NEWS

Dell PowerScale adds new all-flash nodes, with eyes on AI

Dell has added the latest-generation Intel CPUs, PCIe 5.0 storage and DDR5 RAM to PowerScale, doubling the performance and making it a more attractive fit for AI.

By **Adam Armstrong,** News Writer

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Dell has added two all-flash nodes to its PowerScale lineup for customers needing high performance for unstructured data. The Dell PowerScale F210 and F710 are the latest offerings in what the vendor calls its "AI-ready data platform."

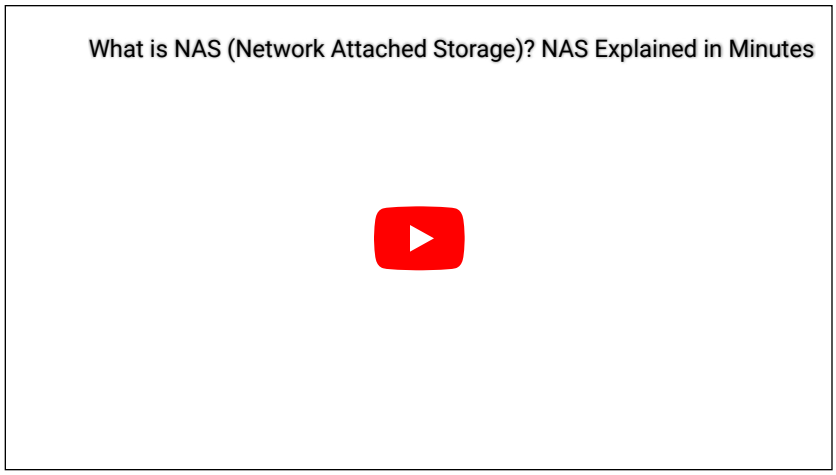
Both nodes have Intel Xeon CPUs with twice the streaming performance over previous models, higher concurrency and higher performance per watt.

Dell's AI focus builds off the updated PowerScale OneFS operating system released in late 2023. At the time, Dell said it would begin updating its storage to all-flash to ease AI modeling and inferencing.

There is a focus on big data and large language models when it comes to working with AI and generative AI, according to Simon Robinson, an analyst at TechTarget's Enterprise Strategy Group. In many cases the sets of data are limited, leading to a smaller environment where higher performance is more important.

"Having something that is the right size for that environment seems to make sense," he said.

With file systems such as PowerScale, customers are looking for ease of use, integration and performance, and Dell is checking all those boxes, Robinson said.



All eyes on performance

Available now, although Dell didn't disclose the price, both nodes focus on added performance. The F210 offers high performance at a lower capacity -- up to 61 TB raw -- and the F710 focuses on balancing performance and capacity, with a maximum of 307 TB raw, according to the vendor.

Upgrading to the new Sapphire Rapids CPUs brought a big performance jump, according to Steve McDowell, an analyst and founding partner at NAND Research. With the new CPUs comes DDR5 RAM and PCIe Gen 5.0 SSDs, all of which improve performance.

"The big thing here is the performance boost and the higher-capacity drives," McDowell said, noting that there isn't new functionality to PowerScale's OS beyond what was introduced in December.

Dell has moved from PCIe 3.0 to 5.0, a larger jump than average. Performance could have been lagging relative to competitors, and this closes that gap, McDowell said.

NAS for AI

While Dell highlights the use for PowerScale in AI, being a network-attached storage system, it is still ideal for typical NAS workloads such as high-frequency trading and electronic design automation. As for whether NAS systems are good fits for AI use, it depends, Robinson said.

"The first wave of AI was all about structured data, but we're definitely moving into the unstructured data realm," he said.

With capabilities like text to video, unstructured data storage will continue to grow as a factor in AI workloads, he said.

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>
> **Steve McDowell**
> Analyst and founding partner, NAND Research

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