

## IBM Storage Insights

### Optimize storage environments with predictive analytics delivered from IBM Cloud

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#### Highlights

- Consolidate management for on-premises and cloud storage from IBM Cloud
  - Use predictive analytics to gain insights that can reduce storage cost
  - Experience proactive support, open support tickets and speed resolution
  - Avoid the upfront cost and complexity of on-premises solutions
  - Provide flexibility with no long-term commitment
  - Deploy IBM Storage Insights at no cost
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The value of data is growing, yet visibility into today's storage environments can be foggy and unclear—the result of expanding IT complexity, escalating user demands and exponential data growth. Many IT organizations lack a true understanding of their storage infrastructure, negatively impacting their ability to make informed decisions and causing storage utilization rates to hover around 50 percent.<sup>1</sup> Manual storage management processes and the rapid deployments of mobile, social, analytics and cloud IT models compound the challenges. With the cost of managing storage infrastructures significantly higher than the cost of purchasing storage capacity, organizations need new approaches to managing their environments.

To meet this need, Storage Insights combines analytics leadership and a rich history of storage management expertise with a cloud-based delivery model, enabling you to:

- Accurately identify and categorize storage assets
- Monitor capacity and performance from the storage consumers' perspective—including application, department and server views
- Increase the precision of capacity forecasting using historical growth metrics
- Reclaim unused storage to delay future purchases and improve utilization
- Optimize data placement based on historical usage patterns

- Resolve storage issues more quickly with automated log uploads and improved diagnostic data available for IBM support

With these capabilities, you can enhance storage performance as you lower the cost of storage. Because the solution is cloud-based you can get actionable insights in minutes—with deeper insights delivered over time as intelligence about your environment builds in the system.

The Storage Insights data collector runs on one or more virtual or physical servers in your environment, gathering metrics already collected by your storage systems. All other functions run on IBM Cloud, maintained by IBM experts. The IT workload for maintaining a storage management infrastructure virtually disappears—allowing you to focus on optimizing your storage environment.

## Rapid results when you need them

Storage Insights is built to deliver almost immediate results, then provide additional insights as it learns.

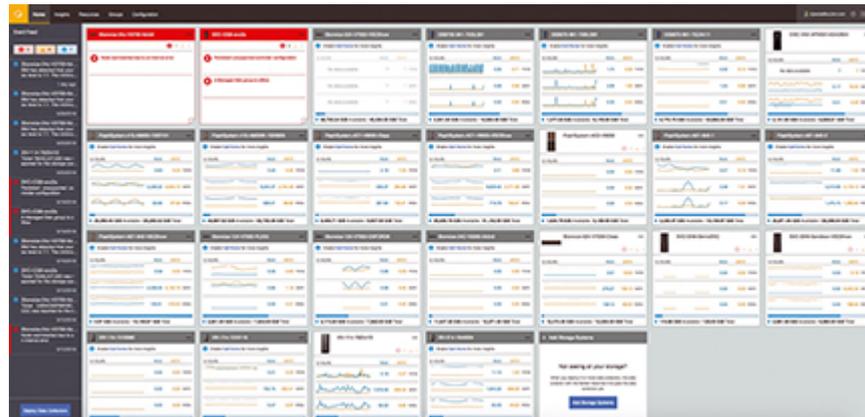
Installation typically takes only about 30 minutes. Simply download and install the data collector on a data center server or virtual machine. The collector gathers storage usage metrics and sends them over a secure channel to IBM Cloud, which provides storage analysis.

Storage Insights returns insight and recommendations quickly using metrics data that would take weeks to analyze on a spreadsheet. Storage Insights can provide information you need to know about your data and storage environment, without the upfront cost and complexity of deploying an on-premises solution.

## Improving storage availability with proactive support

Storage Insights helps keep your storage online with automated identification of “best practice” violations. Automated environmental and predictive analytics from IBM Research help prevent problems before they occur. Based on the diagnostic data collected by Storage Insights, IBM support staff can make proactive recommendations to improve the resiliency of your environment.

