

**NUTANIX HYBRID CLOUD:**

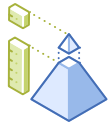
# Delivering on the Promise of Hybrid and Multicloud Deployments



## Accelerate Cloud Adoption while Avoiding Workload Refactoring and Enabling Easy App Mobility

Most enterprises are adopting a hybrid cloud approach to IT infrastructure, taking advantage of cloud technology to increase agility, modernize operations, and accelerate digital transformation. In a recent survey, [85 percent of enterprises](#) said that hybrid cloud is their preferred model.

However, a typical hybrid cloud or multicloud deployment—with different infrastructure stacks and management tools in each cloud—is far from ideal. Disjointed management can decrease visibility, increase costs, and create security risks.



**96%**

are facing hurdles in managing applications and data across both on-prem and public cloud



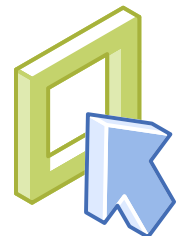
**88%**

are encountering challenges in ensuring their IT staff has the necessary skills to manage a hybrid cloud infrastructure



**95%**

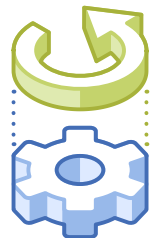
believe their organization would benefit from a “symmetric cloud” solution providing consistent constructs and operations across clouds



Applications, however, are the biggest hybrid cloud pain point. You'd like to be able to lift and shift any application anywhere as business needs dictate, but in reality you'll probably have to replatform many applications—especially those critical in-house applications—before they can run in a new cloud environment. Seventy-five percent of enterprises said [cloud migrations have been slowed](#) due to the need to re-architect or replatform applications.

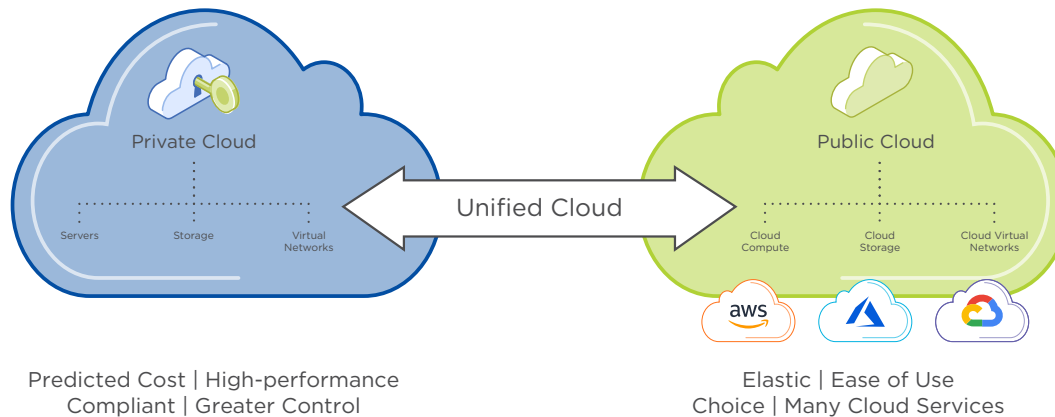
And, if you want an application to deliver high performance at a reasonable cost in the public cloud, you may have to go through the time-intensive and expensive effort of refactoring the application—re-architecting and re-writing it to run in the new environment.

In fact, many enterprises migrate applications to a public cloud only to repatriate them down the road because of high costs, poor performance, or security concerns. According to IDC, 80% of enterprises reported repatriating one or more applications. But, what if you could move your applications between private and public clouds without replatforming or refactoring, and with full visibility of costs? A unified cloud platform that supports both hybrid and multicloud deployments will help your organization deliver on the promise of cloud, avoiding replatforming, repatriation, and unnecessary refactoring while enabling mobility to make your operations more flexible and adaptable.



