



Energy & Utilities

Gaining headroom for international growth

Crowder Consulting

Water engineering consultancy and services company Crowder Consulting modernizes its IT with a hybrid cloud environment based on Lenovo ThinkAgile VX Series—creating headroom for continued expansion.

Lenovo

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Who is Crowder Consulting?

Crowder Consulting provides innovative engineering consultancy services and software solutions to the water industry, specializing in water supply, water distribution, and sewer networks. Headquartered in Birkenhead, England, the company serves major water service providers across the globe.

Through innovation and strong trusted partnerships with its stakeholders, Crowder Consulting strives to help water service providers improve operational efficiency, reduce water losses, and satisfy strategic, regulatory and environmental commitments.



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The Challenge

Crowder Consulting's mission is to use its global water industry expertise and reputation to be a leader in managing water to make the world a better place. The company is growing fast and is targeting further international expansion in the coming years. Crowder Consulting is also continually enhancing and expanding its product portfolio, striving towards cutting-edge solutions using state-of-the-art technology. All this was putting enormous pressure on the company's IT infrastructure.

David Newman, IT Manager at Crowder Consulting, begins: "Our existing infrastructure was more than six years old, and we were pushing it to the absolute limit. The servers and storage systems were running out of capacity and reaching the end of their support period. They could no longer deliver the level of performance needed to support a growing workforce as well as the demands of our software development team. It was time for change."

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“Water is a finite resource that needs to be managed carefully. Our services and solutions are in high demand from water service providers all over the world. To keep operations and software development activity on track, we knew we needed to modernize our IT infrastructure.”

David Newman

IT Manager, Crowder Consulting

Moving to HCI

Initially, Crowder Consulting planned a like-for-like replacement of its server and storage systems, but ultimately the company chose to implement a hybrid cloud environment with Lenovo ThinkAgile VX Series, a turnkey hyperconverged infrastructure (HCI) solution powered by VMware software.

“The simplicity of HCI is what changed my mind,” explains David Newman. “I really liked the idea of having everything—compute, storage, and networking—in one box with one management interface. We have a small IT team of just two people, so ease of management is a priority.”

Crowder Consulting procured four Lenovo ThinkAgile VX7531 and four ThinkAgile VX3331 Integrated Systems via Data Systems Computers (DSC), a Lenovo Partner. Lenovo Services installed the ThinkAgile VX Integrated Systems at Crowder Consulting’s Birkenhead data center, configured as two four-node clusters.

Hardware

Lenovo ThinkAgile VX7531
Integrated Systems
Lenovo ThinkAgile VX3331
Integrated Systems

Software

Lenovo XClarity Integrator for
VMware vCenter
VMware Horizon
VMware vSAN
VMware vSphere Enterprise Plus
VMware vCenter

Software

Lenovo Deployment Services

Total upgrade

The VX7531 cluster replaces Crowder Consulting's previous three-tier infrastructure and supports the company's mission-critical VMware vSphere Enterprise Plus environment. A wide range of business applications runs on this platform—from customer-facing water management solutions and digital services to internal software development workloads and back-office applications.

The VX3331 cluster supports Crowder Consulting's new VMware Horizon virtual desktop infrastructure (VDI) environment. "This infrastructure upgrade gave us the opportunity to put a proper VDI solution in place," says David Newman. "This would be much more secure and convenient for our employees than connecting to their office desktops via VPN."

The two clusters are deployed with VMware vSAN Original Storage Architecture (OSA) which provides a two-tier architecture, consisting of a caching tier and a capacity tier. Crowder Consulting utilizes all-flash storage for the VDI cluster and hybrid storage for the general-purpose cluster for optimal performance and efficiency.

With support from Lenovo Services, the implementation was completed on schedule without any issues. David Newman recalls: "Everything went very smoothly. Lenovo not only installed and configured the new hardware, they also connected it to our old systems so we could easily copy the virtual machines across. The Lenovo team took care of everything and the whole process was totally seamless."

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“Having engineers and VMware technicians from Lenovo handle the installation and configuration was fantastic. It took the pressure off my team and gave us confidence that everything had been set up correctly.”

David Newman

IT Manager, Crowder Consulting

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Results

The move to HCI has transformed Crowder Consulting's IT operations, increasing capacity, boosting performance, simplifying management, and cutting costs.

David Newman says: "We consolidated our VMware vSphere environment from five servers to four Lenovo ThinkAgile VX Integrated Systems while increasing compute and storage capacity by 50%. The result is more headroom and better performance from a smaller number of servers, which has cut electricity costs by 12%.

