



Glenn Howells Architects designs success on Nutanix

Digital transformation at award winning UK architecture practice built on Nutanix infrastructure

INDUSTRY

Professional Services

BUSINESS NEED

- Improve End User Productivity
Enhance Back-up and DR
- Reduce Physical Footprint
- Provide headroom for data growth
- Support business in taking on bigger projects

SOLUTION

- G5 nodes
- Prism
- Nutanix Frame

BUSINESS BENEFITS

For Glenn Howells architects' operational changes such as the use of the latest design tools to drive business growth meant executing a data access and storage driven digital transformation strategy to improve productivity, customer service and performance. Delivering reliability, reducing latency and ensuring capacity availability across two on premise server rooms meant moving off slow, difficult to maintain infrastructure to fully virtualised Nutanix hyperconverged server architecture with cloud storage replication.

“For this major infrastructure refresh and migration project, which was vital to the digital transformation of the business, some suppliers seemed more concerned with selling hardware whereas Nutanix focused on supplying a solution that was long term and fitted the strategy of the practice. They were focused on value added services and software and providing this and a credible technology roadmap at a viable price point.”

- Jonathan Carthy, Head of IT, Glenn Howells

CHALLENGE

Glenn Howells Architects is a UK based, multi-award-winning architecture practice with offices in London and Birmingham. During a period of rapid business growth, the company found its IT infrastructure performance was constraining the company.

In common with other architects Glenn Howells was going through a digital transformation which required the modernisation of its IT infrastructure. The transformation would be storage driven.

As client project sizes grew exponentially the company's IT storage architecture needed to support growing file sizes and heavy graphics work.

Use of data intensive tools such as Vu.city, 3ds Max, and Lumion and new working practices such as digitally retaining every version of designs started to push project file sizes to the multi-gigabyte level. For customer service and compliance reasons every design and change had to be securely stored. Readily available access to every version of a design was vital.

The rapid changes to the business included the growing use of visualisation tools within the practice's expanding technical architecture team. This added significantly to data growth.

The firm found its existing network file servers were rapidly being filled and this in turn was causing performance issues. Emergency archive procedures were regularly being put in place and disk failures were common.

Productivity of end users was being impacted as architects were unable to save, access, archive and restore vital files when required. Long latency time lags, along with slow, back-up and restore between the London and Birmingham data centres meant teams were often restricted to using local infrastructure to access design files. This meant architects were restricted on which projects they could work because of where they were physically located. For the IT team, each data centre was being run as a single entity. This meant any major outage would mean effective disaster recovery was problematic. The performance of the existing infrastructure was simply not good enough and started to have a negative impact on business productivity.

SOLUTION

To meet its strategic IT goals of adopting server virtualisation and cloud storage, a multi-layered solution to enable the continued operation of the two on-premise two server rooms in Birmingham and London had to solve the firm's network issues and its business collaboration problems.

The initial solution deployed comprised of three Nutanix G5 nodes running AHV on each site. With 15TB of capacity located in Birmingham and 8TB in London along with production and file servers the practice operates around 50VMs. The total data footprint including archive data sitting on Nutanix solutions is around 200TB

Today, VMs can now run in both sites and provisioning storage and VMs to either location is simple. Each site can failover to the other with almost real time replication.

Nutanix environment management is easy through Prism. With full visibility of both sites through a single pane of glass, notifications or errors, IOPs performance and use are totally transparent. Live upgrades of firmware, hardware and disks present no issues.

ENGAGEMENT

Soon into the evaluation it became clear that while rival solutions focused on hardware 'which missed the bigger picture' Nutanix software defined solutions and value-added services based approach fitted the bill. The offer of an enterprise grade solution at an SME commercially viable price point proved too attractive to ignore for the IT and executive team inside Glenn Howells.

IMPLEMENTATION AND MIGRATION

The Nutanix implementation was done within one week. With one day spent in the Glenn Howells Birmingham office and one day in London, the system was stood up and running with servers operating in a fully live environment after just a few days. Much of the implementation proved to be plug and play. Knowledgeable Nutanix engineers and clear documentation made for a stress-free project.

OPERATIONS

The impact on operations has been revolutionary. Most gratifying for the business and the IT operation has been the changes to the experience on the user side and how this has shifted the relationship between IT and the architects.

“It is much better. Previously we had had complaints because of storage access and performance. For example, today the visualisation team has the largest need in terms of IOPs. Today, because it generates and stores a vast quantity of data which is pulled and pushed in terms of rendering, they are delighted with the performance,” says Jonathan Carthy, Head of IT, Glenn Howells Architects.

Access to architectural applications such as Vu.City - a large application requiring a lot of disk space and graphic capability is provided through Nutanix Frame. “Rather than install an app that takes 40 or 60GB on every machine, the choice was to install it on Frame and make the App available to our architects over the network.” says Carthy.

In the current lockdown conditions Glenn Howells Architects decision to use Nutanix Frame Desktop as a Service has proved invaluable. Within the practice, Apple Mac users are predominately partners and directors and 95% of users are Windows Workstation and laptop users.

Like all businesses Glenn Howells needed the agility to move swiftly to remote working. When planning started for the lockdown, the IT team looked at the tools available to enable the users to work remotely and Frame proved to be a key element.

The business shifted its entire workforce from being office based to being home based within one week. One hundred and seventy people began working remotely with many using Frame. Through a simple web browser, they can access the full-blown desktop applications and access all of their data. It is no different from being in the office, Carthy says.

ROADMAP

Like many architecture practices, Glenn Howells Architects is experiencing a data surge thanks to the increased use of VR and AR.

Without Nutanix it would not have been feasible to consider adopting such data intensive workloads. Looking forward, the company is exploring Nutanix Xi Leap as a cloud-based disaster recovery solution. The goal is to progress with a complete tool set which fully complement one another. Says Carthy: “Nutanix has helped us think differently.”



T. 855.NUTANIX (855.688.2649) | F. 408.916.4039
info@nutanix.com | www.nutanix.com | [@nutanix](https://twitter.com/nutanix)