



---

## Highlights

- Deploy all-flash performance with leading-edge functionality and storage virtualisation in one cost-effective solution
  - Help lower storage costs with powerful data compression
  - Build hybrid cloud storage solutions to increase business agility
  - Leverage the power of IBM® Spectrum Virtualize to extend the life of existing assets, maximise storage utilisation and help lower costs
  - Simplify storage management with an innovative new user interface that provides an end-to-end (E2E) view of storage health, long-term performance analytics and capacity statistics across more than 400 virtualised system.
- 

# IBM Storwize V7000F

*High-performance, highly functional, cost-effective all-flash storage*

Today's organisations need to meet ever-changing demands for storage while also improving data economics. IT staff must deliver more services faster and more efficiently, enable real-time insight and support more customer interaction. Better than ever before, all-flash storage solutions from IBM Storwize can meet your requirements for fast, reliable and consistent access to data with extraordinary affordability.

IBM Storwize V7000F is the platform within the Storwize family that offers the greatest functionality, performance and reliability. Enterprises looking to implement an all-flash solution with a rich set of storage services at very competitive initial deployment costs typically find Storwize V7000F an ideal solution.

## High performance and functionality

Storwize V7000F is an all-flash, highly scalable, virtualised, enterprise-class storage system designed to consolidate workloads into a single system for ease of management, reduced costs, superb performance and high availability (HA). The 10-core central processing unit (CPU) plus a data compression accelerator card increase storage throughput and performance. Storwize V7000F also leverages the advantages of enhanced flash drives and features an innovative new user interface, synchronous/asynchronous replication, more than 600 Storwize application programming interfaces (APIs), thin provisioning and snapshots, and a flash-optimised data reduction suite. These features make Storwize V7000F an ideal choice for organisations that need cost-effective high performance, highly functional all-flash storage with leading-edge virtualisation capabilities.



## **Powerful storage functionality**

IBM Spectrum Virtualize serves as the block data plane backbone for the IBM Spectrum Storage family of software-defined storage solutions. Its innovative capabilities can combine isolated storage capacity and systems in mixed storage environments into a consolidated, virtual resource and then extend enterprise data services to all virtualised capacity, whether the underlying systems support the functionality natively or not.

Storage virtualisation can reduce capital investment by extending the life of existing assets, simplify storage management, maximise storage utilisation and lower operating costs. Thanks to its IBM Spectrum Virtualize foundation, Storwize V7000F offers a rich set of storage features such as data compression, cloud connectivity, dynamic tiering and data copy services.

## **Multiple cost advantages**

Storwize V7000F leverages the performance and cost advantages of a new category of solid-state drives (SSDs) that provide much higher storage density than previous solutions. To further reduce storage capacity requirements and costs, Storwize V7000F utilises IBM data compression technology that provides more consistent results across an even wider range of application workload patterns.

## **Enterprise-grade security and availability**

Storwize V7000F also provides enterprise-grade system availability and data security, 'five nines' availability, data-at-rest encryption and distributed Redundant Array of Independent Disks (RAID) technology that can reduce disk rebuild times up to 10 times over current RAID solutions.<sup>1</sup> IBM HyperSwap technology enables a single Storwize V7000F system to support servers in multiple data centres (DCs). When combined with server data mobility functions such as VMware vMotion or IBM PowerVM Live Partition Mobility (LPM), IBM HyperSwap enables non-disruptive storage and virtual machine (VM) mobility between DCs up to 300 km (186 miles) apart.



## **Easier management**

Storwize V7000F is designed to be easy to use from the very start. The innovative new 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. IBM Spectrum Control, a member of the leading-edge IBM Spectrum Storage family of solutions, can provide organisations with an E2E view of storage health, long-term performance analytics and capacity statistics for Storwize V7000F and the surrounding storage infrastructure.