"We estimate that performance has improved by 20% on average. Logging into the virtual machines is nearly instant now, and the software development team has reported that their databases and data analytics are running faster too. These positive comments from our users show that the project has really had a noticeable impact."



50% compute and storage capacity increase



20% performance improvement



12% lower electricity costs

Looking ahead

Crucially, with a hybrid cloud environment with Lenovo ThinkAgile VX Series as the foundation of its IT infrastructure, Crowder Consulting has the headroom to support future expansion.

“As a growing company, the easy scalability of HCI was a key deciding factor when we were looking at system specifications,” says David Newman. “In fact, in the nine months since the Lenovo ThinkAgile VX platform was installed, our workforce has grown by about 5%. So, the ability to seamlessly add new nodes to the clusters is a great advantage.”

Thanks to Lenovo XClarity Integrator for VMware vCenter, Crowder Consulting can manage both physical and virtual resources via a single pane of glass. “The solution is very easy to manage,” confirms David Newman. “What’s more, moving to a VDI solution means that we have a single client image to manage rather than dozens of desktops. We used to spend 60% of our week managing the desktop estate; now that’s down to just 20%, which frees up a lot of time for other tasks.”

Why **Lenovo**?

For Crowder Consulting, Lenovo's proactive service and quick responses throughout the sales process made a big impression.

"I found Lenovo easier to deal with than the other vendors we were considering," comments David Newman. "The Lenovo reps were always easier to get hold of when I had questions. And no matter how many times I changed the spec, they always got everything done. It gave me a lot of confidence in the kind of service we could expect post-sale and post-implementation."



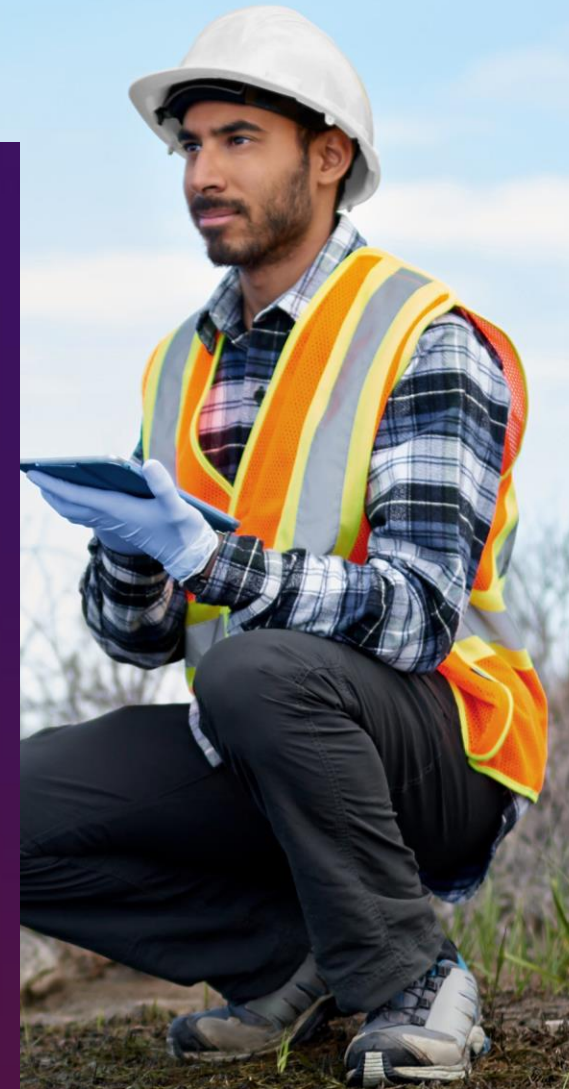
Partner perspective: Data Systems Computers

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“Following the initial conversations with Lenovo around the technologies they offer, they asked if I had a preferred partner they could work through. I proposed DSC as I already had a close working relationship with them built up over the last few years. I knew that I could get DSC on board with this project, and I was sure that they would be 100% engaged to assist with getting the best value and service. As ever DSC did not disappoint, and Alec, my account manager, worked with Lenovo to ensure the project went to plan and was delivered within the time and budget specified.”

David Newman

IT Manager, Crowder Consulting



How can businesses prepare for future growth?

Crowder Consulting laid a flexible foundation for future expansion with Lenovo ThinkAgile VX Series.

[Explore Lenovo ThinkAgile VX Series](#)