

# Storage Software Services Offering Catalog

*Accelerate the success of your storage software solution*



## Highlights

- Partnering with IBM Systems Storage Software, IBM Systems Lab Services gives you access to industry-leading subject matter specialists.
- Our expertise and agile strategies will help accelerate your organization's storage software implementation, avoid pitfalls and mitigate risks.
- Our Lab Services specialists bring technical knowledge, industry skills, implementation-proven best practices and delivery experience gained from thousands of complex engagements worldwide.
- Our engagement practices are designed to provide clients with high return on investment, reduced risk and expedient methods to attain business objectives.

## IBM Spectrum Protect

### IBM Spectrum Protect Health Check

This service examines the configuration and performance of your current IBM Spectrum Protect™ environment. We interview staff to understand business practices and concerns about the effectiveness of backups, disaster recovery plans and data retention policies. We'll leave behind a detailed written report about findings and actions recommended to most effectively meet business needs. Your benefits:

- Efficient and effective data recovery that meets business requirements
- Proposed data retention policies to optimize storage utilization and improve service levels
- Recommended ways to enhance the use of backup and recovery tools to support the business

### IBM Spectrum Protect Quick Start

This service provides specialist skills to plan, install and configure IBM Spectrum Protect in a test environment. It provides efficient initial solution implementation and visible value in the client environment. Lab Services transfers information to IT staff and provides guidance to optimize the initial IBM Spectrum Protect implementation to address business needs. Your benefits:

- Guided experience to install, configure, and operate IBM Spectrum Protect
- Optimized solution implementation and configuration for the needs of the business
- Hands-on guidance in the use of data protection capabilities

### IBM Spectrum Protect Upgrade Workshop

This service facilitates analysis of the current and targeted upgrade environment to ensure comprehensive preparation for migration with minimum disruption. We provide a guided review of business and technical requirements for backup and recovery in the environment and then recommend best practices for upgrade activities resulting in a clear method for the upgrade. The workshop also demonstrates the advantages of current data protection technologies. Your benefits:

- An efficiently and effectively performed upgrade, minimizing risk and improving time to value
- Ability to plan for future needs with lessons learned and recommendations about how to take steps toward them
- Improved ability to respond to data protection needs of the business by knowing which software features will provide the greatest benefits to optimize storage management capabilities and maximize return on investment

### Upgrade/Migration Services for IBM Spectrum Protect

With this offering, Lab Services reviews your existing architecture and backup strategy and verifies existing IBM Spectrum Protect processes. We then prepare the existing environment for the upgrade or migration to a new server platform with a similar operating system. Next, we perform the upgrade or migration installation and configuration activities. After conducting validation and verification of software functions and data migration, Lab Services provides transfer of operating information and supporting system documentation to IT staff. Your benefits:

- Focused, upfront planning for optimal results
- An efficiently and effectively performed upgrade, minimizing risk and improving time to value
- New skills and hands-on experience
- Data protection skills to address and anticipate data protection business needs.

### **Advanced Backup Workload Distributor (Custom Tool) for Complex VMware Environments**

In this service, we facilitate discussion of the business need driving the implementation of multi-threaded backups. Lab Services recommends the appropriate balance of workload between various data movers, proxy servers and Spectrum Protect servers, and then installs and configures IBM Spectrum Protect for Virtual Environments. We provide transfer of information to staff and offer guidance to optimize the implementation for the needs of the business. Your benefits:

- Fine-grained data retention policy control that protects mission-critical and other VM(s) using named management class
- Balance of VM backup workload to meet the data protection needs of the business
- Efficient and effective implementation using experts to minimize risk and maximize time to value
- New skills and hands-on experience

### **Disaster Recovery Implementation using DB2 HADR, IBM Spectrum Protect and ProtecTIER**

This service reviews your existing architecture and backup strategy. We facilitate discussion of current business objectives and methods for disaster recovery; prepare your existing environment for implementation of IBM Spectrum Protect; and perform installation and configuration activities. This service integrates IBM Spectrum Protect with IBM DB2® HADR and IBM ProtecTIER® virtual tape library. We conduct validation and verification of software functions, and simulate a disaster recovery scenario for data recovery. Operating information and supporting system documentation are transferred to IT staff. Your benefits:

