Leading Irish law firm William Fry leverages Nutanix solutions for its fast growing legal practice

Nutanix infrastructure stability, performance, flexibility and capacity establishes a strong foundation

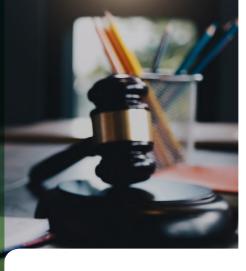
BUSINESS NEED

Faced with performance, reliability and growing disaster recovery (DR) requirements, the IT department William Fry, one of Ireland's most successful and highly respected law firms, saw the need to reduce Storage Area Network (SAN) complexity and bring some sanity and simplicity to its operations. With simple set up and operation, seamless migration, ease of management alongside the ability to handle moves, adds and changes with minimum fuss, Nutanix hyperconverged infrastructure proved to be the solution to address all of these issues. With capacity headroom and simple expansion options, it also laid a technology foundation for the future of the business.



"Nutanix has been a breath of fresh air and has more than met our expectations over the past number of years. The platform continues to grow and allows us consider it as a key part of our IT infrastructure strategy in terms of our on-premise data centre but also looking toward cloud adoption in the near future."

- Michael Devitt, IT Director, William Fry



INDUSTRY

Legal

BENEFITS

- Vastly improved performance, disaster recovery and high levels of redundancy with no single point of failure - Network latency reduced from 20 milliseconds to 1.5 milliseconds; 10Gbps Synchronous Replication between DR and main site enabled.
- Delivered capacity and growth headroom
- Ease of management has freed up the IT team to focus on providing ever improving services - Multiple cluster management through a single console
- Smoothed the adoption of a company wide legal practice management solution on which the future of the business is being built

SOLUTIONS

Nutanix Enterprise Cloud Platform

- Acropolis, including AHV virtualization and Prism management

Nutanix Flow



CHALLENGE

Storage Area Network (SAN) operations at Ireland based law firm William Fry had become so complex to manage, backup and update that they were seriously impacting business productivity. At times latency issues were causing situations where "performance became so degraded it caused a spike in Helpdesk calls."

Limited IOPs meant attempting a 100mbps back up during office hours would slow SAN throughput so much that end users would immediately notice. The system architecture caused added complications. Updates and scheduled back-ups had to be done outside business hours which also meant complex advance planning.

The SAN straddled a production data centre and DR site both with legacy architectures comprising a SAN and blade server compute. Synchronous replication meant two SANs operating as a single cluster.

Change control had also become a serious issue. One of the pain points restricting the team was that it could not independently update the DR site and later update the main site.

Managing updates was also complicated as firmware levels had to be matched to support a particular version of the hypervisor OS, or a specific network card driver. Updates at the SAN OS level meant simultaneously upgrading SAN node, networking switch and blade server firmware alongside hypervisor OS updates. As the SANs were operating as a single cluster, when a bug crept in during a simultaneous update of both sites that didn't manifest itself immediately, this later caused 'a lot of grief.'

This convinced the IT team and the executive management that there was a pressing need to reduce infrastructure complexity and bring some sanity and simplicity to the SAN. Nutanix proved to be the solution to address all of the issues and create a foundation for the future of the business.

SOLUTION

Oisin Concannon is the IT Manager at William Fry. He said: "When we started thinking about what we wanted, we knew hyperconverged infrastructure was an option but we didn't initially zero in on it when the RFP was issued."

William Fry found that many of the solutions being offered 'just looked like more of the same SAN technology that didn't really tick the boxes for simplicity of management and operation.'

Upon further evaluation of Nutanix hyperconverged solution, the team saw that Nutanix supported different hypervisors such as Microsoft Hyper-V and VMware ESXi along with its own Acropolis HV (AHV). William Fry saw this as an opportunity to do something new.

"At the time we were thinking we would stick with our current hypervisor, but use it on a Nutanix platform. But we soon saw that our needs would be better met by using AHV on Nutanix."

Through a series of face to face, online meetings and visits to solutions centres, Nutanix emerged as the clear winner. "We made our recommendation that it would be the Nutanix project."

The installation and set-up proved straightforward.

Over a week of configuration, installation and cabling, everything was done neatly. "We had all the documentation that showed us exactly how everything was configured within the cluster. With IP addresses of every node, we had help converting machines from Hyper-V to AHV through a well-documented and simple procedure. During the following weeks, there were no pain points. It was very straight forward."



The corporate legal practice required vastly improved performance, disaster recovery and high levels of redundancy with no single point of failure. Capacity and growth headroom, alongside the ability to handle moves, adds and changes with minimum fuss, were vital. That is what Nutanix delivered. The main site has 2 Nutanix clusters. One is the application cluster running Exchange servers, SQL, file and web servers. That has a 7 node cluster with 3.5TB of RAM running 170 VMs.

Another more recent six node 6 node cluster with 4.5TB of RAM supports approximately 100 VMs. When this six node upgrade was needed for a Citrix VDI project, the team effectively did the cluster upgrade itself.

"There are identical clusters running at our DR site as cold standby. We replicate synchronously to those nodes in our DR site," says Concannon.

CUSTOMER OUTCOME

The Nutanix solution's ability to simply add nodes meant that long term advance planning for expansion was not necessary - whether this was for changes caused by system refreshes or even for significant transformative projects such as a new practice management system.

A single dashboard provided analytics to track performance over time, while helping identify problems in advance.

"It is very easy to see where you are, thanks to the Nutanix Prism, which simplifies and streamlines common workflows to make hypervisor and workload management as easy as checking your email. This was a key consideration in choosing Nutanix. You can see how many IOPs you're doing. What's the cluster wide IO? What's the cluster wide latency? Additionally, data localisation in Nutanix - whereby VMs run on hosts close to where their data is stored - meant our latency that might have been anywhere from 15 to 20 milliseconds on average on the old SAN is now about 1.5 to 2 milliseconds, even when there is a back-up running," he says.

When deploying Nutanix, William Fry has never had a problem that's taken the system down. "Whenever we've dealt with Nutanix support, they've been very methodical, very logical and very good at finding the root cause and then resolving problems. With Nutanix support, I have never come across a case where they've said: 'Let's see if this works.' They always dig deep into the logs, find the problem and fix it."

NEXT STEPS

William Fry is rolling out a new company wide practice management solution. Had that project started with the old system, it would have meant a lot of time for the infrastructure team in terms of creating, configuring and deploying new VMs based on the specifications from the vendor. Whereas now, anyone in the senior part of the IT department with access to Nutanix can do things for themselves without requiring specialist knowledge.

Prior to having Nutanix, the struggle was to work out how to run day to day operations and much time was spent assessing the performance impact of an action such as back up. It dominated how IT was thinking. Now, with the Nutanix clusters, there is freedom to think and act without worrying about adversely impacting the system.

William Fry also purchased Nutanix Flow to set detailed policies for the VM environment - partly as an additional security measure.



"We were keen to look it at from a security point of view because being a legal firm all data is actually our client's data. We have a lot of security products and we are ISO 270001 certified so everyone in the firm takes security very seriously. For me it was a very clever way of locking down traffic in regards to who can talk to what server and what server can talk to what server. We have been experimenting with that and it works well. After the initial project and migration, subsequent upgrade and now with Flow, the whole team is very enthusiastic about Nutanix. Nutanix has been a breath of fresh air and has more than met our expectations over the past number of years. The platform continues to grow and allows us consider it as a key part of our IT infrastructure strategy in terms of our on-premise data centre but also looking toward cloud adoption in the near future," Concannon concluded.



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