

Fife College

Transforming from an IT department into an IT services provider

A further and higher education college in Scotland has transformed the way that it delivers IT services for staff and students, by consolidating and virtualizing its server infrastructure and introducing a new virtualized desktop environment. Now the IT team no longer has to spend all its time responding to IT outages and performance issues and can instead focus on providing value-adding IT services.

Challenges Faced

The time had come for a radical new approach to delivering IT services at Fife College, a further and higher education provider in Scotland with up to 20,000 full-time and part-time students. Core IT systems had become unreliable and difficult to maintain, so IT staff spent all their time reacting to data management and performance issues. Spread across eight separate datacentres, the aging IT infrastructure also contributed to poor data quality, a lack of system integration and inconsistent processes.

Most significantly, the fragmented IT infrastructure acted as a barrier to the development of the college, rather than being an enabler of new services for staff and students. Fife College's Principal, Hugh Hall, was particularly keen for the college to be a progressive employer, and to achieve this, he wanted to give employees the flexibility to work securely from any of the college's five campuses, from community-based learning centres throughout Fife or from home.

Cutter made all the difference by:



Acting as a 'critical friend' to help shape the college's IT vision



Working collaboratively with the IT team and sharing knowledge



Designing a VDI solution that delivered added capabilities



Providing ongoing advice and guidance

“We wanted a relationship not a transaction. It was clear that Cutter understood our vision and could support us in a way that was sustainable and affordable for the long term.”

Kris Getchell
Chief Information Officer, Fife College

Services Provided

Fife College appointed Cutter Group after evaluating several potential vendors through a formal procurement process. Most of the companies that tendered for the project met the college's technical requirements, but Cutter was the only one that demonstrated a deep understanding of how the college wanted to evolve from a traditional IT department into a forward-looking IT services provider. “We wanted a relationship not a transaction,” says Kris Getchell, Chief Information Officer for Fife College. “It was clear that Cutter understood our vision and could support us in a way that was sustainable and affordable for the long term.”

First, Cutter reviewed Fife College's initial plans for consolidating its infrastructure from its existing eight datacentres into one single datacentre. According to Getchell, Cutter acted as a “critical friend”, helping to shape the college's vision and develop it into a tangible IT plan, with specified hardware and software. The new IT environment comprised a 100% virtualized server infrastructure with no single point of failure.

With a thorough plan in place, Cutter then worked alongside the college's IT staff to implement the new virtualized server infrastructure, incorporating Fujitsu Primergy CX400 and CX 2560 servers, VMware Horizon and NetApp Solidfire. This collaborative approach ensured that the in-house team had the knowledge and confidence to subsequently manage and maintain the new IT infrastructure. “Cutter's consultants acted almost like an extension to my in-house IT infrastructure team,” says Getchell. “This meant that we didn't have to relinquish control of our infrastructure, but got the support and guidance we needed.”

Next, Cutter reviewed Fife College's requirements for a virtualized desktop infrastructure (VDI) solution, to facilitate remote working, and drew up a detailed plan. “It's quite easy to build a mediocre VDI by just buying and installing compatible hardware and software, but that's not what we wanted,” Getchell

says. “Cutter had the expertise to help us move from a good-enough VDI service to a really slick VDI service, capable of meeting the current and future needs of staff and students.”

Cutter now provides ongoing support for Fife College, covering both the virtualized server infrastructure and the VDI solution. “My infrastructure team really appreciates the fact that it can draw on the expertise of Cutter's consultants whenever needed, as a kind of safety net,” Getchell says. “One of the great advantages of working with Cutter is that the consultants are as hands on or hands off as we want them to be.”

Over time, Cutter's consultants have shared a lot of knowledge with the in-house IT team at Fife College, not only about virtualized infrastructure and desktop environments, but also in areas that were, strictly speaking, outside the scope of their contract. “Whilst other vendors might have tightly defined their remit, the relationship we have with Cutter is quite different,” Getchell says. “We see it as a partnership.”

He adds, “Cutter is not the kind of consulting firm that helicopters in and out. With Cutter there is an ongoing dialogue, for which I am massively grateful.”

Results Achieved

The new virtualized server infrastructure and VDI solution at Fife College have delivered wide-ranging benefits including:

An immediate reduction in system downtime

Following the installation of the new virtualized server environment in a single datacentre, IT performance at Fife College improved almost overnight. “In the academic year 2017-18 we experienced three major IT outages, the longest of which lasted half a day,” Getchell recalls. “Since we went live with the new virtualized datacentre, our systems have been 100% reliable.”

“Cutter had the expertise to help us raise our aspirations from a good-enough VDI service to a really slick VDI service, capable of meeting the current and future needs of staff and students.”

Kris Getchell
Chief Information Officer, Fife College

Significant time savings in the IT team

IT staff no longer have to respond constantly to IT issues across multiple sites and can, as a result, spend more time working on projects that add value for the college. For example, recently, the IT team migrated all data and users from a legacy Active Directory to a brand new Active Directory. “If we had still been managing eight separate IT infrastructures, we would not have had the capacity to take on this Active Directory project ourselves, in-house.”

Capital and operational cost savings

Fife College expects to make long term cost savings from its IT virtualization strategy. It made capital expenditure savings equal to half of the cost of the new datacentre by removing the need to make planned upgrades to computing hardware, cooling and power supply across its eight existing IT sites. Furthermore, as it has reduced the size of its server estate by more than 25%, it has reduced its ongoing operating costs for power and cooling.

A more consistent and flexible user experience

For the first time, college staff and students now have a consistent, high performance user experience, regardless of which campus or building they are working in. Staff can also access key systems from home, which enables them to work more flexibly, particularly during periods of heavy snowfall when travel from rural areas can be difficult.

Improved security for sensitive data

As members of staff no longer use Virtual Private Networks (VPNs) to access data remotely, the security of the college’s personnel, student and financial data has been improved. All sensitive data remains on the college network at all times and doesn’t travel via the Internet onto devices that the college doesn’t control.

Accurate data for business intelligence

The creation of the single virtualized infrastructure has enabled Fife College to create ‘a single version of the truth’ and improve access to data. Consequently, managers can now more easily analyse data to help them make decisions. “We can consider, for example, on which campus to deliver courses, taking into account the locations of prospective new students and make better decisions about how we drive our business forwards,” Getchell explains.

New, value-adding services for students

When Cutter designed the VDI solution, it enabled the network to be segregated logically, and this approach has enabled Fife College to provide VDI services for students, without any risk of compromising the security of the college’s core student and financial systems. Using the VDI solution, students can access specialised software applications to complete their coursework and continue their learning at home.

The ability to meet future requirements

Critically, Fife College’s new virtualized infrastructure and VDI solution have the capacity and flexibility to allow the IT team to respond to the emerging requirements of the business. Rather than being a barrier to change, the new IT infrastructure is an enabler for the delivery of new services for staff and students in the future.