- Essential upfront planning for improved results
- Shortened data recovery time objective (RTO)
- Increased confidence in business continuance in the event of a disaster recovery incident
- Hands-on experience using IBM Spectrum Protect to address disaster recovery needs
- Documentation of implementation-specific details helpful to the recovery of data in the event of a disaster recovery incident

### **SAP Backup and Restore of MaxDB using IBM Spectrum Protect**

This service facilitates discussion of the business needs for backups and restores of MaxDB databases. We recommend the appropriate backup and restore processes, and we install

and configure IBM Spectrum Protect. Lab Services provides transfer of information to IT staff and guidance to optimize the implementation for business needs. Your benefits:

- Efficient and effective plans to implement the backup solution under the guidance of experienced subject area specialists, minimizing risk and maximizing time to value
- Hands-on experience managing database backups to meet business needs
- Knowledge to plan for future database backup efforts as business needs change

### **IBM Spectrum Protect Snapshot Quick Start**

This service facilitates discussion of the business needs for fast, application-aware backup and restore of DB2, Oracle, MSSQL, Exchange and VMware using built-in database support. It can also be used to protect other databases or files using the custom application feature. We review the existing architecture and backup strategy; prepare the environment for software implementation and perform installation and configuration activities. Lab Services also conducts validation and verification of software functions and data backup and restore, and then provides transfer of operating information and supporting system documentation. Your benefits:

- Hands-on experience to install, configure and operate IBM Spectrum Protect Snapshot
- Optimized solution implementation and configuration for the needs of the business
- Learn how to use backup and restore capabilities through guided hands-on use
- Document implementation details helpful to the ongoing maintenance and use of the data protection environment

### **Node Replication for IBM Spectrum Protect Clients**

This service analyzes data replication requirements. Lab Services facilitates discussion of replication concepts and architecture options. We define data replication solution design, verify the existing IBM Spectrum Protect environment and configure IBM Spectrum Protect for node replication. We then demonstrate data replication function and data recovery and provide transfer of operating information and supporting system documentation to IT staff. Your benefits:

- A clear and consistent architecture for data replication
- Ability to transparently replicate data as needed within the environment to optimize data protection and business costs
- Hands-on experience managing data replication and recovery to meet business needs

**Cloud Solutions for IBM Spectrum Protect**

In this service, we analyze cloud platform requirements and facilitate a discussion of cloud platform architecture options. We then implement IBM Storage replication, backup and archive solutions across private and public clouds. Lab Services configure IBM Spectrum Protect data to integrate with the cloud solution and demonstrates backup and recovery capabilities from the cloud. Finally, we provide transfer of operating information and supporting system documentation. Your benefits:

- Ability to easily adapt to changing storage demands
- Ability to capitalize on cloud-based disaster recovery capabilities using the existing storage environment and storage management skill set, minimizing administration and training costs
- Reduced cost for storing and managing long-term data
- Flexibility in managing a disaster recovery operation and performing failover and fallback regardless of platform

**IBM Spectrum Protect with IBM Cloud Object Storage System**

This service analyzes object storage business requirements. We facilitate a discussion of IBM Cloud Object Storage System™ (COS) architecture and implement the COS storage pool. Lab Services then configures IBM Spectrum Protect to integrate with COS and demonstrates backup and recovery capabilities from the object storage pool. We provide transfer of operating information and supporting system documentation. Your benefits:

- Ability to easily adapt to changing customer demands for storage
- Improved efficiency, reduced cost to store and manage data
- Integrated data protection capabilities with the efficiency of object storage

**IBM Spectrum Protect Custom Implementation**

This service provides custom implementation and design for specific IBM Spectrum Protect solutions to meet best practice implementation for network storage backups, disaster recovery planning, implementation and testing, and Content Manager implementation and integration. We provide transfer of operating information and supporting system documentation. Your benefits:

- Data protection aligned to business policies and requirements
- Reduced need for manual intervention in the daily backup process
- Improved data management and recovery practices for faster recoveries