When support is needed, Storage Insights enables you to open a new ticket and lets you view the status of existing support tickets. Automated log uploads speed and simplify providing diagnostic data to IBM. IBM support staff have access to complete configuration, capacity and performance diagnostic information so they have a clearer view of your entire environment. Together, these capabilities are designed to deliver faster resolution of issues should they arise.



*The IBM Storage Insights dashboard provides an at-a-glance view of the entire storage environment, with the ability to drill into efficiency-improving recommendations and immediately identify systems requiring attention.*

## Immediate, cross-environment visualization

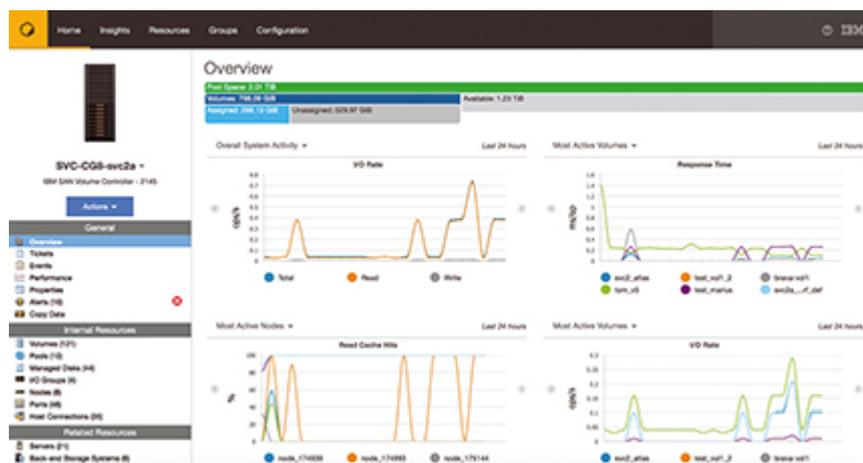
With Storage Insights, you can get out-of-the-box views of storage from the server, application and file system perspective. In a few easy steps, you can set up application and department views—email, SAP or recovery site storage, for example. These views enable you to report on application or departmental use of storage, as well as opportunities to optimize performance and save money.

Before Storage Insights, tools typically provided information on storage system use only, not use by the departments or applications consuming the storage. Now, you can get an at-a-glance view of the entire storage environment. You can quickly identify healthy storage and systems requiring attention while capacity and performance issues are easy to see from an application perspective. Unmapped or unused volumes can be easily identified for reclamation.

## Performance analysis at your fingertips

Storage Insights learns by analyzing storage system and server data usage. And as it gathers data, the solution becomes smarter—within hours—helping identify performance hotspots that may be impacting users. Just as important, it helps you understand when storage is not the cause of a performance problem.

The solution also identifies unused and under-used volumes, helping you free trapped capacity on top-tier storage for more demanding application data.



*IBM Storage Insights provides visibility into available capacity and performance to help take the guesswork out of capacity planning.*

## Enduring value from predictive analytics

Storage tier optimization using IBM predictive analytics can significantly reduce the total cost of storage, based on IBM experience with its own implementations and on client feedback. The technology makes tier recommendations based on actual data usage, regardless of original predictions. Data can be migrated from top-tier to mid-tier storage with confidence, knowing that service levels won't be compromised.

Significant savings are possible because the total cost of top-tier storage, in reality, is much higher than the initial invoice—with software and maintenance fees significantly higher than midrange storage. Most data becomes relatively inactive soon after creation. Predictive analytics built into Storage Insights identifies volumes that no longer require top-tier storage.

Predictive capacity analytics becomes more precise over time, as actual growth metrics are analyzed. Storage Insights provides visual trend analysis of capacity usage, future capacity needs and opportunities to improve storage efficiency.

