



Case Study

Server Infrastructure Refresh - Using Azure Stack HCI and Storage Spaces Direct (S2D) Technologies

Client:

Djanogly Learning Trust – Sherwood Rise Site

Technology Partners:

HPE (Physical Servers) + Microsoft (Server Operating System and S2D/Azure HCI Technology)

Project Date

Summer 2021



The Challenge

The server infrastructure at the Trust's Sherwood Rise site was ageing and beginning to show signs of failure. The site which contains one of the Trust Schools, as well as housing many of the Trust's central team of staff, experienced regular disruptions caused by a failing SAN Storage Area Network (SAN) appliance. The system would crash regularly, making servers and resources intermittent and often completely

unavailable.

In addition, the age of other server equipment in use at the site presented a high level of risk for the school, with equipment no longer being covered by warranty or hardware support agreements. This meant that, in the event of a more catastrophic hardware failure, the school could be left with considerable barriers to access data and systems as well as significant downtime.

The Solution

A new server and storage infrastructure solution was designed and implemented for the school, based on a two-host Azure Stack HCI solution, using Microsoft's Storage Spaces Direct (S2D) Technology. This solution allowed the school to utilise mainstream server hardware, from Tier 1 vendors, which was configured to provide a virtualised, hyper-converged storage, networking and compute server cluster to meet the Trust's needs.

In addition to the physical server hardware provided, to offer additional resilience in the design, an Azure-hosted Cloud witness solution was implemented alongside the physical hardware, to ensure Cluster Quorum for the solution could be maintained, even in the unlikely event of a failure of either host. This ensured the school's network would continue to function and operate effectively, providing the resilience and reliability the school/Trust needed from its IT.

Our Statement

The Trust now benefits from a reliable server infrastructure offering a vastly increased performance. There's now an opportunity for scalability within the current solution, as well as options to expand and upgrade if required. The IT framework provided also reduces the physical hardware on-site, while being much more energy efficient—through lower power and cooling costs. Importantly, the new infrastructure will also breed IT confidence among users; those who may have become disillusioned with the previous, unreliable system.

Key Points

- Reliable IT is essential for every school, not only in ensuring that everyone can work effectively—but also in building confidence in IT and encouraging its use throughout the school, Trust and across the curriculum.
- Even though not all schools are ready to go serverless and completely do away with their physical server hardware, we can still design and recommend solutions which focus on reducing that requirement and realising the benefits that come from a more streamlined infrastructure. This includes improved efficiency, simplified management and lower costs for power, cooling and racking of

Client Comment

“Since implementing the new server infrastructure solution which was designed and installed by Computeam, our IT is not only once again reliable, but also performs significantly better than with our previous setup. As a result, Staff and pupils, are regaining confidence in the IT at the school,

and its use has become something which enhances teaching and learning and improves pupil engagement rather than something to be wary or mistrusting of.”

Adam White, IT Team Leader – Djanogly Learning Trust

Our Statement

- *“Working closely with Janet and Adam at Djanogly Trust was inspiring, and something with which I will always be proud to have been involved. Building a partnership, sharing ideas and values, enabled the final solution we proposed and delivered to meet the Trust’s needs and help improve its desired outcomes.*

Having a regular open discussion with Trust staff has created a positive working relationship and really helped Computeam to understand the challenges and issues that the Trust were facing. I believe it is only when you truly understand the frustration and issues that you can confidently identify and introduce the technology required to help solve those issues.

It is also with projects like these and of this size that I have really grown to appreciate the depth of knowledge, and support, of the people around me at Computeam. Our team still continues to listen and learn from Djanogly Trust which in turn continues to build the relationship we have, by listening and

learning from each other. This gives real purpose to the ongoing Strategic Planning Meetings, which take place between Computeam and the Trust and allows us to continue working together to help the Trust and its schools achieve their outcomes with our continued support and advice.”

Dean Hately, Trust Account Manager – Computeam Ltd

“Since implementing the new server infrastructure we have seen a significant decline in the number of support tickets raised by the school, due largely to the improved reliability of the new solution. In addition, moving the school forward with newer and more efficient technologies has also helped us to improve the level of support we have been able to provide the school/Trust and helped to strengthen and improve our working relationship as a trusted advisor to the Trust and its IT Staff.”

Ray Burdet, Head of Field Consultancy - Computeam Ltd