“Hitachi Adaptable Modular Storage 2300 systems provide us with the performance, reliability and scalability we need to deliver an agile virtual environment, at a highly competitive price.”

Nial Grimes
IT Consultant
Carmarthenshire County Council

Carmarthenshire County Council

INDUSTRY  Government: Local

SOLUTION  Modular Platform, Storage Management
Hardware — Hitachi Adaptable Modular Storage 2300
Services — Provided by Hitachi TrueNorth™ Partner S3
Carmarthenshire County Council Pioneers Simplified Storage Management with Hitachi Modular Storage

Carmarthenshire County Council, one of the largest and most diverse employers in South West Wales, faced a storage dilemma following the dramatic growth of its organization. The council required more storage capacity, improved management capabilities and a scalable solution that would grow with them. Hitachi Data Systems, and partner S3, had the solutions, support and services that met these needs.

The Search for a Solution

The council had a legacy Hitachi Adaptable Modular Storage (AMS) 500 in place, along with LSI StoreAge virtualization. As the kit reached end of life, Carmarthenshire sought to replace it with a storage solution offering increased capacity, high performance, simple manageability and lower-cost overheads.

The council’s high-level project goals included:

- Find a more up-to-date and efficient storage solution to handle the council’s increasing data requirements.
- Ensure that the chosen offering delivers a reliable and easy-to-use solution to the imminent storage challenge, which would readily scale with the business.
- Remove the shackles of per-terabyte licensing.
- Replace legacy storage solution quickly and efficiently with zero downtime or data loss.

After looking at a number of vendor options, including HP, Carmarthenshire County Council selected a Hitachi Data Systems solution to meet its requirements. “I’d been impressed in the past with our Hitachi offering and was confident that its upgraded storage solution could deliver the demands of our growing organization,” said Nial Grimes, IT consultant at Carmarthenshire County Council. “We looked into other vendor offerings but believed Hitachi Adaptable Modular Storage 2300 systems would provide us with the performance, reliability and scalability we needed, at a highly competitive price.”

An equally important part of the decision and implementation of the Hitachi solution was the involvement of S3. This experienced and trusted Hitachi TrueNorth™ Partner provided technical expertise around the solution from start to finish.

Simplified, Reliable, Integrated Storage

The council purchased 2 Hitachi AMS 2300 systems, which were installed by S3 within the organization’s main data centers. The AMS 2300 systems provided a highly reliable, flexible and scalable storage solution.

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system for Microsoft Exchange Server, VMware, databases and other business applications.

“The Hitachi AMS 2300 systems were primarily used to support the council’s Microsoft Windows environment, comprising some 300 virtual machines and a mix of applications, ranging from document management tools, with heavier storage requirements, to smaller supporting applications for distinct business areas,” explained Alasdair Hill, account manager at S3.

Advanced features of the solution allowed Carmarthenshire County Council to rationalize and simplify its environment with tiered storage: 3 levels with which the council could organize and prioritize data. They could now intermix high-performance SAS drives and cost-optimized SATA drives in the same system.

Hitachi dynamic load balancing controllers automatically reduce controller bottlenecks. The simplified storage solution therefore integrated fully with the council’s VMware environment, ensuring effective performance management. With the Hitachi AMS 2300 systems the council was able to fully utilize its VMware assets. This lead to further cost savings, as it negated the need to upgrade or replace these resources.

“From a management perspective, the Hitachi solution centralizes and manages multiple systems for greater efficiencies from a single-pane-of-glass view,” said Grimes.

Success for the wider project has meant the Carmarthenshire County Council has therefore been freed up; cooling requirements have been reduced and simplified management has been enabled.

“Data is the most important thing we hold, and we confidently place it in the safe hands of Hitachi Data Systems,” said Grimes. “S3 provided the consultancy needed to see the project through from inception to implementation and as a team we’ve realized the benefits that effective storage management can deliver.”

Key benefits of the implementation include:

- High reliability, with 99.999% data availability and no single point of failure
- Excellent integration with VMware, facilitating high-performance delivery of virtual environments
- Solution that scales as data requirements grow
- Reduced energy and facilities costs; more storage delivered with lower power consumption than legacy equipment
- Simplified storage management
- “Whole array” licensing of key features, reducing the cost of expansion

In 2012, Carmarthenshire County Council installed a 3rd Hitachi AMS 2300 as part of its disaster recovery project.

“The requests for more storage will keep coming and it’s my job, with the support of Hitachi Data Systems, to ensure that we can handle them,” said W. Nigel Davies, infrastructure manager at Carmarthenshire County Council.