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## Highlights

- Automate creation and use of copy data snapshots, vaults, clones and replicas on existing storage infrastructure
  - Simplify management and reduce management time while improving reliability
  - Drive high-value use cases such as leveraging hybrid clouds
  - Modernize IT by providing automation, user self-service and operations based on application programming interfaces (APIs) without adding hardware
  - Catalog and track volumes, snapshots, virtual machines, data stores and files
  - Support multi-vendor storage arrays
  - Deploy as a virtual machine in 15 minutes
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# IBM Spectrum Copy Data Management

*Data center modernization with in-place copy data management*

From automating DevOps to integrating data in the cloud, IT innovations for business improvement are constantly emerging. But most of these opportunities remain out of reach unless organizations can modernize their IT resources to support them. Modernization is not only the key to embracing new use cases, it's also fundamental to increasing efficiencies in established processes for activities such as data protection, disaster recovery, reporting and business analytics, application test and development and DevOps.

One of the essential tools for modernization is copy data management, which delivers the data access that's urgently needed to transform IT. IBM® Spectrum™ Copy Data Management, used in conjunction with storage arrays from a broad range of vendors, enables critical new use cases by providing in-place copy data management to modernize processes within existing IT infrastructures.

## Improving access, speed and efficiency

Whether the goal is operational automation, data integration in the cloud or any of a number of other use cases, the common challenge is how to get access to copies of data. Access—whether to data on storage arrays or to systems such as virtual machines that connect to data—typically requires going through IT gatekeepers in a lengthy, complex request-and-provisioning process. Waiting days or even weeks to get access to data this way isn't unusual, and that can have a severe impact on data consumers' efficiency, productivity and all-around effectiveness.



Copy data management addresses the problem of slow data access by bringing modern IT approaches—including self-service, automation and APIs—to the legacy systems where the vast bulk of organizational data resides. IBM Spectrum Copy Data Management is designed to leverage existing IT infrastructures' data copy services—including storage array snapshots, replication and clone engines.

Leveraging existing IT infrastructure for copy creation and copy management means greater efficiency and cost savings for your organization. With a central management tool that manages copy creation using the existing copy solution on your arrays and in your database and replication software, you can rapidly create the clones and snapshots in place rather than slowly bringing them out of band. And because all copies across your environment are cataloged, one copy can be used across many use cases rather than creating a new copy for each use case, thus reducing your storage footprint.

Delivered as a virtual appliance that can be deployed in 15 minutes, IBM Spectrum Copy Data Management runs in an agentless manner to catalog the existing copy data environment, including storage, virtual machines and applications. Once deployed, the solution can significantly improve the IT team's ability to deliver key functions while dramatically reducing the cost of infrastructure and ongoing operations.

IBM Spectrum Copy Data Management delivers the orchestration and automation of tasks that would otherwise require complex, error-prone scripting or a hodgepodge of existing tools. With the IBM solution, complex workflows in the virtualization, application and storage environments can instead be easily configured and completed using a simple, template-based point-and-click interface or API calls.

### **Use cases: Simplifying copy data management**

By modernizing many common IT processes, IBM Spectrum Copy Data Management simplifies copy data management, enabling automation and orchestration of data copies. The

copies can then be leveraged for value-creating use cases, whether on-premises or in the cloud. IBM Spectrum Copy Data Management enables the following use cases:

#### **Automated copy management**

IT teams can leverage the core policy engine, catalog and reporting of IBM Spectrum Copy Data Management to dramatically improve IT operations that rely on copies of data, including disaster recovery, testing and development, business analytics, and local recovery. IBM Spectrum Copy Data Management improves operations by using automated, service-level based copy policies that are consistent, reliable and easily repeatable. This can provide huge savings in operational expenditures. Without IBM Spectrum Copy Data Management, functions that rely heavily on copies are typically managed using a complex mix of scripts, tools or other products not optimized for copy management. With IBM Spectrum Copy Data Management, you have a holistic, simplified approach that greatly reduces cycle time and frees staff to manage more productive projects.

#### **DevOps**

Development and operations (DevOps) organizations are increasingly moving toward modernized DevOps processes for faster delivery of new applications to market. IBM Spectrum Copy Data Management allows the IT team to use their existing storage infrastructure to enable DevOps and to meet the needs of the development teams for rapid deployment of infrastructure. IBM Spectrum Copy Data Management templates define the policies for infrastructure deployment, and the whole system is accessible via the REST API, which is a fundamental requirement for DevOps. With IBM Spectrum Copy Data Management, DevOps teams get “infrastructure as code.” Rather than following legacy processes to requisition IT resources, developers include the infrastructure deployment commands directly within their development systems, such as Chef, Puppet or IBM Bluemix®. Pre-defined scripts and plug-ins for popular DevOps tools simplify implementation.

