

# SGI® InfiniteStorage™ Intelligent Data Management

Intelligent Storage Analytics and Data Management  
That Meets Expanding Big Data Storage Requirements

## Key Features

Graphical Data Analysis &  
Automated, Policy-Driven  
Content Migration

Storage Virtualization &  
Tiered Data Management

System Monitoring, Audit  
Trail, Retention & Security



## A Shifting Trend in Data Management

Successful organizations view data as an increasingly important asset that provides business value over longer periods of time, and, in some instances, forever. While some of this thought evolution is a result of increased regulatory/legal requirements, much is being driven by new uses for data in analysis models, new data types being created by diverse applications, and the general realization that organizations utilizing long-term data assets are operating more effectively and are outperforming their competition. As a result, organizations want to store and maintain seamless online access to more data throughout a longer lifecycle.

## Big Data Brings Big Challenges

As leading industry analysts are all reporting, the growing requirement for virtually infinite data storage is breaking many of the process and economic frameworks that have historically been associated with storing organizational data.

- **Breaking the Budget:** As data volumes grow by 50% per year, it is no longer an option for organizations to simply purchase more expensive Tier 1 disk space — *especially when over 80% of the data sitting on existing Tier 1 storage has not been accessed in over a year.*
- **Breaking the Backup:** Exploding quantities of data can overflow backup windows and cause massive storage inefficiencies as petabytes of non-changing data are repeatedly backed up and managed.
- **Breaking the Processes:** As organizations deploy new storage technologies over time – the complexity, resources and risks involved in manually performing mass data migrations can lead to security risks – and even critical data loss that may not be discovered until the required data is needed months or years later.

## The Analyze, Migrate & Manage Model

Based on experience in designing and deploying a broad range of petascale storage solutions for the most demanding data environments in the world – SGI has created a software platform and methodology based on three core concepts; Analyze, Migrate & Manage – that address the challenges of storage growth in a creative yet highly proven manner.



- Analysis of data assets to drive understanding of filesize, type, location and usage characteristics
- Deployment of data management policies that can automatically relocate, validate, track and link files to cost-correct tiers of storage
- Implementation of a data management platform that allows organizations to store, protect, monitor, retain, analyze and retrieve file data from a unified and integrated solution

**“IDC is observing a shifting trend in cloud and web-scale architectures to a multitier storage strategy in order to sustain growth while maintaining existing data.”**

Source: IDC Technology Assessment, May 2013

## The Process and Approach Understanding Drives Action

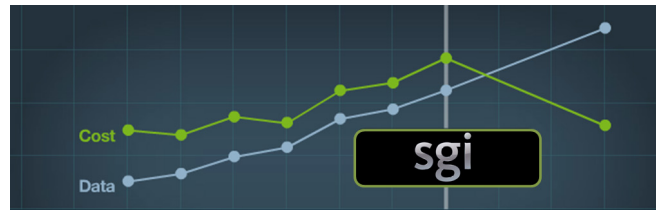
Organizations universally understand that the majority of their most expensive storage assets are filled with files that are not regularly being accessed and modified – but which need to remain online and available in order to support critical business processes, ongoing data analytics and even compliance-related activities. While a tiered data management solution can deliver outstanding ROI in these environments, the first step in the evaluation and implementation process requires organizations to have a solid understanding of their data, its characteristics, and its usage patterns.

SGI's intelligent data management platform enables a powerful level of storage and data understanding by providing IT administrators with interactive analytics on existing files and data that provide utilization information sliced by data age, type, size, owner and more. The software supports the execution of sophisticated 'what if...' scenarios that model the impact and savings associated with various storage tiering strategies – and full printed reports on all storage analysis processes can be generated in order to communicate and document findings.

