

---

## Highlights

- Perform fast restores of individual objects or whole virtual machines
  - Simplify multi-site replication and disaster-recovery management
  - Centralize management of VMware backups and snapshots from within the familiar VMware vSphere Client interface
  - Provide a single platform for virtual, physical, software-defined and cloud backups
  - Improve efficiency with incremental for-ever backups, deduplication, compression and policy-based administration
- 

# Protect critical data in virtual environments

*IBM delivers easy-to-use data protection solutions for VMware and Microsoft Hyper-V workloads*

Today's virtual infrastructure and server administrators are managing more data-intensive and business-critical workloads, as well as more virtual machines (VMs), than ever before. Meanwhile, data management and data protection tasks are also more time-consuming and increasingly complex. Administrators supporting VMware and Microsoft Hyper-V need to perform restores and, in some organizations, may manage backups, too.

VMware and Hyper-V administrators need to know their data is properly protected—and they often do not have the time to become data protection experts. To manage the fast pace of VM deployments, administrators need to be able to configure the right level of data protection quickly, with the least amount of complexity. The challenge is that data protection requirements vary widely, with some VMs managing little or no data and others hosting core business applications.

## Easy-to-use data protection for VM and server administrators

IBM helps automate and simplify data protection. IBM® Spectrum Protect™ backups and snapshots are easy to configure, schedule and monitor. Restores of individual objects or whole VMs are fast, flexible and easy. Backup service levels can be increased as needed, minimizing complexity.

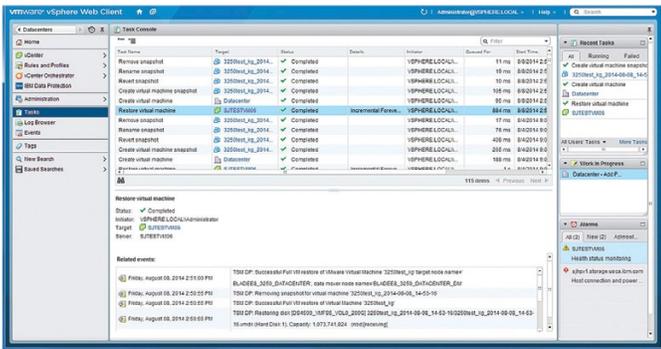
A single IBM Spectrum Protect instance can scale to protect thousands of VMs. New VMs are auto-discovered and backed up, simplifying administration. Advanced in-guest agents are available for email, databases and SAP, including SAP HANA.



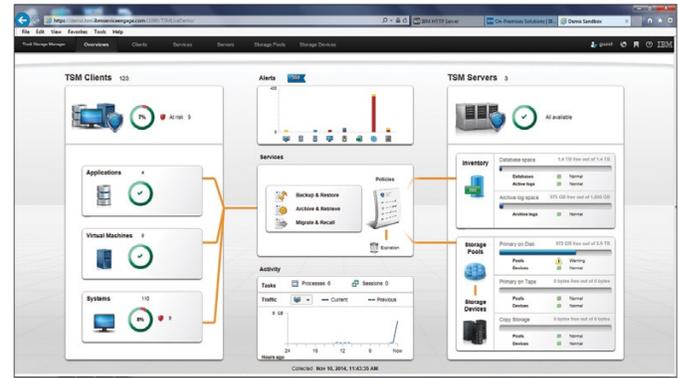
VMware administrators using IBM Spectrum Protect have access to comprehensive data protection capabilities, integrated directly into VMware administration tools. From the VMware vSphere Client, administrators can restore individual VMs and launch the IBM Spectrum Protect VMware graphical user interface to schedule, monitor and perform backups. IBM Spectrum Protect also automates the management of snapshots created by the VMware application programming interface. These IBM solutions enable near-instant backups and restores with minimal impact on applications, and they help optimize data protection for VMware workloads.

IBM offers a single data protection platform for all types of backups, including high-availability virtualized applications. Using one solution, administrators can catalog, replicate and deduplicate backups; plus, they can streamline restores in a broad range of recovery scenarios. IBM Spectrum Protect Operations Center provides an at-a-glance view of data protection status for the entire environment.

Switching to IBM can reduce backup infrastructure costs significantly.<sup>2</sup> Existing IBM Spectrum Protect and IBM Tivoli Storage Manager customers can add advanced data protection for virtual environments at little or no cost.



Administrators can easily configure, schedule and monitor VMware backups and snapshots from within the VMware vCenter interface.



IBM Spectrum Protect Operations Center helps centralize management of virtual, physical and cloud backups, enabling administrators to visualize the workflow.

