SIRIUS
COMPUTER SOLUTIONS

Storage Optimization Services

It's hard to exaggerate the impact that the unprecedented growth of information is having on organizations today. The challenges are compounded by a number of data retention factors, including government or industry regulations, legal requirements, and expanding demand for data-hungry analytical applications. Sirius storage experts have decades of experience with the products and practices that span the entire storage landscape. Our storage services are designed to help you address the complexity of tiered storage in response to the explosive growth of data volumes, simplify storage management, reduce complexity and costs, meet service levels, address business continuity requirements, and provide security to meet compliance and governance mandates.

Contents

Storage Optimization Review Services

Sirius' Storage Optimization Review Services evaluate your current storage performance, utilization, data classification and life cycle; identify areas where improvements in asset utilization can be attained; and quantify recommendations in ROI terms. Sirius can analyze performance and utilization on the storage subsystem(s), host(s) and storage network(s), to help identify potential, latent and actual contention and congestion. Then we help you impose order on your storage infrastructure and ensure that your storage investment is yielding maximum returns.

An initial high-level review is provided to validate that opportunity areas exist in your storage environment. A more detailed review is then provided to identify specific areas of optimization improvement and recommendations, for implementation based on Sirius best practices.

Business Value
- Ensures data resides on cost- and performance-appropriate media, potentially reducing infrastructure costs
- Builds procedures and processes that help monitor and manage data growth and storage costs
- Ensures proper retention of data through well defined processes and procedures
- Leads to a storage infrastructure that meets retention and retrieval time criteria for the lowest cost
- Increases storage utilization and maximizes the ROI of existing assets
- Uses new technologies to evaluate and leverage existing and future assets (data deduplication, thin provisioning, data archival)
- Provides tools and processes to maintain storage efficiency and optimization after the Storage Optimization Review is completed

Enterprise Disk Planning and Implementation Services

Having enough storage capacity for your enterprise requires platforms that are designed to scale. Sirius has experience with numerous large-scale storage platforms and can help you stay ahead of the game. Sirius Enterprise Disk Implementation Planning and Installation Services include providing a scalable and reliable storage solution for your mainframe and open systems enterprise environment. Sirius will work with you to plan and execute the physical and logical installation, ensuring that the storage solution meets your expectations for capacity, performance, manageability and data protection. We provide documentation of your environment and an informal skills transfer.

Business Value
- Decreases overall life cycle costs for growing and managing your data
- Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your enterprise storage
- Uses technical engineers who have performed hundreds of these engagements
- Implements disk storage in as little as two weeks
- Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
- Efficiently trains your personnel through skills transfer during system installation

Midrange System Disk Planning and Implementation Services

Easily expandable and manageable storage requires the right products, design and implementation. Sirius has the capability to design and implement a number of the leading midrange storage solutions. Sirius Midrange System Disk Planning and Implementation Services provide a scalable and reliable storage solution for your midrange environment. Sirius will work with you to plan and execute the physical and logical installation, ensuring the storage solution meets expectations for capacity, performance, manageability and data protection. We document the environment and provide skills transfer.

Business Value
- Implements a manageable, reliable and expandable midrange storage solution that enables you to cost-effectively grow and manage your storage
- Reduces downtime and ensures that information is more easily accessible through a best-practice implementation of your enterprise storage
- Uses technical engineers who have performed hundreds of these engagements
- Implements midrange disk storage in as little as one week
- Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
- Efficiently trains your personnel through skills transfer during system installation

Network Attached Storage Disk Planning and Implementation Services

A Network Attached Storage (NAS) solution can improve your data allocation, data availability and data protection functions. With Sirius Network Attached Storage Disk Planning and Implementation Services, we work with you to plan and execute the physical, logical and network installation of a complete NAS solution. Sirius provides advice on physical and logical configurations, RAID and NAS software functions, and skills transfer.

Business Value

- Implements a cost-effective and robust Network Attached Storage solution
- Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your enterprise storage
- Uses technical engineers who have performed more than 75 of these engagements
- Implements NAS storage in as little as one week
- Minimizes the impact to your staff and their everyday duties, due to less time spent in task preparation and problem research
- Efficiently trains your personnel through skills transfer during system installation

IBM N series/NetApp Health Check Assessment Services

Are you confident that your current IBM N series or NetApp storage environment is completely optimized? Is it maximized for performance? Are you confident of the security and stability of your environment? Sirius storage experts analyze your storage environment to uncover potential improvements with consolidation and virtualization that give you increased growth options, better backup and recovery solutions, and improved reliability.

