

Modernizing IT Infrastructure



Delivering Citizen Services with Transformative Technologies

It's time for a new approach to modernizing IT infrastructure. Organizations navigating today's IT landscape face the difficult balancing act of finding innovative ways to tap into cutting-edge technology while continuing to meet stringent security requirements. With the right infrastructure solution, organizations can leverage cloud-like capabilities on-premise, so they can meet their mission-critical objectives and achieve strategic initiatives.

The increasing complexity of the IT landscape has significant consequences for businesses today. At the root of the problem is legacy infrastructure, which is often fragile, convoluted and cumbersome. When operating with legacy infrastructure with discrete resource silos and multiple layers of management complexity, provisioning new infrastructure is time-consuming and expensive. And multiple points of failure often lead to unplanned downtimes.

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Additionally, legacy infrastructure requires large capital expenditures and is difficult and expensive to scale and upgrade. This forces IT staff and specialists to focus on coordinating with each other to manage their current infrastructure instead of spending time on innovation, which makes it difficult for organizations to pursue new projects, develop advanced services and tackle strategic initiatives.

The Nutanix Hyper-converged Infrastructure Solution

In an effort to solve the traditional challenges of legacy infrastructure, many organizations have opted to implement Cloud-First strategies. Making the switch the Cloud offers an array of benefits, including increased efficiency, elastic workloads, faster time to market for applications and services and a fractional consumption model, which enables organizations to pay only for what they need.



Why Nutanix HCI?

Advanced data centers across the world rely on Nutanix's HCI solutions to power a variety of workloads at any scale. Nutanix offers 24x7x365 support and has a leading mission critical support response time, which means customers get the help they need as soon as problems arise. Nutanix currently has a 97% satisfaction rating and has held a +90 NET promoter score for over four years.

But the decision to migrate to the Cloud comes with its own problems. Organizations have to weigh the costs and benefits of owning and renting storage. For organizations facing irregular demand, public Cloud makes sense — but for organizations with predictable, stable demand, an on-premise solution is preferable.

Nutanix has re-platformed the enterprise data center and pioneered the concept of hyper-converged infrastructure (HCI), an on-premise solution for organizations looking to streamline deployment, management and scaling of their data center resources. HCI natively converges compute and storage into standard x86 servers with attached flash and hard disk drives deployed as a cluster. Customers can start with a small footprint and then add additional compute and storage capacity as needed. Hyperconvergence radically simplifies how infrastructure is deployed and managed, and reduces the footprint of IT infrastructure by up to 90%

Nutanix HCI also natively integrates enterprise-class virtualization into the product. The hypervisor comes pre-installed on all Nutanix appliances and cluster and VM management is built in and integrated with the management platform that is part of the standard product — no additional components for installation are required.

Use Case: San Mateo County

San Mateo County's Information Services department was operating with outdated legacy infrastructure and was in desperate need of a scalable solution that enabled growth, simplified support and enhanced performance. Because their legacy infrastructure consisted of a broad mix of solutions from different providers, the Information Services engineers were spending most of their time on infrastructure maintenance and fielding constant support requests.

CIO John Walton recognized that his staff was frustrated with the mixed bag of outdated technology — phones were constantly ringing, service requests were rampant, and infrastructure was frequently down, which required around the clock maintenance. Walton knew the new solution needed to guarantee high performance and free up time for the engineers and IT staff to focus on customer-facing projects. He

sat down with the staff on his infrastructure team and challenged them to survey the industry and find a solution that addressed their needs.

John Walton is the CIO of San Mateo County. Walton is a respected organizational and technology leader with expertise in creating strategic vision while guaranteeing operational excellence. Before serving San Mateo County, he was the CIO of San Francisco.

San Mateo County first turned to Nutanix to test demo boxes for their VDI capabilities and quickly realized they had found the right fit for their infrastructure needs. A few months after implementing the Nutanix VDI solution, Walton noticed his phone wasn't ringing as often — he was no longer fielding constant complaints about downtime and other technical issues. He met with his senior engineer who lead the implementation and learned that the entire infrastructure team was already in the process of moving to Nutanix — the engineers were simply adding new nodes as needed. Walton hadn't noticed because of the simplicity of the process.