### A single platform for virtual, physical, software-defined and cloud backups

Backup administrators need to manage all workloads: virtual, physical and, more recently, software-defined and cloud. Virtualized workloads can strain old, inflexible data protection infrastructures. According to one industry analyst, 50 percent of organizations will augment with additional products or replace their current backup application between 2014 and 2018.<sup>1</sup>

*“With [IBM Spectrum Protect] Tivoli Storage Manager for Virtual Environments, we are seeing faster backup and recovery, more centralized management and reduced risk of data loss.”*

—Jeff Jones, senior infrastructure engineer, Unum

### Improve harmony between server and backup environments

Administrators managing virtual servers and those managing backups typically have different missions and skill sets. But when it comes to data protection, collaboration is essential. Organizations spend a significant amount of resources coordinating backup efforts and testing recovery scenarios. What if some of that time and effort could be reduced?

#### Advantages of IBM data protection for virtual machines

Feature	Benefits	VMware	Hyper-V
Auto-discovery of new virtual machines	Helps ensure that all data in the virtualized environment is protected	•	•
Item-level recovery	Enables fast recovery of individual files, Microsoft Exchange mailboxes and emails, and Microsoft SQL Server databases	•	•
Application-consistent backup and recovery	Helps ensure complete application backups and simplifies restore processes	•	•
Copy management	Enables a single virtual-machine snapshot to be used for data recovery, testing, development, disaster-recovery assurance, analytics, etc.	•	•
Integration with hardware snapshots*	Enables frequent snapshots with minimal impact on application performance	•	
Incremental “forever” backups	Reduces the need for extra capacity and staff time to manage periodic full backups	•	•
Data deduplication	Enables high-performance space reduction, available at the virtual machine, backup server or (optional) ProtecTIER level	•	•
Nondisruptive, single-pass backups	Help increase application performance during backups	•	•
Agentless support	Helps simplify deployment and reduce operating expenses	•	•
Tape support	Helps reduce costs for long-term archiving and retention	•	•
Instant access/instant restore	Helps reduce the end-user impact to nearly zero during virtual-machine restores	•	
Single-pass, full datastore recovery*	Provides near-instant recovery of an entire datastore, including all virtual machines	•	

---

## IBM integration with VMware tools and APIs

---

Feature	Benefits
VMware vSphere web client support	Allows VMware administrators to easily perform data protection and recovery operations, powered by IBM Spectrum Protect, and launched within the familiar vSphere interface
VMware vCenter integration	Enables VMware administrators to easily configure, schedule, and monitor backups and snapshots
VMware vStorage application programming interface (API) support	Helps reduce compute, storage and network overhead

IBM solutions can help improve the way server and backup administrators work together. With IBM integration, virtual server experts can get immediate access to the information and capabilities they need—all from an intuitive, easy-to-use VMware interface. Backup administrators can use a common platform for virtual and physical data protection, with unified recovery and integrated reporting capabilities. Support for cross-team communications is built into IBM Spectrum Protect Operations Center to help reduce troubleshooting and problem resolution time.

### Why IBM?

IBM provides comprehensive, optimized data protection and data management solutions that are easy to use for both server and backup administrators. IBM data protection solutions for virtual environments can extend the role of IBM Spectrum Protect, enabling organizations to confidently manage virtual, physical, software-defined and cloud backups, while also controlling costs and complexity.

### For more information

To learn more about IBM Spectrum Protect for Virtual Environments, please contact your IBM representative or IBM Business Partner, or visit:

[ibm.com/software/products/storage-mgr-ve](http://ibm.com/software/products/storage-mgr-ve)



---

© Copyright IBM Corporation 2015

IBM Systems  
Route 100  
Somers, NY 10589

Produced in the United States of America  
July 2015

IBM, the IBM logo, ibm.com, IBM Spectrum Protect, Tivoli, and FlashCopy are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. 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 is a trademark of Microsoft Corporation in the United States, other countries, or both.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

vCenter and vSphere are not IBM products or offerings. vCenter and vSphere are sold or licensed, as the case may be, to users under VMware’s terms and conditions, which are provided with the products or offerings. Availability, and any and all warranties, services and support for vCenter and vSphere is the direct responsibility of, and is provided directly to users by, VMware.

\* IBM Spectrum Storage Snapshot capability

<sup>1</sup> Dave Russell et al., “Magic Quadrant for Enterprise Backup Software and Integrated Appliances,” *Gartner*, June 15, 2015.  
[https://www14.software.ibm.com/webapp/iwm/web/signup.do?source=swg-Tivoli\\_Organic&S\\_PKG=ov25423&S\\_TACT=109HJ98W](https://www14.software.ibm.com/webapp/iwm/web/signup.do?source=swg-Tivoli_Organic&S_PKG=ov25423&S_TACT=109HJ98W)

<sup>2</sup> Average projected savings of 38 percent from individual customer *Analysis Engine Reports from Butterfly Software*, May 2013; savings include cumulative 36-month hardware, hardware maintenance and electrical power savings, excluding one-time Spectrum Protect migration cost.



Please Recycle