Sirius performs an independent assessment of your current N series/NetApp storage environment according to industry best practices, taking into consideration your overall corporate objectives. The assessments may include (but are not limited to):

- A review of overall corporate objectives for consolidated storage
- Autosupport messages and Syslogs
- Network configuration (VIF configuration and traffic separation, e.g. between CIFS and NFS)
- SnapMirror configuration and schedule
- Data de-duplication configuration and storage savings
- Aggregate configuration laid out for best performance (RAID group sizes)
- Volume and LUN sizing and configuration aligned with Host type
- Snapshot reserve space and scheduling
- A review of cabling
- Verification of multi-pathing on all hosts
- A review of Fibre Channel zoning
- A review current storage consolidation, as well as high availability and backup/recovery procedures

Business Value

- Provides detailed findings including a well documented view of your storage environment, potential risks, and exposures to stability and performance
- Offers a clear look at how your current environment compares with industry standards for best practices, and recommendations for how best to achieve them
- Helps maximize stability, growth and performance in your storage environment, at minimal cost

Tape Planning and Implementation Services

When it comes to capacity, portability and cost, few data solutions can match the overall efficiency and ease-of-use of tape. Sirius can help you improve tape capacity and operations performance by automating your tape environment. Sirius Tape Planning and Implementation Services include planning and installation of vendor tape library system hardware and associated software, solution testing and skills transfer.

Business Value

- Implements tape technology, which is by far the most cost-efficient storage medium and can also play a vital role in a tiered storage strategy, substantially reducing business expenses
- Reduces downtime and ensures information is more easily accessible through a best-practice implementation of your enterprise storage
- Uses technical engineers who have performed hundreds of these engagements
- Implements disk storage in as little as one week
- Minimizes the impact on your staff, due to less time spent in task preparation and problem research
- Efficiently trains your personnel through skills transfer during system installation

Planning and Implementation Services for IBM Tivoli Storage Manager

Is your data protected? Sirius can help protect and manage your data with our skills and expertise related to the IBM Tivoli Storage Manager (TSM) product set. TSM is a family of software products that provides protection against data loss and helps reduce complexity, manage costs and address compliance. Sirius Planning and Implementation Services for TSM include working with you to plan for the appropriate product installations, configurations and testing. Service options can include any of the following functionalities:

+ Tivoli Disaster Recovery Manager (DRM)
+ Tivoli Data Protection (DB2, Lotus Domino, Microsoft Exchange, Microsoft SQL Server, or Oracle Database)
+ Tivoli Storage Manager LAN-Free Backup
+ Tivoli Storage Manager Extended Edition

Business Value
+ Optimizes recovery point objectives (RPO) and recovery time objectives (RTO)
+ Protects your data from costly system outages and downtime
+ Prevents incorrect backup processes
+ Uses technical engineers who have performed hundreds of these engagements, giving Sirius the ability to match a TSM solution to your specific business need
+ Implements TSM in as little as two weeks
+ Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through skills transfer during system installation

TSM Version 6 Planning & Upgrade Services

IBM TSM Version 6 offers significant improvement to existing TSM environments, including:

+ A database upgrade to DB2, which enhances the ability to store more objects and manage more data, with greater server hardware efficiency
+ Integrated data deduplication technology, which helps reduce storage requirements for backups
+ New near-real-time operational monitoring and reporting (with a customizable dashboard), which reduces the cost and complexity associated with similar third-party software
+ More-granular support for Microsoft Windows Exchange Mail servers and Microsoft Windows Active Directory environments

With the significant functional improvement over previous versions, the TSM Version 6 upgrade process is understandably more complex. Sirius TSM Version 6 Planning and Upgrade Services will quickly and efficiently move you to TSM Version 6, enabling you to receive these benefits immediately.

Business Value
+ Determines the most effective upgrade path to reach TSM Version 6, helping to reduce upgrade duration and possible rework
+ Identifies new functional improvements that will provide the most value to your company, and ensures they are implemented first
+ Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through informal skills transfer during the engagement

Implementation Services for Symantec NetBackup

Is your data protected? Sirius can help protect and manage your data with our skills and expertise related to the Symantec NetBackup product set. Sirius Implementation Services for Symantec NetBackup include

+ Assistance with implementing Symantec NetBackup backup and recovery software
+ Advising on best practices; advanced backup techniques
+ SAN and network connectivity requirements; installation of server and initial client software
+ High-level documentation; and skills transfer

Business Value
+ Protects your data from costly system outages and downtime
+ Uses technical engineers who have performed dozens of these engagements
+ Implements NetBackup in as little as two weeks
+ Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through skills transfer during system installation

Backup/Restore Health Check for Tivoli Storage Manager or Symantec NetBackup

Sirius can ensure your backups are optimized with our Backup and Restore Health Check Services for Tivoli Storage Manager or Symantec NetBackup. Sirius consultants conduct a storage assessment relative to your backup and recovery environment. This work includes:

