

# IBM Spectrum Fusion

## A container-native hybrid cloud data platform for OpenShift

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### Highlights

- Simple to manage data infrastructure for OpenShift
- Simple to manage storage services for OpenShift
- Simple to access container data from current storage resources
- Simple to access container data from remote cloud resources

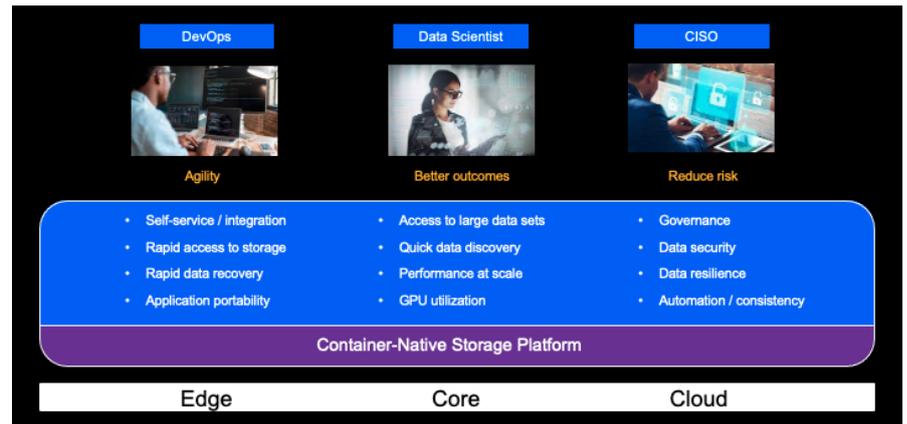
Our story begins with agility. The end game is for businesses and organization to quickly adjust to the changing business and outside influences that are causing rapid change. Customers need applications and data to adjust and shift in response to dynamic market demands. They also need diverse and easy to use tools & data services to build anywhere, at any pace. And finally, they need applications and data to scale dynamically, achieve peak performance, and adhere to security requirements. The end goal: Business agility and faster business insights.

### How to best proceed?

71% of companies need for a consistent way to deploy applications across on-premises infrastructure and public clouds and we see 50% of companies deploying containers to create that portability and consistency between cloud and on-prem environments.

Red Hat has been the leader in the containerization and orchestration platform space for years now, and it continues to be the leader today. The "Multicloud Container Development Platforms" Forrester Wave report, released at the end of Q3 2020, attests to OpenShift's dominance. There are strong competing vendors in this space as you can see, yet Red Hat and IBM continue to maintain a discernable edge over the competition. Let's dig into a few of those factors.

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*Data challenges: three different views*

With container platforms such as OpenShift, there are several challenges that exist, especially for enterprise data workloads. For the developer it includes:

- Self-service / integration
- Rapid-access to storage
- Rapid data recovery
- Application portability

For the data users or even the AI or business applications they include:

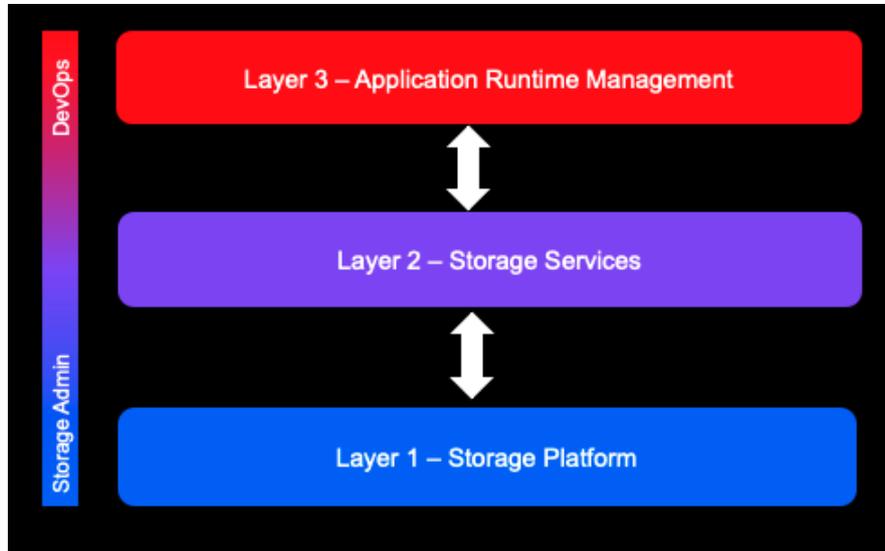
- Access to large data sets
- Quick data discovery
- Performance at scale
- GPU utilization

And finally for the CIO or security office or business analyst it includes:

- Governance
- Data security
- Data resilience
- Automation / consistency

## An application approach to data

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### *Enterprise Storage Architecture for NexGen Apps*

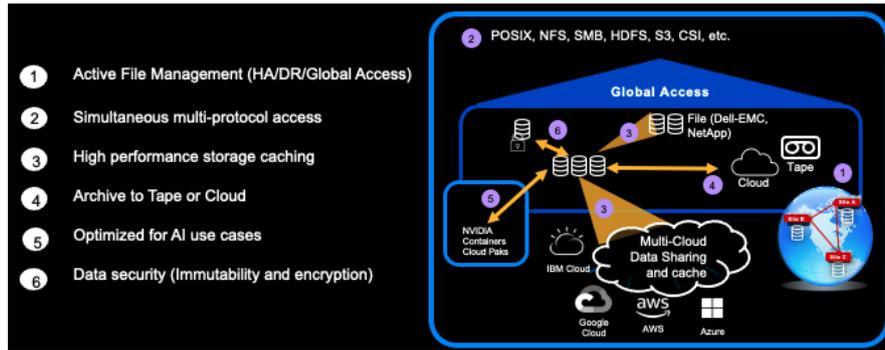
We need an architecture that has applications on top, a strong storage platform on the bottom and storage services in the middle that provide a bridge between the layers and between the developer and the storage administrator.