**IBM Spectrum Protect for Virtual Environments**

This service provides custom implementation to backup VMware environments using IBM Spectrum Protect for Virtual Environments. We review your existing VMware environment and then recommend and implement proxy servers to meet business service level agreements. The offering integrates your solution into existing IBM Spectrum Protect backup infrastructure. We provide transfer of operating information and supporting system documentation. Your benefits:

- Efficiently and effectively plan and implement the backup solution under the guidance of experienced subject area specialists, minimizing risk and maximizing time to value
- Gain hands-on experience managing database backups
- Plan for future database backup efforts as needs change

**Data Protection for Elastic Storage**

This service analyzes the existing IBM Elastic Storage™ on IBM AIX® or Linux, the IBM Spectrum Protect environment and network and data size. Lab Services recommends an architecture to protect Elastic Storage data and presents options for IBM Spectrum Protect backup solutions including technology, skills and processes. We install and configure IBM Spectrum Protect to back up Elastic Storage data on one of the clustered nodes. Lab Services also demonstrates backup and restore Elastic Storage files. Your benefits:

- Ability to efficiently and effectively plan and implement the backup solution under the guidance of experienced subject area specialists, minimizing risk and maximizing time to value
- Centralized protection based on smart-move and smart-store technology for faster backups and restores using fewer network and storage resources
- An intelligent, distributed workload across multiple IBM Spectrum Protect backup/archive clients in parallel, implemented for best performance utilizing full-integration with the Elastic Storage backup facility

## Butterfly Data Migration

### IBM Butterfly Migration Planning Workshop

This service facilitates the analysis of current and target environments to ensure comprehensive preparation for data migration with minimum disruption. We identify key characteristics of the environments as they relate to the data migration process and then create a project and detailed data migration plan. Lab Services implements the target environment to receive the migrated data. Your benefits:

- Efficient and detailed upfront planning for optimal migration results under the guidance of experienced subject area specialists
- An understanding of how to consolidate legacy and current data onto the most effective storage media
- Clarity on how to clean and optimize historic data files, reducing data risk and maintenance costs
- Knowledge of how to migrate data without excessive consultancy charges or disruption to backup operations

### IBM Butterfly Data Migration

This service implements efforts identified in the project and detailed data migration plans created during an IBM Butterfly Migration Planning Workshop. We provide a thorough review of the analysis engine report (AER). Lab Services implements the target environment to receive the migrated data and implements the data migration software. We then initiate and monitor the data migration process, validating migrated data and confirming readiness to decommission the existing environment. Your benefits:

- Efficient and effective migration to minimize risk and maximize time to value
- Consolidation of existing and current data onto the most effective storage media
- Clean and optimized historic data files to reduce data risk and maintenance costs
- Ability to move data with no impact to the production environment or backup operations
- Improved data RTO

### IBM Butterfly Data Migration for IBM Spectrum Protect Upgrade

This service upgrades the IBM Spectrum Protect environment to the current level of software and migrates data to this upgraded level. Lab Services implements efforts identified in the project and detailed data migration plans created during an IBM Butterfly Migration Planning Workshop and the thorough review of the AER. We implement the target environment to receive the migrated data and implement the data migration software. We also initiate and monitor the data migration process, as well as validate migrated data and confirm readiness to decommission the existing environment. Your benefits:

- Efficient and effective migration to minimize risk and maximize time to value
- Consolidation of legacy and current data onto the most effective storage media
- Clean and optimized historic data files to reduce data risk and maintenance costs
- Ability to move data with no impact to the production environment or backup operations
- Improved data RTO

## IBM Spectrum Control

### IBM Spectrum Control Health Check

This service examines the configuration and performance of the current IBM Spectrum Control™ environment. We interview staff to understand business practices and concerns about the effectiveness of storage management monitoring components, report data and tuning options. We'll then provide a detailed written report about findings and actions recommended to most effectively meet business needs. Your benefits:

- Efficient and effective storage management that meets business requirements
- Proposed storage management policies to optimize tiered storage utilization and improve service levels
- Recommended ways to enhance the use of storage management tools to support the business