* Data collection on process logs, operation and configuration reports, and system logs
* Evaluation of master and media server hardware configurations to determine if they follow sizing recommendations
* Suggested tuning options where relevant
* Advice for policy and scheduling options
* Advice for disk and tape backup options

Business Value

* Provides a best-practice review of your backup/restore environment
* Prevents outages or data loss due to the inability to restore from a backup
* Implements the solution in as little as two weeks
* Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
* Efficiently trains your personnel through skills transfer during system installation

Implementation Services for IBM Tivoli Storage Productivity Center for Data

IBM Tivoli Storage Productivity Center (TPC) for Data provides an excellent tool to meet the challenges of monitoring and managing your storage environment. TPC for Data is designed to help identify, evaluate, control, and predict enterprise storage management needs. TPC is often used as part of Enterprise Management solutions. Sirius Implementation Services for IBM TPC for Data include implementation of TPC for Data in your development and production environments. We will install the software on one TPC for Data server and up to 10 TPC for Data client systems.

Business Value

* Enables your staff to be more efficient in monitoring and managing data
* Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your enterprise storage
* Implements the solution in as little as one week
* Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
* Efficiently training your personnel through skills transfer during system installation

Implementation Services for IBM Tivoli Storage Productivity Center for Disk

Managing a growing storage environment is challenging, but IBM Tivoli Storage Productivity Center (TPC) for Disk provides an excellent tool for monitoring and managing your storage environment. Sirius Implementation Services for TPC for Disk include installation of TPC for Disk, and documentation of recommended resource usage in your environment. This work includes installation of the associated database, Agent Manager, server software, implementation of the appropriate CIMOM services, basic instruction on the TPC infrastructure, and a demonstration of basic report generation.

Business Value

* Protects your data from costly system outages and downtime
* Implements TPC in as little as one week
* Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
* Efficiently trains your personnel through skills transfer during system installation

Planning and Implementation for DFSMShsm Services

The mainframe platform has a long history of excellent data management capabilities. IBM Data Facility Storage Management Subsystem Hierarchical Storage Management (DFSMShsm) software is a powerful tool that can save you valuable resources by relocating aged and/or rarely accessed data to lower cost storage. Sirius mainframe storage experts collect and analyze your current data sets and volume usage. We then help you develop policies for data management and implementation of those policies utilizing the DFSMShsm product.

Business Value

+ Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your DFSMS system
+ Implements the solution in as little as one week
+ Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through skills transfer during system installation

Design Review Services for Data Facility Storage Management System

As your mainframe system grows, IBM Data Facility Storage Management Subsystem (DFSMS) configuration is sometimes overlooked, resulting in poor storage management. Sirius Design Review Services for DFSMS provides consulting services to review your DFSMS environment and make recommendations on reducing storage management processing overhead and costs. Sirius experts can also implement these recommendations at your request, and provide support for your environment and skills transfer as needed to maintain the operational environment.

Business Value

+ Optimizes your mainframe storage capacity and prevents you from purchasing additional unneeded storage
+ Provides you with DFSMS best practices to ensure reduced downtime and that necessary data is available and easily accessible
+ Minimizes the impact to your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through skills transfer during system installation

Open Systems Data Migration Planning and Implementation Services

When replacing an existing open systems storage subsystem with a new one, how do you move the data? Sirius has successfully migrated hundreds of terabytes of data for our clients. Our Data Migration Planning and Implementation Services for Open Systems includes the migration of data from existing disk subsystems to other disk subsystems non-disruptively, using Sirius' partner Vicom. This service includes developing a volume migration and placement plan for all data to be migrated, migration of the data to replacement devices, initialization of old source volumes, and verification of data migration.

Business Value

+ Migrates with zero downtime and no impact on your business
+ Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your enterprise storage
+ Uses technical engineers who have extensive experience with these engagements
+ Implements the solution in as little as one week
+ Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
+ Efficiently trains your personnel through skills transfer during system installation

Mainframe Data Migration Planning and Implementation Services

When replacing an existing mainframe storage subsystem with a new one, how do you move the data? Sirius has successfully migrated hundreds of terabytes of data for our clients. Sirius Data Migration Planning and Implementation Services for Mainframe provide data migration from existing S/390 DASD to other DASD non-disruptively, using IBM-Softek TDMF software. Sirius will install TDMF software and migrate the data non-disruptively to a new/replacement storage device.

This work includes developing a volume migration and placement plan for all data to be migrated, migration of pre-negotiated TB of capacity to replacement DASD devices, initialization of old source volumes, and verification of data migration.

Business Value

- Migrates with zero downtime and no impact on your business
- Reduces downtime and enables information to be more easily accessible through a best-practice implementation of your enterprise storage
- Implements the solution in as little as one week
- Minimizes the impact on your staff and their everyday duties, due to less time spent in task preparation and problem research
- Efficiently trains your personnel through skills transfer during system installation