## **Cloud capabilities**

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

With its virtualised storage design and tight affinity with PowerVM, OpenStack, Microsoft Hyper-V, VMware vSphere v6 and VMware vSphere Virtual Volumes, Kubernetes and Docker containers, Storwize V7000F makes an ideal complement for virtualised servers at the heart of cloud deployments.

## Extraordinary 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 HA Guarantee helps enterprises avoid the costs and risks related to business downtime by ensuring the availability of business-critical data and storage systems.

### IBM Storwize V7000F at a glance

<b>Host interface</b>	1 gigabits per second (Gbps) Internet small computer system interface (iSCSI) and optional 16 Gbps Fibre Channel (FC) or 10 Gbps iSCSI/Fibre Channel over Ethernet (FCoE)
<b>User interface</b>	Graphical user interface (GUI)
<b>Supported drives</b>	2.5-inch flash drives <ul style="list-style-type: none"> <li>• 400 GB, 800 Gigabytes (GBs), 1.6 TB, 1.92 TB, 3.2 TB, 3.84 TB, 7.68 TB and 15.36 TB</li> </ul>
<b>Redundant Array of Independent Disks (RAID) levels</b>	RAID 0, 1, 5, 6, 10, Distributed
<b>Maximum drives supported</b>	760 per system; 3,040 per clustered system
<b>Fans and power supplies</b>	Fully redundant, hot-swappable
<b>Rack support</b>	Standard 19-inch
<b>Management software</b>	IBM Spectrum Virtualize software
<b>Cache per control enclosure/clustered system</b>	128 or 256 GB/up to 1,024 GB clustered
<b>Advanced features <i>included</i> with each system</b>	Virtualisation of internal storage, thin provisioning, data migration
<b>Additional available advanced features</b>	Remote mirroring, compression, external virtualisation, encryption, IBM Easy Tier
<b>Replication services</b>	IBM FlashCopy, IBM Spectrum Protect Snapshot, Metro Mirror (synchronous), Global Mirror (asynchronous)

## Why IBM?

The Storwize family of products from IBM is known for providing cost-efficient, highly functional, high-performance storage for any type of workload. Storwize solutions, customised for small, mid-sized and large organisations, 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 V7000F, contact your IBM representative or IBM Business Partner (BP), or visit: [ibm.com/us-en/marketplace/storwize-v7000f](http://ibm.com/us-en/marketplace/storwize-v7000f)

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](http://ibm.com/financing)



---

### IBM United Kingdom Limited

PO Box 41  
North Harbour  
Portsmouth  
Hampshire  
PO6 3AU  
United Kingdom

### IBM Ireland Limited

Oldbrook House  
24-32 Pembroke Road  
Dublin 4

IBM Ireland Limited registered in Ireland under company number 16226.

The IBM home page can be found at [ibm.com](http://ibm.com)

IBM, the IBM logo, [ibm.com](http://ibm.com), IBM Spectrum Control, IBM Spectrum Protect, IBM Spectrum Storage, IBM Spectrum Virtualize, Easy Tier, FlashCopy, HyperSwap, PowerVM and Storwize are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries.

A current list of IBM trademarks is available on the Web at 'Copyright and trademark information' at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

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

<sup>1</sup> IBM lab measurements – April 2012.

References in this publication to IBM products, programs or services do not imply that IBM intends to make these available in all countries in which IBM operates.

Any reference to an IBM product, program or service is not intended to imply that only IBM products, programs or services may be used. Any functionally equivalent product, program or service may be used instead.

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, IBM warranty terms apply.

This publication is for general guidance only. Information is subject to change without notice. Please contact your local IBM sales office or reseller for latest information on IBM products and services.

This publication contains non-IBM Internet addresses. IBM is not responsible for information found at these Web sites.

IBM does not provide legal, accounting or audit advice or represent or warrant that its products or services ensure compliance with laws. Clients are responsible for compliance with applicable securities laws and regulations, including national laws and regulations.

Photographs may show design models.

© Copyright IBM Corporation 2017



Please Recycle