

At a Time of Financial Restraint,
Manchester City Council Puts
Nutanix Enterprise Cloud at the
Heart of Visionary Digital
Transformation Strategy



**MANCHESTER
CITY COUNCIL**

Building the City of Tomorrow; Serving the City of Today

BUSINESS NEED

As a modern, forward-thinking City authority, Manchester City Council has ambitious plans to take advantage of technological advances to meet the challenges of its increasingly diverse and mobile population. At the same time, however, it has to meet the immediate needs of City residents and do so against a background of strict financial constraints, onerous governance requirements and rapidly escalating demand in sectors as diverse as transport, recycling, housing and adult social care.

Balancing these demands meant replacing legacy IT infrastructure, and doing so with regard to the UK government's Cloud First policy, whereby public sector organisations are required to fully evaluate potential cloud solutions before any other option. As such the Council established a five year strategy to build a more agile, flexible and highly available infrastructure based on a mix of cloud computing and software-defined data centre technologies. Rather than public cloud only however, the council opted to put an on-premise hyper-converged infrastructure at the heart of its strategy and, following an open tender procedure, chose the Nutanix Enterprise Cloud as the best way of achieving that goal.

With the first phase of implementation now almost complete, the council is reaping the rewards of this ambitious project in terms of lower total cost of ownership, improved performance and vastly enhanced availability. Moreover, it is moving ahead with plans to exploit other advantages conferred by its investment in the Nutanix Enterprise Cloud, as outlined in this case study.

CHALLENGE

One of the biggest local government contracts to be awarded in the UK, the Manchester City Council infrastructure project was initiated in the wake of escalating maintenance, management and support issues with its legacy IT platforms. A fundamental requirement was a move away from a conventional on-premise data centre to a hyper-converged infrastructure distributed across two new co-location facilities with the aim of building a scalable, robust and highly resilient infrastructure to meet both the immediate and ambitious long term IT needs of the Council and the population it serves.

“In the short term, the Nutanix Enterprise Cloud gives us a vastly more scalable and resilient IT environment from which to deliver existing services. However, the real value lies in how it empowers us to take advantage of new digital technologies going forward – something we just couldn't have done with our old 3-tier infrastructure.”

- Bob Brown, CIO,
Manchester City Council

SOLUTION

To future-proof its investment and deliver maximum agility, the Council decided to build its replacement infrastructure around Cloud and software-defined technologies. To this end, it opted for Cisco ACI (Application Centric Infrastructure) for software-defined networking and also evaluated a number of hyperconverged infrastructure (HCI) solutions to virtualise, manage and secure compute and storage resources. With its emphasis on delivering the benefits of a public Cloud approach in a secure enterprise environment, the Council decided that the Nutanix Enterprise Cloud was the best fit for its requirements.

“Working to a clear set of requirements aligned to our strategic objectives, we completed a detailed, vendor agnostic appraisal, with Nutanix Enterprise Cloud identified as the most appropriate solution,” explained Mike Farrington, Technical Operations Manager, Manchester City Council. “We recognised that the solution went far beyond meeting our immediate infrastructure and disaster recovery requirements, providing us with a comprehensive set of technologies, tools and services to support other, more ambitious projects and initiatives. Such as the ongoing Manchester Smarter City Programme aimed at optimising city systems and ultimately improving how people live, work and play in and around the Manchester area.”

CUSTOMER OUTCOME

Enterprise Cloud installation took just a few days, followed by the migration of 900+ application workloads over a period of 3-4 months, with immediate benefits. For example, along with greater levels of performance and cloud-like scalability, rack occupancy was reduced by 90%. This has contributed to an annual saving of £285k per annum through a significant reduction in power, cooling as well as rack space. The move to Nutanix Enterprise Cloud also supports the city's ambitious climate change target to become a zero carbon city by 2038.

The migration to Nutanix Enterprise Cloud has both consolidated and simplified the Council's data centre infrastructure which, in turn, will enable Farrington and his team to de-risk the planned move to separate colocation facilities later this year, as Farrington explains:

“The way we've implemented the Nutanix solution, using two independent clusters, will enable us to leverage the built in capability of the platform to move and protect the Council's most critical applications and services when it comes to the migration. Essentially we will relocate critical workloads before we power off one of the clusters, then move to the new colocation facility, power on, test, and repeat the exercise.”

Another positive outcome is that the Council no longer needs separate groups to manage compute and storage resources. Instead these have been combined to create a single multi-skilled team able to manage and support all aspects of the infrastructure, as well as provide a valuable resource to support future projects.

NEXT STEPS

In the short term, Farrington and his team are planning to migrate from VMware to the AHV Hypervisor. “We initially stayed with what we had to simplify and accelerate the migration,” explained Farrington. “However, having reviewed our server workloads, we have yet to identify any that will not run on AHV, presenting us with the opportunity to further reduce management overheads and license costs by approximately £100k per annum.”

Looking further forward, the Council is also keen to use its Enterprise Cloud to evaluate and deploy new technologies, such as the use of public Cloud platforms, the Internet of Things (IoT), and AI as part of its plans to build a smarter city. To this end, CIO Bob Brown is particularly excited by the recent Xi Cloud Services announcement aimed at facilitating this kind of hybrid cloud development.

“Manchester aspires to be one of the top smart cities globally,” explains Brown, “and while that may be some way off, Nutanix Enterprise Cloud provides us with a unique springboard from which to pursue that aim while, at the same time, empowering us to continue to meet and, hopefully, exceed the needs and expectations of those we serve today.”



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INDUSTRY

Public Sector

BENEFITS

- › Agile and scalable infrastructure enabling the Council to expand services rapidly and easily cope with growth and fluctuations in demand.
- › Savings of £285k per annum, delivered by economies in support, maintenance, power and cooling
- › Reduced risk to critical applications and services from built in resilience and recovery capabilities.
- › Unique access to tools and technologies, such as Nutanix Xi Cloud Services, to empower the council to build a “Smarter City”
- › Enabler for multi tenancy and collaboration with other Local Authorities and Public Sector organisations

SOLUTION

- › Nutanix Enterprise Cloud Platform hosted across two active/active replication/failover clusters
- › Prism management plane
- › VMware Hypervisor

SOLUTION

- › 900+ hosted VMs
- › Local government application workloads
- › SAP
- › Microsoft SQL Server
- › Citrix VDI delivering 300+ applications

Nutanix makes infrastructure invisible, elevating IT to focus on the applications and services that power their business. The Nutanix enterprise cloud platform leverages web-scale engineering and consumer-grade design to natively converge compute, virtualization and storage into a resilient, software-defined solution with rich machine intelligence. The result is predictable performance, cloud-like infrastructure consumption, robust security, and seamless application mobility for a broad range of enterprise applications. Learn more at www.nutanix.com or follow us on [Twitter@nutanix](https://twitter.com/nutanix)

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