# Lancashire County Council accelerates performance and improves ROI by swapping out VMware for Nutanix

### **About Lancashire County Council**

Industry: Public sector Employees: Over 10,000

Geo: UK

Website: www.lancashire.gov.uk

**Solutions** 

Nutanix Cloud Infrastructure

- · Eight node cluster
- · Eight-node failover cluster
- · Four-node SQL Server cluster

## **Applications**

300-400 core applications across all council activities

#### Products:

- Flow Network Security
- Nutanix Cloud Infrastructure
- Nutanix Move
- Prism

## Ready to get Hands-On?

Take a Test Drive

## Northwest of England body gains a modern platform for change by deploying Nutanix

## **Business Need**

Lancashire County Council has a mission to help its residents make this historic area in northwest England "the best place to live, work, visit, and prosper". The Council governs all essential needs of Lancashire residents, including healthcare, education, transport/parking, leisure and culture. The county has about 1.49 million citizens, founded in the 12th century, Lancashire became famous in the 18th-19th centuries as a centre of the Industrial Revolution. Today, it is known to nature lovers for the West Pennines, as well as other hills, forests and beauty spots.

Like all public-sector bodies in the UK, Lancashire is under pressure to do more with less. Automating and digitising systems is a big part of the Council's plans to drive efficiency and deliver value to taxpayers. And, with previous-generation systems reaching their end-of-life stage recently, it was time to refresh core systems that control critical applications.

## **Key Results**

#### Faster performance

After replacing VMware with the Nutanix AHV hypervisor, performance improved noticeably.

#### Consistency

Lancashire County Council has now standardised on Nutanix, providing a consistent image and operations control console across its estate

## **Flexibility**

Deploying Nutanix means Lancashire has a range of options to move more towards cloud or make other strategic platform decisions.

The performance of the VMs post-migration has been noticeably better, even leading to a complaint from one department that a regular overnight job had not run after their server was moved. When we investigated, we discovered the job had run but it had actually completed before midnight the day before!

- Mark Ashworth

Principal IT Architect for Digital Services, Lancashire County Council

## Challenge

Lancashire was unusual compared to other councils in that it had lots of experience of hyperconvergence. It had previously used Dell VxRail and, before that, VCE vBlock. Its key challenge was to modernise and gain maximum value for its residents.

One shadow hanging over the planned refresh was the news that VMware was to be acquired by Broadcom and the potential impacts of the acquisition on software licensing and support, especially for customers that weren't large enterprises.

"With Broadcom and the history of what had been seen before, there was uncertainty as to what was going to happen," said Mark Ashworth, principal IT architect for digital services, Lancashire County Council.

"It was not the decisive factor to move to Nutanix but it was something in the back of our minds. And as has been proved, small and medium-sized organisations have seen support bills go through the roof.

"There was a bit of nervousness for staff having to move away from a hypervisor [VMware ESXi] they had been familiar with for 10 years, but we met a lot of people from local government and got a lot of our people attending the bootcamps and sessions Nutanix put on for customers, and that assured everyone."

## Solution

Lancashire narrowed its options to Nutanix and Dell. "With Nutanix, there was deeper engagement and it just felt like a better experience," said Ashworth.

Working with key service provider partner Softcat, in a matter of weeks Nutanix was deployed with Lancashire's workloads in the Council's private datacentre and Equinix co-location facility. In all, Lancashire deployed a four-node cluster for Microsoft SQL Server, an eight-node cluster for main workloads and a failover site with another eight-node cluster. Using the Nutanix Move tool for automating the migration of hypervisors, the IT staff converted over 800 virtual machines in total.

Nutanix now has 99 percent of its estate virtualised across 900 VMs. "These systems run a wide and varied range of applications", Ashworth said, referring to core systems from "social care systems to highways and property asset management".

## **Outcomes**

The experience of migrating from VMware to Nutanix AHV went far smoother and quicker than anyone on the project team had anticipated during the initial planning stages.

"This was due in large part to the quality of the Nutanix Move tool, which allowed us to move 800-plus VMs in the space of three months,

with an average downtime of less than five minutes per VM during cutover," Ashworth said.

"In total, 95 percent of our entire server estate was migrated using the Move tool alone, with very few VMs requiring any pre- or post-migration intervention. Most end-users were unaware of the migrations even happening."

In part due to widespread availability of modern hardware such as all-flash disk arrays, Lancashire saw an immediate acceleration in performance.

"The performance of the VMs post-migration has been noticeably better, even leading to a complaint from one department that a regular overnight job had not run after their server was moved," Ashworth recalled.

"When we investigated, we discovered the job had run but it had actually completed before midnight the day before and the user thought it had failed because it was usually still running the next morning when they started their shift!"

Ashworth said: "The experience has been great all the way through from the first conversations to the support of Nutanix engineers that have given us access to everything we needed. They have been able to point us in the right direction when we need a second viewpoint on where to go next."

## **Next Steps**

As with so many leaders in these uncertain times, and in a period with so many security challenges, Ashworth is seeking resilience and failover capabilities:

"The next big thing will be micro-segmentation for network security with Nutanix Flow and we hope that we will have that in place later this year. The big thing for us is protection when we experience some sort of cyber incident and limiting the 'blast radius'.

"We will also continue to get more of our people formally trained and we are already three-quarters of the way there, so that will help strengthen us. We are advocating more SaaS solutions and the next step in that effort will be some of the more niche local government systems."

Lancashire is examining cloud options as an alternative, but no platform decision has yet been made as network complexity would need to be addressed first. By making Nutanix and its "run anywhere" platform-independent model the centrepiece vendor for its IT strategy, however, Ashworth is well positioned to explore a range of platform options.

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