

Modern Infrastructure Without Compromise: Running Today's Workloads and Tomorrow's



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Deciding where and how to run workloads has never been more complex — or consequential — than it is in today's modern infrastructure. The critical services that run your business must scale on demand, recover from failures and remain secure. At the same time, technical leaders are expected to meet business goals such as lowering costs, accelerating time to value and reducing operational overhead.

Adding to the challenge are competing mandates to either increase cloud adoption or repatriate workloads to address data sovereignty. Each option often requires compromising something essential, creating a perceived tradeoff between what the business needs and what your teams can realistically deliver.

This tradeoff is an artifact of how infrastructures and workloads have evolved. For years, achieving the flexibility offered by cloud-native architectures meant accepting the public cloud's operational and cost models, or stitching together automation and overlay tools in private cloud — along with the complexity that approach introduced. What has changed is that the software overlay has finally been refined and integrated. When you can deploy a single software-defined platform across your data center, edge and public cloud, the divide between control and agility begins to dissolve. This shift simplifies the operation of global applications and services.

Nutanix Cloud Platform provides that unified, software-defined foundation by collapsing compute, storage, automation and networking into a hyperconverged platform. It operates consistently whether deployed on premises, integrated with leading compute, storage and data center networking solutions, or provisioned as Nutanix Cloud Clusters in AWS, Azure, or Google Cloud Platform.

Industries under the greatest pressure to modernize infrastructure often lack the luxury of slow migrations or managing multiple platforms and interfaces. While each industry faces unique challenges, they share a common requirement: infrastructure must support steady production cycles while adapting to unpredictable capacity demands without driving architectural sprawl or operational disruption.

- **Construction:** Project management systems and building information modeling (BIM) applications generate multi-terabyte datasets that distributed teams need to access from job sites and remote offices. Further, project-based work often creates unpredictable demand cycles. Nutanix Cloud Infrastructure runs core applications on premises for consistent performance, then extends capacity to Nutanix Cloud Clusters in AWS, Azure, or GCP as new project phases demand additional engineering and design resources, without rearchitecting applications or retraining teams on new management tools.

- Manufacturing: Manufacturers must run legacy production systems alongside modern operational technology without maintaining separate stacks, all while ensuring security. Nutanix Cloud Infrastructure and Nutanix Kubernetes Platform can run and manage Virtual Machines and Kubernetes containers from the same platform (Prism), regardless of whether those workloads are localized in a private cloud, public cloud, or edge.
- Healthcare: Healthcare organizations face compliance and operational requirements that make balancing resiliency with flexibility especially challenging. Electronic health record systems (EHR) cannot incur downtime and often do not easily support cloud-native architectures. Clinical imaging generates terabytes of data daily that requires immediate access and long-term retention. Nutanix Cloud Clusters and Nutanix Cloud support a lift-and-shift approach to initial adoption, while remaining flexible enough to migrate workloads between cloud boundaries without requiring conversion. Nutanix Unified Storage handles block, file and object storage on a single platform eliminating the need to manage separate systems for active vs archived data.

Organizations that want to thrive in these industries can not afford for infrastructure to be the bottleneck in how quickly they respond to business demands. The architectural question facing technical leadership isn't about choosing between cloud and on premises, or between stability and agility. It's about whether your infrastructure platform can accommodate both the workloads you're running today and the ones you'll need to support going forward without requiring a fundamental redesign each time your priorities shift.

Dean Dorton Technology works with clients facing these same infrastructure challenges. We've built a practice around integrating and implementing solutions like Nutanix to help our clients align modern infrastructure solutions to their business needs. If your teams are spending more time managing infrastructure complexity than delivering business value, we can help evaluate opportunities to unify and optimize how you deliver workloads and services.

[Contact us](#) to discuss your infrastructure strategy.