



# Meet Today's Business Challenges with a Unified Storage Platform: A Comparison of Enterprise Solutions

Results of a comparative analysis conducted by Prowess Consulting reveal that the Dell PowerStore™ 500T system delivers superior latency, performance, data reduction, unified storage, and management usability compared to the IBM FlashSystem® 5300 solution.

In today's fast-paced business environment, enterprises must manage vast volumes of data, maintain user productivity, meet customer expectations, optimize operational efficiency, adapt to changing markets, support growth, and lower total cost of ownership (TCO). When organizations are shopping for the right storage solution to address these needs, Prowess Consulting recommends looking for the following capabilities: low latency, high performance, high data reduction ratio (DRR), unified storage for different data types, and easy-to-use management capabilities.

To help you make informed decisions about your storage investments and find a solution that meets your needs, Prowess Consulting conducted a comparative study in which we tested two enterprise storage solutions: the Dell PowerStore™ 500T solution and the IBM FlashSystem® 5300 solution. Our testing measured key performance indicators (KPIs) such as workload latency during snapshot creation, DRR, overall workload performance, and administrative user experience (UX). These indicators contribute to various TCO benefits, such as consolidating rack space, running more demanding workloads on existing infrastructures, scaling to accommodate fast growth, reducing energy costs, seamlessly migrating workloads, and optimizing resource provisioning.

For all KPIs measured, the Dell PowerStore solution delivered superior results compared to the IBM FlashSystem solution. We also looked at key metrics such as number of snapshots supported, different data types supported, management ease-of-use, and visibility into reducible and unreducible data. In these categories as well, the Dell PowerStore system outperformed the IBM FlashSystem solution.

For enterprises shopping for an enterprise storage solution, the Dell PowerStore 500T solution's superior performance, efficiency, usability, and TCO make it a compelling choice over the IBM FlashSystem solution.

Compared to the IBM FlashSystem® 5300 solution, the Dell PowerStore™ 500T solution provides up to:<sup>1</sup>

52x

lower latency during snapshot creation

2.3x

higher data reduction ratio (DRR)

1.66x

the write performance

2.3x

fewer steps to provision volumes

## Latency During Snapshot Creation

Sub-millisecond latency ensures that critical systems remain dependably responsive during high-peak processing periods. During snapshot creation, the Dell PowerStore system demonstrated 0.69 milliseconds maximum average latency during snapshot creation, or 52x lower than the 36.63 milliseconds observed with the IBM FlashSystem solution.<sup>1</sup> The much higher latency of the IBM FlashSystem 5300 solution reduces overall performance, increases application response time, and could potentially create traffic bottlenecks.

## Data Reduction Ratio

A high DRR indicates a high storage efficiency, which helps lower your TCO by reducing the amount of storage you need to buy, consolidating rack space, and reducing electricity usage. The Dell PowerStore system achieved a DRR of 6.2:1, far outperforming the IBM FlashSystem solution's DRR of 2.6:1.<sup>1</sup>

## Workload Performance

Small write operations are a common workload for many high-performance enterprise applications, such as databases. The Dell PowerStore system delivered 132,290 write input/output operations per second (IOPS), compared to the IBM FlashSystem solution's 79,498 IOPS.<sup>1</sup>

## Usability

A unified storage platform and easy-to-use dashboard help accelerate and streamline tasks such as provisioning volumes and migrating workloads. The Dell PowerStore solution uses a unified platform that supports more storage types than the IBM FlashSystem solution. Its single graphical user interface (GUI) enables you to provision volumes using 10 clicks, as opposed to the three dialog screens and 23 clicks needed by the IBM FlashSystem solution's interface.<sup>1</sup> The Dell PowerStore solution's dashboard also provides a deeply granular view of storage volumes, making it easier to optimize storage resources (see Figure 1).

Dell PowerStore™ 500T

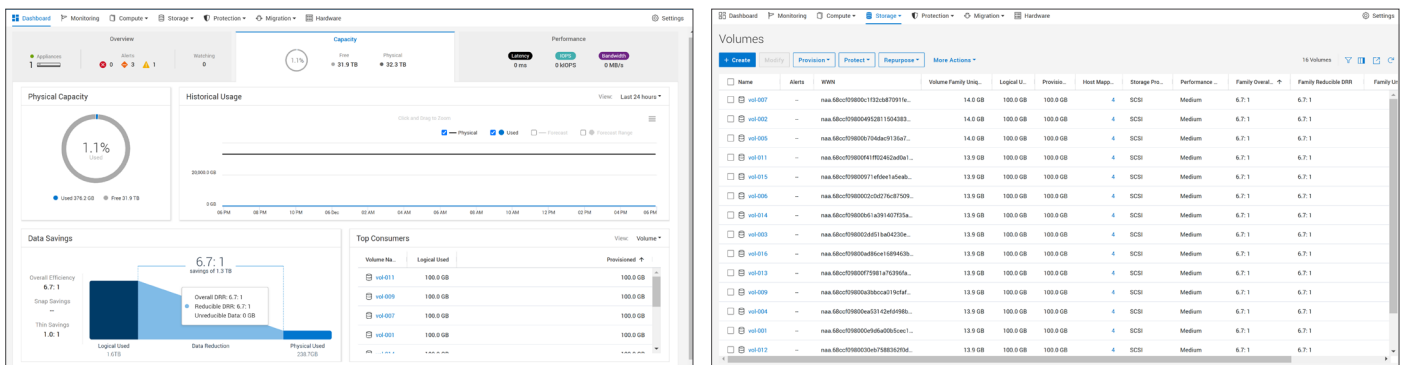


Figure 1 | The Dell PowerStore™ system uses an intuitive GUI that offers deep insights into data storage

Get the full story by reading the technical research report, "[Maximize Performance, Efficiency, and Usability for Enterprise Storage](#)."

### Endnotes

<sup>1</sup> Prowess Consulting. "[Maximize Performance, Efficiency, and Usability for Enterprise Storage](#)." Commissioned by Dell Technologies. February 2025.



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