“I never really appreciated until we started using Nutanix more the power of what I would call simplicity.”

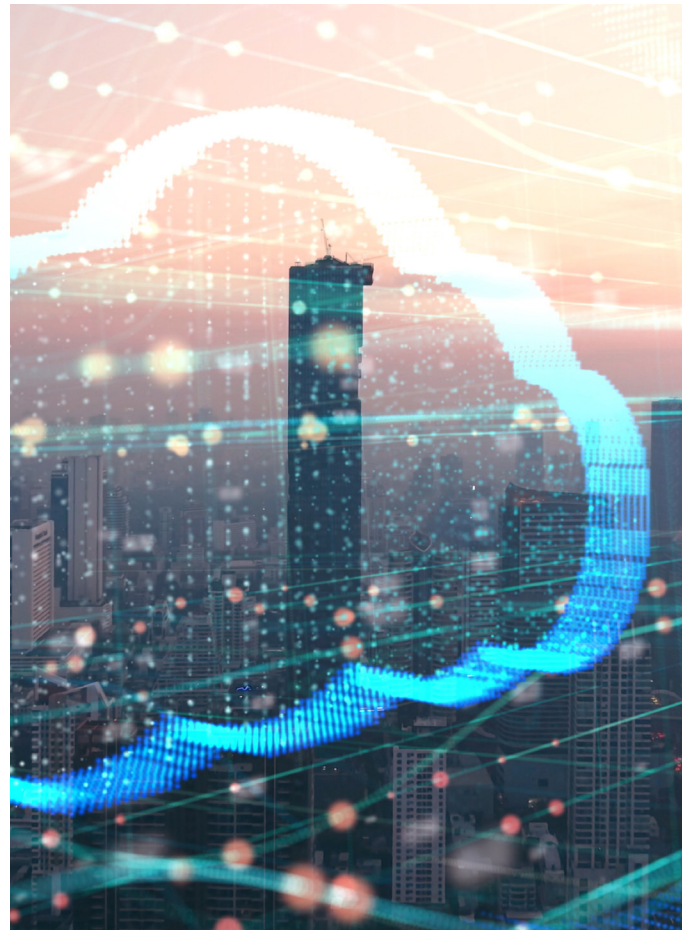
—John Walton, CIO of San Mateo County

Six years later and San Mateo County has virtualized 95% of its data center with help from Nutanix. San Mateo County has 92 Nutanix nodes supporting 1106 virtual machines, running on a variety of models depending on the workload. Satisfaction among the IT staff is high, and the county actually managed to save money using Nutanix HCI.

“Usually you have to drive people to that kind of change, and my engineers, to their credit, really embraced it and took the lead on it and really drove it.”

The linear scalability of Nutanix HCI means San Mateo County only buys what they need now but has the option to quickly expand the Nutanix environment in the future to better respond to citizens’ needs. Instead of spending six to nine months adding additional infrastructure, the San Mateo staff can expand their Nutanix environment within a few hours. Because of Nutanix, San Mateo County has realized an array of additional benefits as well, including:

- Reduction in SAN costs
- Advanced disaster recovery capabilities
- Offsite backups
- Improved employee productivity
- Energy savings
- Increased flexibility for IT staff



About Nutanix

Nutanix is a global leader in cloud software and hyperconverged infrastructure solutions, making infrastructure invisible so that IT can focus on the applications and services that power their business. Companies around the world use Nutanix Enterprise Cloud OS software to bring one-click application management and mobility across public, private and distributed edge clouds so they can run any application at any scale with a dramatically lower total cost of ownership. The result is organizations that can rapidly deliver a high-performance IT environment on demand, giving application owners a true cloud-like experience.

Learn more at nutanix.com or follow us on Twitter [@nutanix](https://twitter.com/nutanix).
