

IBM Spectrum Scale & ESS

Global Data Platform for AI/ML



Matthew Klos

Senior Solutions Architect

Email: matthew.klos@ibm.com

The Need For A Global Data Platform



IBM Spectrum Scale

Why is a Global Data Platform Needed?

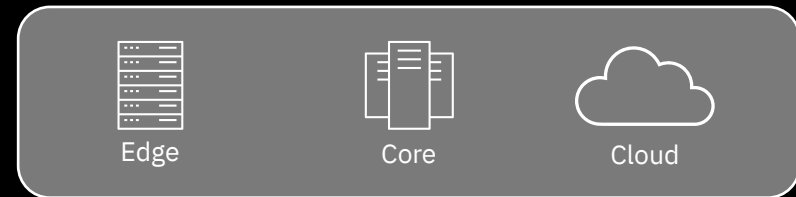
Data Driven Applications

- Data fabric provide consistent data access across diverse infrastructure
- Example: The emergence of AI/ML use cases
 - Data hungry apps and GPUs, need access to more data, faster
 - As new applications and use cases roll out, data silos occur
 - Need unified and consistent approach to accessing data throughout AI/ML Pipeline



Diverse IT Infrastructure









- Many choices, From edge to core data center to public cloud
- Containers to simplify hybrid cloud infrastructure choices
- Drives the need for a single source of truth across diverse infrastructure that facilitates secure access while eliminating data redundancy and inconsistencies.



IBM enables agility and provides faster access to more data

 HPC
  AI / ML
  Analytics
  Enterprise
  Containers
  Backup/Archive

Global Data Platform

Big Data	Extreme Performance File	High Performance Object	Network Attached	High Performance Containers
Search	Spectrum Discover		Organize	
Spectrum Fusion		Spectrum Scale	Cloud Object Storage	
		  	  	

Edge

Core

Cloud

Protected
Secured
Optimized

Anyone

Anywhere

Everywhere

IBM Elastic Storage System 3500

The simplest and fastest way to deploy a global data platform for AI and Hybrid Cloud workloads

Manage next generation and traditional workloads with simultaneous high-performance file and object data access services to the same data

Optimize local and remote access and simplify DR with global hybrid cloud data services

Speed access to critical data with Intelligent and automated data management services

Protect against cyber threats with Cyber-secure data services for unstructured data including end to end encryption and identification to recovery

Lower RTO times with proven data protection and data resiliency services

Scale-up to PB and scale-out to YB for GB/s+ performance and capacity to manage your entire data ecosystem with lower cost and enterprise security and resiliency your business requires



Scale from **1** to **1000s** of nodes

up to **91 GB/s** per node

up to **30M IOPS** per rack

48 TB to **737 TB** raw Flash capacity per node

510 TB to **8.1 PB** raw HDD capacity per node





SCAN ME

IBM Spectrum Scale



SCAN ME

IBM ESS

Get started today!

Learn more about IBM Storage for AI:

- [IBM Storage Data and AI web page](#)

Learn more about IBM Storage for NVIDIA:

- [IBM Storage and NVIDIA web page](#)

Learn more about IBM Spectrum Scale and Elastic Storage System (ESS):

- [IBM ESS web pages](#)
- [IBM Spectrum Scale web page](#)

Learn more about IBM Cloud Object Storage (IBM COS):

- [Learn about the IBM COS story \(interactive experience\)](#)
- [IBM COS web page](#)

Learn more about IBM Spectrum Discover:

- [IBM Spectrum Discover web page](#)

Learn more about IBM Spectrum Fusion:

- [IBM Spectrum Fusion web page](#)



Spectrum Discover



Spectrum Scale



Cloud Object Storage



<https://www.ibm.com/storage/artificial-intelligence>