## What is a Unified Cloud Platform?

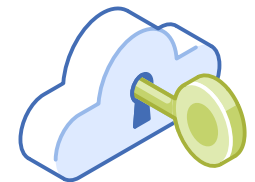
A unified hybrid and multicloud platform delivers the same infrastructure stack and management tools across private and public clouds—including the same APIs, services, and tools—for consistent operations and guaranteed compatibility. The result is seamless application mobility across clouds with no replatforming and no code changes. If you need to expand or move an application from your private cloud to a public cloud, you can do it quickly and easily.



An intelligently chosen cloud platform lets you move beyond the almost constant concerns regarding replatforming, refactoring, and repatriation to an environment with easy mobility and full visibility of costs, performance, and security, enabling you to make smarter IT choices, better support business needs, and take full advantage of use cases that weren't possible previously.

### What's Required for a Hybrid and Multicloud Platform?

While “unified cloud platform” seems simple enough in concept, there's a lot that has to be accounted for. Not only does a unified cloud have to ensure that everything works identically in each supported cloud, everything has to be integrated across clouds, taking into account data locality, workload portability, latency, licensing, cross cloud security, and identity management. The complexity can become problematic fast.



## The Importance of Visibility and Control

A unified cloud platform should also eliminate management silos with a single view across your cloud infrastructure that allows you to monitor and control everything, including security, performance, resource consumption, and cost. With cybersecurity threats on the rise, visibility into security and compliance across your environment is critical for quick detection and remediation of security issues wherever and whenever they arise.

Visibility into performance, resource consumption, and hybrid cloud spending are essential for cost governance and intelligent multi-cloud management, enabling you to allocate business costs based on resources in use and see and compare costs across different cloud environments.

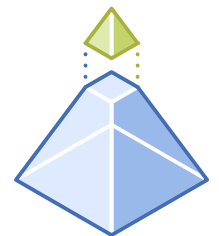
With visibility into every aspect of your hybrid cloud, you have the information necessary to make informed decisions at your fingertips. Suppose a line-of-business team wants to move an application into the cloud to better address customer needs. If you can immediately see what that application costs you to run now and what it will cost after it's migrated, you can work with the line of business to make the best decision. For example, maybe an application costs 25% more in the public cloud, but if the line of business expects the move to increase revenue by 50%, then that may be a smart business choice.

## Enabling Enterprise Use Cases

The right unified cloud platform makes the whole concept of repatriation a thing of the past. You have the freedom to move your applications—or individual application components like web front ends—to wherever they are needed or wherever makes the most sense at the moment. Your hybrid cloud can be used to structure services logically to address specific needs and take advantage of use cases that simply weren't practical in the past.

For example, your finance team may need more computing horsepower at year-end than your datacenter can provide. The right cloud platform gives you the mobility to move or extend applications into the cloud to gain access to the necessary computing power on an as-needed basis.

There are also multi-cloud use cases. For instance, you may have an application running in Azure, but your organization has a lot of AWS credits that need to be used up. The right cloud platform may allow you to move applications from cloud to cloud as well as from on-premises to cloud. Similarly, you may have an app running on AWS, but there's a new service available on Azure that would be perfect for your needs.



## Get More from Public Cloud Investments

Not only can you lift and shift apps where they're needed and burst to the cloud when resource demands increase, you can also use the public cloud for business continuity. Because it eliminates the need for re-platforming, a unified cloud platform allows you to run DR in the cloud like any other datacenter.

You can also easily move applications to take advantage of cloud native services, adding important new functionality to applications in a fraction of the time.

### Lift and Shift



Consolidate datacenters and move applications to the cloud

### On Demand Elasticity



Extend in minutes to handle bursts or seasonal demands and rapidly create Dev/Test

### Business Continuity



Use the Cloud for high availability and disaster recovery

### Modernizing Legacy Applications



Modernize applications and connect natively to cloud services

## Refactoring Becomes a Strategy Not a Necessity

With a unified cloud platform, any application (or piece of an application) that can run in one part of your environment will run anywhere, so you don't have to refactor just to run something efficiently in, for example, Azure, AWS or Google.

