

Delivering VDI with Speed and Scale

Bournemouth University supercharges its virtual desktops with Cisco HyperFlex



The customer summary

Customer name

Bournemouth University

Industry

Education

Location

Bournemouth, England

Challenges

- Responding quickly to a pandemic-related lockdown
- Providing remote access to all university applications
- Delivering graphics-intensive workloads to specific users

Solution

- Hyperconverged infrastructure (HCI) with cloud-based management

Results

- Deployed modern infrastructure to support 500 virtual desktops
- Improved data center visibility and orchestration
- Provided GPU acceleration for users with high-performance computing needs

An urgent need

Like most educational institutions, Bournemouth University (BU) had to react quickly to the sudden, pandemic-related lockdowns. With no advance warning and little time to spare, the university needed to find new ways to enable remote teaching and learning and provide staff and students with access to IT resources that had always been firmly rooted on campus.

“Other than a virtual learning environment, all of our IT systems for students were on-premise,” says Matt Hall, deputy IT director at BU. “Lab work, computer animation, and media production had always been done on campus, and we didn’t have any remote access to those tools and applications.”

To ensure students could continue to utilize university resources, complete their coursework, and stay connected with their lecturers and peers during the pandemic, BU had to quickly replace its legacy systems with a modern, secure, and highly flexible virtual desktop infrastructure (VDI).

“We needed an affordable solution that could support 500 remotely accessible virtual desktops and workstations,” Hall says. “And because of our focus on media, design, and research, we needed graphics acceleration for roughly half of them. We’d never done that before.”

The university’s familiarity and comfort with Cisco UCS® servers, which were already performing reliably in BU’s data centers, led them to Cisco HyperFlex™.

“A hyperconverged solution from a trusted partner was the best approach for moving forward with speed and scale.” Hall says. “Other vendor solutions came with significantly higher implementation risks and complexities.”

Speed and scale

With assistance from ITGL, an award-winning IT services provider and Cisco Gold Partner, BU deployed a Cisco HyperFlex cluster to support its VMware Horizon VDI environment. Utilizing Cisco Nexus® switches, the cluster is stretched between the university’s two data centers for full redundancy and seamless automatic failover.

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“It was an easy shift from UCS to HyperFlex,” Hall says. “We only had a small learning curve.”

Leveraging the cloud-based Cisco Intersight™, the two data centers are managed as a single logical site and can be monitored and orchestrated from anywhere.

“The cluster doesn’t require much monitoring or maintenance, but Intersight is nice and easy to use,” Hall says. “We can easily see all of our licenses, software, and logs.”

With independent scaling of CPU, memory, and storage, the university can also expand the Cisco HyperFlex cluster as user and application requirements evolve.

“The system can support almost any workload and it’s designed to scale,” Hall says. “That gives us a lot of flexibility, and we can add more virtual desktops whenever they’re needed.”

Supporting different users

The flexibility of Cisco HyperFlex also allows the university to support the diverse needs of its users.

“We have two types of virtual desktops: One for standard users who need email, web browsing, and general productivity applications, and another with GPU acceleration for users who are involved with computer animation, game design, video production, and other high-performance workloads,” Hall says, referencing the NVIDIA T4-16 GPUs and NVIDIA vGPU licensing that are included in select Cisco HyperFlex configurations.

A preexisting, custom-built app store provides easy access to all of the university’s 300-plus applications, so the user experience is consistent across virtual and physical desktops.

“From a technology adoption standpoint, it seemed like VDI was becoming less relevant, but the pandemic certainly changed all of that,” Hall says. “Instead of VDI being an afterthought, we now view it as a stepping stone into our future.”



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Product list

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- [Cisco Intersight](#)
- [Cisco Nexus switches](#)