

Advanced Storage Management of Unstructured Data for Cloud, Big Data, Analytics, Objects and More

Explosions of data, transactions, and digitally-aware devices are straining IT infrastructure and operations, while storage costs and user expectations are increasing. To deliver those insights, an organization's underlying storage must support both new-era, big-data applications and traditional applications with high performance, reliability and security. To handle massive unstructured data growth, storage must scale seamlessly while matching data value to the capabilities and costs of different storage tiers and types.

IBM® Spectrum Scale™ can help you move beyond simply adding storage to optimizing data management. Spectrum Scale is a high-performance parallel file system for managing data at scale with the distinctive ability to perform archive and analytics in place. Based on IBM General Parallel File System (GPFS™), IBM Spectrum Scale delivers scalable capacity and performance to handle demanding data analytics, content repositories and technical computing workloads. It can be deployed in shared-disk or shared-nothing distributed parallel modes.

By including IBM Spectrum Scale in their software-defined infrastructure, organizations can streamline data workflows, help improve service, reduce costs, manage risk and deliver business results today while positioning the enterprise for future growth.

Spectrum Scale Clustered Storage

Spectrum Scale provides concurrent high-speed file access to applications executing on multiple nodes of clusters with concurrent shared disk access to a global namespace in either block level or file level and capabilities for high performance parallel workloads. Spectrum Scale can be used with disparate or heterogeneous clusters of AIX, Linux and Windows nodes. In addition to providing filesystem storage capabilities, Spectrum Scale provides tools for management and administration of the Spectrum Scale cluster and allows for shared access to file systems from remote Spectrum Scale clusters. All software features such as snapshots, replication and multi-site connectivity are included inherently.

RAID Inc. + Spectrum Scale

RAID Inc. has a long history of fine-tuning Spectrum Scale to customer specifications and performance requirements. Our engineers are among the most qualified in the world to review existing systems and identify opportunities for optimizing Spectrum Scale performance based on various applications. RAID Inc. also has a proven process to study application and data workflows to understand and mitigate potential performance barriers in getting customers set up with Spectrum Scale for the first time. RAID Inc. assisted Spectrum Scale solutions are used by many of the world's largest commercial companies and supercomputers.

Highlights

- Consolidate storage across traditional file and new-era workloads for object, Hadoop and analytics use cases.
- Achieve new operational efficiency and cost effectiveness—deliver up to 10 times higher performance on the same hardware.
- Help lower the cost of data retention up to 90 percent through policy-driven automation.
- Improve application performance with scale-out and flash-based acceleration.
- Enable collaboration and efficient sharing of resources among global, distributed teams.
- Transparently tier to and from cloud object storage on-premises or in the cloud.

Some of the content shown in this solution brief is duplicated from IBM Spectrum Scale <https://www.ibm.com/downloads/cas/GQN4XN15>