IBM Spectrum Protect Plus
Data Offload Solutions

March 11, 2019

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This edition applies to version 10.1.3 and later of IBM Spectrum Protect Plus, and to all subsequent releases and modifications until otherwise indicated in new editions or technical newsletters.

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Data offload summary

IBM® Spectrum® Protect Plus release 10.1.3 introduces a new data offload capability that is ideal for long-term data storage and data compliance, and provides an attractive storage option for disaster recovery and cyber resiliency.

Spectrum Protect Plus provides the ability to store data on a lower-cost storage tier by integrating with object storage application programming interfaces (APIs), such as the standard S3 protocol. These storage tiers include IBM Cloud Object Storage, Amazon S3 and Microsoft Azure Blob Storage. Secure long-term data storage can be achieved using IBM Cloud Object Storage features such as retention-enabled vaults, and cannot be deleted or changed during a specified retention period. This ability to lock down data is a key part of cyber resiliency. There is also instant data recovery from offload backups.

Spectrum Protect Plus uses a “full once, incremental forever” model for data movement throughout the solution. Only data that has changed will be captured in the backup streams, replication streams and data offload streams. Customers specify whether the data offloads are created from the primary backup data or replicated copies of the backup data. The new data offload to object storage feature works for all workloads supported by IBM Spectrum Protect Plus including VMware vSphere and Microsoft Hyper-V virtual machines, IBM Db2®, Oracle, MongoDB and Microsoft SQL Server databases, and Microsoft Exchange Server. No additional software or agents are required to support any of these workloads.

Unified data protection: Backup, replication, disaster recovery and long-term retention

This section examines how long-term retention through data offloading combined with replication can provide a holistic data protection ecosystem.

Figure 1: IBM Spectrum Protect Plus data offload with multiple sites

Spectrum Protect Plus extends data protection and availability to include long-term data retention frequency and retention. The customer can choose to use the new offload feature to create an offload of each protected asset once a week and keep the offloaded copies for three years. This is in addition to the daily backups, which are being maintained for seven days. All aspects of the backup policy (daily backups for operational recovery and data reuse and the weekly backups for long-term retention) can be expressed in a single SLA policy in the Spectrum Protect Plus management console. Therefore, data recovery can be achieved from the local disk storage system (vSnap server) or an object storage system.
In addition, this data is also replicated daily to the second location via vSnap replication, which is the built-in software replication offered in IBM Spectrum Protect Plus. The customer can specify unique retention values for the replicated data; for example, keeping the replicated data for 14 days. The Spectrum Protect Plus data offload capability will extend the data protection and availability capabilities to include long-term data retention with a unique frequency and retention. In this replicated ecosystem, the customer also can choose where the data offload originates, whether from the primary storage in the main data center or the replicated storage.

**Data availability at multiple locations**

This section will examine how object storage provides flexibility of data availability across multiple sites.

![Diagram](image)

**Figure 2: Recoverability at both sites**

Figure 2 illustrates the recovery capabilities for data that has been offloaded to an object storage system. The customer can recover data from the object storage system to either of the locations, independent of the location of the original source data or the original location of the offload. For example, if the customer created backups and offloads from the primary data center, they can recover the data directly to the second data center just as easily as recovering data to the primary data center.

**Additional options provided by IBM Cloud Object Storage immutable object storage**

Retention-enabled vaults enforce retention protection for all objects stored in buckets, which means objects cannot be deleted or changed during the specified retention period. Retention-enabled vaults help clients that are building out cyber resiliency infrastructures by providing functionality similar to an “air gap” to increase the protection and security of the data in the event of a malicious attack.

When defining this SLA policy, IBM Spectrum Protect Plus will recognize that the object storage target is an IBM Cloud Object Storage retention-enabled vault and the data protection policy will inherit the retention value of the vault. For example, if the customer sets up a retention vault with a retention duration of two years, IBM Spectrum Protect Plus will automatically recognize the bucket and use two years as the retention value.
Summary
By integrating with object storage APIs, such as the standard S3 protocol, IBM Spectrum Protect Plus can offload data to object storage, such as IBM Cloud Object Storage (including immutable object storage), Amazon S3 and Microsoft Azure Blob Storage, as well as IBM Spectrum Protect. Backups, data reuse, replication and data offload are all managed using SLA policies, which means the entire data protection lifecycle is managed through a single, easy-to-use, common user interface.

As a result, IBM Spectrum Protect Plus customers can leverage a vast array of low-cost, durable and highly scalable storage options for long-term data retention, data compliance and disaster recovery.