage family. Its innovative capabilities can combine isolated storage capacity and systems in mixed storage environments into a consolidated virtual resource and then extend a spectrum of enterprise data services to all, whether the underlying systems support the functionality natively or not. Thanks to its IBM Spectrum Virtualize foundation, Storwize V5030F offers a rich set of storage features such as data reduction pools, cloud connectivity, dynamic tiering, thin provisioning and data copy services. IBM Spectrum Virtualize technology can help reduce capital investments by extending the life of existing assets, simplifying storage management, maximizing storage utilization and helping to lower operating costs.

Increased affordability

IBM Storwize V5030F leverages the performance and affordability of a category of flash drives that provides much higher storage density than previous solutions. To further reduce storage capacity requirements and costs, Storwize V5030F utilizes data reduction pools technology. Capabilities include:

- Block deduplication that works across all of the storage in a data reduction pool to minimize the number of identical blocks
- New compression technology that provides consistent performance across application workload patterns
- New SCSI UNMAP support that deallocates physical storage when operating systems delete logical storage constructs such as files in a file system



IBM Storwize V5030F

Enterprise-grade security and availability

Storwize V5030F also provides enterprise-grade system availability and data security, “five nines” availability, data-at-rest encryption and distributed RAID technology that can reduce drive rebuild times up to 10 times over current RAID solutions.¹ IBM HyperSwap functionality enables a single Storwize V5030F system to support servers in multiple data centers. When combined with server data mobility functions such as VMware vMotion or IBM PowerVM Live Partition Mobility, IBM HyperSwap enables nondisruptive storage and virtual machine mobility between data centers up to 300 km (186 miles) apart.

Easier management

Storwize V5030F is designed to be easy to use from the very start. The innovative user interface enables administrators to perform configuration, management and service tasks in a consistent manner over multiple storage systems—even from different vendors—vastly simplifying management and helping reduce the risk of errors. Plug-ins to support Microsoft System Center

Operations Manager and VMware vCenter help enable more efficient, consolidated management in these environments.

IBM Spectrum Control, a member of the industry-leading IBM Spectrum Storage family of software-defined storage solutions, can provide organizations with an end-to-end view of storage health, long-term performance analytics and capacity statistics for Storwize V5030F and the surrounding storage infrastructure.

Gain Storage Visibility, Insight, and Control

As the resource on which your business depends, data is paramount. Your storage systems take on even greater importance. IBM Storage Insights and Storage Insights Pro provide critical capabilities that enhance your experience throughout its lifetime:

- A single dashboard so you can see the status of all your IBM block storage at a glance
- Trend information about capacity and performance so you can make better and more informed decisions
- Storage health information that helps you bring your configuration in line with best practices
- When support is needed, the ability to easily open a ticket, upload log information, and view open tickets
- Detailed configuration data available to IBM specialists to help close tickets quickly.

Delivered as a service from IBM Cloud at no charge, Storage Insights is quick and easy to set up and requires no ongoing software maintenance. IBM Storage Insights Pro is an upgrade that provides more detailed information and additional capabilities.

Cloud capabilities

IBM Spectrum Virtualize for Public Cloud functionality enables replication of heterogeneous storage between on-premises data centers and IBM Cloud. It provides the ability to use IBM Cloud for setting up a disaster-recovery target or for workload migration between on-premises and IBM Cloud.

With its virtualized storage design and tight affinity with PowerVM, OpenStack, Microsoft Hyper-V, VMware vSphere v6 and VMware vSphere Virtual Volumes (VVOL), Kubernetes, and Docker containers, Storwize V5030F makes an ideal complement for virtualized servers that are at the heart of cloud deployments.

World-class support

Storwize family solutions now offer three new customer support and product upgrade programs:

- The IBM Data Reduction Guarantee helps reduce planning risks and lower storage costs with baseline levels of data compression effectiveness in IBM Spectrum Virtualize-based offerings.
- The IBM Controller Upgrade Program enables customers of designated all-flash IBM storage systems to reduce costs while maintaining leading-edge controller technology for essentially the cost of ongoing system maintenance.
- The IBM High-Availability Guarantee helps enterprises avoid the costs and risks related to business downtime by ensuring the availability of business-critical data and storage systems.

¹ IBM lab measurements – April 2012.

IBM Storwize V5030F at a glance

Host interface	10 Gbps iSCSI and optional 16 Gbps Fibre Channel, 12 Gbps SAS, 25 Gbps iSCSI, 10 Gbps iSCSI/FCoE or 1 Gbps iSCSI
User interface	Graphical user interface (GUI)
Supported drives	2.5-inch flash drives: 400 GB, 800 GB, 1.6 TB, 1.92 TB, 3.2 TB, 3.84 TB, 7.68 TB and 15.36 TB
RAID levels	RAID 0, 1, 5, 6, 10, Distributed
Maximum drives supported	760 per system; 1,520 per clustered system
Fans and power supplies	Fully redundant, hot-swappable
Rack support	Standard 19-inch
Management software	IBM Spectrum Virtualize software
Cache per control enclosure/clustered system	32 GB/64 GB clustered
Advanced features included	Virtualization of internal storage, data migration, data reduction pools with thin provisioning, unmap and deduplication
Additional available features	Remote mirroring, compression, external virtualization, encryption, IBM Easy Tier
Replication services	IBM FlashCopy, IBM Spectrum Protect Snapshot, Metro Mirror (synchronous), Global Mirror (asynchronous)
Warranty	Hardware: <ul style="list-style-type: none"> • Flexible warranty • One- or three-year warranty with 9 to 5 next-business-day response (dependent upon machine type) • Tier 1 customer-replaceable units and on-site repairs • Warranty service upgrades available • Post-warranty support available • Customer setup (initial installation and field upgrades) Software: <ul style="list-style-type: none"> • Initial license purchase. Software maintenance agreement available
Size	8.7 cm (3.4 in.) H x 48.3 cm (19.0 in.) W x 55.6 cm (21.9 in.) D
Approximate weight:	Small form-factor control enclosure: <ul style="list-style-type: none"> • Empty: 19.0 kg (41.8 lb) • Fully configured: 27.3 kg (60.0 lb) Small form-factor expansion enclosure: <ul style="list-style-type: none"> • Empty: 16.7 kg (36.7 lb) • Fully configured: 25.0 kg (55.2 lb)
Operating environment	Air temperature: <ul style="list-style-type: none"> • Operating: 10°C 35°C (50°F - 95°F) 30.5 m below to 3,000 m above sea level (100 ft below to 9,840 ft above) • Non-operating: -10°C 50°C (14°F - 125°F) Relative humidity: <ul style="list-style-type: none"> • Operating: 20% 80% • Non-operating: 10% 90%
Supported systems	For supported servers, operating systems, host bus adapters, clustering applications, SAN switches and directors, visit IBM System Storage Interoperation Center at: ibm.com/systems/support/storage/config/ssic
Independent software vendor (ISV) solutions	For a list of high-quality solutions with our partner ISVs, including access to solution briefs and white papers, refer to the ISV Solutions Resource Library.



Why IBM?

The Storwize family of products from IBM is known for providing efficient, highly functional, high-performance storage for any type of workload. Storwize solutions, customized for small, midsized and large organizations, are specifically designed to deliver performance in streamlined packages that are easy to buy, deploy and manage.

For more information

To learn more about Storwize V5030F, contact your IBM representative or IBM Business Partner, or visit: ibm.com/bz-en/marketplace/external-virtualization

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit: ibm.com/financing

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