## Storage Insights is right for you

Storage Insights is available at no cost to all users of IBM storage and for users of more than 500 storage systems from IBM and others, when attached to IBM SAN Volume Controller and IBM FlashSystem and Storwize families.

Storage Insights Pro is an upgrade available as a subscription that provides additional reporting, more performance and capacity metrics, wider storage support and longer history. Storage Insights Pro adds support for cloud storage managed by IBM Spectrum Virtualize for Public Cloud, Dell-EMC VNX, VMAX, and Unity, NetApp FAS and AFF, Pure Storage FlashArray//X and M, and HDS VSP G Series systems, which enables you to monitor the health of even more of your storage, whether from IBM or others, on-prem or cloud, all from a single dashboard. As a Storage Insights user, you can try Storage Insights Pro for 30 days before deciding to upgrade.

Try a Storage Insights guided live demo anytime, using just your browser and storage running in an IBM lab. There is no software to download and nothing to configure—just see how it works.

<sup>1</sup> Average of individual customer Analysis Engine Reports produced using IBM Butterfly Software

IBM Storage Insights at a glance

<b>Supported storage environments</b>	<ul style="list-style-type: none"> <li>• Direct support for most IBM storage, including flash, file, object, software-defined, and block.</li> <li>• More than 500 storage systems from IBM and others, when attached to IBM SAN Volume Controller, and IBM FlashSystem and Storwize families.</li> <li>• Non-IBM storage: Dell-EMC VNX, VMAX, and Unity, NetApp FAS and AFF, Pure Storage FlashArray//X and M, and HDS VSP G Series systems (Storage Insights Pro only)</li> <li>• Cloud storage managed by IBM Spectrum Virtualize for Public Cloud (Storage Insights Pro only)</li> </ul>
<b>Block storage systems</b>	IBM FlashSystem family, IBM Storwize family, IBM SAN Volume Controller, VersaStack, IBM XIV, IBM DS8000 family
<b>File and object storage systems (Storage Insights Pro only)</b>	IBM Cloud Object Storage System, IBM Spectrum Scale, IBM Elastic Storage Server, IBM Storwize V7000 Unified
<b>Software-defined storage</b>	IBM Spectrum Accelerate, IBM Spectrum Scale, IBM Spectrum Virtualize
<b>Data security</b>	
<b>ISO 27001</b>	The Information Security Management System supporting IBM Storage Insights has been ISO 27001 certified since November 2015
<b>User data moved to the cloud</b>	No user or application data is accessed
<b>System data moved to the cloud</b>	Usage and performance metrics, device names and IP addresses, storage device configuration
<b>Cloud connectivity</b>	Secure HTTPS channel
<b>Cloud service</b>	
<b>Service provider</b>	IBM Cloud
<b>IPV6 support</b>	Yes
<b>License model</b>	Monthly, based on capacity managed
<b>Data collector requirements</b>	
<b>On-premises server requirements</b>	Runs on virtual and physical machines: <ul style="list-style-type: none"> <li>• Intel server running Microsoft Windows or Linux</li> <li>• IBM Power server running IBM AIX or Red Hat Enterprise Linux</li> </ul>
<b>Network</b>	TCP/IP connectivity to all storage devices being managed, HTTPS connectivity to IBM Cloud

## Why IBM?

Storage Insights, part of the IBM Spectrum Storage family, brings together market-leading IBM capabilities in cloud, analytics and data management. IBM has a rich history of storage innovations that help organizations maximize the value of their storage investments. When combined with strategic IBM investments in analytics and cloud, IBM Spectrum Storage solutions provide the security and reliability of the IBM platform as well as confidence in the recommendations you receive for optimizing storage.

## For more information

To learn more about IBM Storage Insights, please contact your IBM representative or IBM Business Partner, or visit: [ibm.com/us-en/marketplace/analytics-driven-data-management](https://ibm.com/us-en/marketplace/analytics-driven-data-management)

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