Western Digital

Built on Western Digital, Powered by Scality: Software-Defined Storage at Petabyte Scale

SCALITY

Highlights

- Achieve extreme scalability in on premises storage
- Easily manage and access data for both file and object storage
- Protect your data with highly reliable storage hardware and always-on software

Challenge

- Exploding storage requirements add costs and complexity
- Inflexible legacy solutions can't keep pace with growing volumes of unstructured data
- Public cloud options won't work for many businesses

Solution

- Scality RING software-defined storage brings extreme scale and cloud efficiencies to on-premises storage
- Western Digital Ultrastar® Serv60+8 hybrid storage servers provide superior density, reliability and affordability for scale-out environments
- Western Digital and Scality deliver flexible, easy-to-manage storage with low total cost of ownership, even as data volumes grow to petabyte scale

Staying Afloat in a Deluge of Data

Modern businesses generate and consume huge amounts of data. By collecting and analyzing a vast amount of information from different data points, organizations can better understand customers, improve products, and gain an edge on the competition. However, this wealth of data brings new challenges—chiefly, finding a scalable, affordable storage solution to accommodate data growth.
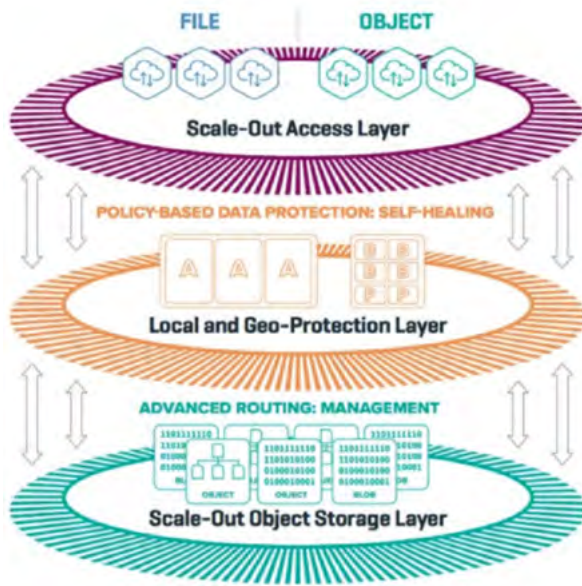
Legacy SAN/NAS storage models can't keep pace with the huge amounts of unstructured data businesses now collect. Instead, many are turning to software-defined storage (SDS). By decoupling storage software from the underlying hardware, you can realize public cloud-like efficiencies and scalability in on-premises environments. You can balance sustained performance with predictable costs and manageability as data volumes grow.

Petabyte Scalability for Private Cloud

Today, two global leaders in storage, Western Digital and Scality, have joined forces to provide a validated solution architecture and bring cloud efficiency and scalability to on-premises storage.

- Western Digital Ultrastar Serv60+8 hybrid storage servers provide a performance-optimized platform for SDS. It combines high-density, reliability and affordability in a scalable 4U platform—a perfect fit for rapidly growing big data environments.

- Scality RING8 delivers easy-to-manage, linearly scalable file and object storage with high availability. This state-of-the-art SDS software can be deployed on hundreds of Ultrastar platforms to enable petabyte-scale storage.

By deploying RING software on Ultrastar hybrid storage servers, you can achieve exceptional density, performance and reliability. At the same time, you can realize low total cost of ownership (TCO) as your storage footprint grows.

Cloud Scalability, Management and Access

Scality RING provides a cloud-scale, distributed SDS solution optimized for unstructured data. Acting as a single, distributed system, the RING can scale linearly across hundreds of Ultrastar Serv60+8 hybrid storage servers, multiple sites and provides support for an extreme number of objects. It protects data with policy-based replication, erasure coding and geo-distribution, achieving up to 14×9s of durability and 100% availability. And, it features integrated support for native file, object, and AWS IAM and S3 interfaces.

Named a leader in file and object storage by both IDC and Gartner, Scality RING provides high performance across a variety of workloads with up to 90% lower TCO than legacy storage.

- Massive scalability up to thousands of petabytes

- Zero downtime with 100% availability

- Extreme data durability with up to 14×9s protection

- Simplified data access with native file interface over NFS or SMB

- Easy to use with effortless deployment and management

Setting the Bar for Storage Innovation

Western Digital Ultrastar platforms provide the ideal foundation for scale-out SDS solutions like Scality RING. The Ultrastar Serv60+8 hybrid storage server is designed from the ground up for cloud and SDS, delivering superior capacity, density and reliability with low TCO.

- **Industry-leading innovation:** Ultrastar platforms draw on nearly 50 years of Western Digital innovation and one of the most powerful patent portfolios in the industry. Western Digital's vertical integration brings decades of flash and hard disk drive (HDD) design experience to its storage servers—often delivering innovations six to 12 months ahead of the competition.

- **Reliability:** Western Digital has brought innovation to the storage enclosure that give real-world benefits. ArcticFlow™ thermal zone cooling technology improves cooling, reduces vibration and lowers energy consumption while IsoVibe™ vibration isolation technology maintains performance by reducing the impact of vibration. Together these technologies have been observed to reduce field drive returns by 62% compared to the previous generation enclosures.

- **Low TCO:** Western Digital designs and manufactures devices end-to-end. By owning the entire vertical stack for its solutions, and configuring and selling them directly to global distributors, it has cut excess layers from its supply chain. Western Digital offers state-of-the-art innovation and enterprise-class reliability and performance, with reduced hardware acquisition costs and a lower overall TCO.

- **Maximum flexibility and capacity:** With Ultrastar Serv60+8 platforms, you can choose your CPU, memory and drives to find the right balance of capacity and performance for your requirement. Each server supports up to 60 HDDs plus up to 8 SSDs connected via SAS or SATA. Depending on the mix of drives, you can deploy over 960 terabytes[1] of storage capacity per 4U platform.

Western Digital's Ultrastar Serv60+8 Hybrid Storage Server

Bring Cloud Scalability and Efficiency to On-Premises Storage

The amount of data your organization collects will continue to grow. As data volumes reach petabyte scales, the manageability and economics of yesterday's storage solutions simply can't keep up. Fortunately, modern distributed storage solutions can. By combining Ultrastar hybrid storage servers with Scality RING SDS software, you can create a powerful, flexible foundation for handling the most demanding workloads at petabyte scale.

To learn more, please visit www.scality.com/partners/westerndigital/

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