### **Next-generation data protection and disaster recovery**

Through its template-based management and orchestration of application-aware copies, IBM Spectrum Copy Data Management becomes a powerful solution for next-generation data protection and recovery. It works with your existing infrastructure, including IBM Spectrum Protect for Snapshot, to catalog and automate snapshot and copy creation and management. This enables IT to mount and instantly access copies that are already in the production storage environment. IBM Spectrum Copy Data Management catalogs all snapshots, replicas, and it alerts you if a snap or replication job was missed or failed. Disaster recovery can be fully automated and tested nondisruptively. In addition, IBM Spectrum Copy Data Management can coordinate sending data to Amazon Web Services (AWS) S3. This provides an easy-to-use, low-cost option for longer term or archival storage of protection copies.

### **Automated test and development**

The speed and effectiveness of test and development processes are most often limited by the time it takes to provision IT infrastructure. Typical organizations take weeks to deploy infrastructure; even the most efficient can take several days. With IBM Spectrum Copy Data Management, test and development infrastructure can be spun up in minutes, either on an automated, scheduled basis or with push-button ease on demand. Copies delivered in this manner can be kept up to date with regular, automated refreshes from the master copy. Using the most recent copy application data for test and development reduces bugs, increasing development efficiency and resulting in improved applications delivered through your test and development process.

### **Leverage hybrid cloud compute**

IBM Spectrum Copy Data Management is a powerful enabler of the hybrid cloud that empowers IT to take advantage of cloud compute resources. IBM Spectrum Copy Data Management not only helps you move data to the cloud, it

enables you to bring up live application environments that can leverage the less expensive, elastic compute infrastructure in the cloud. You can spin up workloads and then spin them back down reliably. This maximizes the economic benefit of the cloud by using and paying for only the infrastructure you need.

IBM Spectrum Copy Data Management is an easy-to-deploy software platform that is designed to leverage the existing infrastructure in the IT environment. It works directly with hypervisor and enterprise storage APIs to provide the overall orchestration layer that leverages the copy services of the underlying infrastructure resources. IBM Spectrum Copy Data Management also integrates with AWS S3 for cloud-based data retention, as well as Puppet, Bluemix and other platforms.

### **Capabilities: Bringing a unique variety of features to IT teams**

IBM Spectrum Copy Data Management enables you to effectively manage data protection, disaster recovery and other critical functions with capabilities including:

#### **Database-specific functionality**

IBM Spectrum Copy Data Management allows the IT team to simply and easily create and share copies of all popular database management systems by integrating key database management system (DBMS) tasks within well-defined policies and workflows. The solution also includes application-aware integration for Oracle, SAP HANA and Microsoft SQL Server platforms, providing a deeper level of coordination with the DBMS.

#### **Secure multi-tenancy**

Secure multi-tenancy meets the needs of both managed service providers and large organizations that need to delegate resources internally. Individual “tenants” can be created within a single IBM Spectrum Copy Data Management instance, allowing each tenant its own set of resources and the ability to support administration within the tenancy to create users, define jobs and perform other functions.

## Policy templates for automation and self-service

Template-based provisioning and copy management provides easy self-service access for internal customers to request the resources they need, when they need them. Templates are pre-defined by the IT team, and they're accessible via a self-service portal interface or through API calls.

## Compatibility

IBM Spectrum Copy Data Management is a simple-to-deploy software platform designed to leverage the existing IT infrastructure. It works directly with hypervisor and storage APIs to provide the overall orchestration layer that leverages the copy services of the underlying infrastructure resources. It also integrates with Amazon Web Services S3 for cloud-based data retention.

## Why IBM?

IBM offers a vast portfolio of hardware, software and services, including some of the best data storage products and solutions in the industry. Innovative technology, open standards, excellent performance and a broad portfolio of proven storage offerings—all backed by IBM with its recognized industry leadership—are just a few of the reasons to consider IBM Spectrum Copy Data Management and other storage solutions from IBM.

## For more information

To learn more about IBM Spectrum Copy Data Management, please contact your IBM representative or IBM Business Partner, or visit:

[ibm.com/systems/storage/spectrum/copy-data-management](http://ibm.com/systems/storage/spectrum/copy-data-management)

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.

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