Modernising IT for the next generation
On-premises SDDC solution modernises IT delivery

The Customer

With over 18,000 students from over 130 countries, this organisation is one of London's largest and oldest universities.

The Situation

The IT infrastructure provision consisted of 2 data centres and an externally hosted cloud platform.

Due to increasing costs associated with the hosting of the public cloud provision the customer decided not to continue with the public cloud provider and instead procure new infrastructure on-premises to support their requirements for the next 5 years.

The customer's key requirements were:

- modernisation of the IT delivery
- provide a next-generation IT solution with full data protection included
- performance and availability to be better or equal to the existing cloud solution
- provide east-west traffic security (micro-segmentation)
- visibility within the environment

The relocation of workloads to the on-site deployment had to be completed within agreed time frames so as not to impact the day-to-day running of the institution and avoid financial penalties.

Our Approach

Xtravirt consultants worked with the customer to design and deploy a new on-premises SDDC platform.

We also planned and designed a migration methodology and process to migrate the cloud hosted workloads to the on-premises infrastructure.

Full scale test migrations were undertaken prior to the final migration in order to minimise risk and ensure minimal downtime and disruption to the business when the solution went live.

A combination of VMware® and Dell EMC™ technologies were used to deliver an active-active data centre and migrate workloads. This included Dell EMC VxRail™, VMware vSphere®,vSAN & NSX.

Outcomes Achieved

Delivered an active-active data centre spanning the campus site and all workloads migrated within the agreed time frames, with no unplanned downtime thus avoiding significant financial penalties.

Exceeded all specified availability and performance requirements.

Migrated: 525 virtual machines, 2 data centres, 180+tb of data.

Achieved a 10-fold improvement in network performance by migrating to VMware NSX and Dell EMC VxRail. The use of NSX reduced network latency from 10 milliseconds to less than 1 millisecond.

Cost savings, increased reliability and performance achieved by migrating to an on-premises solution.

Improved business continuity and disaster recovery (BCDR) planning through dual site implementation.

At a glance

Challenge

- Rising costs of existing public cloud platform prompted a move to an on-premises environment
- IT delivery needed to be modernised to provide a next generation IT solution
- Performance and availability needed to be equal to or better than the existing public cloud solution and include network security

Solution

- Design and deployment of new on-premises SDDC platform using a combination of VMware and Dell EMC technologies
- Design of migration methodology and processes, including full scale test migrations prior to final migration

Outcome

- Delivered on-premises SDDC environment and migration of workloads:
  - 525 virtual machines
  - 2 data centres
  - 180+tb of data
- Achieved cost savings by moving from public cloud to on-premises environment
- Exceeded availability and performance requirements
- Achieved significant improvement in network performance

Xtravirt is an independent cloud consulting business. We believe in empowering enterprises to innovate and thrive in an ever-changing digital world. We are experts in digital transformation and our portfolio of services cover digital infrastructure, digital workspace, automation, networking and security.

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