

# Multicloud vs Hybrid Cloud: What's the Difference?

The arrival of cloud computing to enterprise IT brought much more than new business value and end-user utility. Most notably, confusion. An entirely new set of terms was created to describe the many varieties of virtual data storage and transmission. First, private cloud, or cloud environments that were created to only support workloads from a specific organization. Private cloud infrastructure like this was created utilizing resources within a company's own on-prem datacenter, edge or remote sites, or in a hosted datacenter. Then as time progressed, public clouds were introduced where all hardware-based networking, storage, and compute resources are owned and managed by a third-party provider like Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP) or service providers like Equinix or OVHcloud. Though workloads are partitioned for data security, these resources are shared by the customers of a particular public cloud provider.

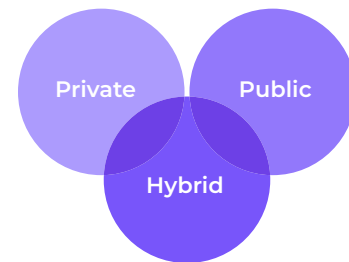
## Hybrid Cloud Definition

With now two types of clouds to account for, we would naturally need terminology to describe the transmission of applications and data between public and private clouds. This architecture is what is defined as a hybrid cloud.

## So, What is a Hybrid Cloud?

As an encrypted highway of sorts, hybrid cloud allows operators to run workloads and store data leveraging two separate cloud resources. However, keep in mind that hybrid cloud environments utilize the same common control plane. Running natively in a public cloud and running a private cloud on-prem does not equate to a hybrid cloud. The key to remember is that hybrid combines the resources of two different clouds spanning on-prem/edge with a public or service provider cloud. If you were to visualize a Venn diagram, and assigned an on-prem private cloud on the left and a cloud hosted private on the right, a hybrid cloud would entail the sum of both parts.

Hybrid cloud infrastructure provides notable flexibility for organizations. You enjoy the secure access of on-premises resources while also having the rapid scale and elasticity of the public cloud. Not to mention, the encrypted data sharing allows for industries who manage hypersensitive information to consume cloud services. For example, public sector entities, law offices, financial service institutions, and healthcare providers. Organizations from these industries can share data as needed with external partners while still adhering to regulatory compliance guidelines. HIPAA, ISO, PCI-DSS, CIS, NIST and SOC-2 are all regulatory guidelines that govern how sensitive personal data is stored and shared.



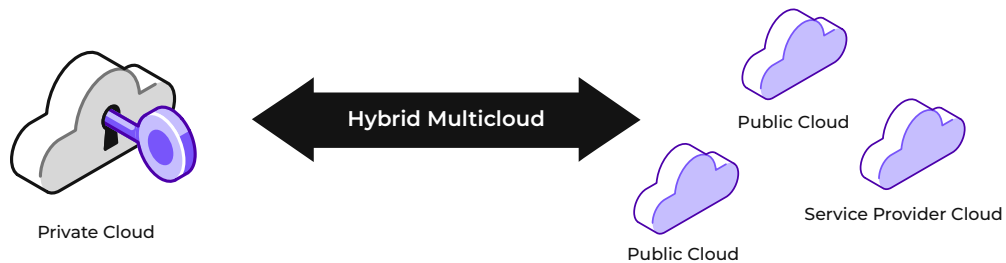
This middle ground between clouds provides a vital bridge for data and workload transmission, like bursting virtual desktops or disaster recovery. It allows organizations to leverage cloud capabilities without compromising productivity or adding complexity.

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But what about environments that utilize multiple public clouds with private cloud infrastructures? How do we categorize this scenario?

A "hybrid multicloud environment" would be the right answer. These types of cloud environments differ from just hybrid clouds, as they include the presence and usage of more than one public or service provider cloud utilizing the same common operating model. Utilization of this emerging architecture is growing as it provides access to different services from different cloud providers without the complexity of them all being managed differently.

Organizations from both the public and private sectors are increasingly presented with business justifications for managing workloads amongst several cloud providers.



## Why Choose Multicloud Over Hybrid Cloud?

Hybrid multicloud environments increase choice, reduce risk of lock-in, and give options to control costs by easily moving to a lower cost cloud if pricing changes. Utilization of this emerging architecture is growing as it provides access to more service models. According to the [Enterprise Cloud Index](#), the majority (60%) of IT teams leverage more than one IT infrastructure, whether it is a mix of private and public clouds, multiple public clouds, or an on-premises datacenter along with a hosted datacenter. That number is expected to grow to nearly three quarters (74%) in the near future.

## How to Achieve Hybrid or Hybrid Multicloud Success?

The key for success with both deployments is in being able to holistically manage your resources as if they were in one location. Managing resources in their respective cloud without considering the adjacent environments will result in wasted capacity and budget. You need deep visibility and insight into your multicloud or hybrid cloud environment to achieve your desired business outcomes.

To learn more about hybrid and hybrid multicloud approaches, visit <https://www.nutanix.com/solutions/hybrid-multicloud>

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