

# IBM Storwize V3700: Ideal for VMware environments

*Efficient, high-performing virtualized storage for small and medium businesses*




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## Highlights

- Optimize storage efficiency for VMware vSphere 5.0 environments by leveraging a rich set of features including storage virtualization and thin provisioning
  - Improve performance and consolidation capabilities with VAAI support that offloads I/O-intensive storage operations
  - Leverage built-in IBM FlashCopy technology for data protection, application testing and virtual machine cloning
  - Simplify management and improve administration with an intuitive, easy-to-use interface
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Many businesses already have deployed or are considering VMware virtualization solutions to reduce costs through server consolidation while increasing the efficiency, utilization and flexibility of their IT infrastructure. Realizing the full benefits associated with server virtualization also requires a complementary and robust shared storage foundation. IBM delivers smarter storage solutions for businesses of all sizes that help optimize the VMware infrastructure and maximize the benefits while also addressing today's ongoing explosion of data.

## Raising the bar with IBM Storwize V3700

IBM® Storwize® V3700 is a highly efficient and easy-to-use storage system based on the innovative architecture of IBM Storwize V7000. Raising the bar for entry-level disk systems, this virtualized storage system is designed to deliver superior performance and address growing data requirements and consolidation needs. By improving the efficiency, resiliency and agility of VMware infrastructures, Storwize V3700 can help lower costs while keeping the business on track and positioned for the future.

## Built-in storage efficiencies

The efficiency features included with Storwize V3700 can deliver significant benefits for VMware environments and mixed workloads. Like server virtualization, storage virtualization can boost asset utilization while optimizing expenditures and capabilities. Thin provisioning leverages virtualization technology, enabling applications to consume only the space they are actually using, not the total space that has been allocated to them. Higher utilization can be realized by reducing the need to install physical disk capacity that would otherwise be unused. Dynamic migration is also included with Storwize V3700 and enables non-disruptive data movement to the system for consolidation efforts or when upgrading to new technology.

## VAAI integration improves performance

Through integrated support for vSphere Storage APIs for Array Integration (VAAI), Storwize V3700 can improve performance and consolidation capabilities. vSphere can execute operations faster and consume less server resources and storage bandwidth with VAAI enabled. Processing for certain I/O-intensive operations like virtual machine cloning can be offloaded from VMware ESX hosts to Storwize V3700 when



utilizing VAAI, which eliminates redundant data flows between the physical server and storage. Reducing the workload on the server also allows more virtual machines to be deployed for consolidation purposes or growing business needs.

## Essential snapshot technology

Storwize V3700 includes a rich FlashCopy® function that is designed to create an almost instant copy of active data, which then can be used for data protection purposes or parallel processing activities. FlashCopy can help you recover from situations where data has been lost because of application or user error. For example, FlashCopy can be used to take a snapshot of critical data at regular intervals before beginning any maintenance activity to protect against possible accidental deletion.

The ability to clone virtual machines is one major advantage that virtual machines have over physical servers. New systems can be quickly provisioned, or existing systems can be cloned for testing. vSphere can be used to create a clone; however, by using the FlashCopy capability built into Storwize V3700 instead of server resources, individual virtual machines or entire virtual environments can be quickly cloned. Leveraging FlashCopy to create writeable snapshots or space-efficient copies can also boost performance for virtual desktop infrastructure (VDI) deployments.

## Easy to deploy and manage

Small and medium businesses (SMBs) typically have IT departments with limited resources, experience and time to dedicate to system deployment and data management. With this in mind, Storwize V3700 has been designed for exceptional ease of use and includes a highly graphical and intuitive user interface. The initial system setup typically only takes minutes and volumes can be provisioned with only a few clicks. With this innovative interface that has been integrated across multiple IBM storage systems, IT departments can administer a storage system in almost half the time and with 30 percent less complexity, compared to EMC UniSphere.<sup>1</sup>

## The IBM-VMware Relationship

As established leaders in the virtualization space, IBM and VMware are long-time partners with hundreds of thousands of successful deployments. IBM continues to be a VMware Global Alliance Partner and one of the largest OEMs of VMware software. Continued strong investment and active involvement in joint development initiatives and partner programs ensures that IBM solutions like Storwize V3700 are supportable and designed with optimal performance and functionality in mind.

## For more information

To learn more about the IBM Storwize V3700 storage system, please contact your IBM representative or IBM Business Partner, or visit: [ibm.com/systems/storage/disk/storwize\\_v3700](http://ibm.com/systems/storage/disk/storwize_v3700)

For a list of high quality solutions with our partner independent software vendors (ISVs), including access to solution briefs and white papers, visit: [ibm.com/systems/storage/solutions/isv](http://ibm.com/systems/storage/solutions/isv)



Integration between IBM Storwize V3700 and VMware vSphere enables simple configuration and consolidated management while also increasing performance and improving efficiency.



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<sup>1</sup> Edison Group, *Competitive Management Cost Study: IBM Storwize V7000 vs. EMC VNX5500 Storage Systems*, April, 2012.



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