



Technology Company

Delivering **revolutionary** storage services

Distributed Storage Solutions

Australia's largest IPFS cloud storage provider uses Lenovo TruScale Infrastructure as a Service to add capacity fast with minimal initial resources—bringing competitively priced decentralized storage to an even bigger customer base.

Lenovo

1

Who is Distributed Storage Solutions?

Distributed Storage Solutions (DSS) is Australia's largest provider of storage services for Filecoin—a decentralized cloud storage network developed on the Interplanetary File System (IPFS) protocol with more than 14 exabytes of committed capacity. IPFS is a protocol, hypermedia, and file sharing peer-to-peer network for storing and sharing data in a distributed file system.

Filecoin is a blockchain-based cloud storage application, offering users an immutable record (cryptographic proof) of their data's location and integrity. Filecoin allows users to store data at hypercompetitive prices, with enterprise storage providers such as DSS attracting customers based on their storage capacity, reliability, and speed. Users' data can be managed in several ways at their discretion. This includes replication in geographically diverse locations and/or distribution of a single dataset across multiple nodes on the network, resulting in no single point of failure.

These features make Filecoin an attractive alternative to traditional cloud storage services, especially for organizations with large storage needs and limited budgets. DSS sees this reflected in its own client base, made up largely of higher education, medical research, public sector, and independent research organizations.



2

The Challenge

Running a successful storage provisioning operation on Filecoin has high hardware demands. DSS needs to support computationally intense operations and provide fast, high-performance, and large-capacity storage. As DSS competes with hyperscale cloud providers for enterprise storage customers, the ability to guarantee reliable performance is key to success.

As DSS set out to establish itself as a trusted Filecoin storage provider, it needed a technology partner capable of delivering enterprise-grade data management solutions that met multiple requirements. The infrastructure needed to perform under the high demands of customer workloads and scale to multiple PBs per system, while remaining easy to monitor, maintain, and manage.

As a startup, DSS also needed to carefully consider the economics of procuring this hardware. The company was keen to find a flexible commercial model that would allow it to establish a high-performing infrastructure while avoiding large up-front costs.

“Not only was it crucial to find the right technology stack at the right price, we also needed a provider who could deliver that hardware in a reliable timeframe.”

Andrew Leece
CEO, DSS

Finding the right fit

DSS assessed infrastructure options from several vendors, including Lenovo. Lenovo's ThinkSystem DE Series Storage proposal offered higher redundancy, higher availability, and faster drive rebuild times. What's more, Lenovo offered faster delivery than competitors during the supply chain crisis triggered by the COVID-19 pandemic.


Andrew Leece, CEO of DSS, recalls: "Lenovo put in a lot of work to plan supply forecasts and line up their delivery schedule with our growth cycle. It showed us they were serious about getting us the hardware we needed, when we needed it."

Services

Lenovo TruScale Infrastructure as a Service

Hardware

Lenovo ThinkSystem DE6000H Hybrid Storage Array



One of the most important deciding factors was Lenovo TruScale Infrastructure as a Service, which gives DSS access to top-of-the-line Lenovo hardware through a pay-as-you-go model with minimal initial investment. There's no need for large upfront investment, and DSS only pays for the infrastructure resources it actually uses, with predictable and easy-to-understand pricing.

Working closely with a team from Lenovo, DSS procured and deployed a suite of Lenovo ThinkSystem DE6000H Hybrid Storage Arrays including Lenovo Essential Services, which provides DSS with up to four-hour on-site support 24 hours a day, seven days a week. This offering also includes YourDrive YourData, which allows DSS to retain possession and dispose of failed drives—which otherwise must be returned to Lenovo upon replacement.

What's more, DSS benefits from a dedicated Lenovo customer success manager for the lifecycle of the project. The customer success manager helps with onboarding, internal escalations, health checks, future growth projects, and the potential renewal process.

Thanks to the seamless agility and scalability of Lenovo TruScale, DSS has established a fast-paced expansion schedule, regularly adding new ThinkSystem DE6000H arrays to its environment to support ever-rising storage needs.



“

“We get regular deliveries of ThinkSystem DE6000H arrays with high-capacity drives. Thanks to TruScale’s pay-as-you-go model, we only start paying for the extra capacity when we start using it, as opposed to when the hardware is shipped. This lets us plan ahead for future needs while keeping our costs closely in line.”

Andrew Leece

CEO, DSS

3

Results

With Lenovo TruScale Infrastructure as a Service, DSS gets the best of both worlds: access to enterprise-grade hardware that delivers on the huge performance and capacity demands of Filecoin storage, wrapped up in a transparent and predictable pay-as-you-go commercial model that optimizes cash flow.

Opting for an infrastructure-as-a-service (IaaS) solution also means that DSS is free to focus on growing its business, and can leave hardware procurement, deployment, and maintenance safely in Lenovo's hands.

The company expects Lenovo to be a crucial enabler for its ambitious expansion plans. Backed by Lenovo TruScale, the company can easily scale storage capacity in line with actual business needs—keeping DSS on the path to profitable growth.



Agile digital transformation through a pay-as-you-go model



Fully managed service frees DSS to focus on business growth



Fast delivery during the supply chain crisis



“

“Lenovo TruScale gives us the freedom to scale at a significantly reduced capital cost. We can also count on excellent support for the full lifecycle of our storage assets. It’s an extraordinarily valuable service for a relatively small startup such as us.”

Andrew Leece
CEO, DSS

Why **Lenovo**?

Lenovo TruScale's flexible procurement model proved to be a major deciding factor for DSS. With TruScale, the company can procure millions of dollars' worth of equipment every year under a nimble OPEX-based approach, avoiding large up-front investments—a key selling point for the startup.

“We're essentially procuring half a million dollars' worth of equipment every month; if we were buying the hardware outright, we would be constantly raising capital,” explains Leece. “Lenovo TruScale has freed us from those capital constraints and given us the agility we need to grow at a very fast pace.”

Beyond the hard commercial benefits, DSS has also established an invaluable partnership with a team that's truly committed to helping its business succeed. As Leece notes: “Our relationship with Lenovo started out with a simple web enquiry about laptops. Now, a year-and-a-half later, we have over 30 PB of storage infrastructure and growing. That's down to the eagerness of Lenovo to learn about our business and engineer solutions for us that are incredibly cost-effective and easy to manage with our small team.”



How can storage providers rapidly scale their operations to meet growing demand?

Staying on track for consistent, cost-effective growth with Lenovo TruScale.

[Explore Lenovo TruScale](#)