

Re-define application agility to serve new business initiatives faster without any data silos and enterprise reliability

DATASHEET

Hitachi Virtual Storage Software Block software-defined storage delivers application agility and scale for new distributed workloads

#### Hitachi's first new storage family for a decade

As the number and types of workloads that enterprise data center teams support has increased, so have the demands on the underlying storage infrastructure.

It isn't enough for storage to be fast and efficient. It needs to be agile enough to support cloud initiatives, containerized and distributed workloads and even utility consumption models that reduce up-front costs. Solutions need to support the next generation of distributed applications wrapped up with all the enterprise support and reliability you trust from Hitachi.

With our latest enterprise distributed software-defined Storage (SDS), Hitachi can help. Our new Hitachi Virtual Storage Software Block (VSS Block) software is designed to consolidate new and core workloads to deliver a cloud-first strategy for application modernization.

Hitachi Virtual Storage Software Block (VSS Block) is not a data silo and enables the data plane to be extended from Hitachi Virtual Storage Platform (VSP) solutions. Simplifying mangament, migration and deployment operations freeing staff to focus on architecting solutions that drive the company forward. Without these things, costs escalate, and operations do not run at peak efficiency.

# Hitachi Polyphased Erasure Coding

We know the importance of protecting and safeguarding your data as the lifeblood of your business. How can a software-defined distributed storage solution deliver the legendary Hitachi reliability?

Current implementations of Erasure Coding are fraught with high CPU resource consumption, network latency due to the distributed I/O, and subpar read and write performance due to the same distributed architecture.

Hitachi Polyphase Erasure Coding features a different approach in how it adapts software data protection. Hitachi carefully evaluated Erasure Coding through years of research and developed a unique patented approach that improves crucial elements of data and parity placement, which efficiently improved latency within Hitachi Polyphase Erasure Coding and lowered storage resource overhead.

Hitachi's strategic storage portfolio enables our customer's all-around performance, data availability, and efficient storage technologies that act as a foundation to multiple workloads.

Patent: US# 10,185,624 B2 & 10,496,479 B2

### **Enterprise Innovation**

As workloads change and data levels grow, it is important for storage to deliver scalable performance, capacity and storage efficiency. Solutions that only focus on one of these items are unlikely to deliver long-term value and may result in you spending more on new and siloed solutions than expected.

To maximize return on investment (ROI) and deliver long-term scaling, Hitachi has redesigned our Storage

Virtualization Operating System (SVOS RF) to run on commodity servers. By running virtualized on your server of choice, you can integrate your core enterprise storage platform with your existing hypervisor. We bring you the ability to run the latest distributed application along side traditional business applications on a scale out infrastructure, allowing you to scale performance and capacity independently to consolidate even more workloads.

Hitachi's first SDS offering is a true enterprise solution, with years of reseach and development our patented Hitachi Polyphase Erasure Coding brings our legendary reliability into the SDS marketplace. By allowing data to be balanced across the whole cluster reduces the cost and complexity of management while offering the most resilient solution. Integration with a hypervisor allows you to automate and simplify daily tasks and guarantee uptime.

What if you have already invested in VSP solutions, our engeerings wanted to develop a seamless experience without any data silo. VSS Block offers full integration and easy migration from VSP and 3<sup>rd</sup> party virtualized storage arrays through common UVM data services.

#### **Ready Nodes**

Hitachi VSS Block Ready Nodes are a quick, simple to deploy and reliable way of building your new distributed storage platform. They combine pre-configured and validated Hitachi HA Servers powered by Intel® Xeon® processors, and the software-defined storage ability of VSS Block. Remove the guesswork of building an SDS infrastructure and accelerate your deployment of new applications.

Hitachi VSS Block and HA Servers are covered by the global Hitachi Remote Ops monitoring system. Remote Ops gives you constant access to the full spectrum of our unmatched Global Support Center infrastructure and expertise while satisfying the highest security requirements to protect your environment. Remote Ops monitors, alerts, collects data and provides analytics to us about your Hitachi solutions, 24/7. We'll always know what code level you're on and when you need service. And, Remote Ops can make recommendations to improve your performance.

### Call to Action

<u>Learn More</u> If you would like to learn more about Hitachi Virtual Storage Software Block solutions please visit our website



### Hitachi Vantara

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# TABLE 1: HITACHI VIRTUAL STORAGE SOFTWARE BLOCK

	VSS Block HA810 ReadyNode	VSS Block HA820 ReadyNode
Storage Software	Hitachi Virtual Storage Software Block	
Max Raw Capacity	HPEC(4D+1P): 124 TiB/Node HPEC(4D+2P): 148 TiB/Node	
Supported Hypervisor	VMware ESXi	
Max nodes supported	32	
Chassis	1U	2U
Host interface types	iSCSI/FC	
Max Host port count	iSCSI: 2ports/Node FC: 2ports/Node	
Processor	Intel® Xeon® Silver 4208 Processor	Intel® Xeon® Silver 4210 Processor
Processor Cores	8 cores/Socket	10 cores/Socket
Number of Processor	2	2
Memory Capacity	128 GiB	128 GiB
Drives Supported	1.6TB x 2 SFF SSD (Boot) 6.4TB x4 (up to 8) SFF SSD (Storage)	1.6TB x 2 SFF SSD (Boot) 6.4TB x4 (up to 24) SFF SSD(Storage)
Power supply	800W	1600W
Node Dimensions	1.69 x 17.11 x 27.83 in / 4.29 x 43.46 x 70.7 cm	3.44 x 17.54 x 26.75 in / 8.73 x 44.54 x 67.94 cm

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