You simply move the application or component where you want it. If you want the application to connect to a particular cloud service, you only have to make the minimum configuration and code changes necessary—with no need to refactor.

Whether or not to refactor becomes a decision based on utility rather than one based on necessity. Many of the applications that are critical to your business may have been developed in-house using software platforms that are now out of date or designed with hard-to-modify monolithic architectures. Refactoring updates an application to take advantage of current software methods without changing the application's function. It can be a time consuming, and potentially costly process, but you wind up with a modernized application able to adapt quickly to future needs.

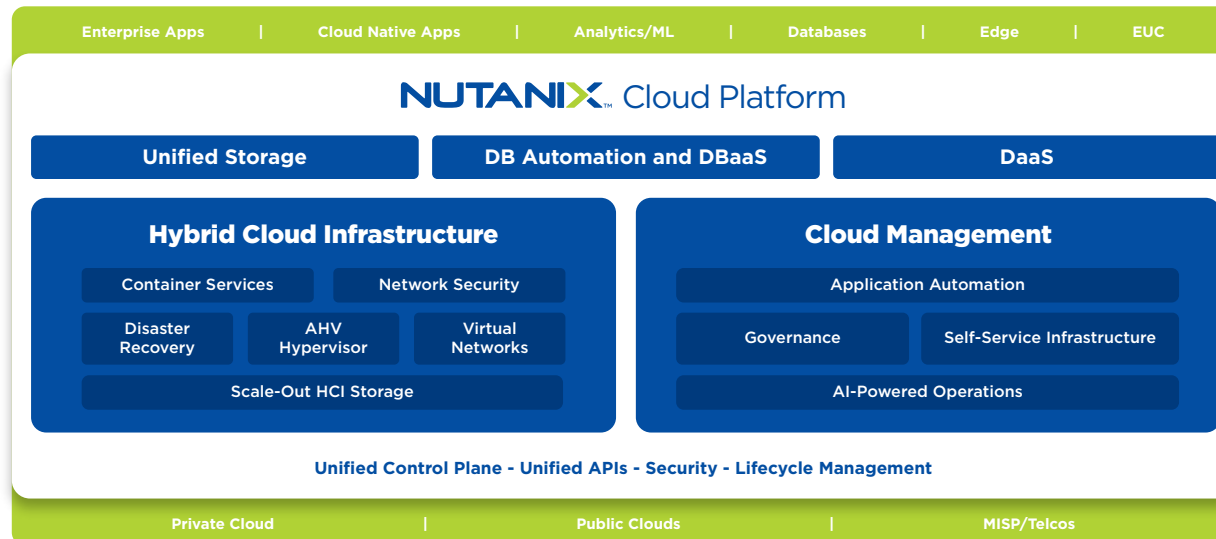
While you can't and shouldn't refactor every application in your portfolio, modernizing a subset of your existing applications may be essential to keep your business moving forward. Your cloud platform should enable both traditional applications and modern applications—perhaps utilizing containers and Kubernetes—to run anywhere across your entire environment.





# Nutanix Hybrid and Multicloud Solutions

At Nutanix, we believe that an intelligent cloud platform is the smartest path to success for most enterprises, delivering greater flexibility and more control while reducing operational complexity, supporting the most critical use cases, and giving you the visibility you need to make informed decisions.



With unified management, one-click simplicity, intelligent automation, and always-on availability, the Nutanix Cloud Platform delivers hybrid and multicloud success with less effort. Your operations benefit from:

- Seamless app mobility without retooling or rework.
- One skill set. Any cloud.
- Software portability and hybrid cloud optionality.
- Harmonized operations across cloud environments.

Nutanix delivers the simplicity and agility of public cloud combined with the performance, security, and control of private cloud. To find out more, visit [nutanix.com/hybrid](https://nutanix.com/hybrid). To learn more about the economics of workloads and hybrid cloud, [visit to the IDC paper](#).