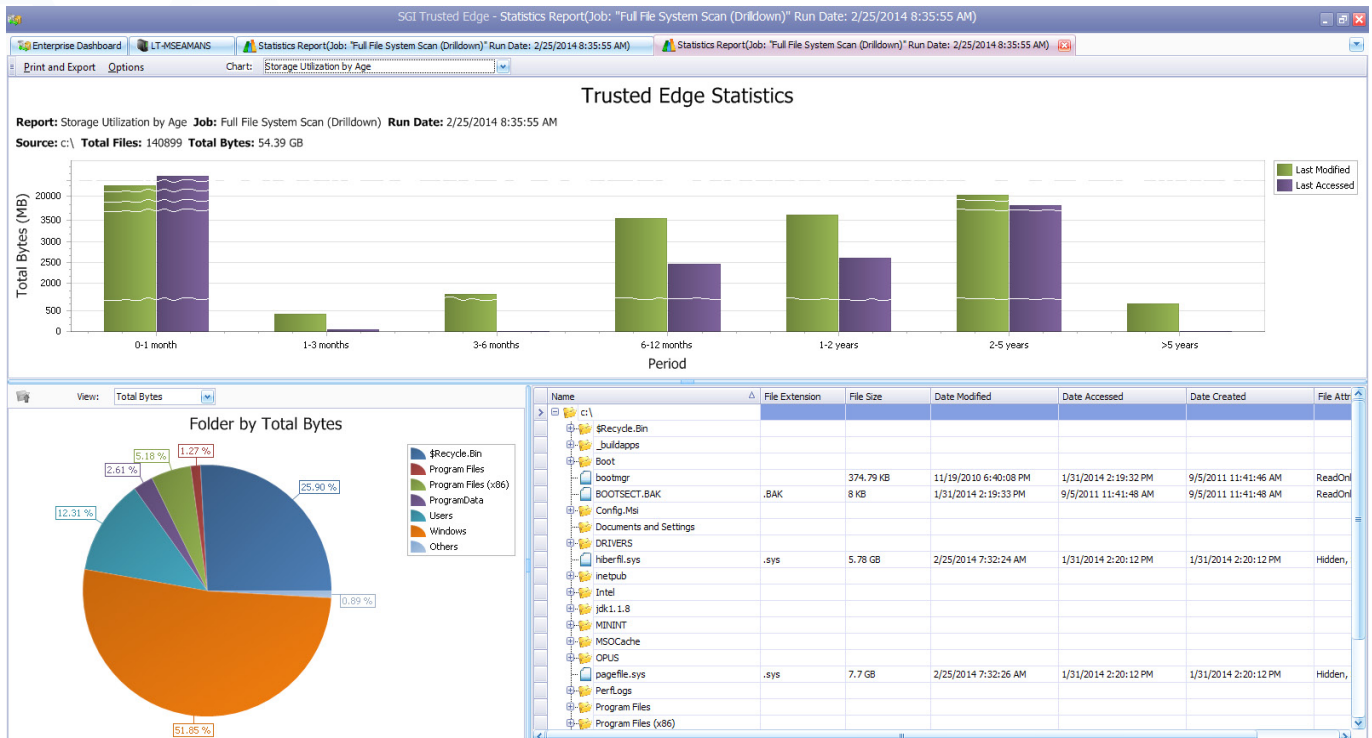
## Data Management Based on Policies

Armed with a fact-based understanding of their existing storage utilization patterns and data characteristics, IT administrators can leverage SGI's policy-driven data migration capabilities to implement rules that will govern which pieces of data remain on expensive Tier 1 storage and which are eligible for migration to cost-correct tiers of storage that can include lower-cost disk, object storage systems, public cloud environments and even high-speed tape.

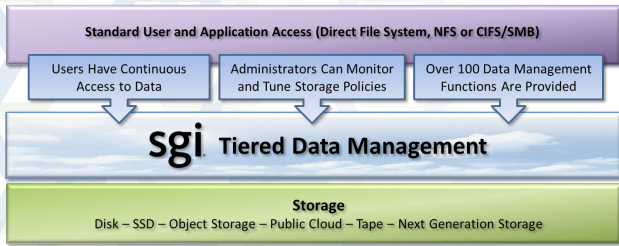
And by leveraging SGI's integrated scheduling and job orchestration capabilities, policies are consistently enforced so that storage utilization is actively managed and cost savings are predictably delivered.



*SGI's Intelligent Data Management Solutions Break the Link Between Capacity and Cost*



*Drill-Down Analytics Enable Storage Policy Creation*



*Standard User and Application Access to Limitless Storage*

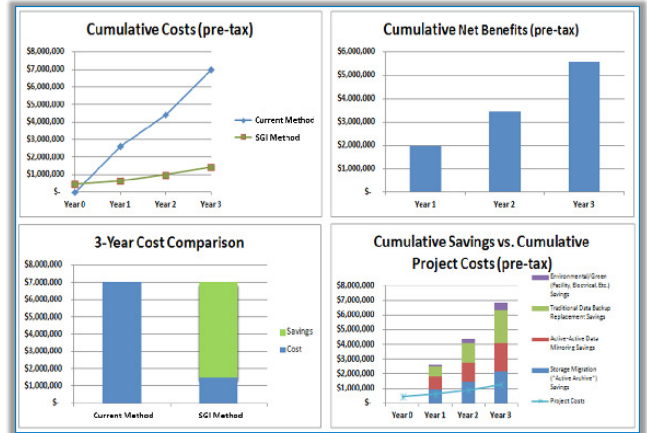
### Unmatched Access and Assurance With Precise Control Over Storage Costs

SGI intelligent data management virtualizes multiple classes of storage into an addressable array of tiers that can be combined and assembled as the foundation of rich data management policies. For example, a policy for research data could include a primary copy of data on disk with a secondary copy being automatically made on tape for assurance purposes. Likewise, a concurrently active storage policy for finance data might include a local copy of data being kept on disk with an off-site copy being stored in a secure public cloud.

However, policies may be tuned and adjusted at any time and the SGI platform will automatically migrate, re-validate and adjust data storage. Throughout the process, users have continuous access to data, and all user interaction with the SGI platform is managed, tracked and auditable.

### Measurable and Credible ROI

SGI intelligent data management solutions take a pragmatic approach to solving the problem of rapidly expanding storage costs and management complexity – and the software and techniques that SGI delivers have been developed and proven over decades of deployment experience in some of the most demanding data centers in the world.



*SGI Tools Deliver Sophisticated ROI Modeling and TCO Metrics*

Additionally, SGI has developed sophisticated modeling tools that can be used *prior to system deployment* in order to project return on investment and cost savings. These tools provide a customized and fact-based view of how, when and where the return on investment will be achieved.

## About SGI

SGI, the trusted leader in high performance computing (HPC), is focused on helping customers solve their most demanding business and technology challenges by delivering technical computing, Big Data analytics, cloud computing, and petascale storage solutions that accelerate time to discovery, innovation, and profitability.

## For More Information

Please contact an SGI sales representative at 1-800-800-7441 or visit [www.sgi.com/contactus](http://www.sgi.com/contactus).