The storage platform must have a strong foundation and needs to include key components such as:

1. Active File Management (HA/DR/Global Access)
2. Simultaneous multi-protocol access
3. High performance storage caching
4. Ability to archive to Tape or Cloud
5. Optimized for AI use cases

And finally data security (Immutability and encryption).

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*A foundational storage platform*

The storage services layer must also provide key components such as:

- Data Resilience
- Capacity and performance management
- Data Discover and orchestration
- HA and DR
- Security and encryption
- Migration services to not only move data but also applications

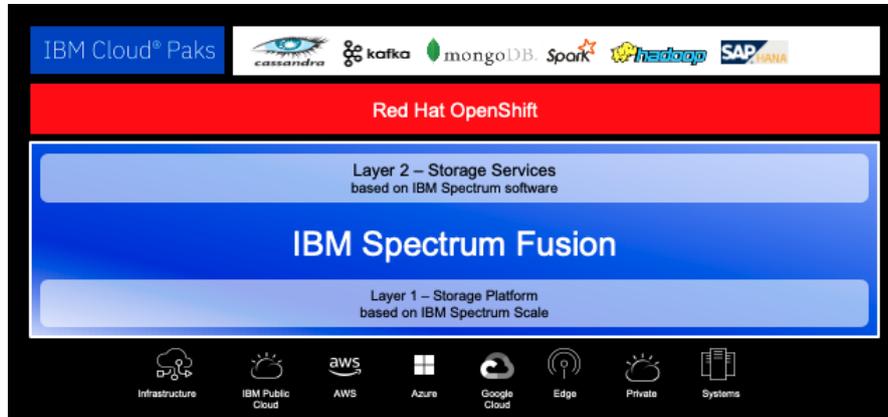
<p><b>Data Resilience</b></p> <ul style="list-style-type: none"> <li>• Supporting Red Hat Open APIs for Data Protection (OADP)</li> <li>• Unified protection across traditional, virtualize, cloud and container environments</li> <li>• Redundant and high available failover</li> </ul>	<p><b>Capacity and Performance Management</b></p> <ul style="list-style-type: none"> <li>• Monitor performance and with predictive analytics moves data to optimal location based on actual data usage</li> <li>• Monitor capacity and in real time expand storage transparently to global namespace on remote systems or in the cloud</li> </ul>	<p><b>Discovery and Orchestration</b></p> <ul style="list-style-type: none"> <li>• Always-on data identification for compliance and data set optimization</li> <li>• Fast searching enables rapid discovery of hidden duplicate and hard to find data across multiple data sources</li> </ul>
<p><b>HA/DR</b></p> <ul style="list-style-type: none"> <li>• Policy based and application aware</li> <li>• Online configuration management and monitoring integrated into OpenShift and user configurable</li> </ul>	<p><b>Security/Encryption</b></p> <ul style="list-style-type: none"> <li>• Monitor system for file access log analysis</li> <li>• Role-based access and authorization</li> </ul>	<p><b>Migration</b></p> <ul style="list-style-type: none"> <li>• Clone entire application environments in minutes and migrate data</li> <li>• Access remote data from multiple clusters for application migration</li> </ul>

*Application storage services*

**IBM Spectrum Fusion**

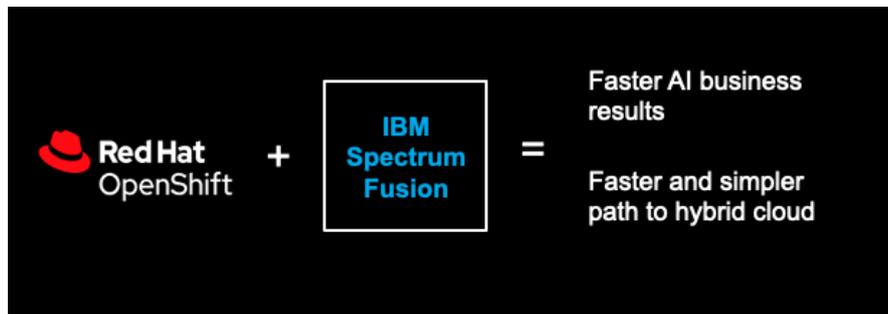
IBM Spectrum Fusion a container-native hybrid cloud data platform for OpenShift. Built with a storage platform that includes the essential elements necessary for mission critical containers and the hybrid cloud with storage services that are necessary for enterprise applications and a

data driven Red Hat OpenShift environment.



*IBM Spectrum Fusion*

IBM has a Simple Equation for Faster AI & Business Results with a fast track your data to hybrid cloud.



*Fast track your data to hybrid cloud*

## Why IBM?

Customers need applications and data to adjust and shift in response to dynamic market demands. They also need diverse and easy to use tools & data services to build anywhere, at any pace. Finally, customers need applications and data to scale dynamically, achieve peak performance, and adhere to security requirements. The business goal is to drive agility throughout the organization to become more flexible for constantly changing market dynamics. As customers drive toward hybrid cloud and containers the data becomes the focus as it is the lifeblood of an organization. As this data is mission critical and the driver to competitive differentiation it must be encircled with a filter for security.

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## For more information

For more information on IBM Spectrum Fusion visit our web page at : [www.ibm.com/products/spectrum-fusion](http://www.ibm.com/products/spectrum-fusion)

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