**Spectrum Control Quick Start**

In this service, we plan, install and configure the Standard Edition of IBM Spectrum Control in a limited environment. Lab Services implements disk and fabric components; demonstrates the creation of Spectrum Control reports using IBM Cognos®; and guides the process of optimizing the initial implementation for the needs of the business. We'll provide transfer of operating information and supporting system documentation to IT staff. Your benefits:

- Guided experience to install, configure and operate IBM Spectrum Control
- Access to status and performance information through dashboards and web interface
- An optimized solution implementation and configuration for the needs of your business
- Ability to achieve storage management objectives and realize return on investment quickly

**IBM Spectrum Control Implementation Services**

This service reviews the client's existing architecture and storage management strategy. We verify existing storage management processes, prepare the environment for software implementation, and install and configure IBM Spectrum Control software. Lab Services implements and configures disk and fabric components, as well as highlights the use of new features included in the current software version. We recommend optimization of the initial implementation to best meet business needs and guide the client in the use of IBM Spectrum Control reports using Cognos. Finally, we provide transfer of operating information and supporting system documentation to IT staff. Your benefits:

- Efficient and effective implementation using experts to minimize risk and maximize time to value
- Gain knowledge of storage management best practices and hands-on experience
- Get defined report views to help manage the storage environment and anticipate storage management needs
- Learn to perform application modeling for capacity usage, performance and SAN resource dependencies on a per-application basis

**IBM Spectrum Control Upgrade Services**

This service reviews your existing architecture and backup strategy and verifies existing TPC or IBM Spectrum Control processes. We prepare your existing environment for upgrade of the DB2 IBM Spectrum Control software components. Lab Services performs the upgrade installation and configuration activities and conducts validation and verification of software functions. We provide transfer of operating information and supporting system documentation to IT staff. Your benefits:

- Focused, upfront planning for optimal results
- An efficient and effective upgrade, minimizing risk and improving time to value
- Knowledge of storage management best practices and hands-on experience in your environment
- Storage management skills to address and anticipate storage management business needs

**IBM Copy Services Manager Implementation Services**

This service reviews the client's existing architecture and copy services strategy for the storage environment, including FlashCopy®, Metro Mirror, Global Mirror and Metro Global Mirror. We verify the existing copy services processes. We prepare your existing environment for software implementation and then install and configure IBM Copy Services Manager. Lab Services will highlight the use of new features included in the current software version and recommend optimization of the initial implementation to best meet business needs. Finally, we provide transfer of operating information and supporting system documentation. Your benefits:

- Efficient and effective implementation using experts to minimize risk and maximize time to value
- Knowledge of copy services management best practices and hands-on experience with IBM Spectrum Control in your environment
- Ability to plan for future copy services needs with lessons learned and experience for next steps



### **IBM Spectrum Control Value Pack Foundation Services – Introduction to Reporting and Alerting**

This service provides an analysis and interpretation of IBM Spectrum Control reports to effectively manage the storage environment. We facilitate the implementation of alerts to optimize management of the environment. Lab Services provides guidance to customize reports for the business and provides transfer of information about reporting and alerting capabilities. Your benefits:

- Hands-on experience
- Ability to identify the IBM Spectrum Control reports and alerts that provide the greatest value to your business
- Ability to plan for future storage reporting and alerting needs with lessons learned and experience for next steps

### **IBM Spectrum Control Value Pack Advanced Services – Advanced Reporting and Managing Performance**

This service involves imparting best practices to measure and report subsystem performance. We do a detailed analysis of file and database space usage and trending and then provide transfer of information about reporting and alerting capabilities. Lab Services provides guidance to customize reports for business needs. Your benefits:

- Hands-on experience
- Ability to identify the IBM Spectrum Control reports and alerts that provide the greatest value to your business
- Ability to plan for future storage reporting and alerting needs with lessons learned and experience for next steps

### **Storage Usage Chargeback Tool**

This service leverages the IBM Spectrum Control database to provide chargeback reporting based on actual data usage. It provides chargeback based on usage at the operating system level, correlating to back-end storage devices for billing also based on storage tier. We configure your existing IBM Spectrum Control environment to support chargeback reporting. Your benefits:

