



**Kingston  
University**  
London

Kingston University is a prestigious higher education institution based in London. It offers courses across various disciplines from undergraduate to postgraduate level and prides itself on producing the most sought-after graduates in the country.

### Industry

Education

### Strategic priorities

- Cloud Transformation

### Partner

Xtravirt is a modern cloud consulting and managed service provider. It empowers customers to thrive in an ever-changing digital world. The company is an [award-winning VMware partner](#).

### VMware footprint

- VMware® Cloud™ on AWS
- VMware HCX®
- VMware NSX® Distributed Firewall™
- VMware Aria Operations™ for Networks
- VMware Cloud Gateway™
- VMware vSphere®

# Kingston University Accelerates Consciously Hybrid Cloud Strategy with VMware

To prepare students for the future, Kingston University combines great education with sought-after digital and problem-solving skills. This progressive vision relies on agile and scalable infrastructure, and the university's IT team has the responsibility to enable change. In partnership with Xtravirt, Kingston University kicked off a consciously hybrid cloud strategy to migrate 90 percent of workloads from an aging on-premises environment to the cloud. With support from VMware and Xtravirt, it now has a future-ready IT platform to transform the staff and student experience as needs evolve.

## Shaping the next generation of talent

Kingston University is a prestigious higher education institution based in London, supporting and educating more than 19,000 students from the UK and abroad each year.

In 2022, the university published its long-term strategy to deliver a more progressive model of higher education. Founded on its Future Skills campaign, the Town House Strategy outlines plans to produce the most sought-after graduates by teaching digital and problem-solving skills that will enable them to thrive in the workplace. Alongside this is a goal to build stronger connections with businesses, create more apprenticeship opportunities, and expand distance learning offerings to open more opportunities to students based anywhere in the world.

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Daniel Bolton, Head of Technical Services, Kingston University

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The university's IT team developed a five-year plan to support the Town House Strategy by proactively identifying and removing technical and digital barriers to change. To achieve its ambitions, Kingston University needs flexible and agile technology that enables it to respond rapidly to changing requirements. The IT team is also supporting the university's transition to more sustainable and energy efficient solutions.

## Reducing the data center footprint by 90 percent

The university's on-premises data centers were complex to manage and maintain. The infrastructure refresh cycle was problematically variable, there was growing technical debt, and a need for more scalability.

"We had a choice between investing in upgrading our physical infrastructure or adopting a different approach. Moving to the cloud was a smarter long-term investment, but we identified that some resource-intensive workloads were more aligned to run on-premises," explains Daniel Bolton, head of technical services, Kingston University.

The team decided to take a consciously hybrid cloud approach, allowing the university to migrate up to 90 percent of its workloads to a cloud platform and refresh the remaining data center infrastructure to support those applications that needed to remain in-house.

## Extending in-house capability

To ensure the success of its hybrid cloud strategy, the university needed the right skills and capabilities to design and project manage the migration and to focus on transforming the staff and student experience.

The internal team ran a three-month proof of concept with VMware Cloud on AWS to define the best approach for the migration. While this supported overall objectives, the team was able to identify other areas that needed to be addressed as part of the program. The existing backup solution was unsuitable, and current virtual private network (VPN) connectivity needed to be more appropriate for several heritage application services. They also identified knowledge gaps around some of the technologies that could delay or compromise the solution's success.

"We needed a partner to guide us through the migration and train our team in parallel so we could take over running the environment at the end of the engagement," says Bolton.

The university turned to a leading VMware partner, Xtravirt, to design and support the cloud migration.

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**"We set out to remove the barriers to innovation, and with support from Xtravirt and VMware, we're free to explore everything the cloud has to offer."**

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During the discovery phase of the project, Xtravirt ran a series of workshops for project stakeholders and technical staff. Steve Wood, delivery manager at Xtravirt explains, "The goal of the workshops was to ensure the IT strategies and implementation plans aligned with the university's business objectives and requirements. These are then translated into targets that influence the choice of technology, features, configuration and roll-out plans to ensure we provide the greatest business value as quickly as possible."

With the outcomes defined, the team decided to adopt a non-disruptive approach to the solution and migration. This would minimize downtime and re-architecture work, while with support from Xtravirt, the IT team could focus on delivering business change.



## Migrating to the cloud with no downtime

“We chose VMware technology so we could use our existing skills and wouldn’t need to reconfigure servers. We already use VMware technology, so we knew we could achieve a more seamless migration to cloud, and we’d end up with a future-ready platform within the AWS ecosystem. That would allow us to explore the future integration and adoption of native AWS services as part of our longer-term roadmap,” says Bolton.

With Xtravirt, the initial cloud platform was built and tested, and the initial 200 virtual machines were migrated in just three weeks. VMware HCX simplified the workload migration, supporting bulk transition with no downtime. In total, 650 of the 750 virtual machines will be moved to the cloud by March 2023.

The team also extended from the existing hardware-based firewall to VMware NSX Distributed Firewall, enabling micro-segmentation to increase workload-level security. VMware Aria Operations for Networks was deployed to accelerate application security and networking, and the incumbent backup solution was replaced with Veeam.

The data center environment, when rebuilt to VMware vSAN, will recycle the freed-up hardware, completing the transformation and refresh.

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## Selecting the right partner

One of the factors that led Kingston University to select Xtravirt as its partner for cloud transformation was its ability to support the team beyond the point of go-live. As Bolton explains, “Achieving success with technology is the first step. To turn that into business success, it’s important to make sure there are no skills gaps that could stall our progress, and we are supported as we learn to adopt, manage and unlock more benefits from our investment in hybrid cloud. Xtravirt genuinely cares about our future success, which makes our partnership so strong.”

The consciously hybrid environment will ensure that staff and students have seamless access to highly performing apps whether they’re hosted in the cloud or the data center, however, for the IT team, life will be very different.

“We set out to remove the barriers to innovation, and with support from Xtravirt and VMware, we’re free to explore everything the cloud has to offer. With hybrid cloud, we can consciously decide where to host applications to ensure the best performance and cost benefits,” explains Bolton. “That flexibility enables us to pivot quickly to changing requirements and have a wider choice of cloud services.”

Freed from maintaining a large, traditional physical infrastructure, the team can focus on adapting the environment to meet future needs and scaling up to accommodate growth, safe in the knowledge that its infrastructure is secure, compliant and more sustainable than the previous data centers.

With a modern hybrid cloud infrastructure, the university is now more agile and ready to make more possibilities a reality. From having the flexibility to deliver more online courses to enabling better ways for students, staff, businesses and researchers to collaborate, the university is facing an exciting future.

## Taking remote access to the next level

In response to the increasing demand for remote access, the next phase of the Kingston University migration is to roll out multi-cloud VDI on VMware Horizon Cloud on Microsoft Azure.