- Hands-on experience.
- Chargeback reports implemented efficiently and effectively to optimize time to value
- Ability to plan for future chargeback needs with lessons learned and experience for next steps

### **IBM Spectrum Scale**

#### **Active Archive using IBM Spectrum Archive for IBM Spectrum Scale on Linux**

This service facilitates the analysis of the current IBM Spectrum Scale™ environment. We discuss architectural options to manage data by tier based on client defined policies. Lab Services guides the review of business and technical requirements and then installs and configures the IBM Spectrum Archive™ solution to manage IBM Spectrum Scale file movement from and to tape devices. We'll demonstrate the archive and retrieval of files and provide transfer of operating information and supporting system documentation. Your benefits:

- Seamless integration of IBM Spectrum solutions that can leverage your existing IBM tape library investment
- Storage tiers that match with business need based on data access frequency, speed and cost requirements
- Ability to make data management choices transparent to the user

#### **IBM Spectrum Protect for Space Management for IBM Spectrum Scale on AIX or Linux**

This service facilitates the analysis of the current IBM Spectrum Scale environment. Lab Services discusses architectural options for managing data by tier based on client defined policies. We guide the review of business and technical requirements to implement the solution and then install and configure IBM Spectrum Protect for Space Management on an IBM Spectrum Scale clustered node. We'll also demonstrate the migration and recall of IBM Spectrum Scale files and provide transfer of operating information and supporting system documentation. Your benefits:

- Seamless integration of IBM Spectrum solutions that help you leverage your existing IBM tape library investment
- Storage tiers that align to business needs based on data access frequency, speed and cost requirements
- Ability to make data management choices transparent to the user

## Active Archive using IBM Linear Tape File System (LTFS) for IBM Elastic Storage on Linux

With this service, we facilitate analysis of the current Elastic Storage environment. Lab Services discusses architecture options to manage Elastic Storage by tier using client defined policies and reviews business and technical requirements. We then implement Linear Tape File System™ (LTFS) Enterprise Edition on an Elastic Storage clustered node and demonstrate archive and retrieval of Elastic Storage files. Finally, we'll transfer operating information and supporting system documentation. Your benefits:

- Seamless integration of IBM Spectrum solutions to help you leverage your existing IBM tape library investment
- Storage tiers that match with business need based on data access frequency, speed and cost requirements
- Ability to make data management choices transparent to the user

## IBM Systems Lab Services

IBM Systems Lab Services has the proven expertise to help leaders design, build, and deliver IT infrastructure for the cognitive era. We help IBM clients design for cognitive business, build with collaborative innovation, and deliver through a cloud platform.

Lab Services consultants' proven expertise derives from a combination of business and extensive practical technical experience, leveraging proven tools and methodologies. Our Lab Services consultants perform IT Infrastructure services for clients on site, helping them solve business challenges, gain new skills, and discover best practices. Lab Services has a global presence and can deploy its consultants in any region as required.

Lab Services is uniquely positioned to help IBM clients through the lifecycle of designing, building, and delivering IT infrastructure for the cognitive era. We offer a wide range of services for Power Systems™, IBM z Systems®, IBM LinuxONE™, and IBM Storage and Software Defined Infrastructure.

## For more information

To inquire about services and sales assistance, contact:

Michael Benanti, [mbenanti@us.ibm.com](mailto:mbenanti@us.ibm.com) or Allison Ferguson, [fergusoa@us.ibm.com](mailto:fergusoa@us.ibm.com)



© Copyright IBM Corporation 2017

IBM Corporation  
Route 100  
Somers, NY 10589

Produced in the United States of America  
April 2017

IBM, the IBM logo, ibm.com, AIX, Cloud Object Storage System, Cognos, DB2, FlashCopy, IBM LinuxONE, IBM Spectrum Archive, IBM Spectrum Control, IBM Spectrum Protect, IBM Spectrum Scale, IBM z Systems, Power Systems, and ProtecTIER 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 [www.ibm.com/legal/copytrade.shtml](http://www.ibm.com/legal/copytrade.shtml).

Linux is a registered trademark of Linus Torvalds 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.



Please Recycle